



**7300-M049-00**

**GA2945D.26S  
GA2945ITD.26S**

**INSTRUCTION MANUAL**

**EN**

TRANSLATION FROM THE  
ORIGINAL INSTRUCTIONS

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*For spare parts drawings refer to "LIST OF COMPONENTS" section.*

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- For any further information please contact your local dealer or call:

Technical services: **SPACE s.r.l. a s.u.** - Via Sangano, 48 - 10090 Trana - Torino Italy  
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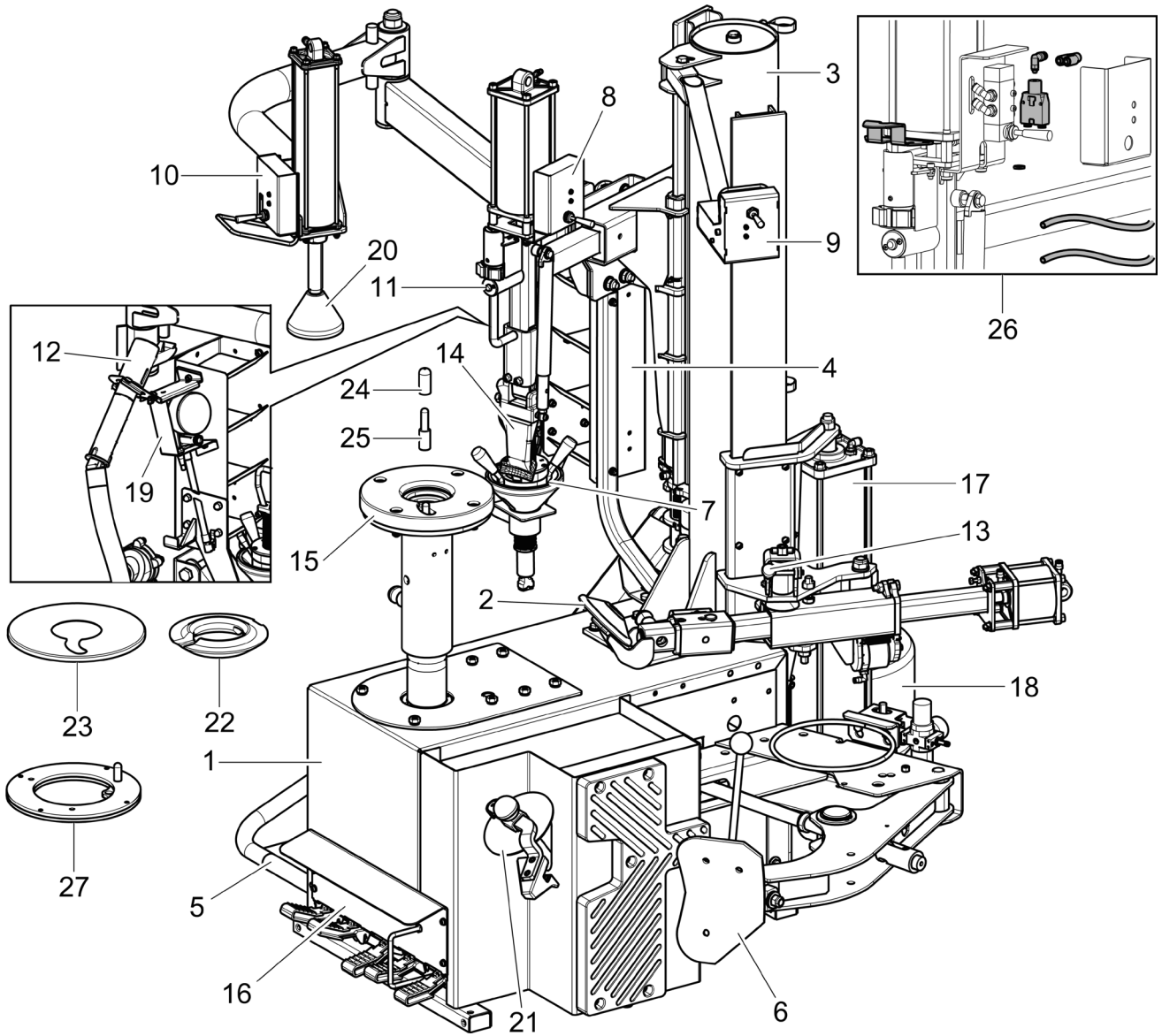
Feature / Fixtures Versions	Model	GA2945D.26S	GA2945ITD.26S
Tubeless inflation unit			●

● = standard

OPT = optional

**GENERAL DESCRIPTION**

**Fig. 1**














**KEY**

- |  |  |
|--|--|
| 1 - Machine base   | 14 - Tyre mounting/demounting tool                   |
| 2 - Bead breaker roller                                    | 15 - Central locking chuck                           |
| 3 - Column unit  | 16 - Control pedal                                   |
| 4 - Tool box   | 17 - Bead breaker roller movement cylinder           |
| 5 - Lateral lifting device                                 | 18 - Tank unit (models with tubeless inflation only) |
| 6 - Lateral bead breaker                                   | 19 - Inflation unit with pressure gauge              |
| 7 - Locking shaft unit                                     | 20 - Rotating bead pressing device                   |
| 8 - Tool control unit                                      | 21 - Beadpusher with pulling system                  |
| 9 - Bead breaking roller control unit                      | 22 - Two-faced cone                                  |
| 10 - Rotating bead pressing device control unit            | 23 - Reverse wheels protection                       |
| 11 - Tool arm unlock push button                           | 24 - Protection with OR                              |
| 12 - Inflator (models with tubeless inflation unit only)   | 25 - Entrainer pin extension                         |
| 13 - Lever for bead breaker roller lateral opening release | 26 - Tool head safety kit                            |
|  | 27 - D.14 pin light truck flange (optional)          |

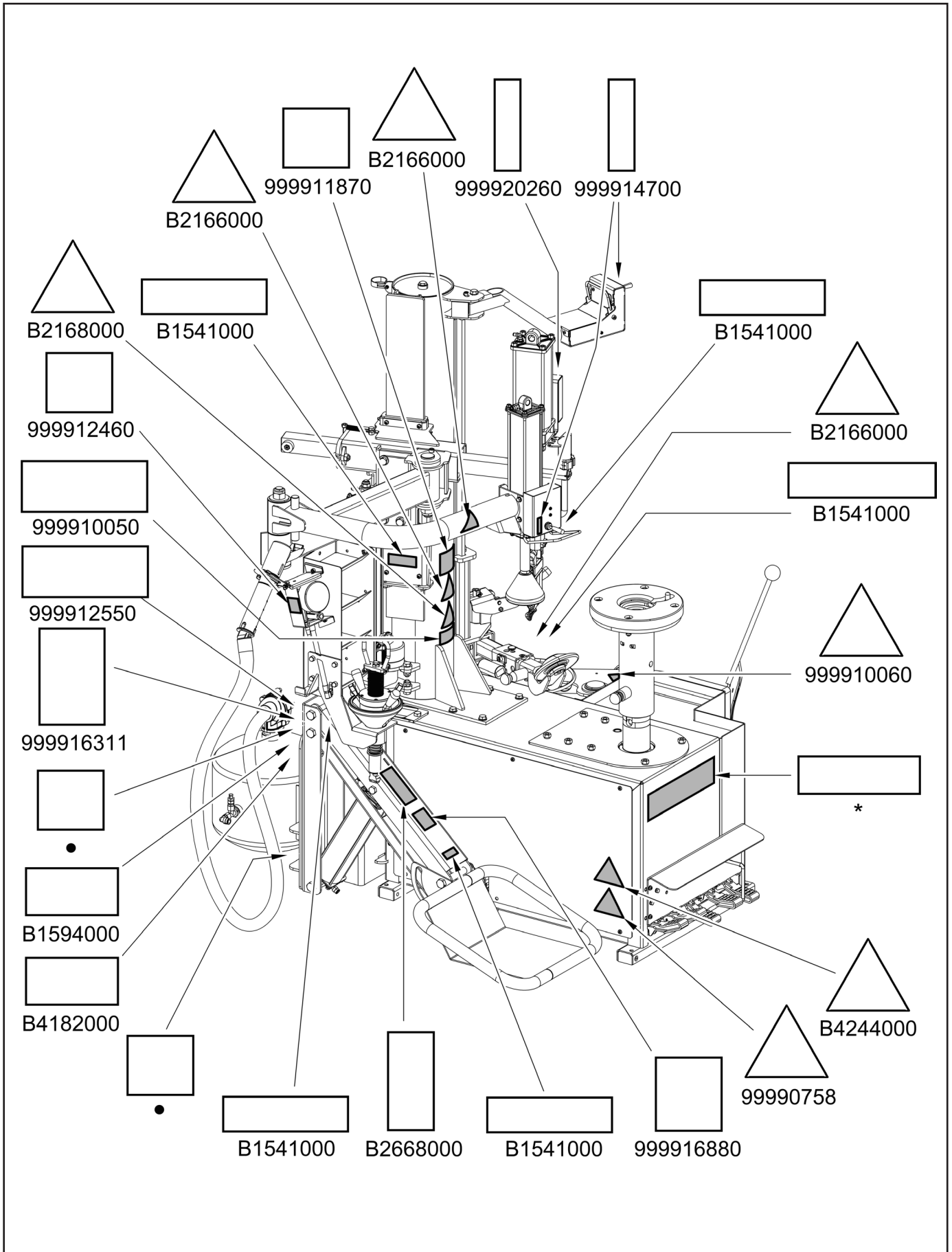


**SYMBOLS USED IN THE MANUAL**

Symbols	Description
	Read instruction manual.
	Wear work gloves.
	Wear work shoes.
	Wear safety goggles.
	Mandatory. Operations or jobs to be performed compulsorily.
	Warning. Be particularly careful (possible material damages).

Symbols	Description
	Danger! Be particularly careful.
	Note. Indication and/or useful information.
	Move with fork lift truck or pallet truck.
	Lift from above.
	Technical assistance necessary. Do not perform any intervention.

**INFORMATION PLATE LOCATION DRAWING**



## Code numbers of plates

<b>B1541000</b>	<i>Danger plate</i>
<b>B1594000</b>	<i>Date indicating plate</i>
<b>B2166000</b>	<i>Hand crushing danger plate</i>
<b>B2168000</b>	<i>Tyre burst plate</i>
<b>B2668000</b>	<i>Wheel lifting device danger plate</i>
<b>B4182000</b>	<i>Electric motor specifications plate</i>
<b>B4244000</b>	<i>Rotating parts danger plate</i>
<b>99990758</b>	<i>Electric shock danger plate</i>
<b>999910050</b>	<i>Protection device use plate</i>
<b>999910060</b>	<i>Bead breaker danger plate</i>
<b>999911870</b>	<i>Headset plate</i>
<b>999912460</b>	<i>Supply pressure indicating plate</i>
<b>999912550</b>	<i>Voltage plate 110-60-1 (apply to version 110V 60Hz 1Ph)</i>
<b>999914700</b>	<i>Bead pressing device control plate</i>
<b>999916011</b>	<i>Motoinverter plate</i>
<b>999916311</b>	<i>Rubbish skip plate</i>
<b>999916880</b>	<i>Max. capacity load 80 Kg plate</i>
<b>999920260</b>	<i>Tool control plate</i>
.	<i>Serial number plate</i>
*	<i>Manufacturer plate</i>



**IF ONE OR MORE PLATES DISAPPEAR FROM THE MACHINE OR BECOMES DIFFICULT TO READ. REPLACE IT AND QUOTE ITS/THEIR CODE NUMBER/S WHEN REORDERING.**



**SOME OF THE PICTURES PRESENT IN THIS MANUAL HAVE BEEN OBTAINED FROM PICTURES OF PROTOTYPES, THEREFORE THE STANDARD PRODUCTION MACHINES AND ACCESSORIES CAN BE DIFFERENT IN SOME COMPONENTS.**

## 1.0 GENERAL INTRODUCTION

**This manual is an integral part of the product and must be retained for the whole operating life of the machine.**

Carefully study the warnings and instructions contained in this manual. It contains important instructions regarding **FUNCTIONING, SAFE USE and MAINTENANCE.**



**KEEP THE MANUAL IN A KNOWN, EASILY ACCESSIBLE PLACE FOR ALL OPERATORS TO CONSULT IT WHENEVER IN DOUBT.**



**THE MANUFACTURER DISCLAIMS ALL RESPONSIBILITY FOR ANY DAMAGE OCCURRED WHEN THE INDICATIONS GIVEN IN THIS MANUAL ARE NOT RESPECTED: AS A MATTER OF FACT, THE NON-COMPLIANCE WITH SUCH INDICATIONS MIGHT LEAD TO EVEN SERIOUS DANGERS.**

### 1.1 Introduction

Thank you for preferring this tyre-changer. We feel sure you will not regret your decision.

This machine has been designed for use in professional workshops and in particular it stands out for its reliability and easy, safe and rapid operation: with just a small degree of maintenance and care, this tyre changer will give you many years of trouble-free service and lots of satisfaction.

## 2.0 INTENDED USE

The machines described in this manual and their different versions, are tyre-changers for car tyres projected to be used exclusively for the mounting, demounting, and inflation of any type of wheels with dimension and width values mentioned in "Technical specifications" chapter.



**DANGER: EMPLOYING THESE MACHINES OUTSIDE THE USE DESTINATION THEY HAVE BEEN DESIGNED FOR (AS INDICATED IN THIS MANUAL) IS INAPPROPRIATE AND DANGEROUS.**



**THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED BY IMPROPER, ERRONEOUS, OR UNACCEPTABLE USE.**

### 2.1 Training of personnel

**The machine may be operated only by suitably trained and authorized personnel.**

Given the complexity of the operations necessary to manage the machine and to carry out the operations safely and efficiently, the personnel must be trained in such a way that they learn all the information necessary to operate the machine as intended by the manufacturer.



**A CAREFUL READING OF THIS INSTRUCTION MANUAL FOR USE AND MAINTENANCE AND A SHORT PERIOD OF TRAINING WITH SKILLED PERSONNEL CAN BE AN ENOUGH PREVENTIVE PREPARATION.**

### 3.0 SAFETY DEVICES



**PERIODICALLY, AT LEAST MONTHLY, CHECK THE INTEGRITY AND THE FUNCTIONALITY OF THE SAFETY AND PROTECTION DEVICES ON THE MACHINE.**

All the machines are equipped with:

- **“man-operated” controls** (immediate stop of operation when the control is released) for all operating devices;
- **chuck rotation;**
- **tool translation;**
- **bead breaking roller translation;**
- **side bead breaking;**
- **lifting device;**
- **fixed protections and guards.**

The machine is fitted with a number of fixed guards intended to prevent potential crushing, cutting and compression risks.

These protections have been realized after risks evaluation and after all machine operative situations have been considered.

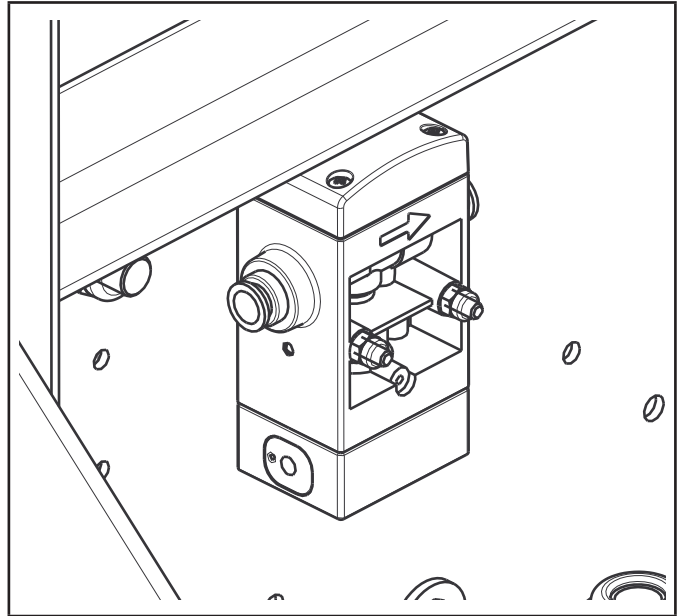
All protections, specially the rubber ones, have to be periodically checked in order to evaluate their wear state.



**PERIODICALLY CARRY OUT THE MAINTENANCE OF THE PROTECTIONS, SHELTERS AND SAFETY DEVICES IN GENERAL, AS INDICATED IN CHAPTER 13. ROUTINE MAINTENANCE.**

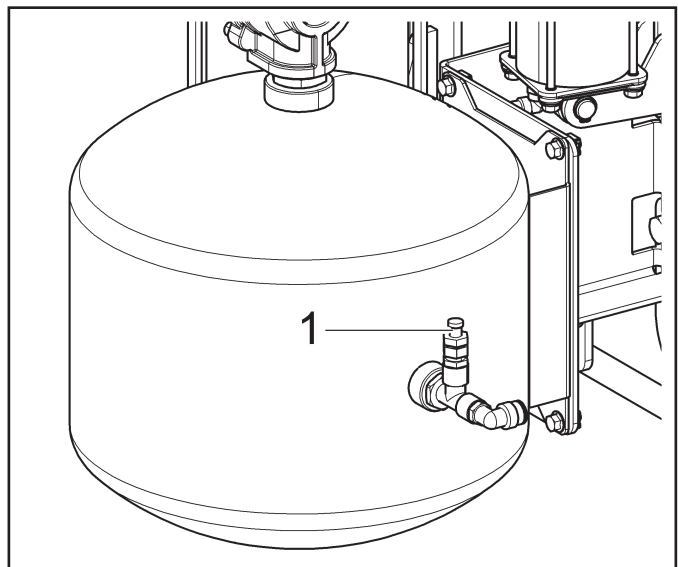
#### • **Non-adjustable pressure limiter.**

This allows inflation of tyres in reasonable safety. Inflation of tyres to over  $4,2 \pm 0,2$  bar (60 PSI) is not allowed.



#### • **12bar safety valve on tank.**

The safety valve (see the following figure ref. 1) avoids that the inflation tank is under a pressure above 12 bar.



### 3.1 Residual risks

The machine was subjected to a complete analysis of risks according to reference standard EN ISO 12100. Risks are as reduced as possible in relation with technology and product functionality.

This manual stresses possible residual risks, also highlighted in pictograms on the present manual and adhesive warning signals placed on the machine: their location is represented in “PLATE LOCATION” on page 6.

#### 4.0 GENERAL SAFETY RULES



- Any tampering with or modification to the machine not previously authorized by the manufacturer exempts the latter from all responsibility for damage caused by or derived from said actions.
- Removing of or tampering with the safety devices or with the warning signals placed on the machine leads to serious dangers and represents a transgression of European safety rules.
- Use of the machine is only permitted in places free from **explosion** or **fire** hazard and in **dry places under cover**.
- Original spare parts and accessories should be used.



**THE MANUFACTURER DENIES ANY RESPONSIBILITY IN CASE OF DAMAGES CAUSED BY UNAUTHORIZED MODIFICATIONS OR BY THE USE OF NON ORIGINAL COMPONENTS OR EQUIPMENT.**

- The installation must be performed by qualified and authorized personnel in full compliance with the instructions given below.
- Ensure that there are no dangerous situations during the machine operating manoeuvres. Immediately stop the machine if it miss-functions and contact the assistance service of an authorized dealer.
- In emergency situations and before carrying out any maintenance or repairs, disconnect all supplies to the machine by using the main switch.
- The machine power supply system must be equipped with an appropriate earthing, to which the yellow-green machine protection wire must be connected.
- Ensure that the work area around the machine is free of potentially dangerous objects and that there is no oil since this could damage the tyre. Oil on the floor is also a potential danger for the operator.



**OPERATORS MUST WEAR SUITABLE WORK CLOTHES, PROTECTIVE GLASSES AND GLOVES, AGAINST THE DANGER FROM THE SPRAYING OF DANGEROUS DUST, AND POSSIBLY LOWER BACK SUPPORTS FOR THE LIFTING OF HEAVY PARTS. DANGLING OBJECTS LIKE BRACELETS MUST NOT BE WORN, AND LONG HAIR MUST BE TIED UP. FOOTWEAR SHOULD BE ADEQUATE FOR THE TYPE OF OPERATIONS TO BE CARRIED OUT.**

- The machine handles and operating grips must be kept clean and free from oil.
- The workshop must be kept clean, dry and not exposed to atmospheric agents. Make sure that the working premises are properly lit. The machine can be operated by a single operator. Unauthorized personnel must remain outside the working area, as shown in **Fig. 4**. Avoid any hazardous situations. Do not use air-operated or electrical equipment when the shop is damp or the floor slippery and do not expose such tools to atmospheric agents.
- When operating and servicing this machine, carefully follow all applicable safety and accident-prevention precautions. The machine must not be operated by untrained personnel.
- During inflation do not lean on the tyre or stand on it; when beading in the tyre, keep hands away from tyre and rim edge.
- Never activate the inflation device (only on models with tubeless inflation) if the tyre has not been correctly clamped.
- During inflation always stay to the side of the machine and never in front of it.



**IN CASE OF A CHANCE SUPPLY FAILURE (WHETHER ELECTRICITY OR COMPRESSED AIR), MOVE THE PEDALS TO THE NEUTRAL POSITION.**



## 5.0 PACKING AND MOBILIZATION FOR TRANSPORT



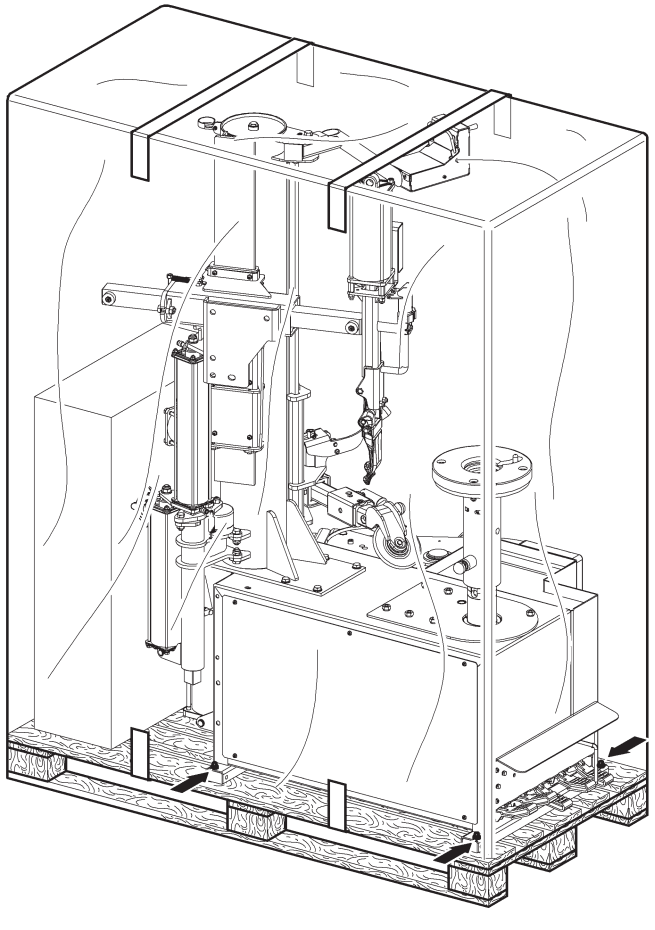
**HAVE THE MACHINE HANDLED BY SKILLED PERSONNEL ONLY.**

**THE LIFTING EQUIPMENT MUST WITHSTAND A MINIMUM RATED LOAD EQUAL TO THE WEIGHT OF THE PACKED MACHINE (SEE PARAGRAPH "TECHNICAL SPECIFICATIONS").**

The packed machine is partially assembled in its main components.

Movement must be by pallet-lift or fork-lift trolley. The fork lifting points are indicated on the packing.

**Fig. 2**



## 6.0 UNPACKING



**DURING UNPACKING, ALWAYS WEAR GLOVES TO PREVENT ANY INJURY CAUSED BY CONTACT WITH PACKAGING MATERIAL (NAILS, ETC.).**

The cardboard box is supported with plastic strapping. Cut the strapping with suitable scissors. Use a small knife to cut along the lateral axis of the box and open it like a fan.

It is also possible to unnailed the cardboard box from the pallet it is fixed to. After removing the packing, and in the case of the machine packed fully assembled, check that the machine is complete and that there is no visible damage.

If the machine is packed dismantled into its principal parts, after removing the packing, lay the individual parts on the floor and check them for any missing components, damage, or irregularity.

If in doubt **do not use the machine** and refer to professionally qualified personnel (to the seller).

The packing (plastic bags, expanded polystyrene, nails, bolts, timber, etc.) should not be left within reach of children since it is potentially dangerous. These materials should be deposited in the relevant collection points if they are pollutants or non biodegradable.



**THE BOX CONTAINING THE FIXTURES IS CONTAINED IN THE WRAPPING. DO NOT THROW IT AWAY WITH THE PACKING.**

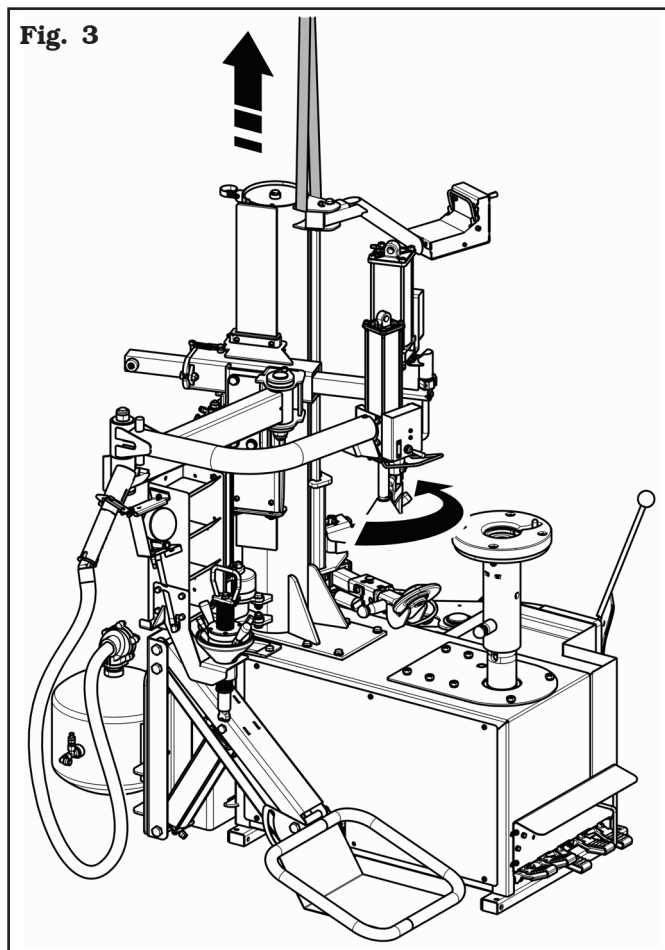
## 7.0 MOBILIZATION



**THE LIFTING EQUIPMENT MUST WITHSTAND A MINIMUM RATED LOAD EQUAL TO THE WEIGHT OF THE MACHINE (SEE PARAGRAPH TECHNICAL SPECIFICATIONS). DO NOT ALLOW THE LIFTED MACHINE TO SWING.**

If the machine has to be moved from its normal work post, the movement must be conducted following the instructions listed below.

- Protect the exposed corners with suitable material (Pluribol/cardboard).
- Do not use metallic cables for lifting.
- Disconnect all machine power supply sources.
- Lift and transport with suitable device with adequate dimensions.
- Sling with a 100 cm long belt, with a capacity load greater than 1000 kg as shown in **Fig. 3**.



## 8.0 WORKING ENVIRONMENT CONDITIONS

The machine must be operated under proper conditions as follows:

- temperature: 0° + 55° C
- relative humidity: 30 - 95% (dew-free)
- atmospheric pressure: 860 - 1060 hPa (mbar).

The use of the machine in ambient conditions other than those specified above is only allowed after prior agreement with and approval of the manufacturer.

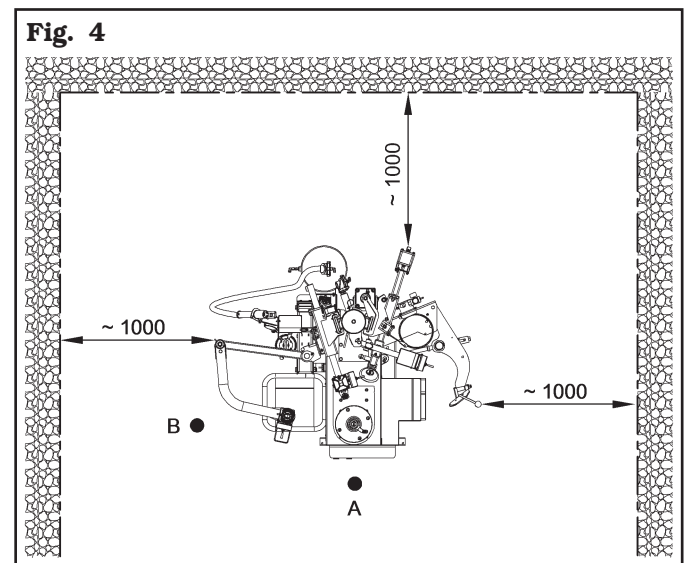
### 8.1 Working position

In **Figure 4** it is possible to identify working positions **A** and **B**.

Position **A** is the main position for wheel fitting and removal on the chuck, while position **B** is ideal to follow tyre inflation operations.

Working in these positions allows better precision and speed during operating phases as well as greater safety for the operator.

### 8.2 Installation space



**USE THE MACHINE IN A DRY AND ADEQUATELY LIT PLACE, POSSIBLY INDOORS OR ANYWAY IN A ROOFED AREA, THIS PLACE MUST BE IN COMPLIANCE WITH APPLICABLE SAFETY REGULATIONS.**



The location of the machine requires a usable space as indicated in **Fig. 4**. The positioning of the machine must be according to the distances shown. From the control position the operator is able to observe all the machine and surrounding area. He must prevent unauthorized personnel or objects that could be dangerous from entering the area.

The machine must be secured to a flat floor surface, preferably of cement or tiled. Avoid yielding or irregular surfaces.

The base floor must be able to support the loads transmitted during operation.

This surface must have a capacity load of at least 500 kg/m<sup>2</sup>.

The depth of the solid floor must be sufficient to guarantee that the anchoring bolts hold.

### 8.3 Lighting

The machine does not require its own lighting for normal working operations. However, it must be used in an adequately lit environment.

In case of poor lighting, use lamps having total power 800/1200 Watt as envisaged by UNI 10380.

## 9.0 MACHINE ASSEMBLY

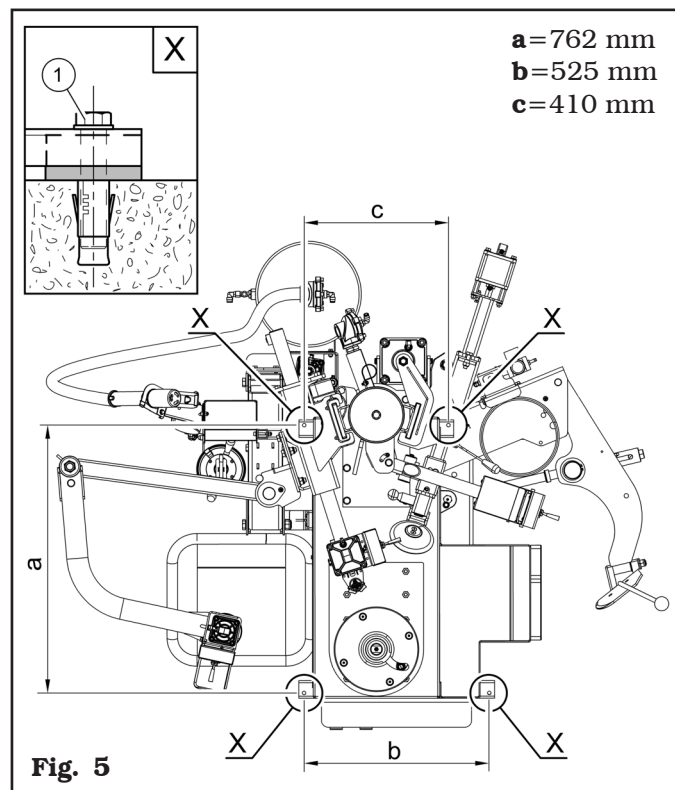


**EACH MECHANICAL INTERVENTION MUST BE CARRIED OUT BY PROFESSIONALLY QUALIFIED STAFF.**

After having freed the various components from the packing check that they are complete, and that there are no anomalies, then comply with the following instructions for the assembly of the components making use of the attached series of illustrations.

### 9.1 Anchoring system

The packed machine is fixed to the support pallet through the holes prearranged on the frame. Such holes can be used also to secure the machine to the ground, through floor anchor small blocks (excluded from supply). Before carrying out the definitive fixing, check that all the anchor points are laid down flat and correctly in contact with the fixing surface itself. If not so, insert shimming profiles between the machine and the fixing lower surface, as indicated in **Fig. 5**.

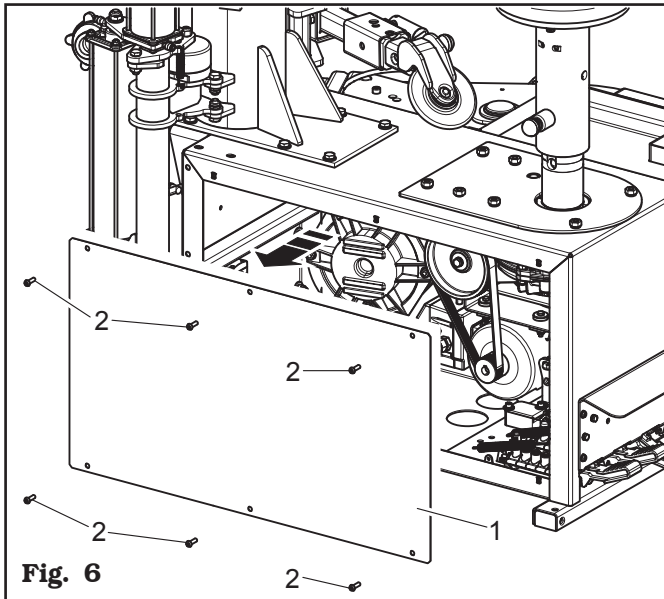


- Execute 4 holes with 8 mm diameter on the floor by the holes on the bottom floor;
- insert the small blocks (excluded from supply) into the holes;
- secure the machine to the ground with 4 M8x80 mm bolts (excluded from supply) (**Fig. 5 ref. 1**) (or with 4 8x80 mm stud bolts (excluded from supply)). Tighten the bolts with an approximate tightening torque of 70 Nm.

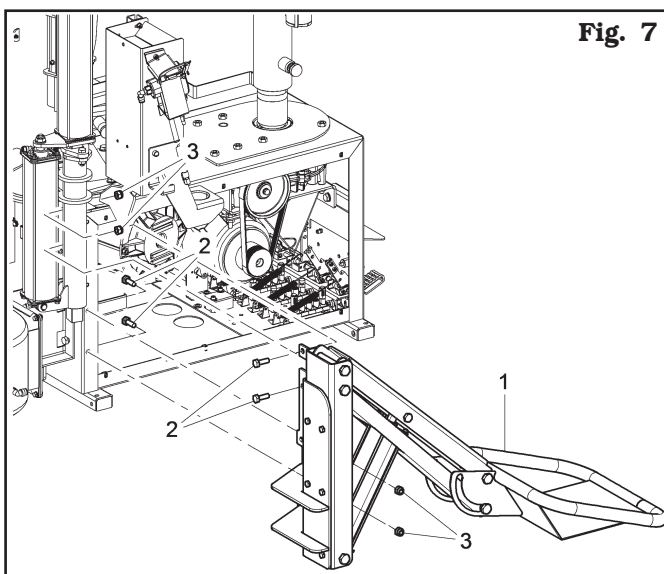
## 9.2 Assembly procedures

### Lifting device installation

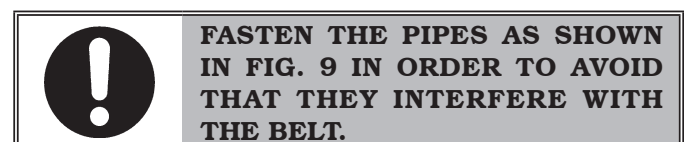
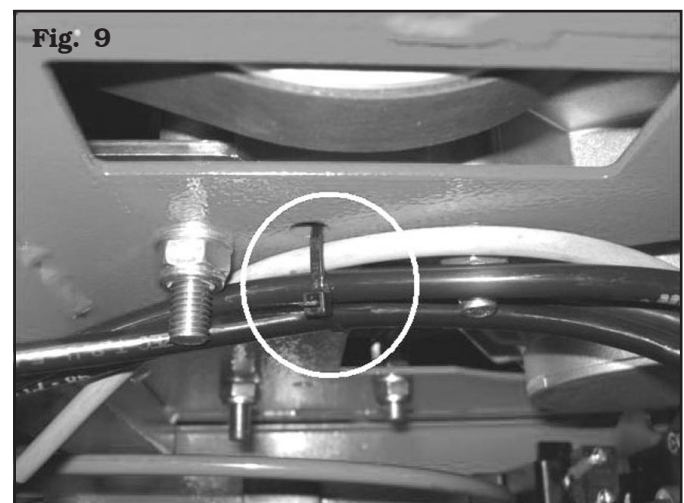
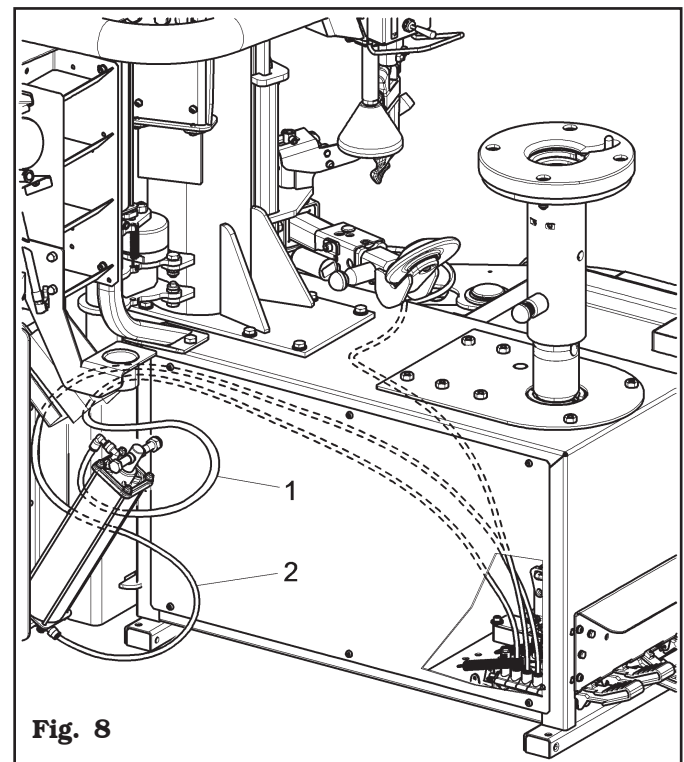
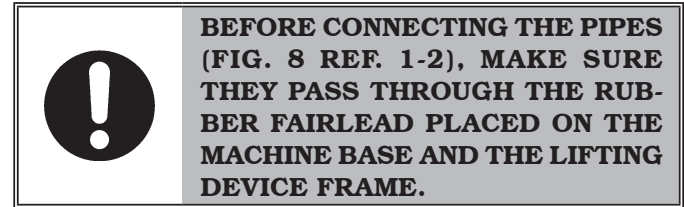
1. After placing the tyre-changer in the working place and after making sure it is insulated from its power supply sources, proceed with the fastening of the lifting device.
2. Remove the lateral carter (**Fig. 6 ref. 1**) by removing the relevant bolts (**Fig. 6 ref. 2**).



3. Place the lifting device that is assembled next to the tyre-changer on which it will be installed.
4. Prepare and arrange near the bolts and the accessories, which are necessary for fixing the lifting device to the tyre-changer.
5. Secure the lifting device (**Fig. 7 ref. 1**) to the tyre-changer using bolts (**Fig. 7 ref. 2**) and nuts (**Fig. 7 ref. 3**), on issue.



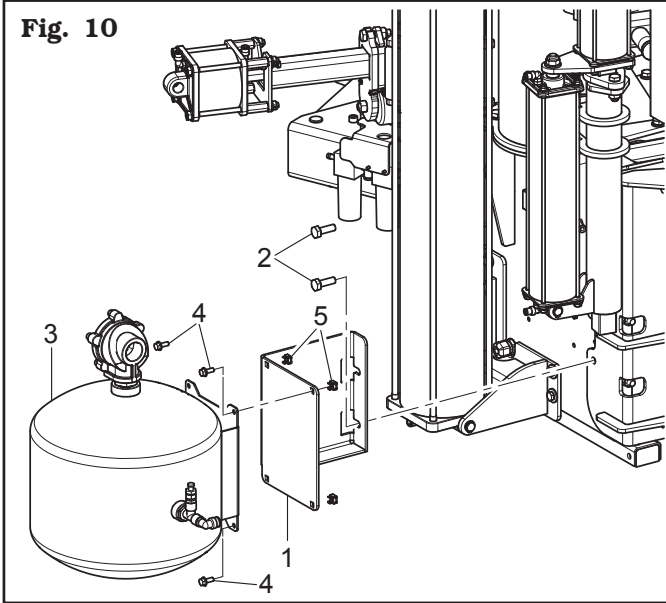
6. Connect the pneumatic pipes (**Fig. 8 ref. 1-2**) coming from the lifting device pedalboard to the lifting cylinder, as shown in **Fig. 8**.



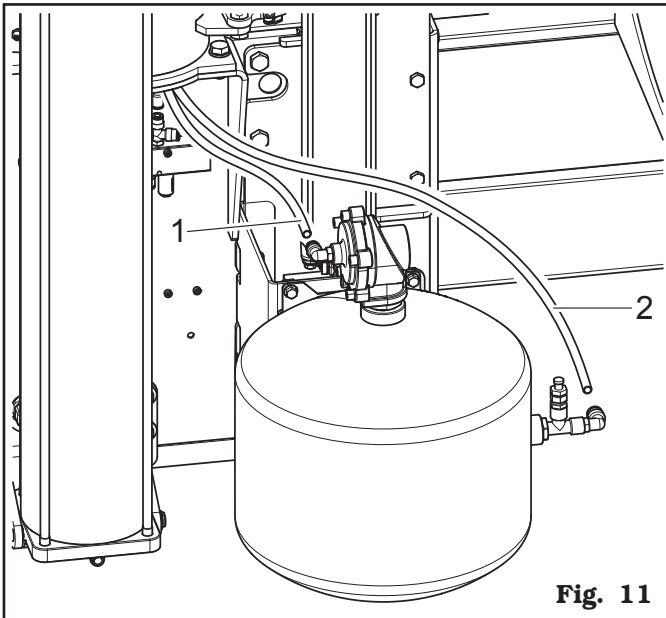
### Tubeless inflation tank installation

7. Secure the bracket (**Fig. 10 ref. 1**) using the two bolts (**Fig. 10 ref. 2**).  
Secure the tank (**Fig. 10 ref. 3**) to the bracket (**Fig. 10 ref. 1**) using the 4 bolts (**Fig. 10 ref. 4**) and the 4 crated nuts (**Fig. 10 ref. 5**) on issue.

Fig. 10

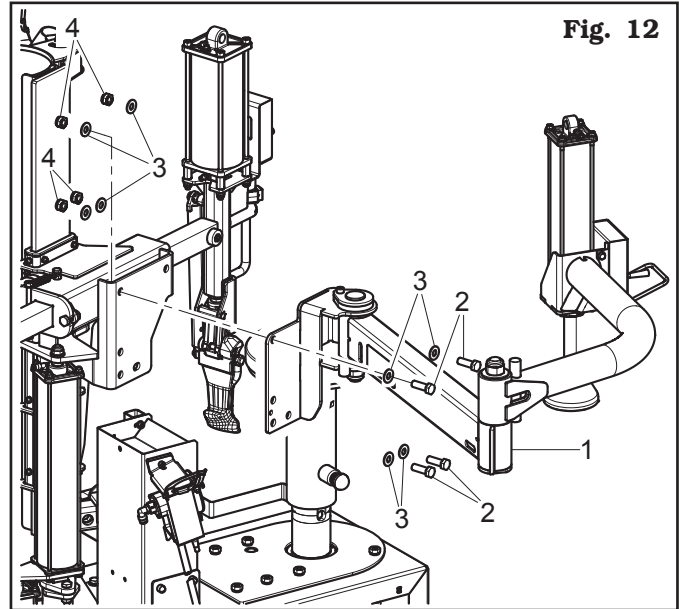


8. Connect the black pipe (**Fig. 11 ref. 1**) and the blue pipe (**Fig. 11 ref. 2**) on the provided quick couplings as shown in **Fig. 11**



### Rotating bead pressing device installation

9. Fit the Bead press arm (**Fig. 12 ref. 1**) with the bolts (**Fig. 12 ref. 2**), the washers (**Fig. 12 ref. 3**) and the supplied nuts (**Fig. 12 ref. 4**).

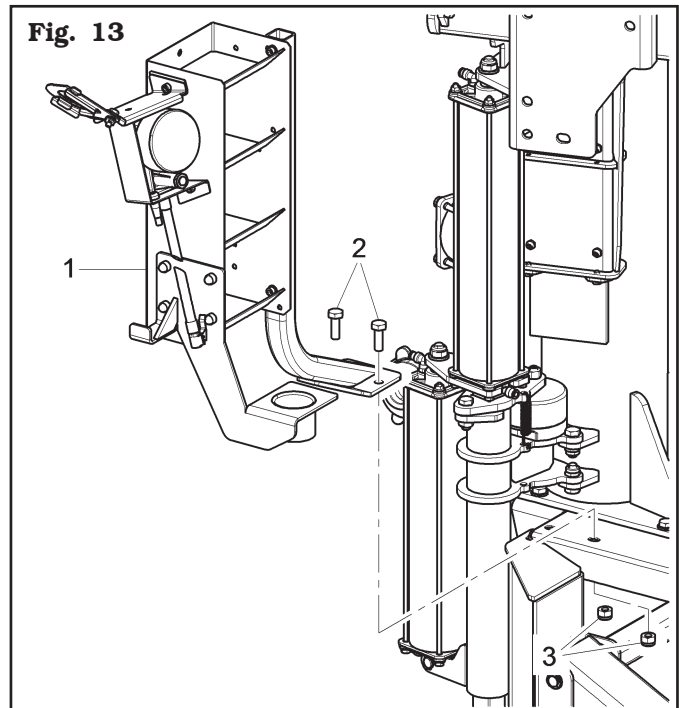


10. Connect the main pneumatic supply to the Bead press arm.

### Installation of tool box, pneumatic connection and bead breaker vane

11. Fit the tool box (**Fig. 13 ref. 1**) using the bolts (**Fig. 13 ref. 2**) and the nuts (**Fig. 13 ref. 3**).

Fig. 13

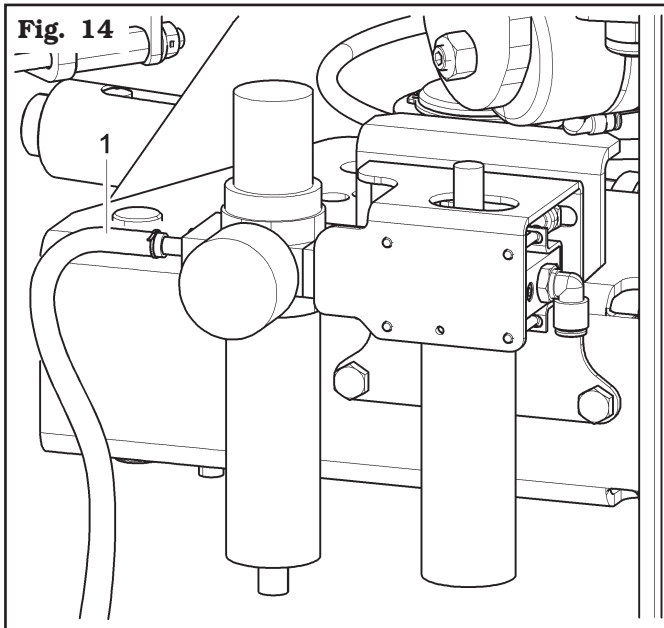


12. Connect the main pneumatic supply (**Fig. 14 ref. 1**) by using the fitting placed on machine filter unit.

The pressurized pipe coming from the mains must have a section of 10x19 (see **Fig. 14**).



**ANY PNEUMATIC INTERVENTION  
MUST BE CARRIED OUT BY PRO-  
FESSIONALLY QUALIFIED STAFF.**



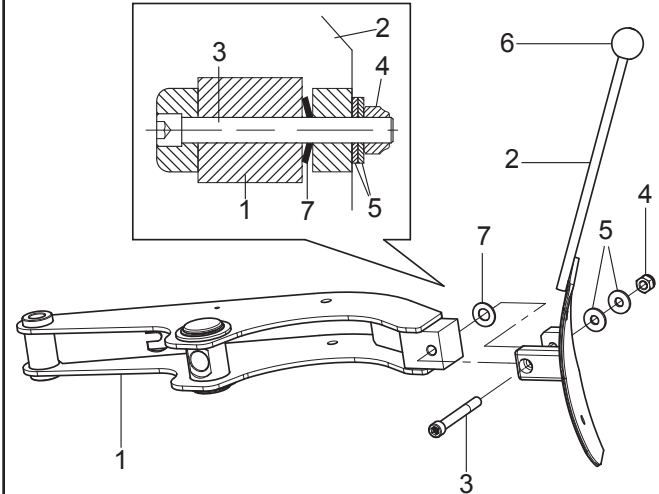
13. Reassemble the lateral carter (**Fig. 6 ref. 1**) previously removed.



**IF OTHER PNEUMATIC CONNE-  
CTIONS SHOULD BE EXECUTED,  
REFER TO THE PNEUMATIC DIA-  
GRAMS ILLUSTRATED IN CHAPT.  
19.**

14. Fix the vane (**Fig. 15 ref. 2**) onto the bead-breaking arm using the accessories already in place on the above-mentioned tool. The Belleville washer must be positioned inside the tool tongue (see **Fig. 15**).

**Fig. 15**



**KEY**

- 1 - Bead breaking arm
- 2 - Vane
- 3 - Screw for bead-breaker arm
- 4 - M12 self-lock nut
- 5 - Flat washer
- 6 - Ball knob D. 40
- 7 - Belleville washer




**ONCE THE ASSEMBLY OPERA-  
TIONS HAVE BEEN ENDED, CHECK  
ALL MACHINE FUNCTIONS.**




**CARRY OUT A DAILY CHECK OF  
THE MAINTAINED ACTION CON-  
TROLS CORRECT FUNCTIONING,  
BEFORE STARTING MACHINE  
OPERATION.**

### 10.0 ELECTRICAL CONNECTIONS



**EVEN THE TINIEST PROCEDURE OF AN ELECTRICAL NATURE MUST BE CARRIED OUT BY PROFESSIONALLY QUALIFIED STAFF.**




**BEFORE CONNECTING THE MACHINE MAKE SURE THAT:**

- **THE MAIN POWER RATING CORRESPONDS TO THE MACHINE RATING AS SHOWN ON THE MACHINE PLATE;**
- **ALL MAIN POWER COMPONENTS ARE IN GOOD CONDITION;**
- **THE ELECTRICAL SYSTEM IS PROPERLY GROUNDED (GROUND WIRE MUST BE THE SAME CROSS-SECTION AREA AS THE LARGEST POWER SUPPLY CABLES OR GREATER);**
- **MAKE SURE THAT THE ELECTRICAL SYSTEM FEATURES A CUTOUT WITH DIFFERENTIAL PROTECTION SET AT 30 MA.**


As envisaged by the regulations in force, the machine is not equipped with a master circuit breaker, but simply has a plug-socket connection to the electrical mains.

The machine is supplied with a cable. A plug corresponding to the following requirements must be connected to the cable:


For any other type of power supply, ask the manufacturer at the time of purchase: a machine functioning under the required voltage conditions will be prepared.



**FIT A TYPE-APPROVED PLUG TO THE MACHINE CABLE (THE GROUND WIRE IS YELLOW/GREEN AND MUST NEVER BE CONNECTED TO ONE OF THE PHASE LEADS).**



**MAKE SURE THAT THE ELECTRICAL SYSTEM IS COMPATIBLE WITH THE RATED POWER ABSORPTION SPECIFIED IN THIS MANUAL AND APT TO ENSURE THAT VOLTAGE DROP UNDER FULL LOAD WILL NOT EXCEED 4% OF RATED VOLTAGE (10% UPON START-UP).**



**IN CASE OF A CHANCE SUPPLY FAILURE, AND/OR BEFORE ANY POWER SUPPLY CONNECTIONS, MOVE THE PEDALS TO THE NEUTRAL POSITION.**

Models	Conformity standard	Voltage	Amperage	Poles	Minimum IP rating
Inverter	IEC 309	220/240V	32A	2 Poles + Ground	IP 44
Version 110V 60Hz 1-phase with CSA supply cable	UL/CSA	110V	32A	2 Poles + Ground	IP 44

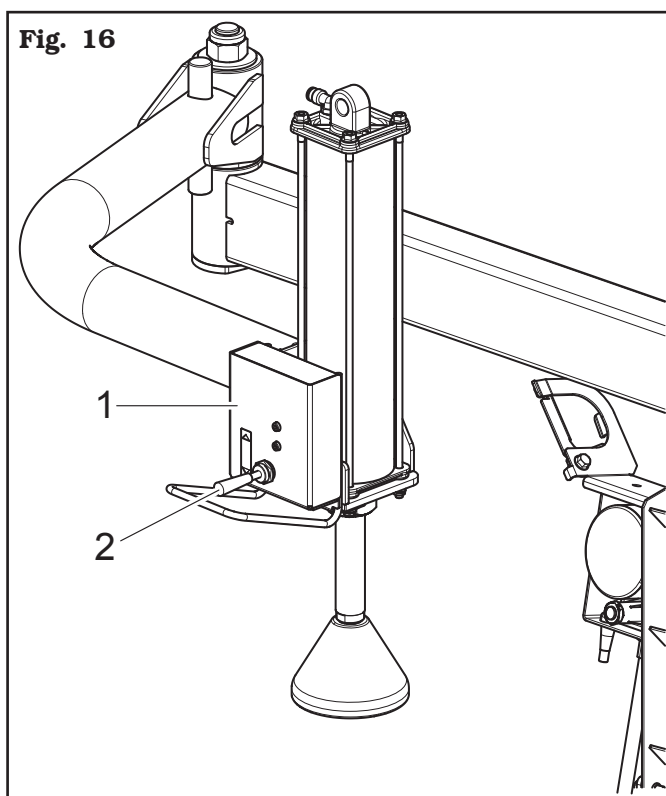


## 11.0 CONTROLS

### 11.1 Rotating bead pressing device control unit

It is made up of an handle control (**Fig. 16 ref. 1**), positioned on the device. This handle control allows to operate the vertical translation of the pressor roller. Lift the lever (**Fig. 16 ref. 2**) to operate the upwards translation, and lower the lever (**Fig. 16 ref. 2**) to perform the downwards translation.

The device positioning next to the tyre is a completely manual operation.



### 11.2 Tool control unit

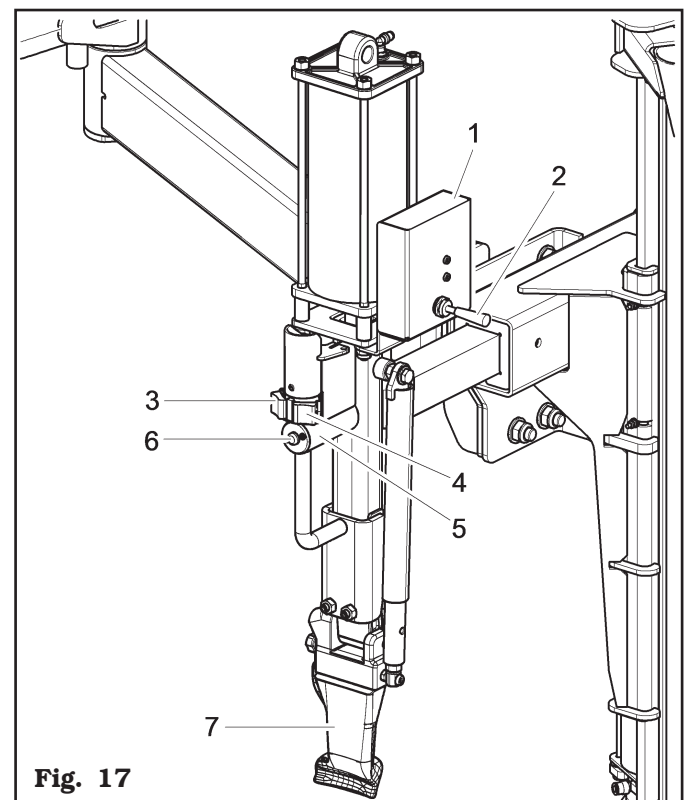
It is made up of:

- a handle control (**Fig. 17 ref. 1**), placed on the tool arm. Through this handle control you can control the vertical translation for the tool introduction and bead coupling. Lift the lever (**Fig. 17 ref. 2**) to operate the upwards translation, and lower the lever (**Fig. 17 ref. 2**) to perform the downwards translation;
- a control with two push buttons: press the button (**Fig. 17 ref. 3**) to unlock the horizontal translation and to move upwards the tool arm, by pressing the push button (**Fig. 17 ref. 4**) you can unlock the horizontal translation and move downwards the tool arm;



**CONTROLS (FIG. 17 REF. 3-4) (IN ORDER TO PREVENT THE WRONG USE OF THE TYRE CHANGER) ARE OPERATIVE ONLY IF THE TOOL (FIG. 17 REF. 7) IS IN COMPLETELY LIFTED POSITION. OPERATE LEVER (FIG. 17 REF. 2), BY SHIFTING IT UPWARDS, IN ORDER TO MOVE THE TOOL TO SUCH POSITION.**

- a handle control (**Fig. 17 ref. 5**), which through a pulling and pushing movement, in combination with the release button (**Fig. 17 ref. 6**), allows the adjustment of the tool on the wheel diameter (only horizontally).



**Fig. 17**

### 11.3 Bead-breaking arm control unit

It is made up of an handle control (**Fig. 18 ref. 1**), positioned on the device. This handle control allows to operate the vertical translation of the bead breaker arm. Lift the lever (**Fig. 18 ref. 2**) to operate the upwards translation, and lower the lever (**Fig. 18 ref. 2**) to perform the downwards translation.

Pull the rear lever (**Fig. 18 ref. 3**) to operate the bead-ing roller progress. This is a maintained action-type control. When the lever is released the bead roller returns to rest position.

The bead breaking arm is equipped with an unlock-ing push button (**Fig. 18 ref. 4**) that must be pressed before gripping the handle (**Fig. 18 ref. 5**) to place the bead breaking roller on the rim edge. Releasing the push button, the roller locks itself into the set position.



**THE PUSH BUTTON (FIG. 18 REF. 4) MUST BE PRESSED BEFORE ACTIVATING THE HANDLE (FIG. 18 REF. 5) OTHERWISE THE HANDLE DOES NOT ALLOW ANY MOVEMENT.**

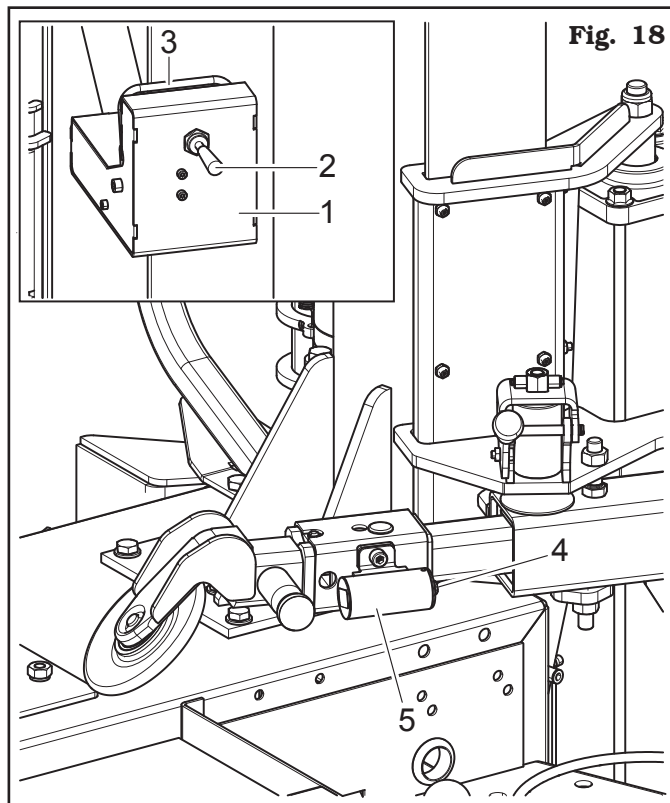


Fig. 18

### 11.4 Pedalboard

The pedal (**Fig. 19 ref. 1**), with maintained action, operates the handling of the wheel lifting device.

Pulling the pedal downwards the lifting device starts its rise while, on the contrary, pulling the pedal upwards the lifting device starts descending.

Releasing the pedal at any time will provoke the lifting devices stop.

The pedal (**Fig. 19 ref. 2**) operates the vertical translation of the tool arm (disengagement).

Pulling the pedal downwards the tool arm in working position starts its descent. Press it again to obtain the tool arm rise in disengagement position.

The pedal (**Fig. 19 ref. 3**) has two maintained action operative positions. When it is pushed downwards it controls chuck motor clockwise rotary movement. When the pedal is lifted upwards it operates the opposite movement.

The pedal (**Fig. 19 ref. 4**) has a maintained action operative position. When pressed down, it operates the bead breaker arm closing. Releasing the pedal, the arm returns to rest position.

The inflation pedal (**Fig. 19 ref. 5**) has a different function according to the version present on the machine.

#### Version with inflation with pressure gauge

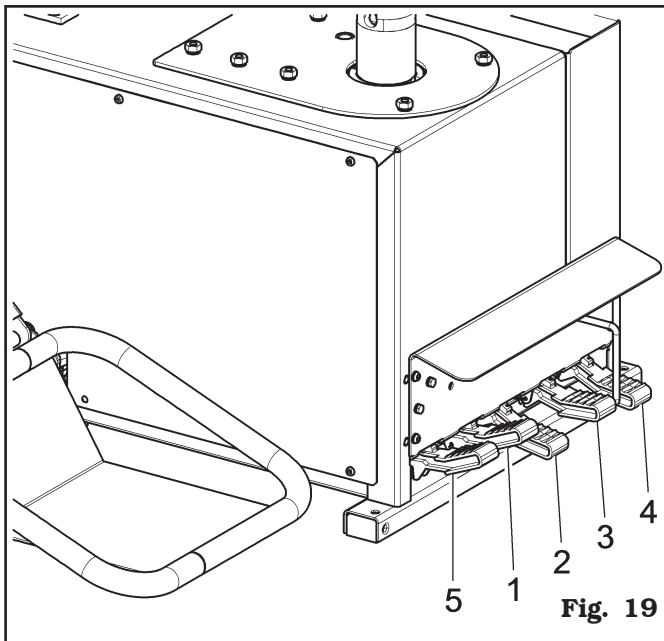
The inflation pedal in this version has only one function. A continuous pressure supplies air at a controlled pressure (max.  $4.2 \pm 0,2$  bar 60 PSI).

#### Version with tubeless inflation

The inflation pedal has two functions. The supply of air at max. controlled pressure as in the previous version, and a second function of a jet of air from the inflation nozzle to assist the beading in of the tyre.



**DO NOT CHANGE THE SET OPERATING PRESSURE VALUE BY MEANS OF THE MAXIMUM PRESSURE VALVES. THE MANUFACTURER SHALL NOT BE RESPONSIBLE FOR INJURY OR DAMAGE ARISING FROM UNAUTHORISED CHANGES.**



## 12.0 USING THE MACHINE

### 12.1 Precaution measures during tyre re- moval and fitting



Before fitting a tyre, observe the following safety rules:

- always use clean, dry and in good condition rims and tyres; in particular, if necessary, clean the rims after all the old balancing weights (as well as the adhesive weights on the inner side) have been removed, and make sure that:
  - neither the bead nor the tread of the tyre are damaged;
  - the rim does not produce dents and/or deformation (especially for alloy rims, dents can cause internal micro-fractures, that pass unobserved at visual inspection, and can compromise the solidity of the rim and constitute danger even during inflation);
- adequately lubricate the contact surface of rim and the tyre beads, using specific tyre lubricants only;
- replace the inner pipe valve with a new valve, if the tyre pipe has a metal valve, replace the grommet;
- always make sure that tyre and rim sizes are correct for their coupling; on the contrary, never fit a tyre unless you are sure it is of the right size (the rated size of rim and tyre is usually printed directly on them);
- do not use compressed air or water jets to clean the wheels on the machine.



### 12.2 Preliminary operations - Preparing the wheel

- Remove the wheel balancing weights from both sides of the wheel.



**REMOVE THE VALVE STEM AND ALLOW THE TYRE TO COMPLETELY DEFLATE.**

- Establish from which side the tyre should be demounted, checking the position of the groove.
- Find the rim locking point.
- Try to establish the special types of wheels, such as "TD" and "AH", in order to improve locking, bead breaking, assembly and disassembly performances.



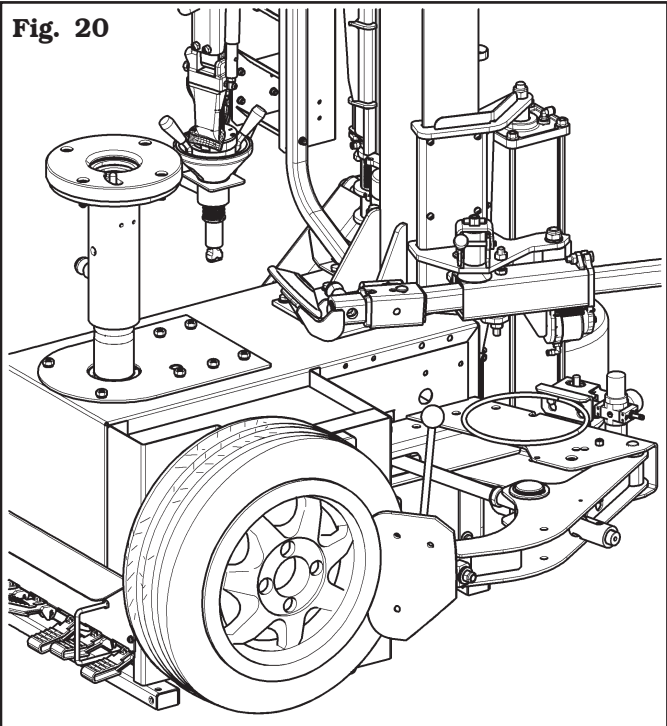
**WHEN HANDLING WHEELS WEIGHING MORE THAN 10 KG AND/OR WITH A FREQUENCY OF MORE THAN 20/30 WHEELS PER HOUR, THE LIFTING DEVICE SHOULD BE USED.**

### 12.3 Bead breaking with side vane



After preparing the wheel as described in the previous point, follow the instructions given below to carry out the bead breaking procedure:

- Position the wheel as indicated in **Fig. 20** and move the bead breaker tool toward the edge of the rim.



- Press the pedal (**Fig. 19 ref. 4**) and activate the bead breaker tool to remove the bead. If the bead does not detach the first time, repeat the operation, on different points of the wheel, until it has come away completely.
- Reverse the position of the wheel and repeat the operation on the other side.
- Lubricate the tyre carefully along the entire circumference of the bead on both sides.



**FAILURE TO LUBRICATE MIGHT CAUSE FRICTION BETWEEN THE MOUNTING TOOL AND THE TYRE, AND WOULD CAUSE DAMAGE TO THE TYRE AND/OR THE BEAD.**

### **12.4 Use of the lifting device**

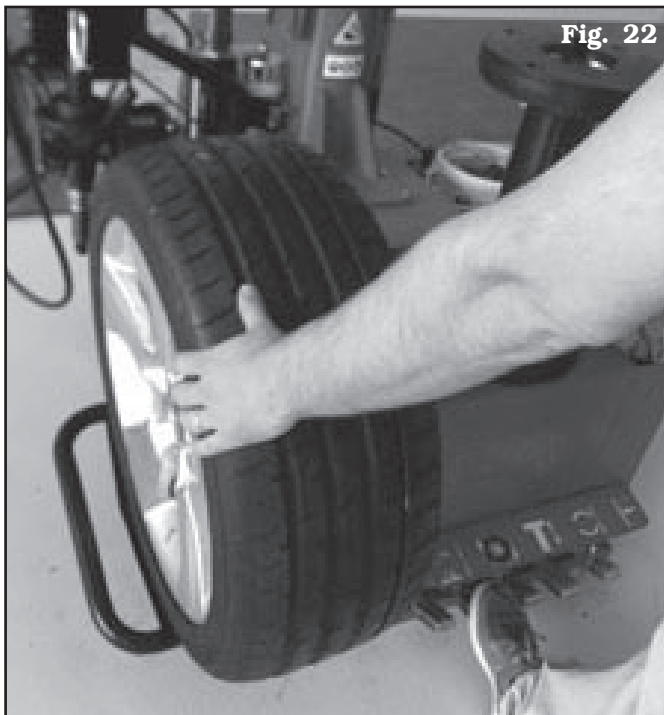


**CARRY OUT A DAILY CHECK OF THE MAINTAINED ACTION CONTROLS CORRECT FUNCTIONING, BEFORE STARTING MACHINE OPERATION.**

1. After placing the wheel on the lifting plate (see **Fig. 21**), press the lifting device drive pedal (**Fig. 19 ref. 1**) downwards and bring the wheel to a level where it can be shifted to the chuck by hand (see **Fig. 22**).

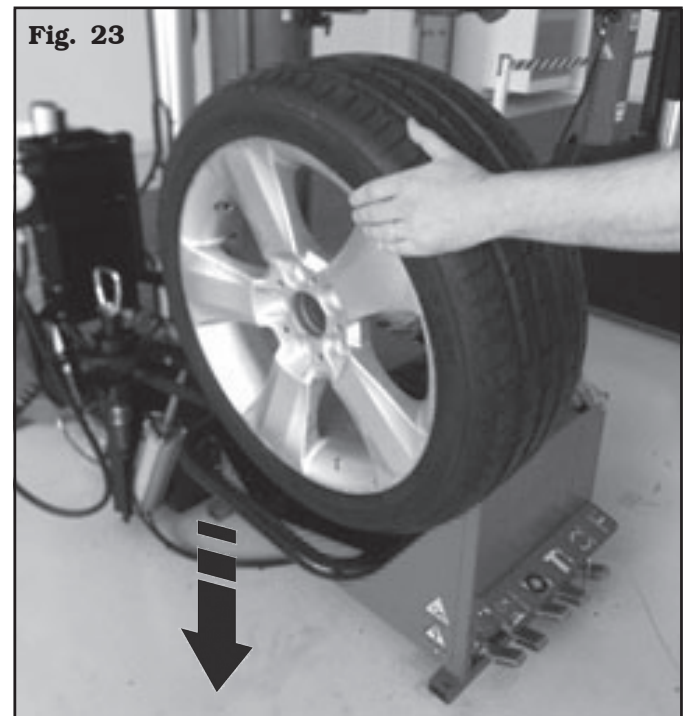


**Fig. 21**



**Fig. 22**

2. Place the wheel on the chuck.
3. Lift the pedal (**Fig. 19 ref. 1**) upwards in order to lower the lifting plate.
4. Perform all the tyre fitting and removal operations (described here as follows) and unlock the wheel from the chuck.
5. Lift the lifting plate by pressing again the pedal downwards (**Fig. 19 ref. 1**).
6. Place the wheel on the lifting plate (see **Fig. 22**).
7. Move again the pedal upwards to make the plate lower and bring back the wheel to the ground keeping a hand on it (see **Fig. 23**).



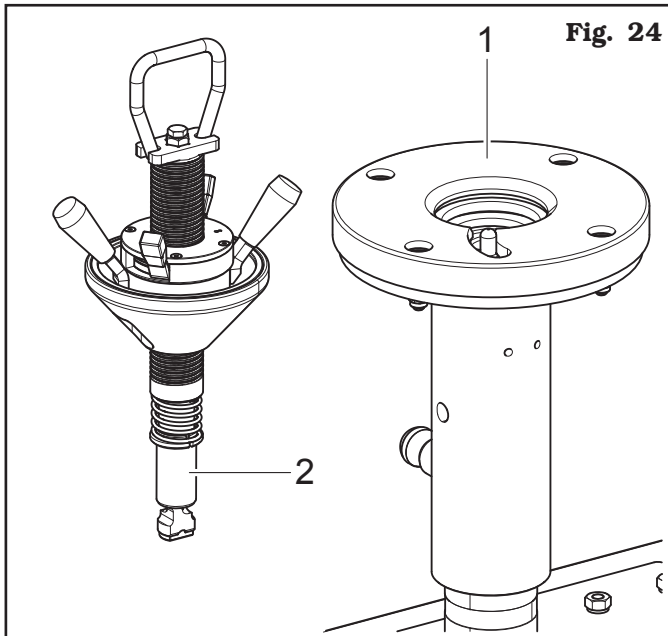
**Fig. 23**



**KEEP A HAND ON THE WHEEL THROUGHOUT LIFTING DEVICE RISING AND DESCENT PHASES, TO PREVENT THE WHEEL FROM FALLING FROM THE LIFTER BECAUSE OF IMBALANCES.**

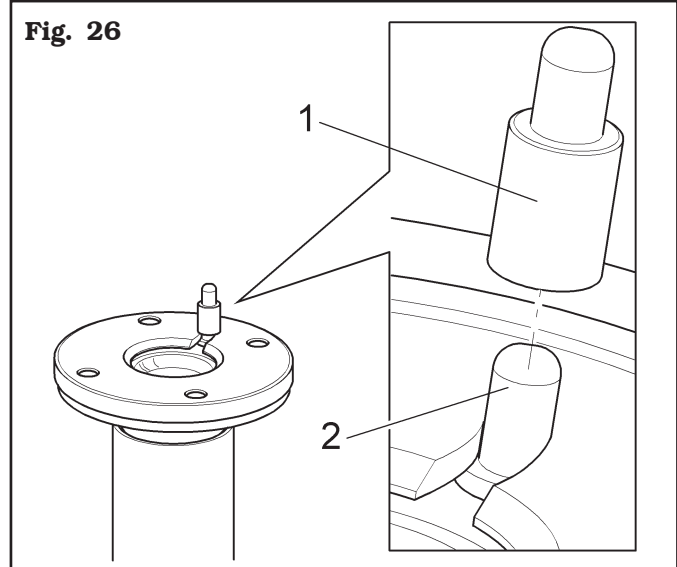
### 12.5 Wheel clamping

All wheels must be locked on the rubber plate (**Fig. 24 ref. 1**) through the central hole using the proper locking device (**Fig. 24 ref. 2**).



- If the wheel hub is higher than the dragger (**Fig. 26 ref. 2**), use the extension (**Fig. 26 ref. 1**) supplied on issue.

Fig. 26



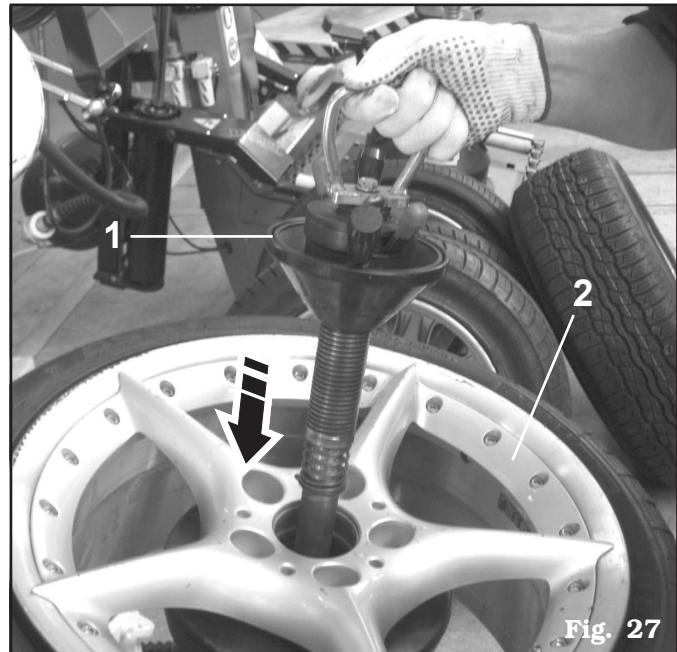
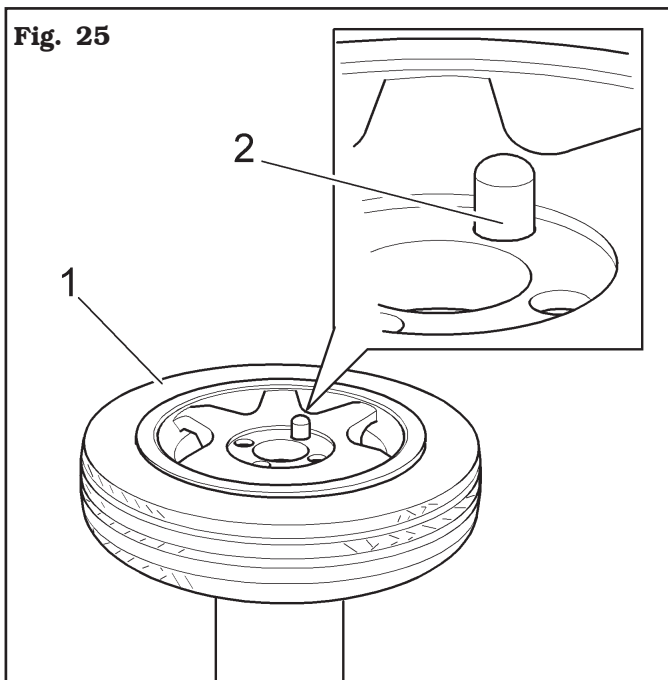
- Insert the shaft complete with cone (**Fig. 27 ref. 1**) on the rim (**Fig. 27 ref. 2**).



IN CASE OF USE OF RIMS WITHOUT CENTRAL HOLE, IT'S NECESSARY TO USE THE PROPER FIXTURE (AVAILABLE ON DEMAND).

To lock a rim proceed as follows:

- Dowel the wheel (**Fig. 25 ref. 1**) on the locking platform and check that the dragging pin (**Fig. 25 ref. 2**) enter in a hole placed on the rim hub.



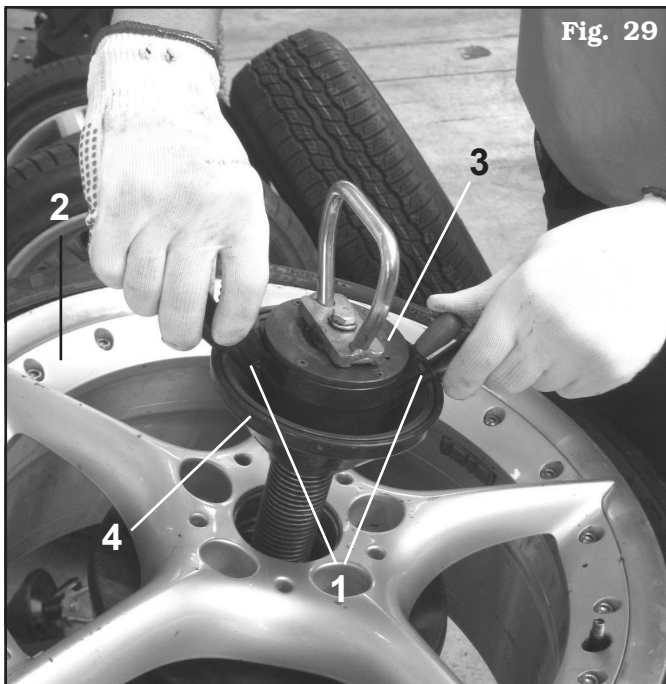


4. Through the proper handle (**Fig. 28 ref. 1**), push down (**Fig. 28 ref. 2**), turn by 90° (**Fig. 28 ref. 3**) and lift the shaft (**Fig. 28 ref. 4**) to hook it into the hole.



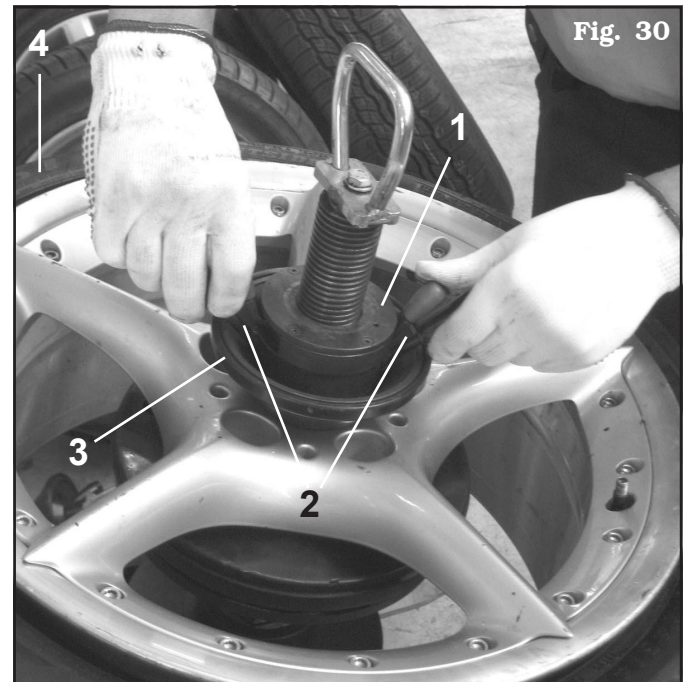
**Fig. 28**

5. Through the internal little levers (**Fig. 29 ref. 1**), loose the ring nut and approach the ring nut (**Fig. 29 ref. 3**) and cone (**Fig. 29 ref. 4**) to the rim (**Fig. 29 ref. 2**).



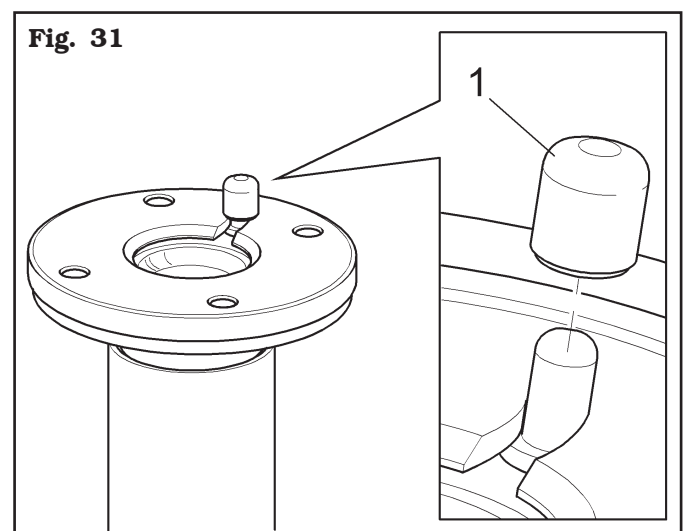
**Fig. 29**

6. Then, turn the ring nut (**Fig. 30 ref. 1**) through the external levers (**Fig. 30 ref. 2**) up to the cone complete clamping (**Fig. 30 ref. 3**) on the wheel (**Fig. 30 ref. 4**).



**Fig. 30**

7. At the end of the operations, loosen the device releasing first the cone with the external levers and then moving the ring nut and the cone away from the rim with the small levers.
8. Lower the shaft to release it from its seat, turn it of 90° on counter-clockwise and extract it from the hole through the proper handle.
9. For wheels with alloy rims, use the proper plastic guard (**Fig. 31 ref. 1**).



**Fig. 31**

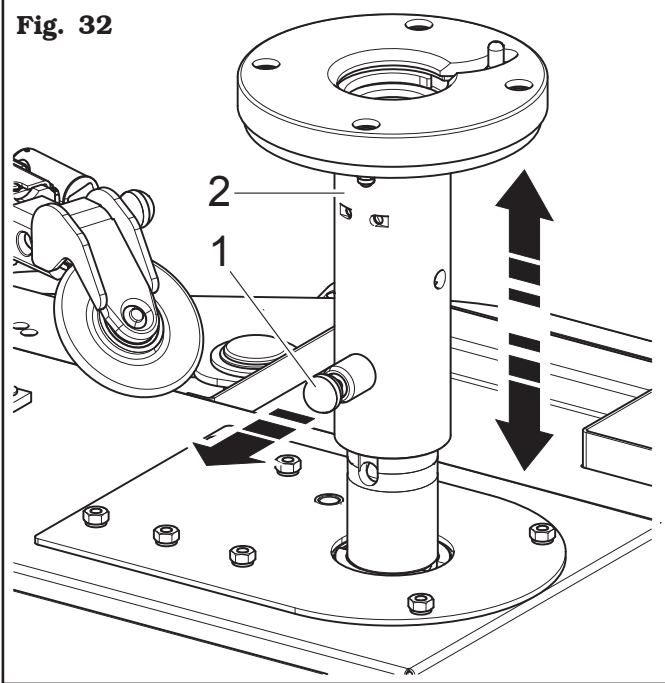


**NEVER LEAVE THE WHEEL FITTED ON THE MACHINE FOR A PERIOD LONGER THAN NECESSARY FOR CARRYING WORK AND IN ANY CASE NEVER LEAVE IT UNATTENDED.**

### 12.5.1 Chuck height adjustment

The chuck with central locking has 2 different height mode. A "quick release" system allows to remove the chuck mobile part and to dowel the support plate at the required height. Adjust the sliding shaft by pulling the locking knob (**Fig. 32 ref. 1**) and by lifting/lowering the wheel support (**Fig. 32 rif. 2**). Now it's possible to place the tyre in the right way with the working tools.

Fig. 32



### 12.5.2 Reverse wheel pan protection

In case of use of reverse wheels, to protect the rim, apply on the rubber platform a protection made of a transparent plastic material available on demand (**Fig. 33 ref. 1**). We suggest a constant replacement of it and in any case if there are visible damages (see **Fig. 33**).

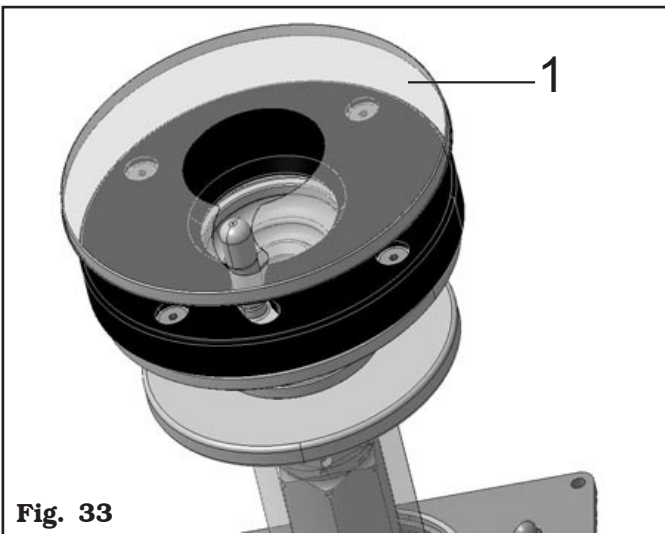


Fig. 33

### 12.6 Bead breaking through vertical roller

1. After locking the wheel on the chuck, bring the vertical bead breaker roller into work position, making sure that it is locked.



**MOVE VERY CAREFULLY THE VERTICAL BEAD BREAKING ARM TO WORKING POSITION, IN ORDER TO AVOID POSSIBLE HANDS CRUSHING.**



**ALWAYS CHECK THAT THE ARM IS CORRECTLY HOOKED.**

2. Define the roller position on the rim diameter through the handle (**Fig. 34 Ref. 1**) after the arm has been unlocked with the push button (**Fig. 34 Ref. 2**) positioned on the handle itself. Lower the lever (**Fig. 34 ref. 3**) to bring the bead breaker roller only just below the rim width. Pull the rear lever (**Fig. 34 ref. 4**) until the bead breaking roller is introduced into the rim.

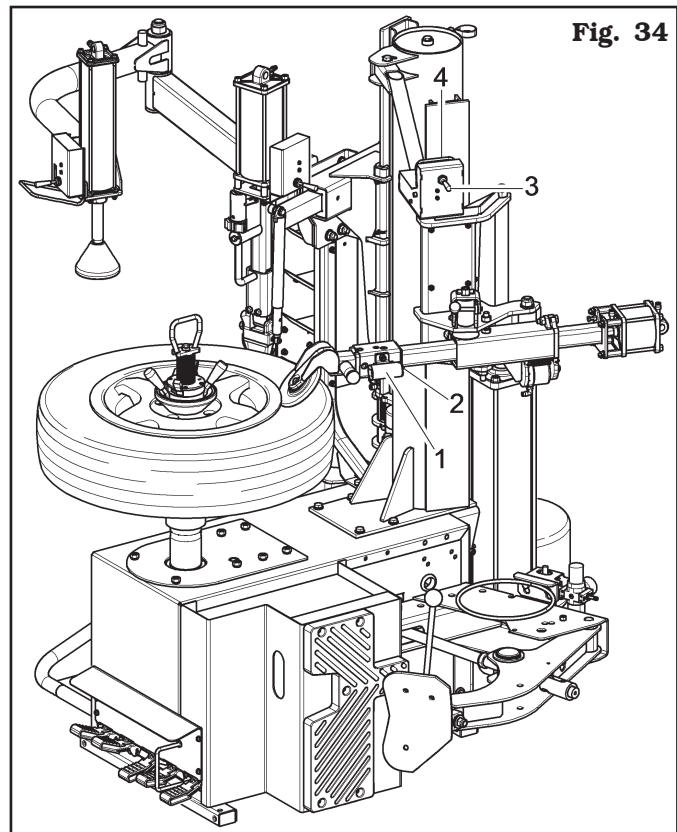


Fig. 34

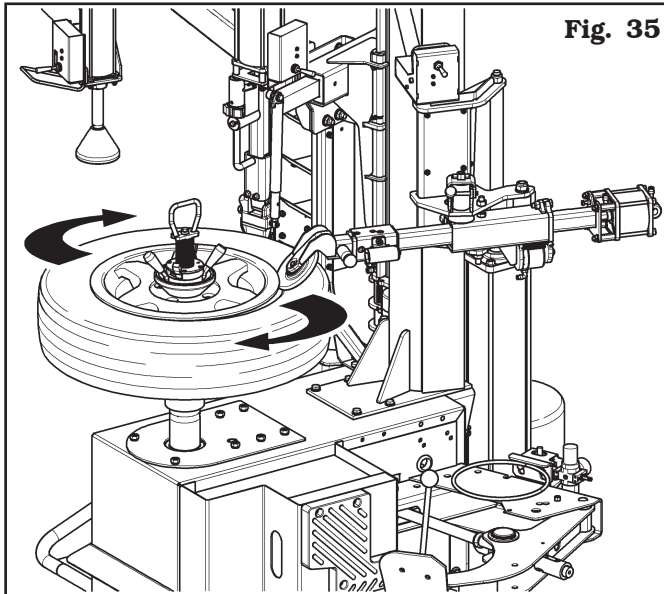


**THE BEAD BREAKING DISC MUST EXERT PRESSURE ON THE TYRE BEAD BUT NEVER ON THE RIM.**



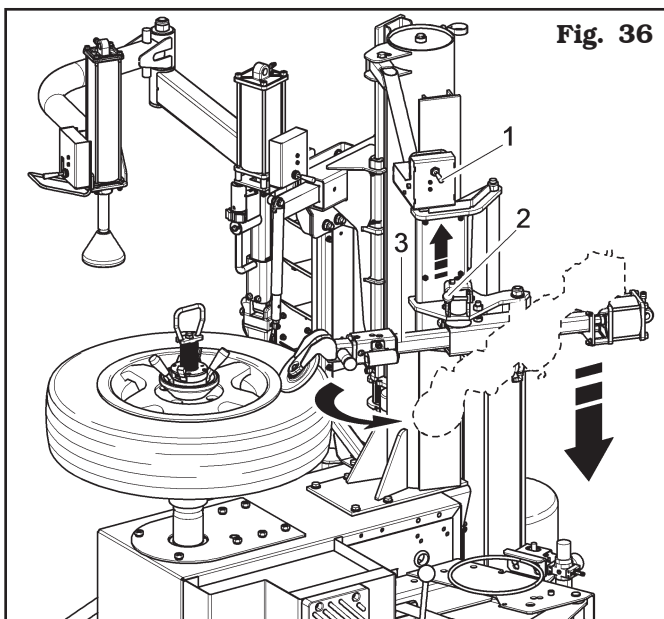
**WHILE THIS OPERATION IS BEING CARRIED OUT PAY ATTENTION NOT TO DEFORM THE TYRE SIDE. GREASE THE BEAD BEFORE THE ROLL RE-ENTERS.**

3. Activate the clockwise rotation by pressing the pedal (**Fig. 19 ref. 3**).  
Keep on rotating the wheel until the operation is completed (see **Fig. 35**).



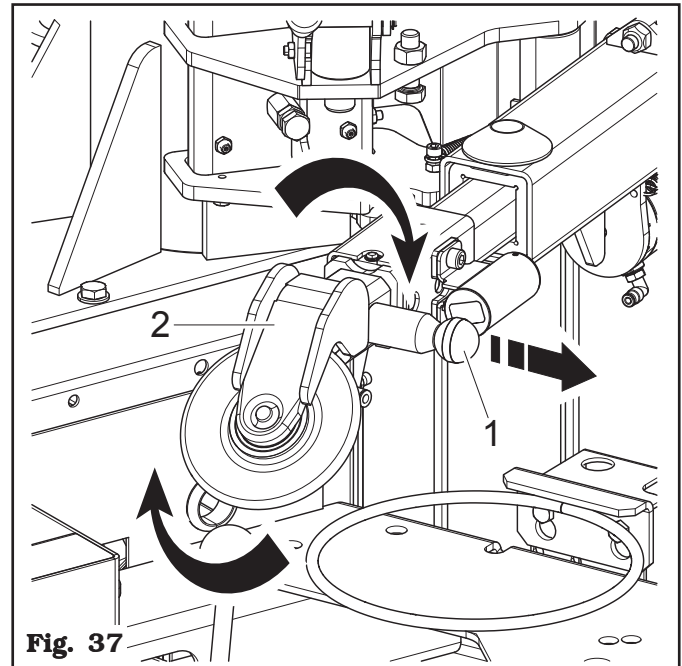
**Fig. 35**

4. Once bead breaking has been completed in the upper part, disengage the bead breaking roller from the rim moving the lever (**Fig. 36 ref. 1**) upwards. Press the lever (**Fig. 36 ref. 2**) to allow the bead breaker arm roller (**Fig. 36 ref. 3**) to open outwards and get out of the wheel way. Use the lever again (**Fig. 36 ref. 1**) to bring the bead breaker arm roller downwards to a lower height than the one of the tyre.



**Fig. 36**

5. Pull the knob (**Fig. 37 ref. 1**) and turn of 180° the bead breaking roller (**Fig. 37 ref. 2**).



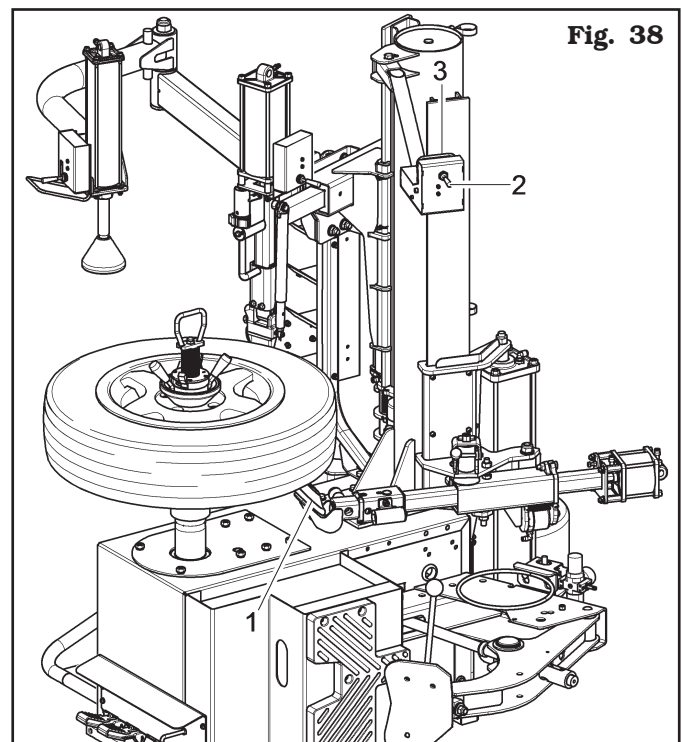
**Fig. 37**

6. Close manually the bead breaker arm roller in work position and make sure that it is locked.



**ALWAYS CHECK THAT THE ARM IS CORRECTLY HOOKED.**

Lift the lever (**Fig. 38 ref. 2**) to bring the bead breaker roller only just above the rim lower edge. Pull the rear lever (**Fig. 38 ref. 3**) until the bead breaking roller (**Fig. 38 ref. 1**) is introduced into the rim.



**Fig. 38**



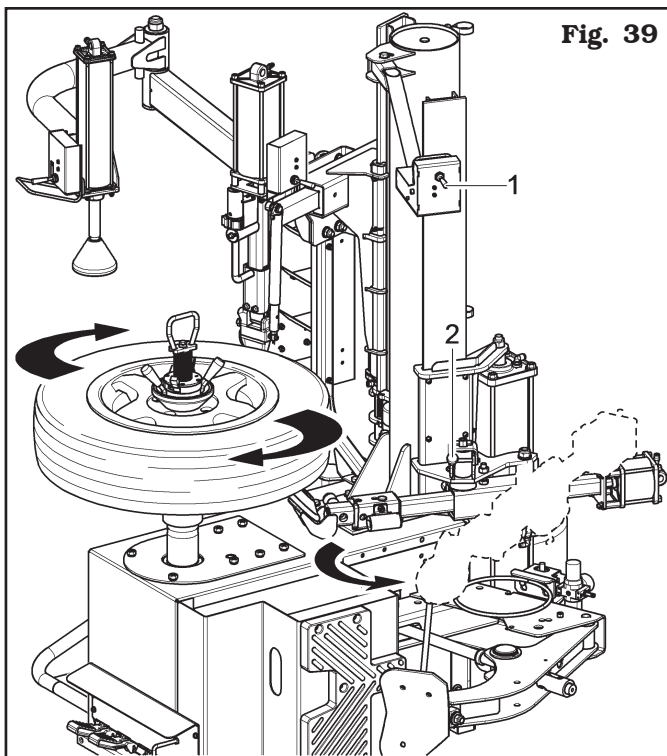


**THE BEAD BREAKING DISC MUST EXERT PRESSURE ON THE TYRE BEAD BUT NEVER ON THE RIM.**



**WHILE THIS OPERATION IS BEING CARRIED OUT PAY ATTENTION NOT TO DEFORM THE TYRE SIDE. GREASE THE BEAD BEFORE THE ROLL RE-ENTERS.**

7. Only at this point rotate the wheel clockwise pressing the pedal (**Fig. 19 ref. 3**). Keep on rotating the wheel until the operation is completed (see **Fig. 39**).



**Fig. 39**

8. Once bead breaking on the lower part has been terminated, move the roller to rest position lowering the lever (**Fig. 39 ref. 1**) and pressing the lever (**Fig. 39 ref. 2**).

### 12.7 Demounting the tyre

When both beads are broken, the tyre can be demounted.

1. Press the pedal (**Fig. 19 ref. 3**) to rotate the wheel clockwise until the valve stem reaches "hour 1" position.
2. Define tool vertical position on the rim edge by pressing the push button (**Fig. 40 ref. 1**). Position the tool correctly on the rim diameter (see **Fig. 41**) through the handle (**Fig. 40 ref. 2**). If necessary perform a horizontal adjustment of the tool arm after unlocking it through the button (**Fig. 40 ref. 3**), placed on the handle itself.

While this phase is being carried out, stay just next to a zone in the tyre where bead breaking has been effectuated.



**CONTROL (FIG. 40 REF. 1) (IN ORDER TO PREVENT THE WRONG USE OF THE TYRE CHANGER) IS OPERATIVE ONLY IF THE TOOL (FIG. 40 REF. 6) IS IN COMPLETELY LIFTED POSITION. OPERATE LEVER (FIG. 40 REF. 7), BY SHIFTING IT UPWARDS, IN ORDER TO MOVE THE TOOL TO SUCH POSITION.**

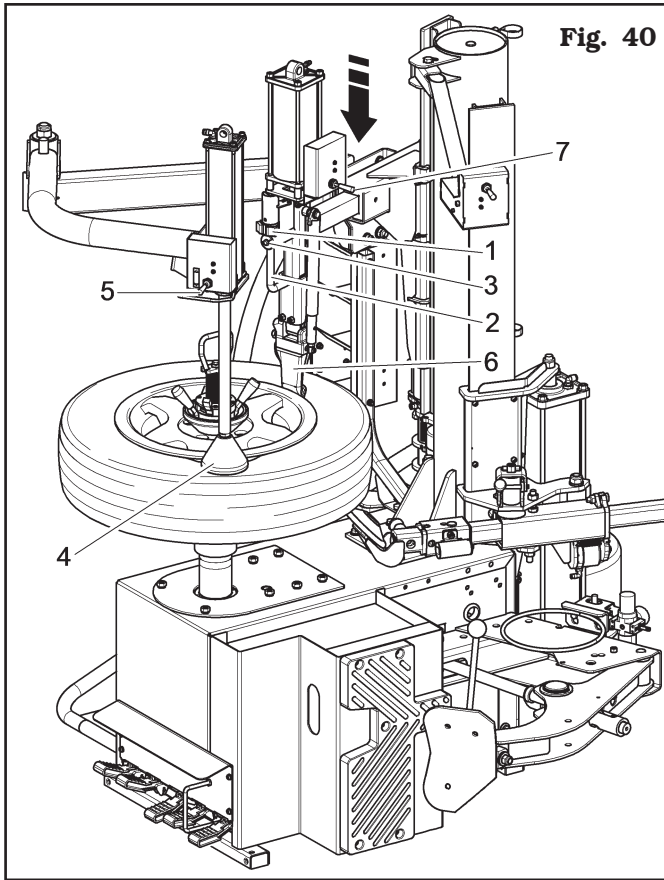
3. Place the presser cone (**Fig. 40 ref. 4**) (if present) in "4 o'clock" position from the machine-head axis and press on the tyre operating the lever of the control unit (**Fig. 40 ref. 5**) downwards, until the tyre bead is placed next to the rim groove.



**MOVE VERY CAREFULLY THE TOOLS HOLDER ARM TO WORKING POSITION, IN ORDER TO AVOID POSSIBLE HANDS CRUSHING.**

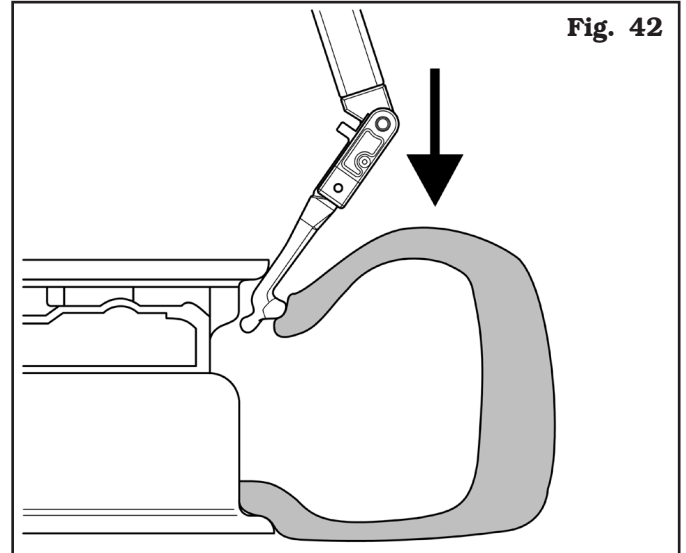


**THE TOOL UNIT IS EQUIPPED WITH A MECHANIC AUTOMATIC MEMORY DEVICE THAT ALLOWS TO STORE THE TOOL WORKING POSITION. IN THIS WAY YOU CAN WORK ON WHEELS HAVING THE SAME RIM WITHOUT HAVING TO PLACE EACH TIME THE TOOL ON THE RIM EDGE.**

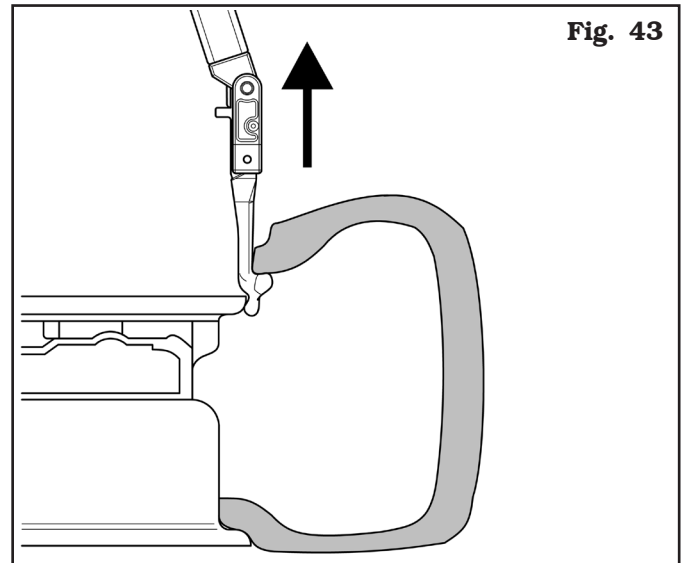


**Fig. 40**

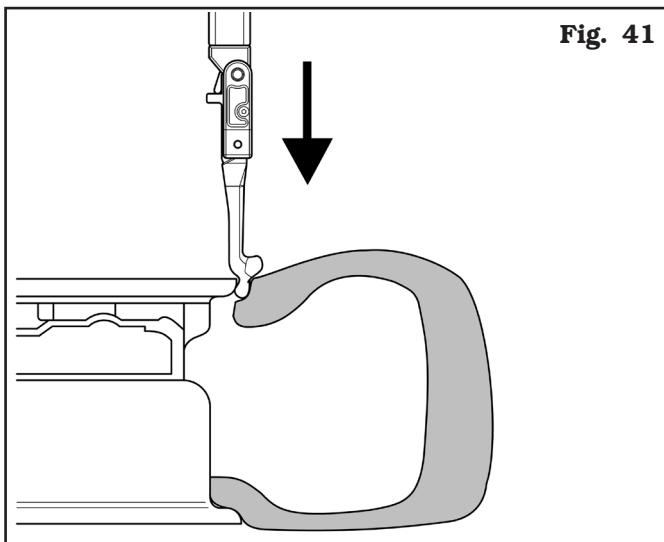
5. Lower the lever (**Fig. 40 ref. 6**) so that the tool penetrates between rim and tyre (see **Fig. 42**). While this operation is being effectuated, the tool rotates around the rim edge until it hooks the tyre bead (see **Fig. 43**).



**Fig. 42**



**Fig. 43**



**Fig. 41**

5. Lift the tool using the lever (**Fig. 40 ref. 6**). When the tool reaches a vertical position related to the rim (**Fig. 44 ref. 1**), rotate the chuck so that the tyre enters the rim groove. Keep on raising the tool until the bead is on the rim edge (see **Fig. 43**).



**WHILE THIS OPERATION IS BEING CARRIED OUT PAY ATTENTION NOT TO DEFORM THE TYRE SIDE. GREASE THE BEAD BEFORE THE ROLL RE-ENTERS.**



**USE ONLY TYRE LUBRICANTS. SUITABLE LUBRICANTS CONTAIN NO WATER, HYDROCARBONS, OR SILICON.**

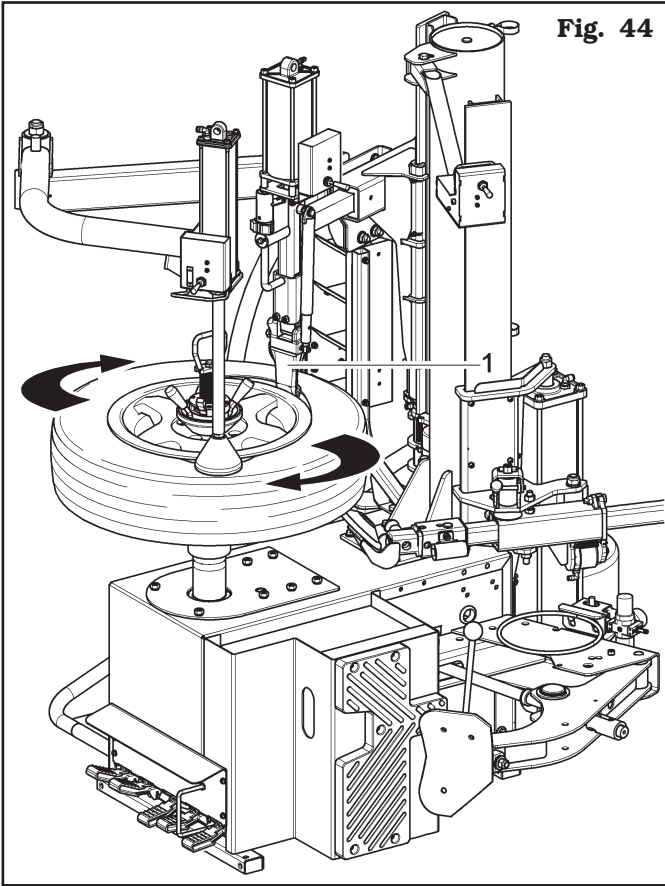


**MAKE SURE THE TOOL IS IN DEMOUNTING POSITION (Fig. 43) BEFORE STARTING CHUCK ROTATION.**

Rotate clockwise until the upper bead is completely disassembled (see **Fig. 44**).

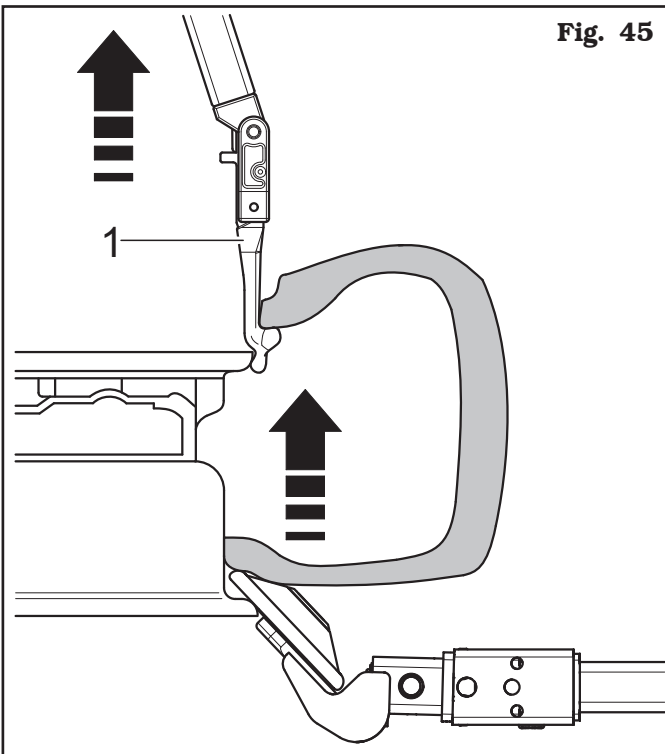


Fig. 44



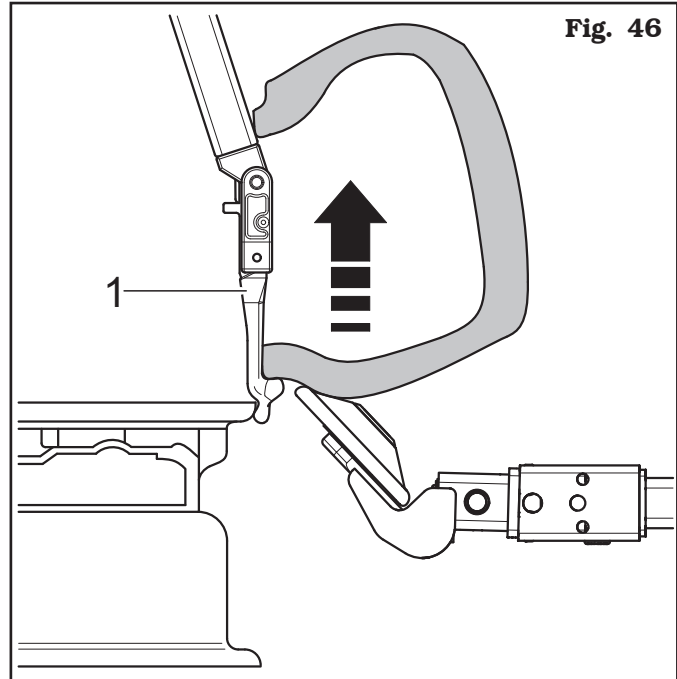
6. Lift the tool (see **Fig. 45 ref. 1**) keeping it coupled to the upper bead of the tyre with the bead breaking roller in lower position.

Fig. 45



7. Position the tool (see **Fig. 46 ref. 1**) just next to the rim edge. Using the lower bead breaking roller, load the lower bead on the tool in demounting position.

Fig. 46



8. Rotate the chuck clockwise until the tyre is completely disassembled.

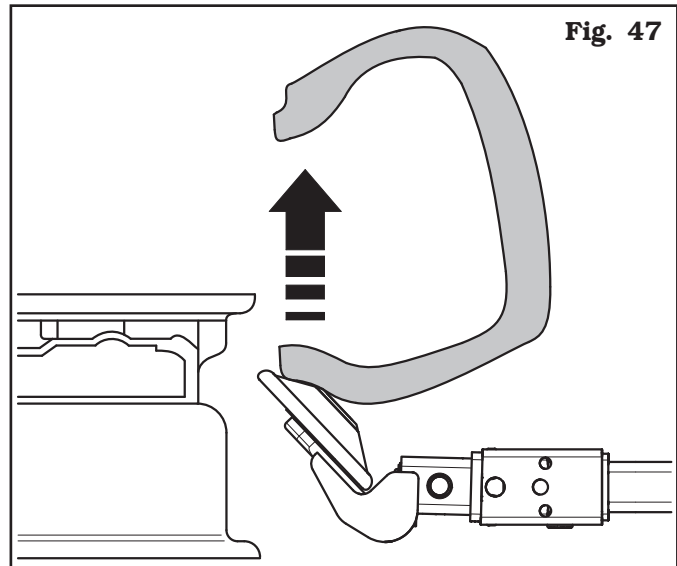
9. Lift the presser roll and close again the Bead press arm into rest position.

#### **Dismounting the lower bead with the bead breaking roller**

For disassembly of the lower bead only the bead breaker roller can be used as an alternative. Lift the tool and go away from the working area, through pressing the pedal (**Fig. 19 ref. 2**).

1. Lift the roll and the tyre just next to the rim edge (see **Fig. 47**).

Fig. 47



- Therefore, introduce the beading roller through the appropriate lever (see **Fig. 18 ref. 3**) between the rim edge and the lower bead (see **Fig. 48**).



**THE BEAD BREAKING DISC MUST EXERT PRESSURE ON THE TYRE BEAD BUT NEVER ON THE RIM.**



**USE VERY CAREFULLY THE BEAD BREAKING ROLLER IN ORDER TO AVOID POSSIBLE HANDS CRUSHING.**



- Then, rotate and complete bead disassembly (see **Fig. 49**).



**WHEN THE BEADS COME OUT OF THE RIM THE TYRE MIGHT FALL. CARRY OUT VERY CAREFULLY THESE OPERATIONS.**

## **12.8 Mounting the tyre**

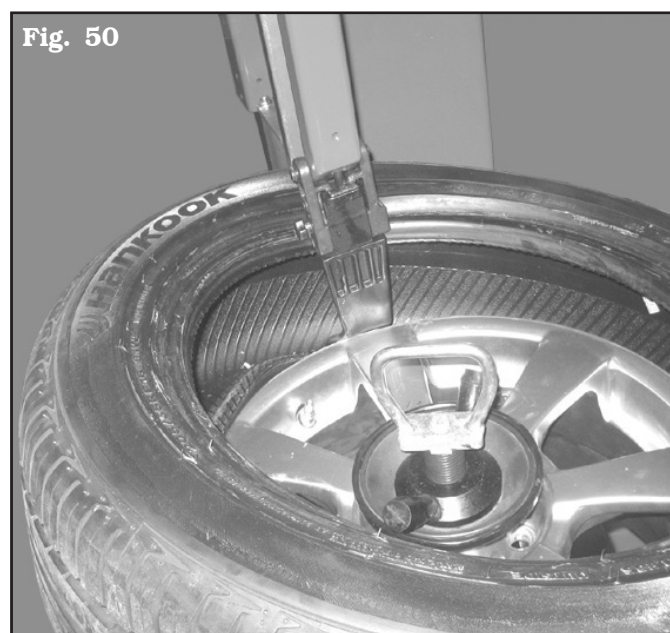
To mount the tyre, proceed as follows:

- Lubricate tyre beads.



**USE ONLY TYRE LUBRICANTS. SUITABLE LUBRICANTS CONTAIN NO WATER, HYDROCARBONS, OR SILICON.**

- Position the tool (**Fig. 50 ref. 1**) onto the rim edge.



- Hook the lower bead on the tool then rotate clockwise until the complete assembly.
- Then, position the upper bead on the tool assembly area (**Fig. 51 ref. 1**).
- Place the presser cone (**Fig. 51 ref. 2**) (if present) in "4 o'clock" position from the machine-head axis and press on the tyre operating the lever of the control unit (**Fig. 51 ref. 3**) downwards.
- Rotate clockwise up to tyre complete mounting.
- When these operations are over move the tool and grip-cone (if present) into rest position.

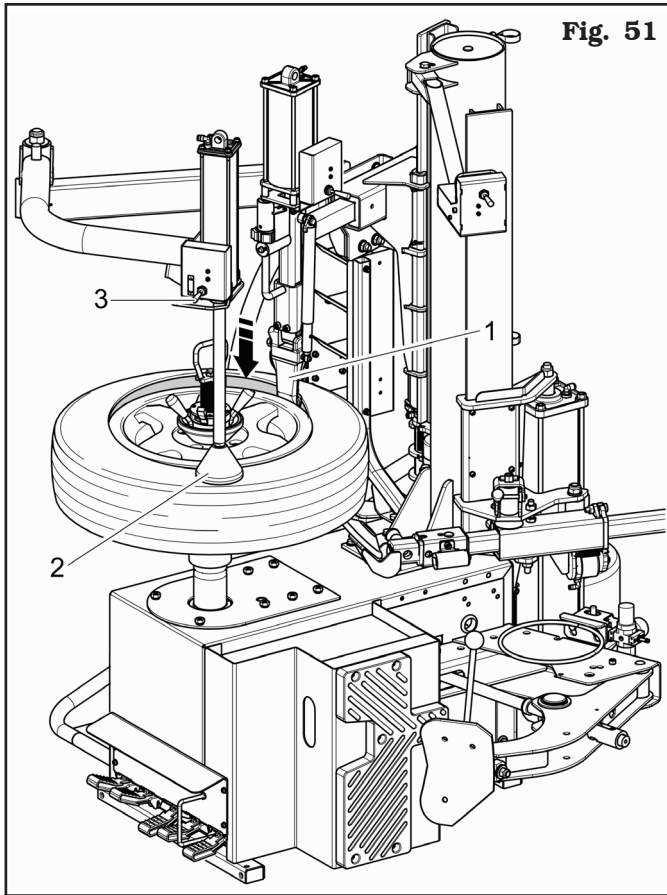


Fig. 51



**THE BEAD BREAKING DISC MUST EXERT PRESSURE ON THE TYRE BEAD BUT NEVER ON THE RIM.**



**USE VERY CAREFULLY THE BEAD BREAKING ROLLER IN ORDER TO AVOID POSSIBLE HANDS CRUSHING.**



Fig. 53

### ***12.8.1 Fitting the tyre upper bead with entrainer***

1. Assemble the beadpusher with pulling system next to the rim edge (see Fig. 52).

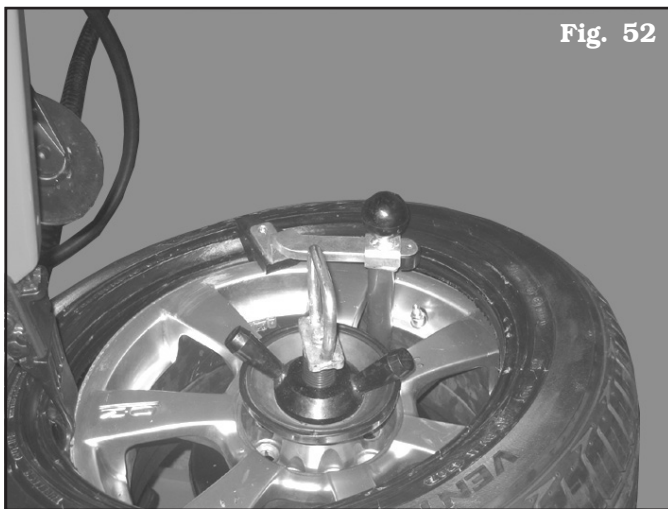


Fig. 52

2. Place the bead breaker roller so that the tyre bead is kept at the same height of the rim groove (see Fig. 53).

3. Rotate clockwise up to tyre complete assembly (see Fig. 54).



**FOR THE MOUNTING OF VERY DIFFICULT WHEELS, USE THE EXTENSION OF THE BEADPUSHER (OPTIONAL) (FIG. 54 REF. 1).**



Fig. 54

4. When these operations are over move the tool and the bead breaker roller into rest position.



### **12.9 Tyre inflation on machine without tubeless inflation unit**

Connect the inflation device to the tyre valve and inflate the same tyre using the pedal provided (Fig. 19 ref. 5).



**A SAFETY DEVICE IS PRESENT FOR THE ADJUSTMENT OF THE MAXIMUM PRESSURE OF THE SUPPLIED AIR (4,2 ± 0,2 BAR / 60 PSI).**

Well lubricated beads and rims make the beading in and inflation much safer and easier.

**In case the beads are not seated at 4.2 ± 0.2 bar, release all the air from the wheel, remove it from the tyre changer and put it in a safety cage to complete the inflation procedure.**

### **12.10 Tyre inflation on machine with tubeless inflation unit**

Some types of tyre can be difficultly inflated if the beads are not in contact with the rim. The tubeless inflation device supplies a jet of high-pressure air from the nozzle, which encourages the correct positioning of the bead against the rim, and therefore normal inflation. In order to carry out the inflation of the tyre follow these indications:

- Remove the valve stem core.  
Removing the valve stem core will allow the tyre to inflate faster and the bead to seat easier.
- Connect the inflation terminal to the valve of the tyre.



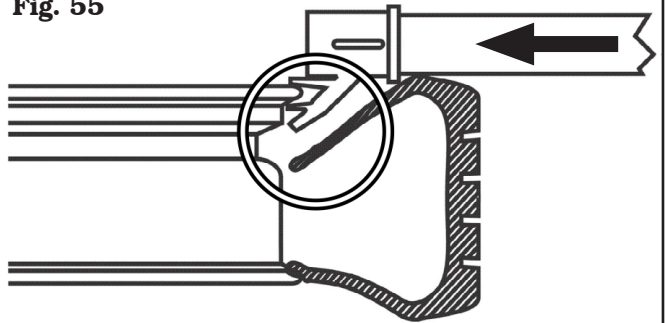
**TO IMPROVE THE EFFECTIVENESS OF TUBELESS INFLATION SYSTEM, ALWAYS LUBRICATE TYRE BEADS.**

- Press the bead blaster pipe on the wheel rim as shown in Fig. 55. Ensure the hose head is pressed in to activate the additional air jet.



**THE NOZZLE SHOULD BE HORIZONTAL FOR OPTIMAL PERFORMANCE (FIG. 55).**

Fig. 55



**IN ORDER TO ALLOW THE AIR JET TO BREAK BOTH BEADS, DO NOT KEEP THE BEAD LIFTED FORCING IT.**

- Press completely downwards the inflating pedal, in order to release a high pressure air jet through the tubeless inflation nozzle.
- Keep the inflating pedal partially pressed downwards to inflate the tyre and place the beads in their seats.



**DO NOT EXCEED THE PRE-ARRANGED PRESSURE VALUES WHILE SEALING THE BEAD.**

- After the beads take place in their own seat, disconnect the inflating terminal and install again the valve gear, that was removed previously. Then connect the inflating terminal and inflate the tyre with the required pressure.



**IF THE TYRE GETS INFLATED TOO MUCH, IT IS POSSIBLE TO GET THE AIR OUT OF THE TYRE, BY PUSHING THE MANUAL DEFLATING PUSH BUTTON LOCATED UNDER THE PRESSURE GAUGE.**

- Disconnect the inflation terminal from the valve.

### 13.0 ROUTINE MAINTENANCE



**BEFORE CARRYING OUT ANY ROUTINE MAINTENANCE PROCEDURE, DISCONNECT THE MACHINE FROM ITS POWER SUPPLY SOURCES, TAKING SPECIAL CARE OF THE ELECTRICAL PLUG/SOCKET CONNECTION.**



**BEFORE CARRYING OUT ANY MAINTENANCE OPERATIONS, MAKE SURE THERE ARE NO WHEELS CLAMPED ON THE CHUCK AND THAT ALL SUPPLIES TO THE MACHINE HAVE BEEN DISCONNECTED.**

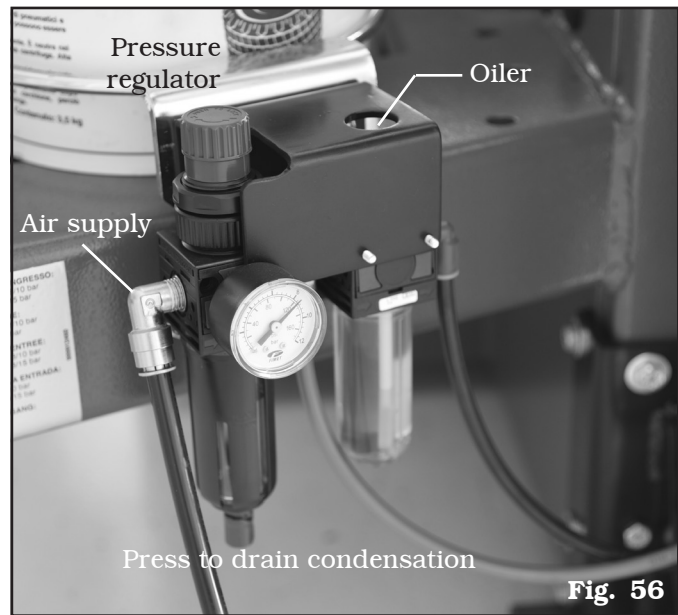
To guarantee the efficiency and correct functioning of the machine, it is essential to carry out daily or weekly cleaning and weekly routine maintenance, as described below.

Cleaning and routine maintenance must be conducted by authorized personnel and according to the instructions given below.

- Disconnect the mains power supply before starting any cleaning or routine maintenance operations.
- Remove deposits of tyre powder and other waste materials with a vacuum cleaner.

**DO NOT BLOW IT WITH COMPRESSED AIR.**

- Do not use solvents to clean the oil/pressure regulator.
- The condensation in the pressure regulator reservoir must be drained **daily**. Press the fitting at the bottom of the regulator to discharge the water. (see **Fig. 56**).
- Periodically check the calibration of lubricator of pressure/oiler gauge unit:



**Fig. 56**



**IN ORDER TO ALLOW A LONGER LIFE OF THE FILTER AND OF ALL MOVING PNEUMATIC DEVICES, YOU HAVE TO MAKE SURE THAT THE SUPPLIED AIR IS:**

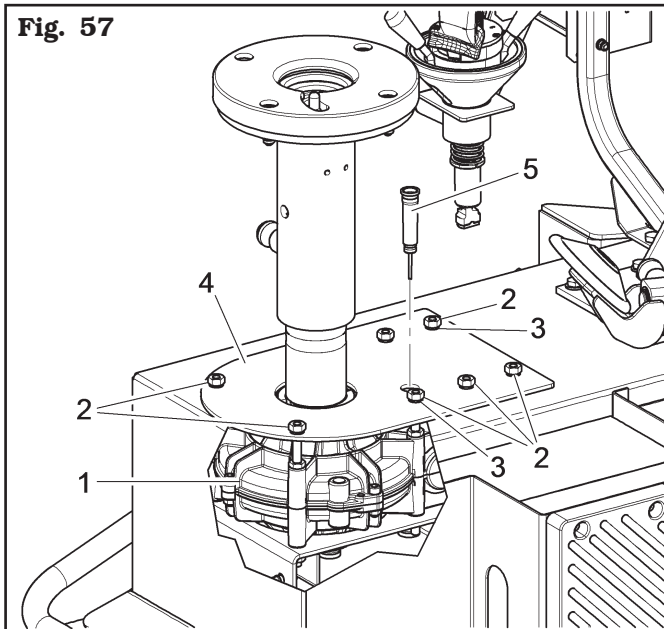
- **EXEMPT FROM THE LUBRICATING OIL OF THE COMPRESSOR;**
- **EXEMPT FROM HUMIDITY;**
- **EXEMPT FROM IMPURITY.**

- Every **week** and/or when necessary, top up the oil tank using the filler hole provided, closed by a cap or bolt, on the lubricator filter.

**NOTE: This operation should not be carried out by unscrewing the cup of the lubricator filter.**

- The use of synthetic oil might damage the pressure regulator filter.
- Immediately replace worn parts, bead breaker roller, assembly tool.

- Periodically (at least every 100 working hours) check reduction gear lubricating oil level (**Fig. 57 ref. 1**). Such operation must be effectuated by removing the nuts (**Fig. 57 ref. 2**) and the washers (**Fig. 57 ref. 3**), removing the flange (**Fig. 57 ref. 4**) and the plug (**Fig. 57 ref. 5**) on the reduction gear.



**ANY DAMAGE TO THE MACHINE DEVICES RESULTING FROM THE USE OF LUBRICANTS OTHER THAN THOSE RECOMMENDED IN THIS MANUAL WILL RELEASE THE MANUFACTURER FROM ANY LIABILITY!!**

### **13.1 Lubricants**

To grease the chuck movement control gearbox, use **ESSO GEAR OIL GX140**.

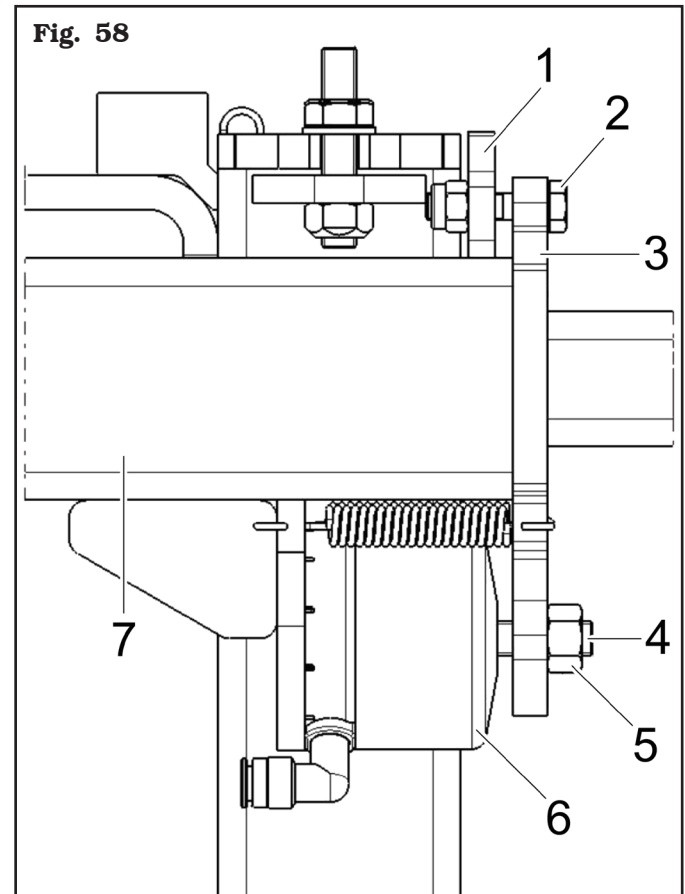
Lubricate slides and bolts/nut bolts or racks and pinion with a soft brush using lubricant of **ESSO GP**.



**ANY DAMAGE TO THE MACHINE DEVICES RESULTING FROM THE USE OF LUBRICANTS OTHER THAN THOSE RECOMMENDED IN THIS MANUAL WILL RELEASE THE MANUFACTURER FROM ANY LIABILITY.**

### **13.2 Neck adjustment**

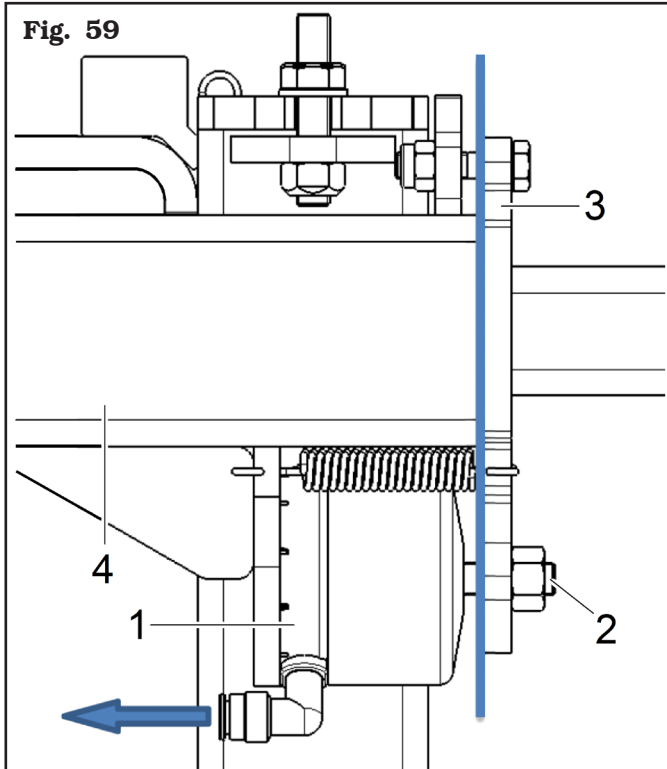
In case of fulcrum-type bolts (**Fig. 58 ref. 2**) with neck (**Fig. 58 ref. 3**) fully beating onto bead breaking arm's guide (**Fig. 58 ref. 7**) (not on the adjusting plate (**Fig. 58 ref. 1**)), carry out neck adjustment procedure as described below.



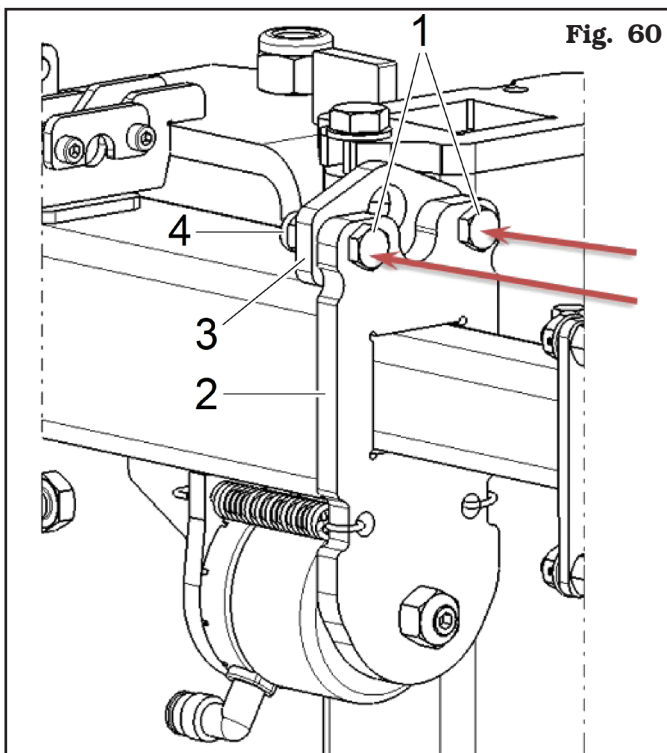
**KEY**

- 1 - Adjusting plate
- 2 - Fulcrum bolts
- 3 - Neck
- 4 - Adjusting dowel
- 5 - Locking nut
- 6 - Neck operating cylinder
- 7 - Bead breaking arm guide

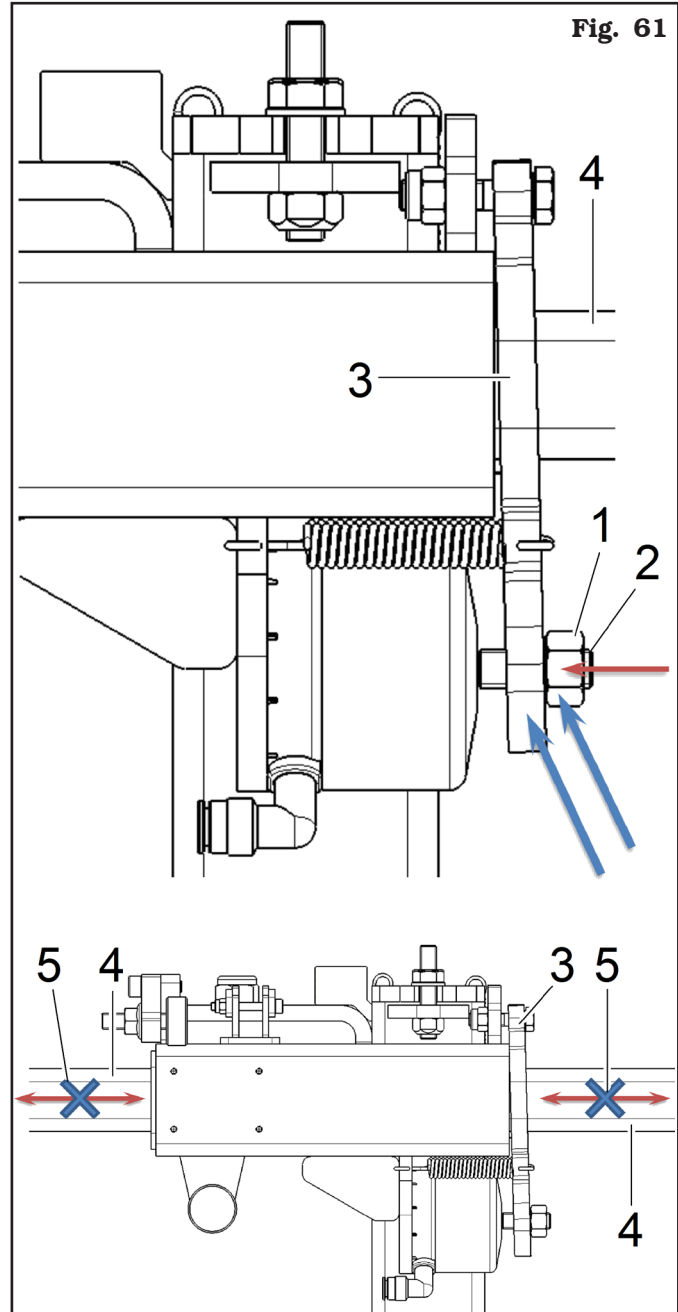
- a. Blow off the compressed air from neck cylinder (Fig. 59 ref. 1). Make neck (Fig. 59 ref. 3) reach beat position again on the guide support surface (Fig. 59 ref. 4), by turning the adjusting dowel (Fig. 59 ref. 2).



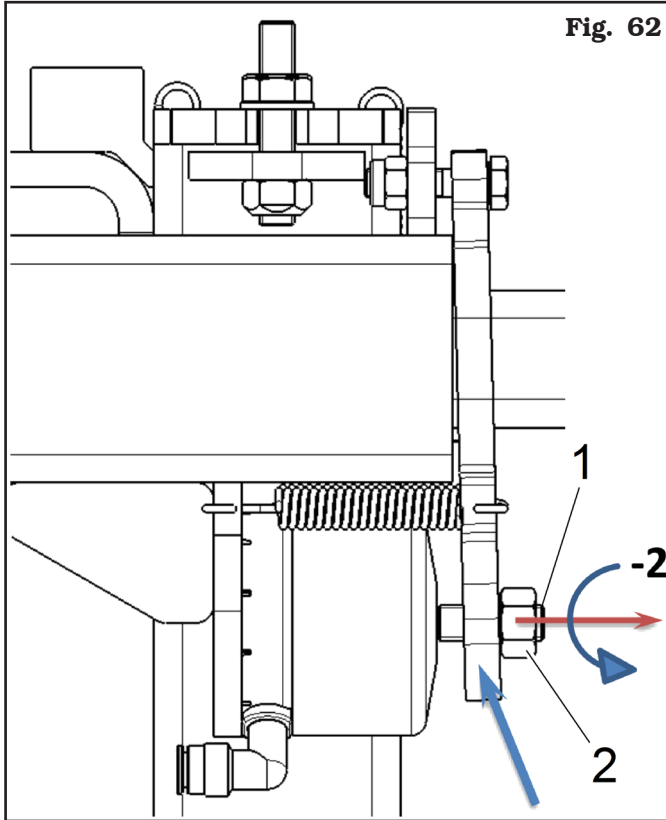
- b. Completely screw fulcrum-type bolt (or bolts) (Fig. 60 ref. 1) but without locking them, just making them approach, setting a  $0.1 \div 0.2$  mm play between neck (Fig. 60 ref. 2) and adjusting plate (Fig. 60 ref. 3), positioning nut (Fig. 60 ref. 4) and letting it rest completely onto adjusting plate.



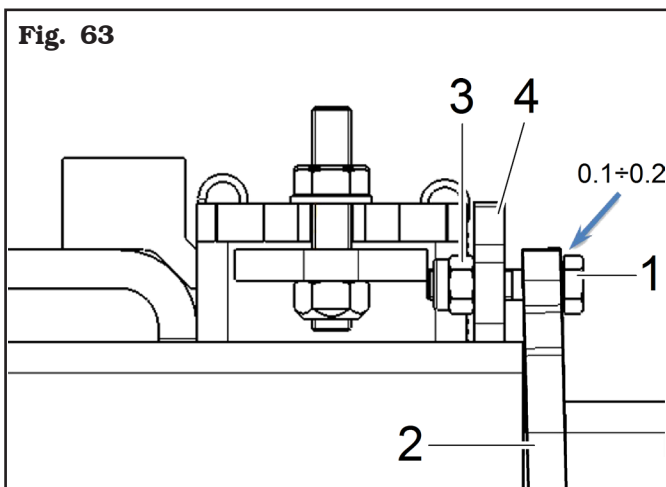
- c. Slacken lock nut (Fig. 61 ref. 1) of adjusting dowel (Fig. 61 ref. 2). Then, screw the dowel (Fig. 61 ref. 2) until neck (Fig. 61 ref. 3) strikes onto arm (Fig. 61 ref. 4), that as a consequence results clamped (Fig. 61 ref. 5).



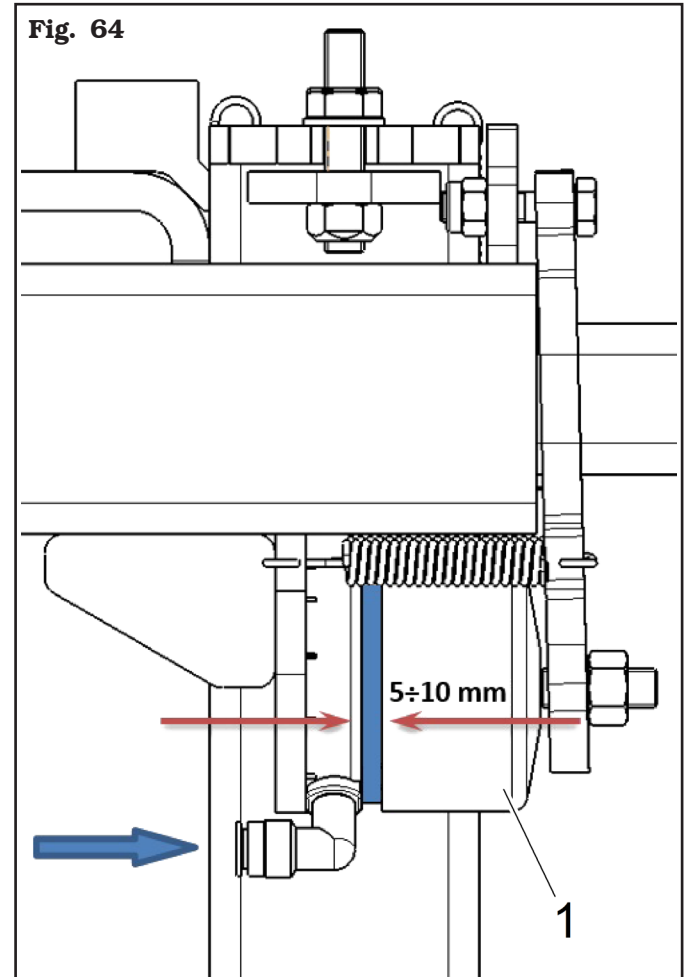
- d. Starting from the position reached at point (c), remove neck adjusting dowel counter-clockwise by 2 complete turns (**Fig. 62 ref. 1**) and lock the relevant counter nut (**Fig. 62 ref. 2**).



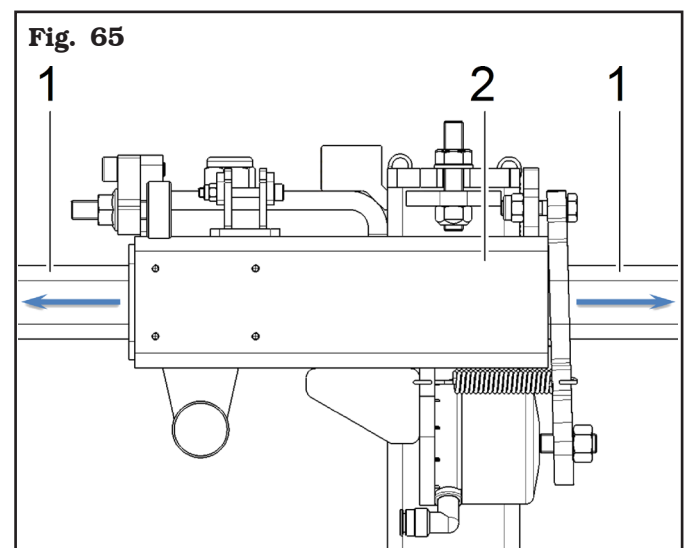
- e. Turn fulcrum-type bolt (or bolts) (**Fig. 63 ref. 1**) in order to reset  $0.1 \div 0.2$  mm play between neck (**Fig. 63 ref. 2**) and fulcrum-type screw head (**Fig. 63 ref. 1**), letting nut (**Fig. 63 ref. 3**) rest completely onto adjusting plate (**Fig. 63 ref. 4**).



- f. Operate cylinder (**Fig. 64 ref. 1**), supplying it with compressed air, and make sure its stroke is included between  $5 \div 10$  mm.



- g. Blow off cylinder and make sure the arm (**Fig. 65 ref. 1**) can slide freely in its guide (**Fig. 65 ref. 2**).



- h. Repeat points (f) and (g) 3 times at least.



**14.0 TROUBLESHOOTING TABLE**





Possible troubles which might occur to the tyre-changer are listed below. The manufacturer disclaims all responsibility for damages to people, animals or objects due to improper operation by non-unauthorised personnel. In case of trouble, call Technical Service Department for instructions on how to service and/or adjust the machine in full safety to avoid any risk of damage to people, animals or objects.

In an emergency and before maintenance on tyre-changer, set the main switch to “0” and lock it in this position.



**CONTACT AUTHORIZED TECHNICAL SERVICE**  
do not try and service alone

Problem	Possible cause	Remedy	
The bead breaker roller is not immediately activated.	<ol style="list-style-type: none"> <li>1. Power supply missed.</li> <li>2. The control push button is broken.</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect the power supply.</li> <li>2. Call for technical assistance.</li> </ol>	
The bead-breaker hydraulic pump jams.	The bead-breaker lubricator is empty.	Top up the reservoir with suitable oil having first disconnected the power supply. Call for technical assistance.	
The nozzle doesn't supply air when the inflation pedal is pressed (Model with tubeless inflation).	The inflation pedal is badly adjusted.	Call for technical assistance.	
During bead-breaking the bead-breaker tool does not engage.	<ol style="list-style-type: none"> <li>1. The arm valve is not activated.</li> <li>2. The arm valve is badly adjusted.</li> <li>3. The connection cylinder is broken.</li> </ol>	<ol style="list-style-type: none"> <li>1. Move the bead-breaker tool out.</li> <li>2. Call for technical assistance.</li> <li>3. Call for technical assistance.</li> </ol>	
The tool arm's vertical translation control does not work	Wrong position of the upper mechanical stop of tool's stem.	Operate on the lever of the tool control, moving it upwards up to it comes in contact with the relevant upper limit switch. If the problem persists, call for technical assistance.	
No movements take place when the pedals are pressed.	<ol style="list-style-type: none"> <li>1. Power supply missed.</li> <li>2. Inflation pedal unit not set correctly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check power supply.</li> <li>2. Call for technical assistance.</li> </ol>	
The chuck does not reach the maximum rotation speed.	The mechanical resistance of the gearmotor system has increased.	Turn the chuck without wheel for a few minutes so that the system heats, thus reducing frictions. If in the end the chuck does not accelerate again, call for technical assistance.	
The chuck does not turn in the clockwise or counter clockwise direction in one of the allowed speed.	Pedalboard microswitch breakage.	Check cables or replace microswitch or call for technical assistance.	

<b>Problem</b>	<b>Possible cause</b>	<b>Remedy</b>
The chuck doesn't rotate, but it attempts rotation when the machine is switched on again.	Pedalboard irreversible de-calibration.	Call for technical assistance. 
The chuck rotates slowly but it does not operate on the motor pedal.	Pedalboard irreversible de-calibration.	<ol style="list-style-type: none"> <li>1. Keep the pedal in rest position.</li> <li>2. Keep the machine connected to the net.</li> <li>3. Wait for 30 seconds that the pedalboard recalibration automatic attempt ends.</li> </ol>
The chuck doesn't rotate.	<ol style="list-style-type: none"> <li>1. Inverter overload alarm. or inverter undervoltage alarm. or inverter overvoltage alarm.</li> <li>2. Overtemperature alarm.</li> </ol>	<ol style="list-style-type: none"> <li>1. Shorten the length of a possible machine extension cable or increase the conductors section (disconnect and connect again). Lift the motor pedal and wait for the automatic reset.</li> <li>2. Wait until the motor system cools (the machine does not restart if the temperature level does not go below the set safety threshold).</li> </ol>
<b>LIFTING DEVICE</b>		
No movement is produced when the control pedal is operated.	<ol style="list-style-type: none"> <li>1. Supply missing or insufficient.</li> <li>2. The supply pipes have not been correctly assembled.</li> <li>3. The control valve is not working.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check power supply.</li> <li>2. Check pipes fitting.</li> <li>3. Call for technical assistance.</li> </ol> 
When the machine is aired, the lifting device tends to move, with no consent by the operator.	When the lifting device is fixed to the machine, the spool that connects the pedal to the valve has lost its settings.	Re-calibrate the control valve rod slackening the nut between the rod and the fork and turn the rod in cw or ccw direction until restoring the correct functioning.
<b>ROTATING BEAD PRESSING DEVICE</b>		
No movement is generated when the control lever is operated.		<ol style="list-style-type: none"> <li>1. Check power supply.</li> <li>2. Check pipes fitting.</li> <li>3. Call for technical assistance.</li> </ol> 
When the control lever is operated movement arises in one direction only.	The control valve is not working.	Call for technical assistance. 

## 15.0 TECHNICAL DATA

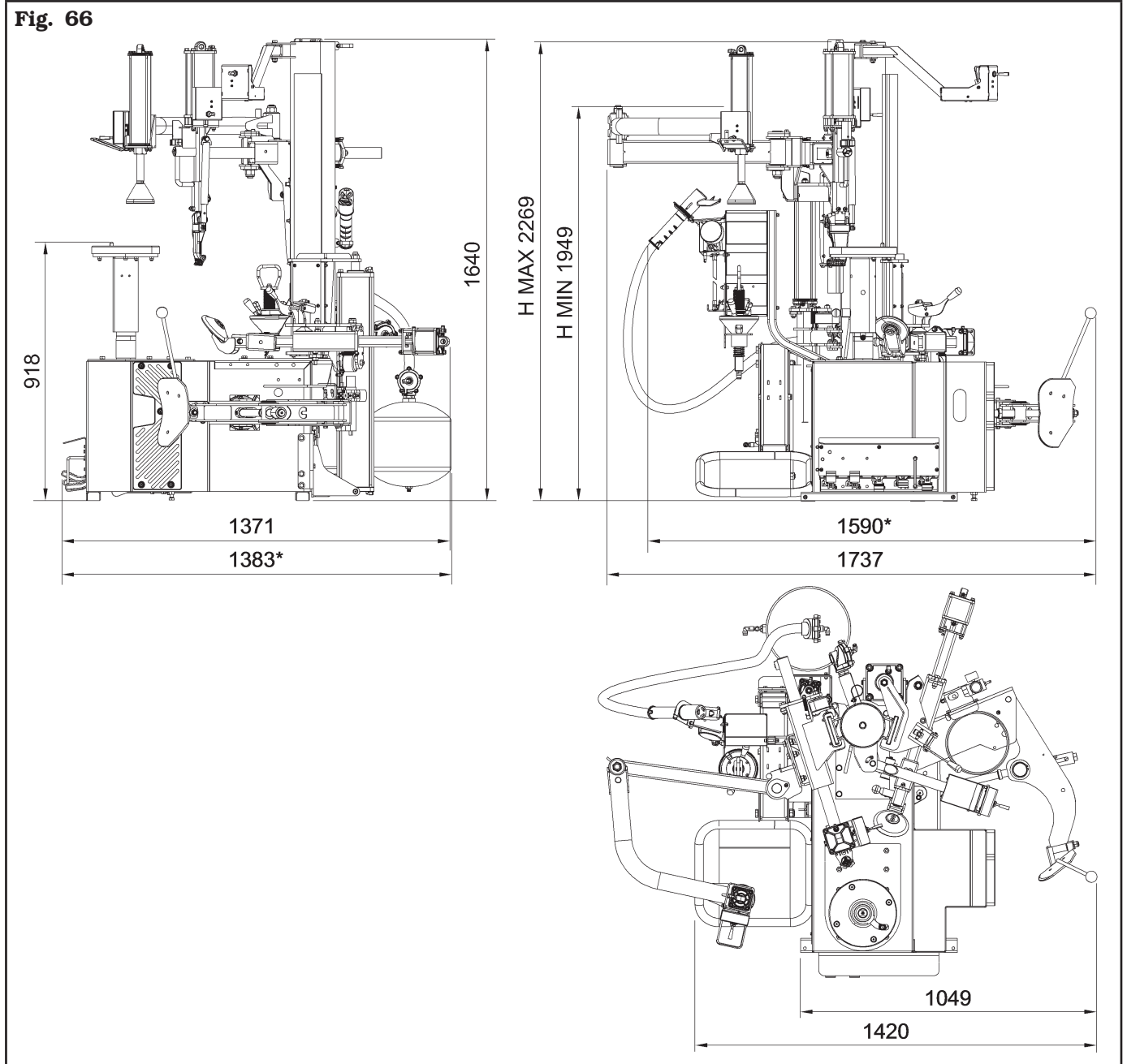
### 15.1 Technical electrical data

	Inverter	Version 110V 60Hz 1-phase with CSA supply cable
Motor power (kW)	1.5	0.75
Power supply	Voltage (V)	220/240
	Phases	1
	Frequency (Hz)	50/60
Chuck rotation speed (rev/min)	0 ÷ 15	6.5/13

### 15.2 Technical mechanical data

	Model without tubeless inflation	Model with tubeless inflation
Maximum tyre diameter (mm)	1143 (45")	
Max. wheel width (mm)	381 (15")	
Max. rotation torque (Nm)	1200	
Max. wheel weight (kg)	80	
Side shovel bead breaking maximum opening (mm)	432 (17")	
Rim locking diameter (inches)	10 - 26	
Bead breaking force (roller) (kg)	1200 (2645 Ibs)	
Bead breaking force (shovel) (kg)	3600 (7900 Ibs)	
Gear noise (dB) (A)	<80	
Operating pressure (bar)	8 - 10	
Weight (Kg)	370	380

**15.3 Dimensions**



\* Apply to versions with tubeless inflation

## 16.0 STORING

If storing for long periods (6 months or longer) disconnect the main power supply and take measures to protect the machine from dust build-up. Lubricate parts that could be damaged from drying out. When putting the machine back into operation replace the rubber pads and the mounting tool. Moreover, carry out a verification of machine perfect functioning.

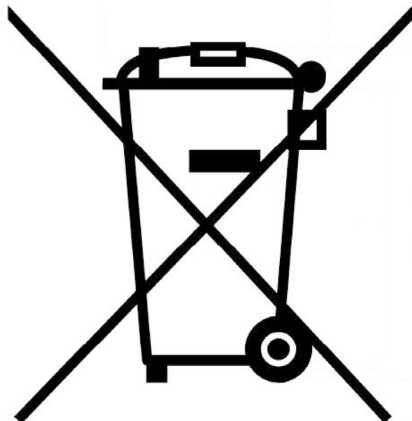
## 17.0 SCRAPPING

When the decision is taken not to make further use of the machine, it is advisable to make it inoperative by removing the connection pressure pipes. The machine is to be considered as special waste and should be dismantled into homogeneous parts. Dispose of it in accordance with current legislation.


**Instructions for the correct management of waste from electric and electronic equipment (WEEE) according to the Italian legislative decree 49/14 and subsequent amendments.**

In order to inform the users on the correct way to dispose the product (as required by the article 26, paragraph 1 of the Italian legislative decree 49/14 and subsequent amendments), we communicate what follows: the meaning of the crossed dustbin symbol reported on the equipment indicates that the product must not be thrown among the undifferentiated rubbish (that is to say together with the "mixed urban waste"), but it has to be managed separately, to let the WEEE go through special operations for their reuse or treatment, in order to remove and dispose safely the waste that could be dangerous for the environment and to extract and recycle the raw materials to be reused.

Fig. 67



## 18.0 REGISTRATION PLATE DATA

		<b>SPACE s.r.l.</b> 10090 TRANA (TO) Via Sangano 45 Tel 011-93440300 Fax 011-9338864	
MODEL			
SERIAL N°	YEAR		

The validity of the Conformity Declaration enclosed to this manual is also extended to products and/or devices the machine model object of the Conformity Declaration can be equipped with.

Said plate must always be kept clean from grease residues or filth generally.



**DO NOT TAMPER WITH, CARVE, CHANGE OR REMOVE THE MACHINE IDENTIFICATION PLATE; DO NOT COVER IT WITH PANELS, ETC., SINCE IT MUST ALWAYS BE VISIBLE.**

*WARNING: Should the plate be accidentally damaged (removed from the machine, damaged or even partially illegible) inform immediately the manufacturer.*

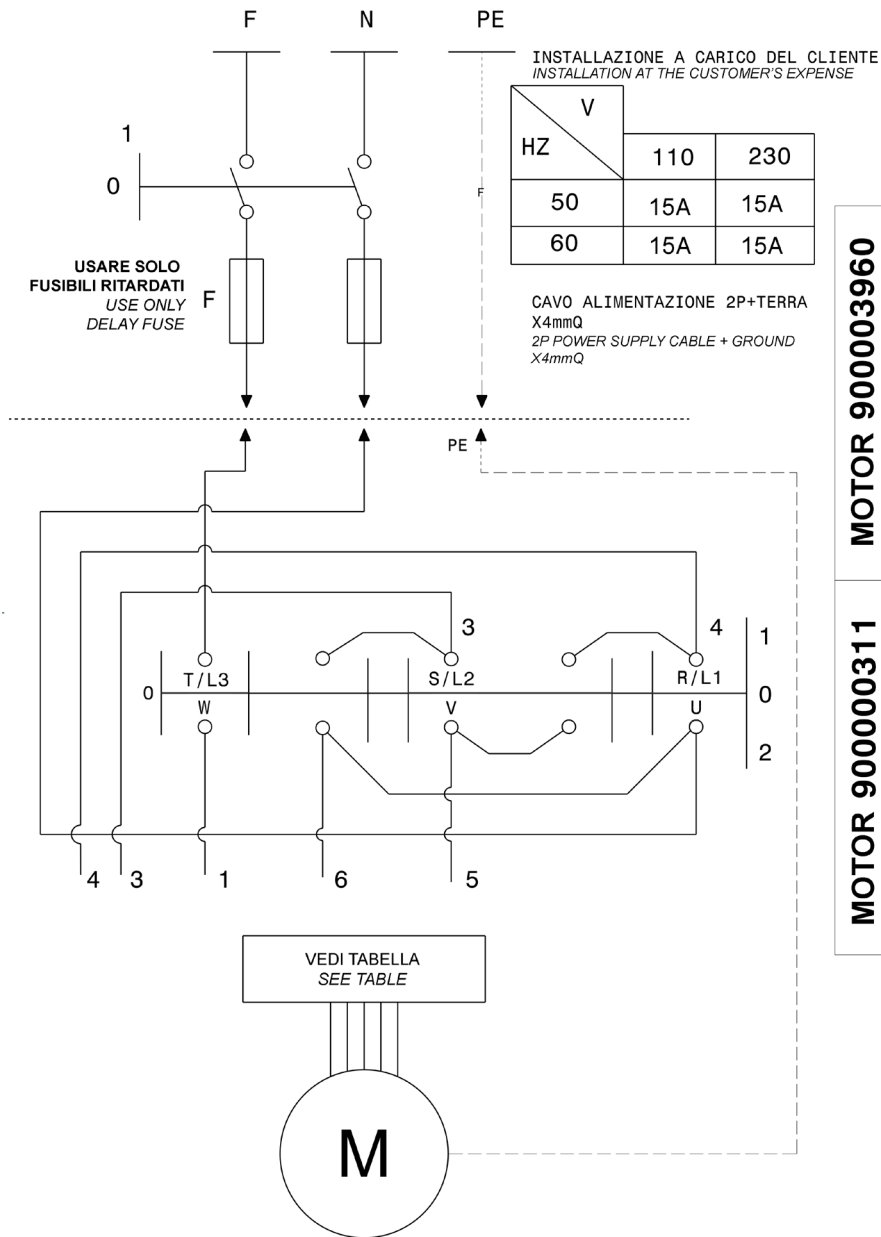
## 19.0 FUNCTIONAL DIAGRAMS

Here follows a list of the machine functional diagrams.

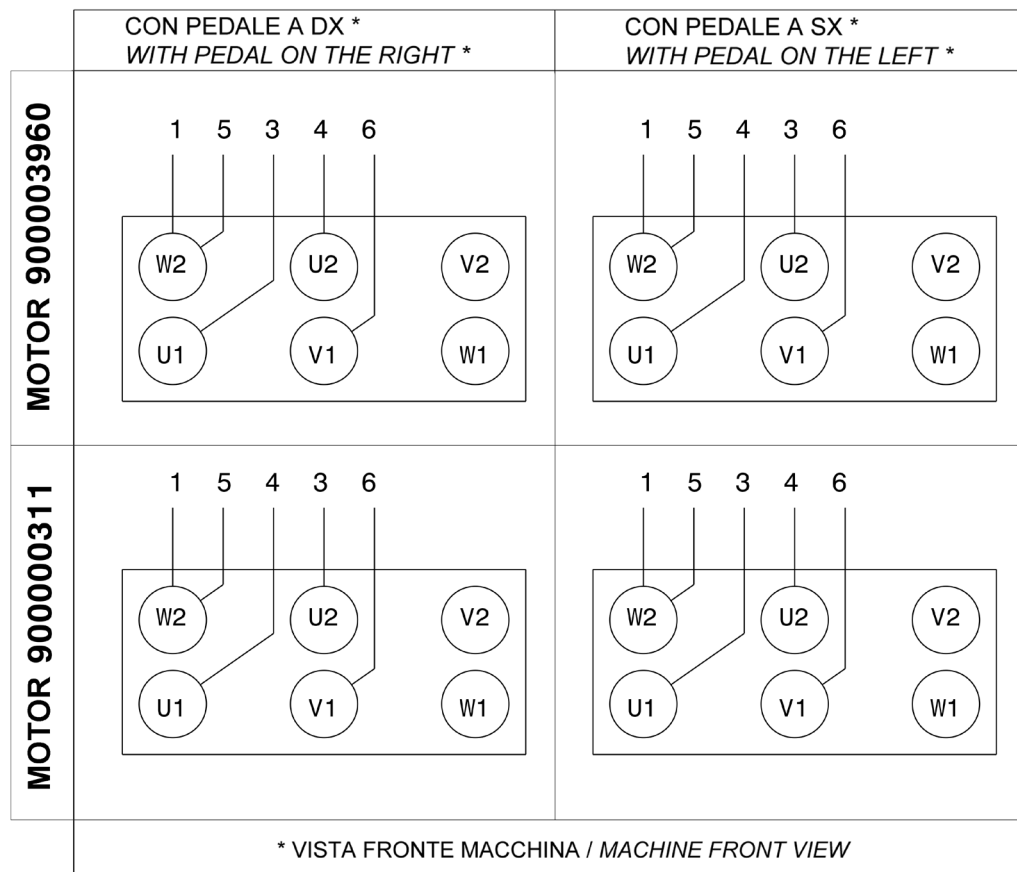


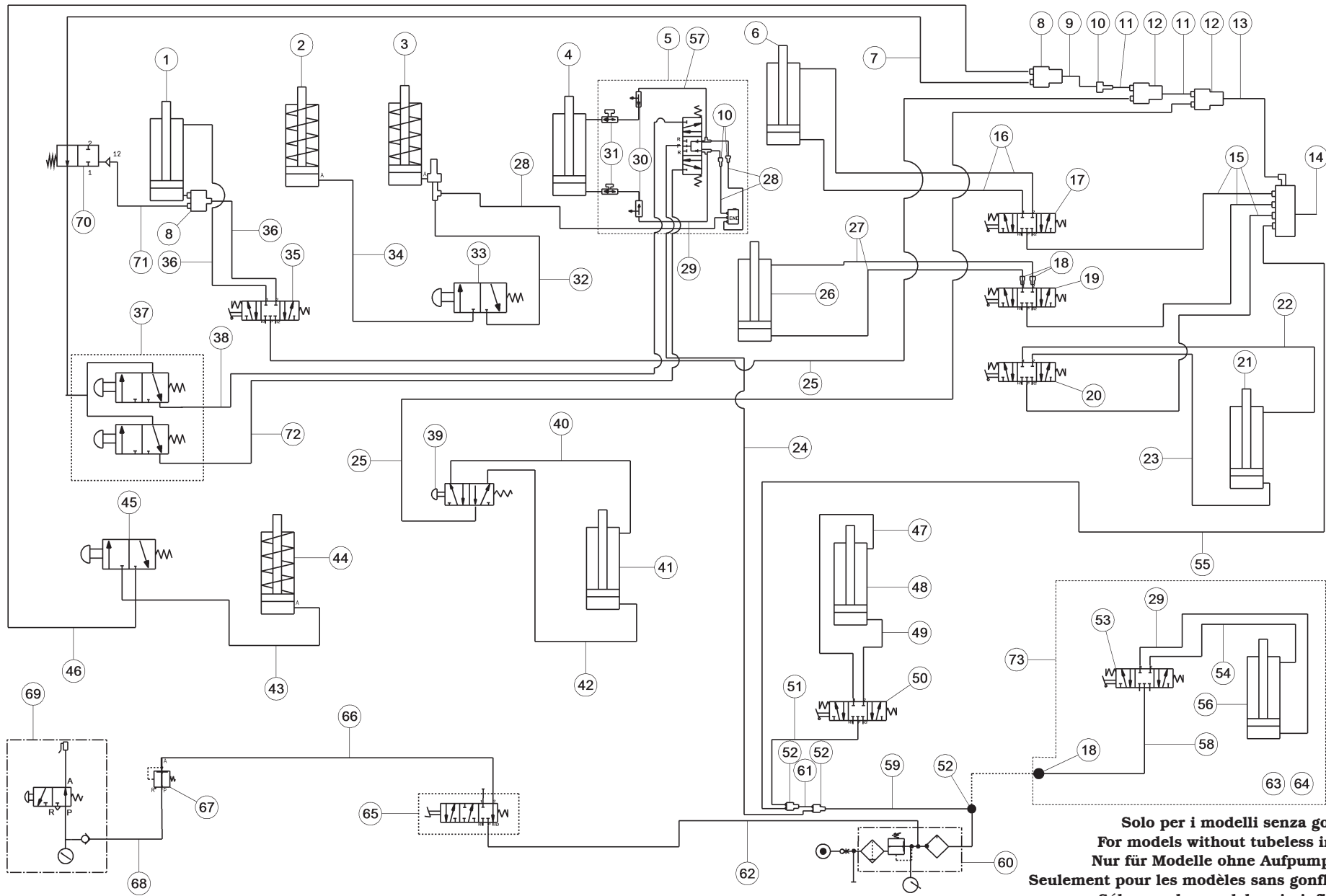






**TABELLA - COLLEGAMENTI ELETTRICI MORSETTIERA**  
**TABLE - TERMINAL BOARD ELECTRICAL CONNECTION**



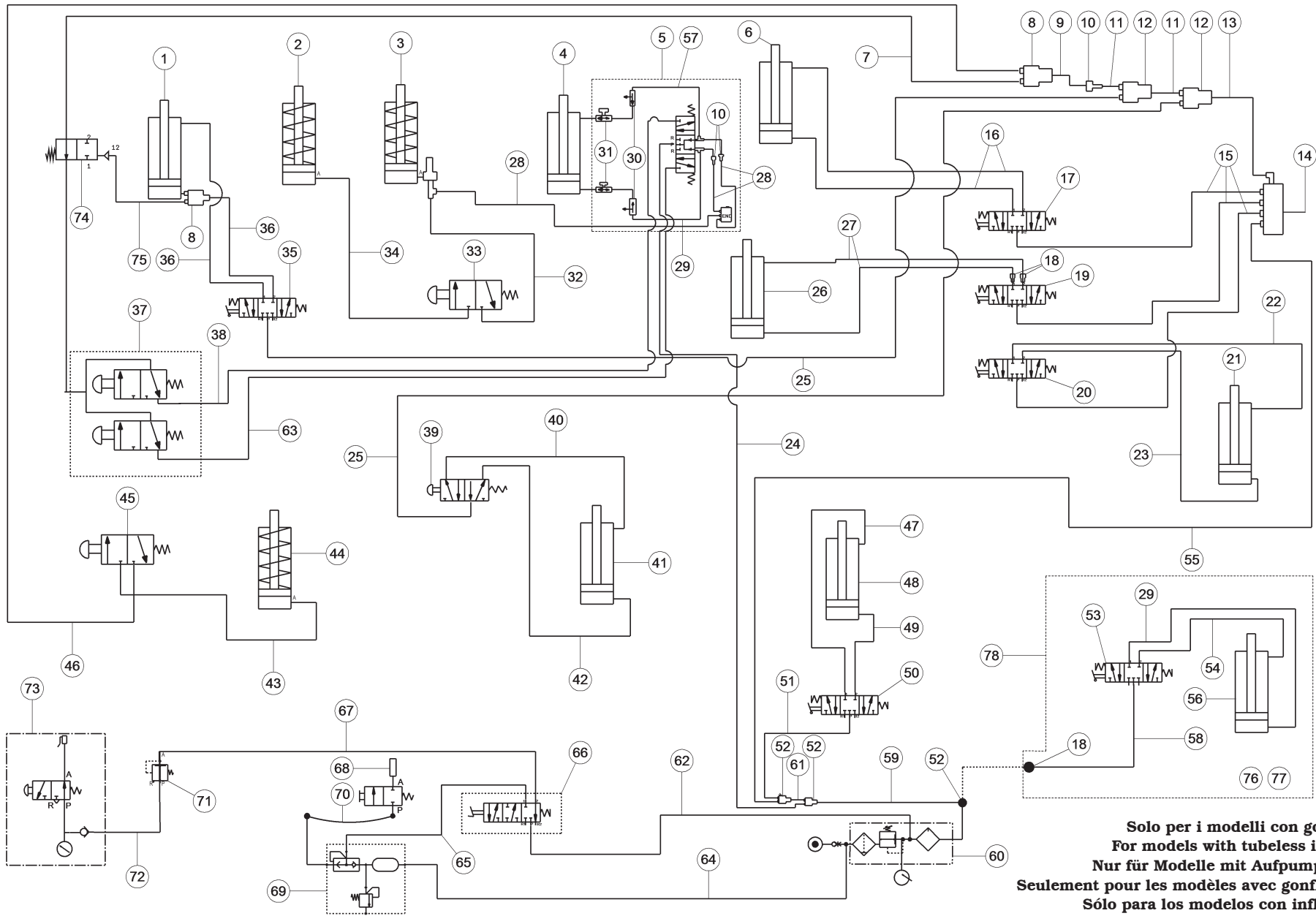


**Solo per i modelli senza gonfiatubeless**  
**For models without tubeless inflation only**  
**Nur für Modelle ohne Aufpumpen Tubeless**  
**Seulement pour les modèles sans gonflage tubeless**  
**Sólo para los modelos sin inflado tubeless**

N°	Cod.	Descrizione	Description	Beschreibung	Description	Descripción
1	730093780	Cilindro pneumatico 90x173x25	90x173x25 pneumatic cylinder	Pneumatikzylinder 90x173x25	Cylindre pneumatique 90x173x25	Cilindro neumático 90x173x25
2	710690520	Cilindro strangolo	Neck cylinder	Sperrvorrichtungszylinder	Cylindre étranglement	Cilindro estrangulación
3	730093850	Cilindro strangolo D.80	D.80 neck cylinder	Sperrvorrichtungszylinder D.80	Cylindre étranglement D.80	Cilindro estrangulación D.80
4	730093600	Cilindro pneumatico 70x310x20	70x310x20 pneumatic cylinder	Pneumatikzylinder 70x310x20	Cylindre pneumatique 70x310x20	Cilindro neumático 70x310x20
5	730093860	Gruppo pneumatico comando utensile	Tool control pneumatic unit	Werkzeugsbefehle Pneumatischesatz	Groupe pneumatique commande outil	Grupo neumático mando utensilio
6		Cilindro stallonatore	Bead breaking cylinder	Abdrückzylinder	Cylindre décolle-talon	Cilindro destalonador
7	317029	Tubo rilsan 4x2,7 bianco L=3300	4x2,7 white rilsan pipe L=3300	Rilsan Schlauch 4x2,7 weiß L=3300	Tuyau rilsan 4x2,7 blanc L=3300	Tubo rilsan 4x2,7 blanco L=3300
8	B5815000	Raccordo V D.4	V D.4 union	Verbindung V D.4	Raccord V D.4	Conector V D.4
9	317026	Tubo rilsan 4x2,7 nero L=60	4x2,7 black rilsan pipe L=60	Rilsan Schlauch 4x2,7 schwarz L=60	Tuyau rilsan 4x2,7 noir L=60	Tubo rilsan 4x2,7 negro L=60
10	325086	Riduzione intermedia D.6 - D.4	Intermediate reduction D.6 - D.4	Mittlere Reduktion D.6 - D.4	Reduction intermédiaire D.6 - D.4	Reducción intermedia D.6 - D.4
11	317006	Tubo rilsan 6x4 nero L=60	6x4 black rilsan pipe L=60	Rilsan Schlauch 6x4 schwarz L=60	Tuyau rilsan 6x4 noir L=60	Tubo rilsan 6x4 negro L=60
12	325191	Raccordo a V 6	V 6 union	V6-Verbindung	Raccord à V 6	Enlace a V 6
13	317006	Tubo rilsan 6x4 nero L=1000	6x4 black rilsan pipe L=1000	Rilsan Schlauch 6x4 schwarz L=1000	Tuyau rilsan 6x4 noir L=1000	Tubo rilsan 6x4 negro L=1000
14	B2850001	Blocchetto a 5 vie	5-way block	Blöckchen 5 Weg	Petit block à 5 voies	Bloquecillo a 5 vías
15	317007	Tubo rilsan 8x6 nero L=200	8x6 black rilsan pipe L=200	Rilsan Schlauch 8x6 schwarz L=200	Tuyau rilsan 8x6 noir L=200	Tubo rilsan 8x6 negro L=200
16	317010	Tubo rilsan 10x8 nero L=950	10x8 black rilsan pipe L=950	Rilsan Schlauch 10x8 schwarz L=950	Tuyau rilsan 10x8 noir L=950	Tubo rilsan 10x8 negro L=950
17		Valvola cilindro stallonatore	Bead-breaker cylinder valve	Zylinderabdrückerventil	Vanne cylindre décolle-talons	Válvula cilindro destalonador
18	325054	Riduzione 6-8	6-8 reduction	Reduktion 6-8	Reduction 6-8	Reducción 6-8
19		Valvola alzo palo	Column lifting valve	Zylinderabdrückerventil	Vanne lève-mât	Válvula levanta palo
20		Valvola sollevatore	Lifting device valve	Hubvorrichtungsventil	Vanne soulèveateur	Válvula llevador
21		Cilindro sollevatore	Lifting cylinder	Anhebezylinder	Cylindre soulèveateur	Cilindro levantador
22	317022	Tubo Elastolan 8x6 nero L=1200	8x6 black Elastolan pipe L=1200	Schlauch Elastolan 8x6 schwarz L=1200	Tuyau Elastolan 8x6 noir L=1200	Tubo Elastolan 8x6 negro L=1200
23	317022	Tubo Elastolan 8x6 nero L=1000	8x6 black Elastolan pipe L=1000	Schlauch Elastolan 8x6 schwarz L=1000	Tuyau Elastolan 8x6 noir L=1000	Tubo Elastolan 8x6 negro L=1000
24	317007	Tubo rilsan 8x6 nero L=250	8x6 black rilsan pipe L=250	Rilsan Schlauch 8x6 schwarz L=250	Tuyau rilsan 8x6 noir L=250	Tubo rilsan 8x6 negro L=250
25	317006	Tubo rilsan 6x4 nero L=2900	6x4 black rilsan pipe L=2900	Rilsan Schlauch 6x4 schwarz L=2900	Tuyau rilsan 6x4 noir L=2900	Tubo rilsan 6x4 negro L=2900
26		Cilindro alzo palo	Column lifting cylinder	Pfahlanhebenzylinder	Cylindre lève-mât	Cilindro levanta palo
27	317006	Tubo rilsan 6x4 nero L=3000	6x4 black rilsan pipe L=3000	Rilsan Schlauch 6x4 schwarz L=3000	Tuyau rilsan 6x4 noir L=3000	Tubo rilsan 6x4 negro L=3000
28	317026	Tubo rilsan 4x2,7 nero L=500	4x2,7 black rilsan pipe L=500	Rilsan Schlauch 4x2,7 schwarz L=500	Tuyau rilsan 4x2,7 noir L=500	Tubo rilsan 4x2,7 negro L=500
29	317006	Tubo rilsan 6x4 nero L=370	6x4 black rilsan pipe L=370	Rilsan Schlauch 6x4 schwarz L=370	Tuyau rilsan 6x4 noir L=370	Tubo rilsan 6x4 negro L=370
30	B4077600	Scarico rapido VSR	VRS rapid discharge	Schnellablass VSR	Décharge rapid VSR	Descarga rápida VSR
31	399275	Regolatore di flusso	Flow regulator	Flussregel	Regulateur de débit	Regulación de flujo
32	BMP90000	Tubo rilsan 4x2,7 giallo L=3240	4x2,7 yellow rilsan pipe L=3240	Rilsan Schlauch 4x2,7 gelb L=3240	Tuyau rilsan 4x2,7 jaune L=3240	Tubo rilsan 4x2,7 amarillo L=3240
33	710590800	Valvola NA	NA valve	Ventil NA	Vanne NA	Válvula NA
34	317026	Tubo rilsan 4x2,7 nero L=1915	4x2,7 black rilsan pipe L=1915	Rilsan Schlauch 4x2,7 schwarz L=1915	Tuyau rilsan 4x2,7 noir L=1915	Tubo rilsan 4x2,7 negro L=1915
35		Valvola comando cilindro utensile	Tool cylinder control valve	Werkzeugszylinder Ventilsteuerung	Vanne commande cylindre outil	Válvula mando cilindro utensilio
36	317026	Tubo rilsan 4x2,7 nero L=400	4x2,7 black rilsan pipe L=400	Rilsan Schlauch 4x2,7 schwarz L=400	Tuyau rilsan 4x2,7 noir L=400	Tubo rilsan 4x2,7 negro L=400
37	B2358000	Valvola comando "C"	"C" Control valve	Ventil Steuerung "C"	Vanne commande "C"	Válvula mando "C"
38	317027	Tubo rilsan 4x2,7 rosso L=2700	4x2,7 red rilsan pipe L=2700	Rilsan Schlauch 4x2,7 rot L=2700	Tuyau rilsan 4x2,7 rouge L=2700	Tubo rilsan 4x2,7 rojo L=2700
39		Valvola comando camma	Cam control valve	Nockenventilsteuerung	Vanne commande came	Válvula mando leva
40	317006	Tubo rilsan 6x4 nero L=3560	6x4 black rilsan pipe L=3560	Rilsan Schlauch 6x4 schwarz L=3560	Tuyau rilsan 6x4 noir L=3560	Tubo rilsan 6x4 negro L=3560
41	710491140	Gruppo cilindro pneumatico	Pneumatic cylinder unit	Satz pneumatischen Zylinders	Groupe cylindre pneumatique	Grupo cilindro neumático
42	317013	Tubo rilsan 6x4 blu L=3450	6x4 blue rilsan pipe L=3450	Rilsan Schlauch 6x4 blau L=3450	Tuyau rilsan 6x4 bleu L=3450	Tubo rilsan 6x4 azul L=3450
43	317026	Tubo rilsan 4x2,7 nero L=1150	4x2,7 black rilsan pipe L=1150	Rilsan Schlauch 4x2,7 schwarz L=1150	Tuyau rilsan 4x2,7 noir L=1150	Tubo rilsan 4x2,7 negro L=1150



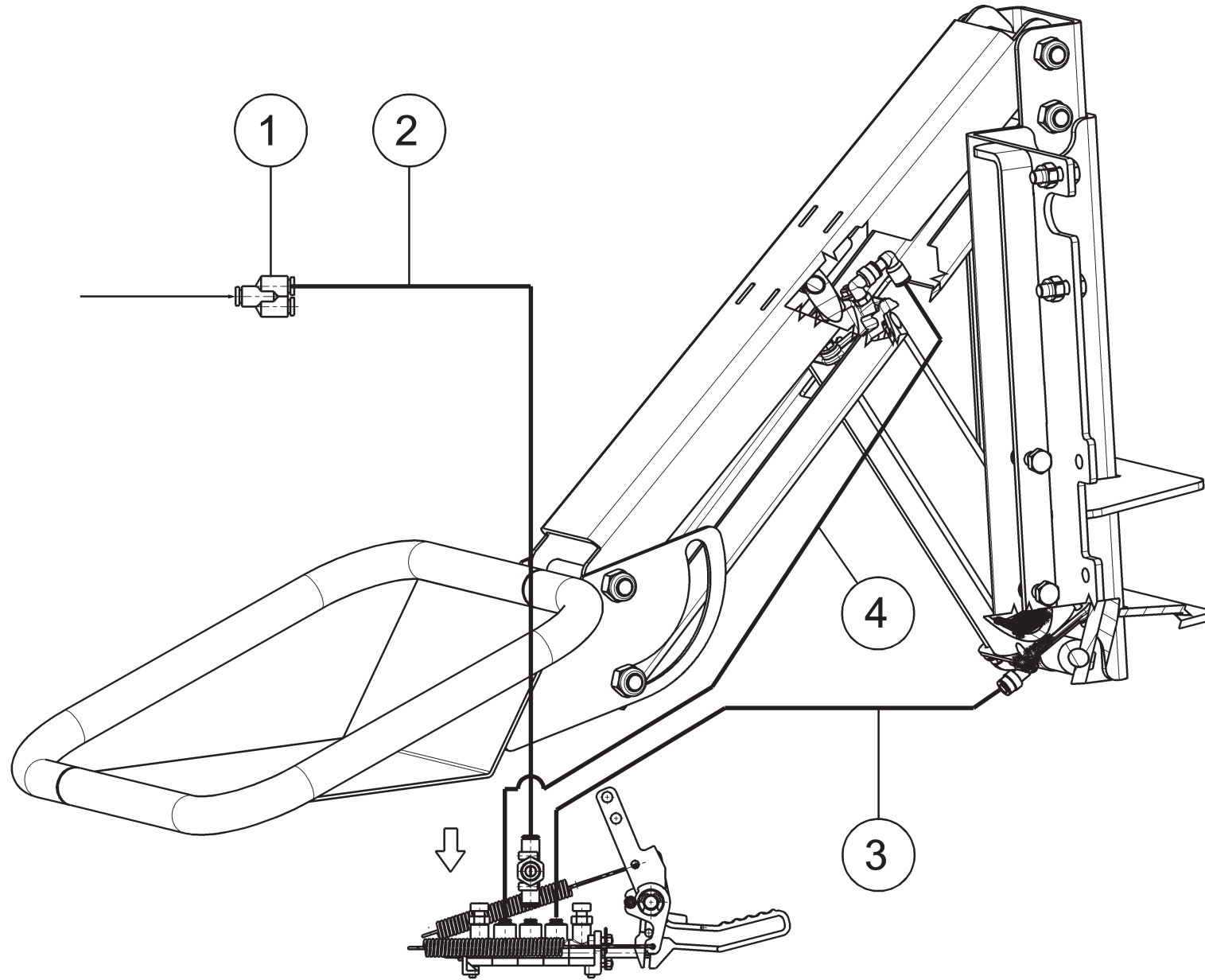




**Solo per i modelli con gonfiatubeless**  
**For models with tubeless inflation only**  
**Nur für Modelle mit Aufpumpen Tubeless**  
**Seulement pour les modèles avec gonflage tubeless**  
**Sólo para los modelos con inflado tubeless**

N°	Cod.	Descrizione	Description	Beschreibung	Description	Descripción
1	730093780	Cilindro pneumatico 90x173x25	90x173x25 pneumatic cylinder	Pneumatikzylinder 90x173x25	Cylindre pneumatique 90x173x25	Cilindro neumático 90x173x25
2	710690520	Cilindro strangolo	Neck cylinder	Sperrvorrichtungszylinder	Cylindre étranglement	Cilindro estrangulación
3	730093850	Cilindro strangolo D.80	D.80 neck cylinder	Sperrvorrichtungszylinder D.80	Cylindre étranglement D.80	Cilindro estrangulación D.80
4	730093600	Cilindro pneumatico 70x310x20	70x310x20 pneumatic cylinder	Pneumatikzylinder 70x310x20	Cylindre pneumatique 70x310x20	Cilindro neumático 70x310x20
5	730093860	Gruppo pneumatico comando utensile	Tool control pneumatic unit	Werkzeugsbefehle Pneumatischesatz	Groupe pneumatique commande outil	Grupo neumático mando utensilio
6		Cilindro stallonatore	Bead breaking cylinder	Abdrückzylinder	Cylindre décolle-talon	Cilindro destalonador
7	317029	Tubo rilsan 4x2,7 bianco L=3300	4x2,7 white rilsan pipe L=3300	Rilsan Schlauch 4x2,7 weiß L=3300	Tuyau rilsan 4x2,7 blanc L=3300	Tubo rilsan 4x2,7 bianco L=3300
8	B5815000	Raccordo V D.4	V D.4 fitting	Verbindung V D.4	Raccord V D.4	Empalme V D.4
9	317026	Tubo rilsan 4x2,7 nero L=60	4x2,7 black rilsan pipe L=60	Rilsan Schlauch 4x2,7 schwarz L=60	Tuyau rilsan 4x2,7 noir L=60	Tubo rilsan 4x2,7 negro L=60
10	325086	Riduzione intermedia D.6 - D.4	Intermediate reduction D.6 - D.4	Mittlere Reduktion D.6 - D.4	Reduction intermédiaire D.6 - D.4	Reducción intermedia D.6 - D.4
11	317006	Tubo rilsan 6x4 nero L=60	6x4 black rilsan pipe L=60	Rilsan Schlauch 6x4 schwarz L=60	Tuyau rilsan 6x4 noir L=60	Tubo rilsan 6x4 negro L=60
12	325191	Raccordo pneumatico Y-6	Y-6 pneumatic fitting	Pneumatischer Anschluss Y-6	Raccord pneumatique Y-6	Empalme neumático Y-6
13	317006	Tubo rilsan 6x4 nero L=1000	6x4 black rilsan pipe L=1000	Rilsan Schlauch 6x4 schwarz L=1000	Tuyau rilsan 6x4 noir L=1000	Tubo rilsan 6x4 negro L=1000
14	B2850001	Blocchetto a 5 vie	5-way block	Blöckchen 5 Weg	Petit block à 5 voies	Bloquecillo a 5 vías
15	317007	Tubo rilsan 8x6 nero L=200	8x6 black rilsan pipe L=200	Rilsan Schlauch 8x6 schwarz L=200	Tuyau rilsan 8x6 noir L=200	Tubo rilsan 8x6 negro L=200
16	317010	Tubo rilsan 10x8 ne L=950	10x8 black rilsan pipe L=950	Rilsanschlauch 10x8 schwarz L=950	Tuyau rilsan 10x8 noir L=950	Tubo rilsan 10x8 negro L=950
17		Valvola cilindro stallonatore	Bead-breaker cylinder valve	Zylinderabdrückerventil	Vanne cylindre décolle-talons	Válvula cilindro destalonador
18	325054	Riduzione 6-8	6-8 reduction	Reduktion 6-8	Reduction 6-8	Reducción 6-8
19		Valvola alzo palo	Column lifting valve	Zylinderabdrückerventil	Vanne lève-mât	Válvula levanta palo
20		Valvola sollevatore	Lifting device valve	Hubvorrichtungsventil	Vanne soulèveateur	Válvula llevador
21		Cilindro sollevatore	Lifting cylinder	Anhebezylinder	Cylindre soulèveateur	Cilindro levantador
22	317022	Tubo Elastolan 8x6 nero L=1200	8x6 black Elastolan pipe L=1200	Schlauch Elastolan 8x6 schwarz L=1200	Tuyau Elastolan 8x6 noir L=1200	Tubo Elastolan 8x6 negro L=1200
23	317022	Tubo Elastolan 8x6 nero L=1000	8x6 black Elastolan pipe L=1000	Schlauch Elastolan 8x6 schwarz L=1000	Tuyau Elastolan 8x6 noir L=1000	Tubo Elastolan 8x6 negro L=1000
24	317007	Tubo rilsan 8x6 nero L=250	8x6 black rilsan pipe L=250	Rilsan Schlauch 8x6 schwarz L=250	Tuyau rilsan 8x6 noir L=250	Tubo rilsan 8x6 negro L=250
25	317006	Tubo rilsan 6x4 nero L=2900	6x4 black rilsan pipe L=2900	Rilsan Schlauch 6x4 schwarz L=2900	Tuyau rilsan 6x4 noir L=2900	Tubo rilsan 6x4 negro L=2900
26		Cilindro alzo palo	Column lifting cylinder	Pfahlanhebenzylinder	Cylindre lève-mât	Cilindro levanta palo
27	317006	Tubo rilsan 6x4 nero L=3000	6x4 black rilsan pipe L=3000	Rilsan Schlauch 6x4 schwarz L=3000	Tuyau rilsan 6x4 noir L=3000	Tubo rilsan 6x4 negro L=3000
28	317026	Tubo rilsan 4x2,7 nero L=500	4x2,7 black rilsan pipe L=500	Rilsan Schlauch 4x2,7 schwarz L=500	Tuyau rilsan 4x2,7 noir L=500	Tubo rilsan 4x2,7 negro L=500
29	317006	Tubo rilsan 6x4 nero L=370	6x4 black rilsan pipe L=370	Rilsan Schlauch 6x4 schwarz L=370	Tuyau rilsan 6x4 noir L=370	Tubo rilsan 6x4 negro L=370
30	B4077600	Scarico rapido VSR	VRS rapid discharge	Schnellablass VSR	Décharge rapid VSR	Descarga rápida VSR
31	399275	Regolatore di flusso	Flow regulator	Flussregel	Regulateur de débit	Regulación de flujo
32	BMP90000	Tubo rilsan 4x2,7 giallo L=3240	4x2,7 yellow rilsan pipe L=3240	Rilsan Schlauch 4x2,7 gelb L=3240	Tuyau rilsan 4x2,7 jaune L=3240	Tubo rilsan 4x2,7 amarillo L=3240
33	710590800	Valvola NA	NA valve	Ventil NA	Vanne NA	Válvula NA
34	317026	Tubo rilsan 4x2,7 nero L=1915	4x2,7 black rilsan pipe L=1915	Rilsan Schlauch 4x2,7 schwarz L=1915	Tuyau rilsan 4x2,7 noir L=1915	Tubo rilsan 4x2,7 negro L=1915
35		Valvola comando cilindro utensile	Tool cylinder control valve	Werkzeugszylinder Ventilsteuerung	Vanne commande cylindre outil	Válvula mando cilindro utensilio
36	317026	Tubo rilsan 4x2,7 nero L=400	4x2,7 black rilsan pipe L=400	Rilsan Schlauch 4x2,7 schwarz L=400	Tuyau rilsan 4x2,7 noir L=400	Tubo rilsan 4x2,7 negro L=400
37	B2358000	Valvola comando "C"	"C" Control valve	Ventil Steuerung "C"	Vanne commande "C"	Válvula mando "C"
38	317027	Tubo rilsan 4x2,7 rosso L=2700	4x2,7 red rilsan pipe L=2700	Rilsan Schlauch 4x2,7 rot L=2700	Tuyau rilsan 4x2,7 rouge L=2700	Tubo rilsan 4x2,7 rojo L=2700
39		Valvola comando camma	Cam control valve	Nockenventilsteuerung	Vanne commande came	Válvula mando leva
40	317006	Tubo rilsan 6x4 nero L=3560	6x4 black rilsan pipe L=3560	Rilsan Schlauch 6x4 schwarz L=3560	Tuyau rilsan 6x4 noir L=3560	Tubo rilsan 6x4 negro L=3560
41	710491140	Gruppo cilindro pneumatico	Pneumatic cylinder unit	Satz pneumatischen Zylinders	Groupe cylindre pneumatique	Grupo cilindro neumático
42	317013	Tubo rilsan 6x4 blu L=3450	6x4 blue rilsan pipe L=3450	Rilsan Schlauch 6x4 blau L=3450	Tuyau rilsan 6x4 bleu L=3450	Tubo rilsan 6x4 azul L=3450
43	317026	Tubo rilsan 4x2,7 nero L=1150	4x2,7 black rilsan pipe L=1150	Rilsan Schlauch 4x2,7 schwarz L=1150	Tuyau rilsan 4x2,7 noir L=1150	Tubo rilsan 4x2,7 negro L=1150











## Dichiarazione di Conformità

Declaration of Conformity  
Konformitätserklärung  
Déclaration de Conformité  
Declaración de Conformidad



Noi  
We / Wir / Nous / Nosotros

**SPACE s.r.l.**  
**Via Sangano, 48**  
**10090 TRANA (Torino) - ITALIA**

### dichiariamo sotto la nostra esclusiva responsabilità che il prodotto

declare, undertaking sole responsibility, that the product  
erklären unter unserer alleinigen Verantwortung, dass das Produkt  
déclarons, sous notre entière responsabilité, que le produit  
declaramos bajo nuestra exclusiva responsabilidad, que el producto

#### Smontagomme

Tyre changer  
Reifenmontiermaschine  
Démonte-Pneus  
Desmontadora

### al quale questa dichiarazione si riferisce, risponde alle seguenti Direttive applicabili:

to which this declaration applies is in compliance with the following applicable Directives:  
auf das sich diese Erklärung bezieht, den nachstehenden anwendbaren Normen entspricht:  
objet de cette déclaration est conforme aux Directives applicables suivantes:  
al que se refiere esta declaración cumple con las siguientes Normas aplicables:

**2006/42/CE**  
**2014/30/UE**

Direttiva Macchine  
Direttiva Compatibilità Elettromagnetica

### Per la conformità alle suddette direttive sono state seguite le seguenti Norme Armonizzate:

To comply with the above mentioned Directives, we have followed the following harmonized directives:  
In Übereinstimmung mit o.g. Richtlinien wurden folgende harmonisierte Normen verfolgt:  
Pour la conformité aux normes ci-dessus, nous avons suivi les normes harmonisées suivantes:  
Para la conformidad a las Normas arriba mencionadas, hemos seguido las siguientes normas armonizadas:

**UNI EN ISO 12100:2010**

Sicurezza del macchinario – Principi generali di progettazione – Valutazione del rischio e riduzione del rischio

**CEI EN 60204-1:2006/AC:2010**

Sicurezza del macchinario – Equipaggiamento elettrico delle macchine –  
Parte 1: Regole generali

### E la seguente Norma tecnica

And the following technical Directive  
Sowie die folgende technische Norm  
Et la Norme technique suivante  
Y la siguiente Norma técnica

**UNI 11691:2017**

Macchine per smontaggio e montaggio pneumatici per veicoli – Requisiti di sicurezza

### La persona preposta a costituire il fascicolo tecnico è SPACE s.r.l..

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**SPACE s.r.l.**

Il modello della presente dichiarazione è conforme alla norma

**UNI CEI EN ISO/IEC 17050-1**

The version of this declaration conforms to the regulation  
Das Modell der vorliegenden Erklärung entspricht der Norm  
Le modèle de la présente déclaration est conforme à la norme  
El modelo de la presente declaración cumple la norma