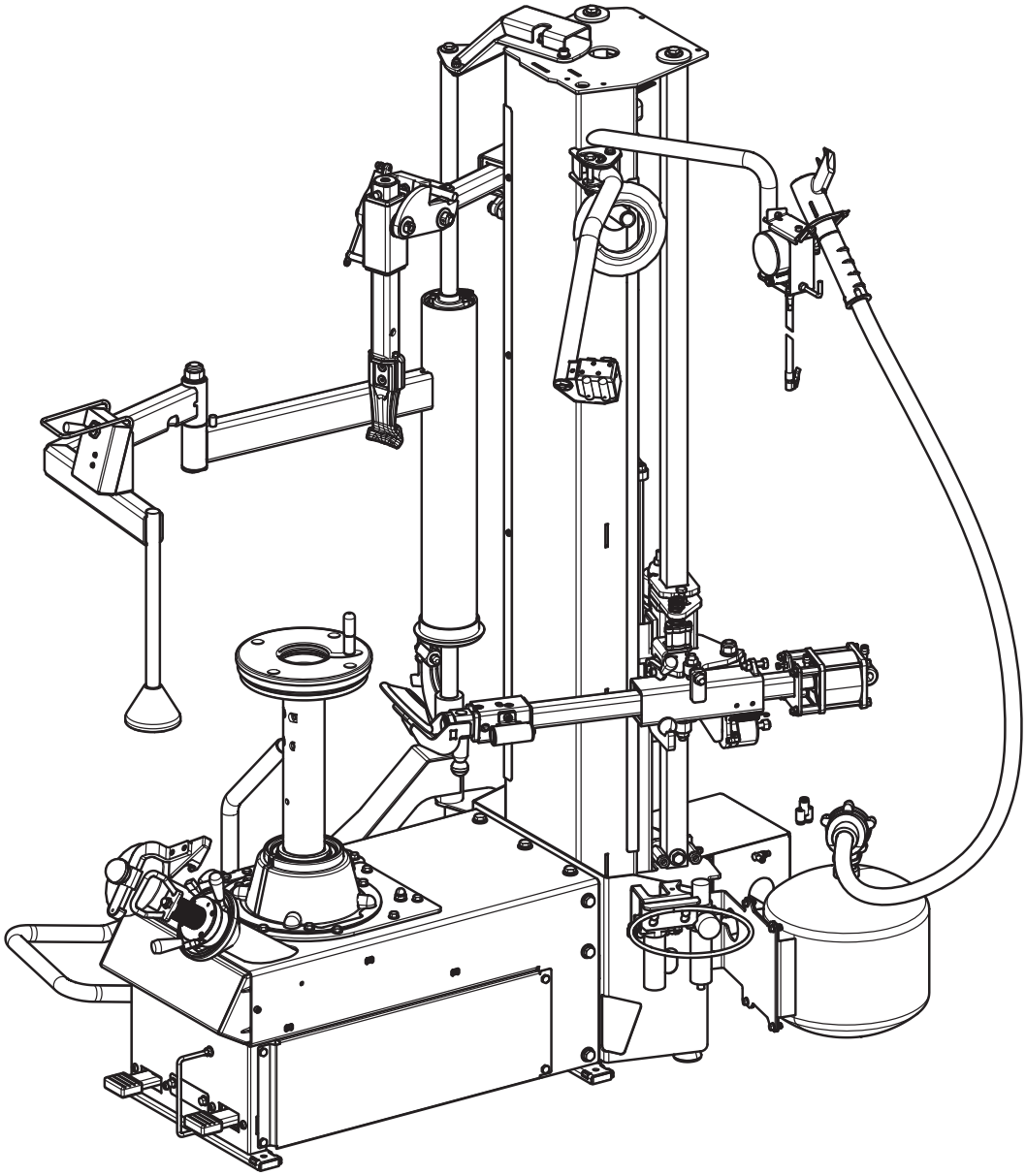
RWC1150 Tire Changer



OPERATION & MAINTENANCE MANUAL

IMPORTANT **Any damage caused by failure to follow the instructions in this manual or improper machine use shall relieve the manufacturer of all liability.**

CO11640

7107-M006-03

Rev. n. 03 (07/2021)

SUMMARY

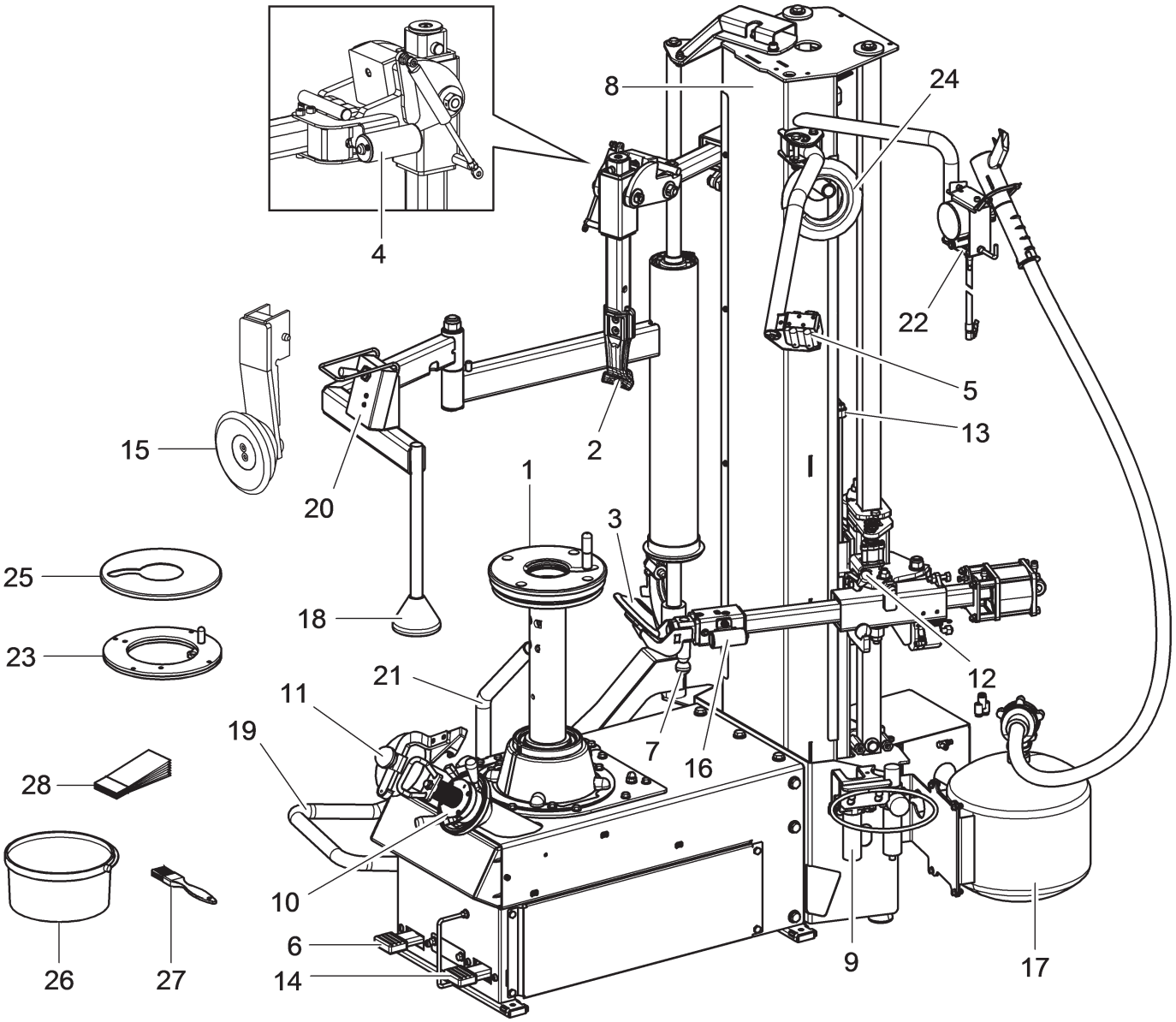
FEATURE / FITTINGS — Model	RWC1150.30IB	RWC1150.30IAB
Electric drive unit	●	
Pneumatic drive unit		●
Roller for matching	**OPT**	**OPT**
D.14 pin light truck flange	**OPT**	**OPT**

● = standard

OPT = standard

GENERAL DESCRIPTION

FIG. 1



KEY

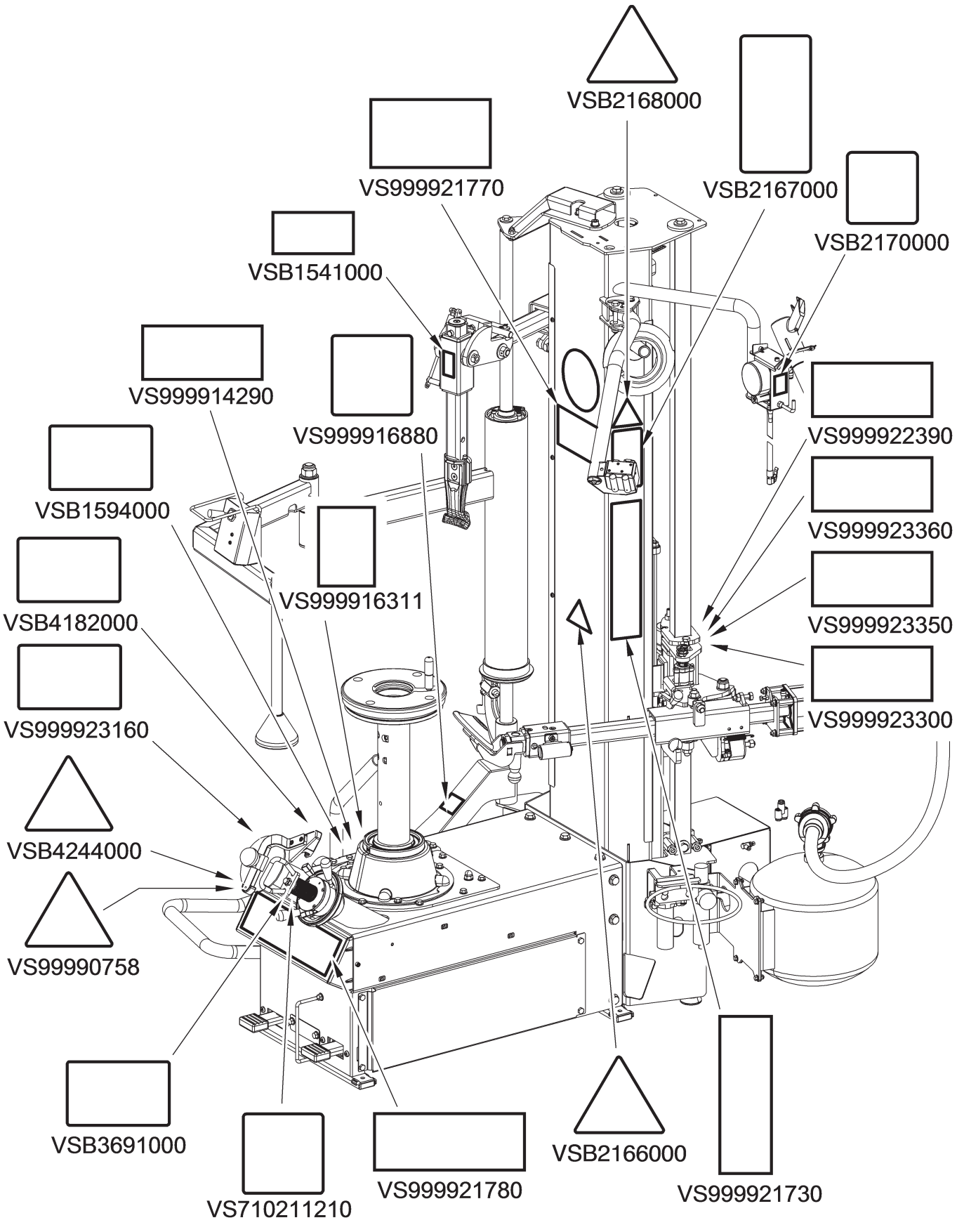
1 – Chuck
2 - Tool
3 – Bead Roller
4 – Handle with tool adjustment release
5 – Control push-button panel
6 – Inflation push-button panel
7 – Pin for lock/unlock of bead breaker roller rotation
8 – Column
9 – Pressure - reducer filter unit
10 – Locking device with quick nut
11 – Entrainer
12 – Lever for bead breaker lateral opening release
13 – Arms movement cylinder
14 – Chuck rotation pedalboard
15 – Roller for matching (optional)
16 – Handle with release of bead breaker adjustment
17 – Tubeless inflation unit
18 – Rotating bead pressing arm
19 – Wheel lifting device
20 – Rotating bead pressor arm and wheel lifting device control unit
21 – Guide pipe
22 – Pedal inflation device with pressure gage
23 – D.14 pin light truck flange (optional)
24 – Two-faced burnished cone
25 – Reverse wheels protection
26 – Mounting grease
27 - Brush
28 – Bead sliding foil

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.
	Danger! Be particularly careful.

Symbols	Description
	Warning. Be particularly careful (possible material damages).
	Move with fork lift truck or pallet truck.
	Lift from above.
	Technical assistance necessary. Do not perform any intervention.
	Note. Indication and/or useful information.
	Caution: hanging loads.

INFORMATION PLATE LOCATION DRAWING



VSB1541000	Danger plate
VSB1594000	Date indicating plate
VSB2166000	Bead breaker danger plate
VSB2167000	Protective clothing plate
VSB2168000	Tire burst plate
VSB2170000	Max inflation pressure rating plate
VSB3691000	Inflation pedal plate
VSB4182000	Electric motor specifications plate (on model with electric drive unit only)
VSB4244000	Rotating parts danger plate
VS99990758	Electricity danger plate (on model with electric drive unit only)
VS710211210	Rotation direction plate
VS999914290	Serial number plate
VS999916311	Rubbish skip plate
VS999916880	Max. capacity load 80 Kg plate (176 lbs)
VS999921730	Rotary plate
VS999921770	Rotary plate
VS999921780	Rotary "Wheel service" plate
VS999922390	Overload protection plate (on model with electric drive unit only)
VS999923160	Prop 65 Attention plate
VS999923300	1Ph 220V 20A 60 Hz voltage plate (on model with electric drive unit only)
VS999923350	For indoor use plate only (on model with electric drive unit only)
VS999923360	Disconnect power supply plate (on model with electric drive unit only)

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 ACCESSORY 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 purchasing this tire-changer. We feel sure you will not regret your decision.
The machine has been designed for use in professional workshops and in particular it stands out for its reliability, safe and rapid operation: with just a small degree of maintenance and care, this will give you many years of trouble-free service and lots of satisfaction.
This manual contains all operating instructions and details on how to service and use the machine correctly.

2.0 INTENDED USE

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

THIS ACCESSORY MUST ONLY BE USED FOR THE PURPOSE FOR WHICH IT IS SPECIFICALLY DESIGNED.
ANY OTHER USE IS CONSIDERED IMPROPER AND THEREFORE UNACCEPTABLE.

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 ENOUGH PREVENTIVE PREPARATION.

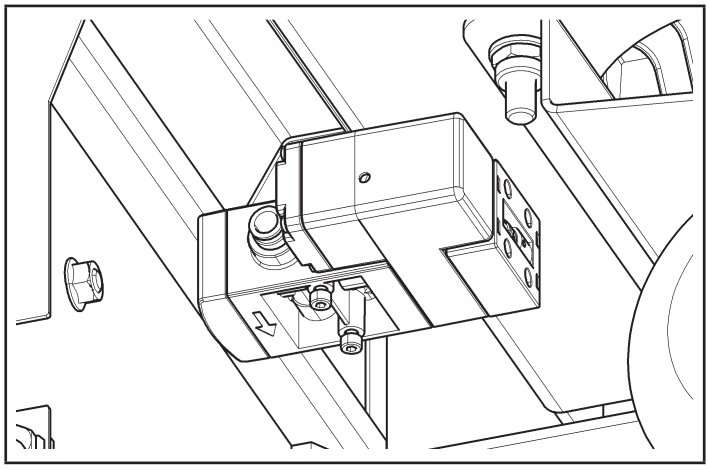
3.0 SAFETY DEVICES

DAILY CHECK THE INTEGRITY AND THE FUNCTIONALITY OF THE SAFETY AND PROTECTION DEVICES ON THE MACHINE.

All the machines are equipped with:

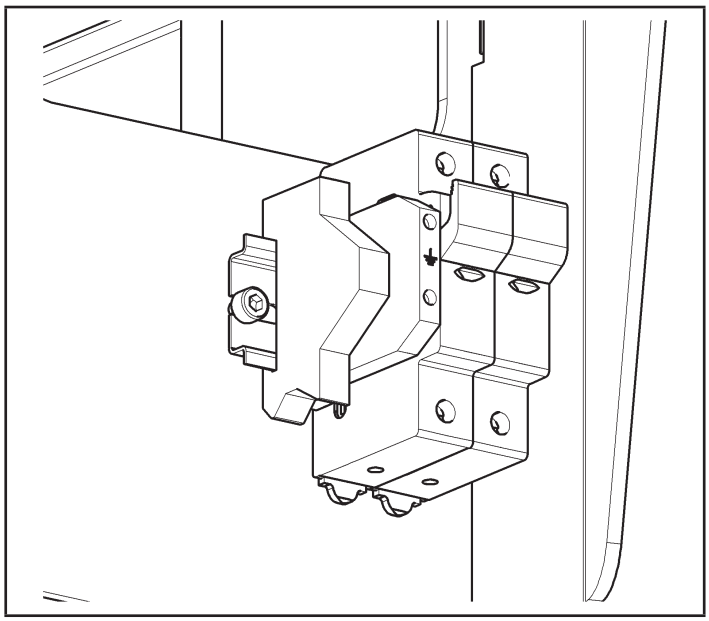
- "man-operated" controls (immediate stop of operation when the control is released) for all operating devices;
- chuck rotation;
- tool movement;
- bead breaking roller movement.
- Non-adjustable (balancing valve) pressure limiter (see figure below).

  This allows inflation of tires in reasonable safety. Inflation of tires to over 4.2 ± 0.2 bar (60 ± 3 psi) is not allowed.



- Control logic disposition

  Its function is to prevent the operator from dangerous mistakes.
- Additional safety device for protection against fuse excess current (see figure below) (on model with electric drive unit only).



- Motor protection devices (on model with electric drive unit only) The new "Invemotor" motor is equipped with electronic protection devices. They stop the motor if working defected conditions appear to avoid that the motor itself can be damaged and that the operator safety can be compromised (overvoltage, overload, overtemperature). For other details, see the chapt. 14 "Fault-Finding".

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 MACHINE INFORMATION DRAWING" on page 5.

4.0 IMPORTANT SAFETY INSTRUCTIONS

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

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

SAVE THESE INSTRUCTIONS

4.1 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 OSHA safety standards.
- 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 missfunctions and contact the customer service of an authorized dealer.
- In emergency conditions and before any maintenance or repair work, isolate the equipment from energy sources by disconnecting the power supply 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 tire. 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 and dry. 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.
- During inflation do not lean on the tire or stand on it; when beading in the tire, keep hands away from tire and rim edge.
- During inflation always stay to the side of the machine and never in front of it.
- When operating and servicing this machine, carefully follow all applicable safety and accident-prevention precautions.
  The machine must not be operated by untrained personnel.
- Never activate the inflation device (only on models with tubeless inflation) if the tire has not been correctly locked.

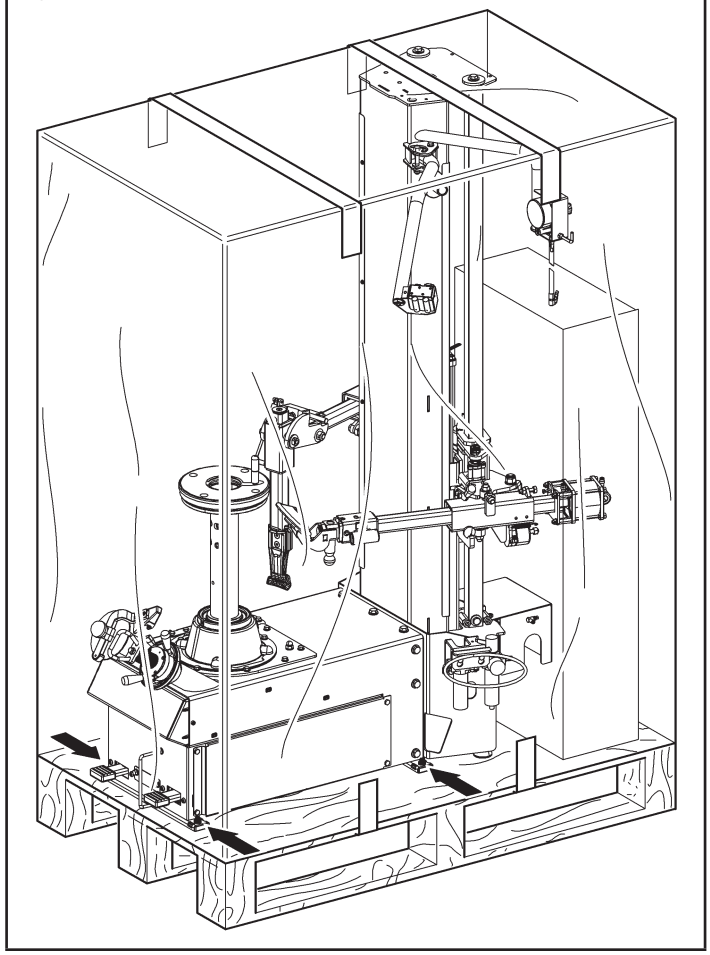
IN CASE OF A CHANCE SUPPLY FAILURE (WHETHER ELECTRICITY OR COMPRESSED AIR), MOVE THE PEDALS TO THE NEUTRAL POSITION.

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 machine is supplied packed in a cardboard box and partially assembled.
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 unnail 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 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

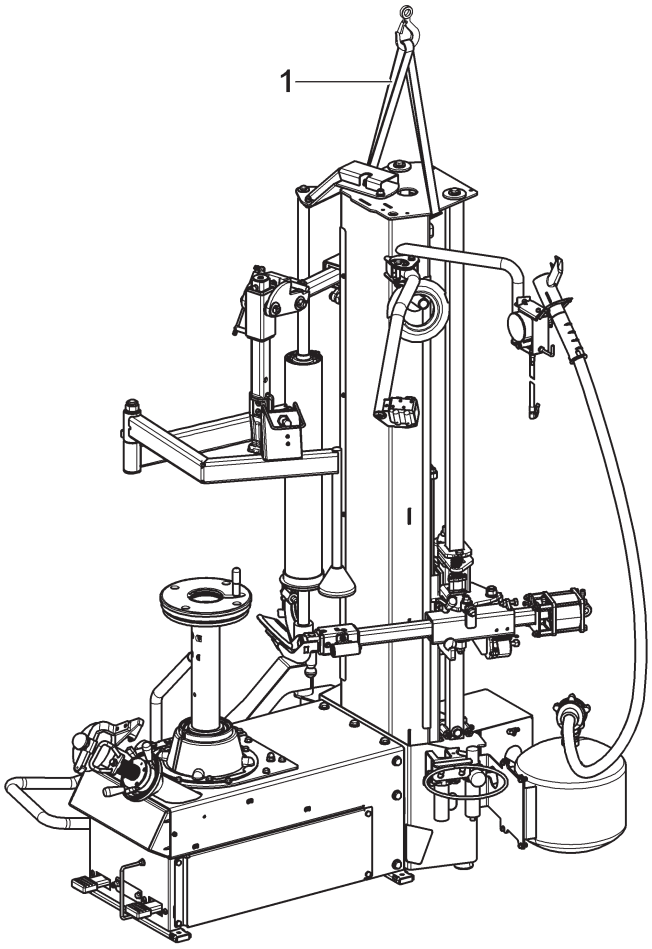
THE LIFTING EQUIPMENT MUST WITHSTAND A MINIMUM RATED LOAD EQUAL TO THE WEIGHT OF THE MACHINE (SEE PARAGRAPH TECHNICAL SPECIFICATIONS). DO NOT ALLOW THE LIFTED MACHINE TO SWING.

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.
- Sling with belts long at least 450 cm (177”) and with a capacity load greater than 2500 Kg (5500 lbs).

Then carry out the lifting using the rope (Fig. 3 ref. 1).

Fig. 3



8.0 WORKING ENVIRONMENT CONDITIONS

The machine must be operated under proper conditions as follows:

- temperature: +5 °C ÷ +40 °C (+41 °F ÷ +104 °F)
- relative humidity: 30 - 95% (dew-free)
- atmospheric pressure: 860 - 1060 hPa (mbar) (12.5 ÷ 15.4 psi).

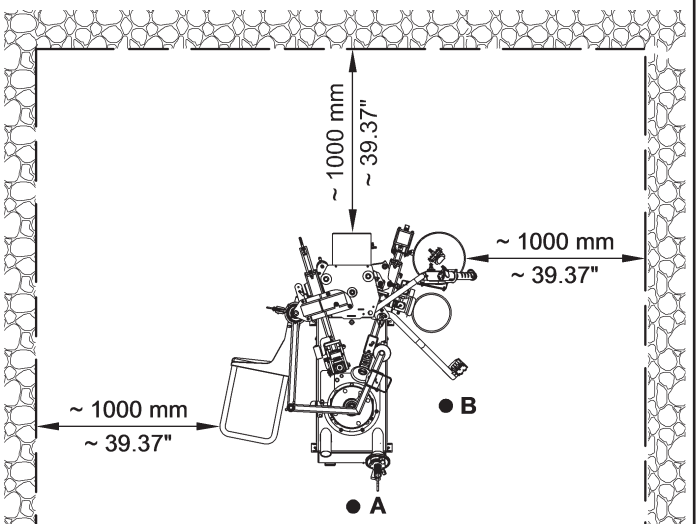
The use of the machine in ambient conditions other than those specified above is only allowed after prior agreement with and approval of the manufacturer.

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 with the chuck, while position B is ideal to follow tire 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

Fig. 4



USE THE MACHINE IN A DRY AND ADEQUATELY LIT PLACE, PROTECTED FROM ALL WEATHER CONDITIONS, THIS PLACE MUST BE IN COMPLIANCE WITH APPLICABLE SAFETY REGULATIONS.

The location of the machine requires a usable space as indicated in Figure 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 on 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\m² (102 lb/ft²).
The depth of the solid floor must be sufficient to guarantee that the anchoring bolts hold.

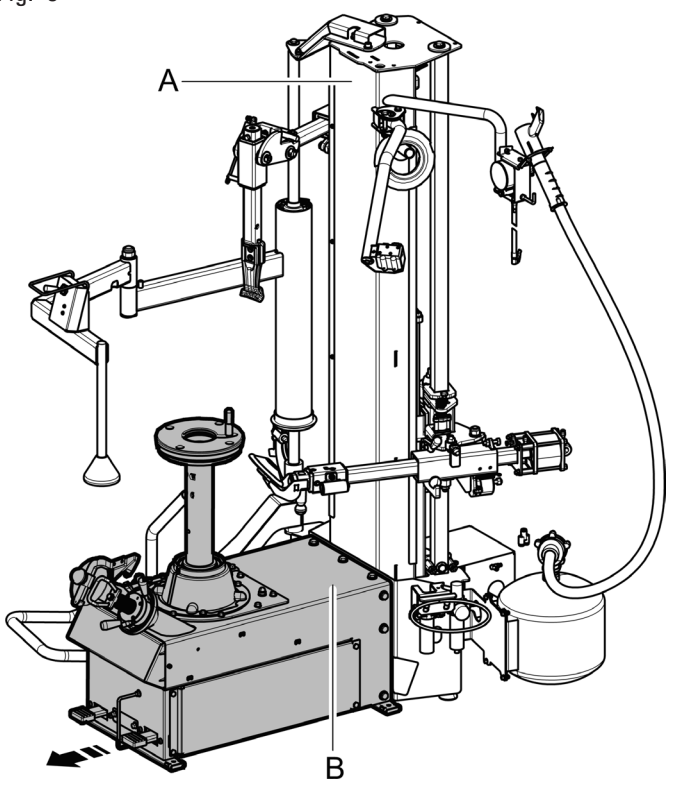
8.3 Lighting

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

8.4 Working area modification

After the delivery, the machine is preset to operate on wheel of 41" maximum diameter and a rim diameter (10" - 26"). It's also possible to move the base in relation to the tools column to enlarge the working area to 43" (with rim diameter of 12" - 28") and up to 45" (with rim diameter of 14" - 30") (see Fig. 5).

Fig. 5



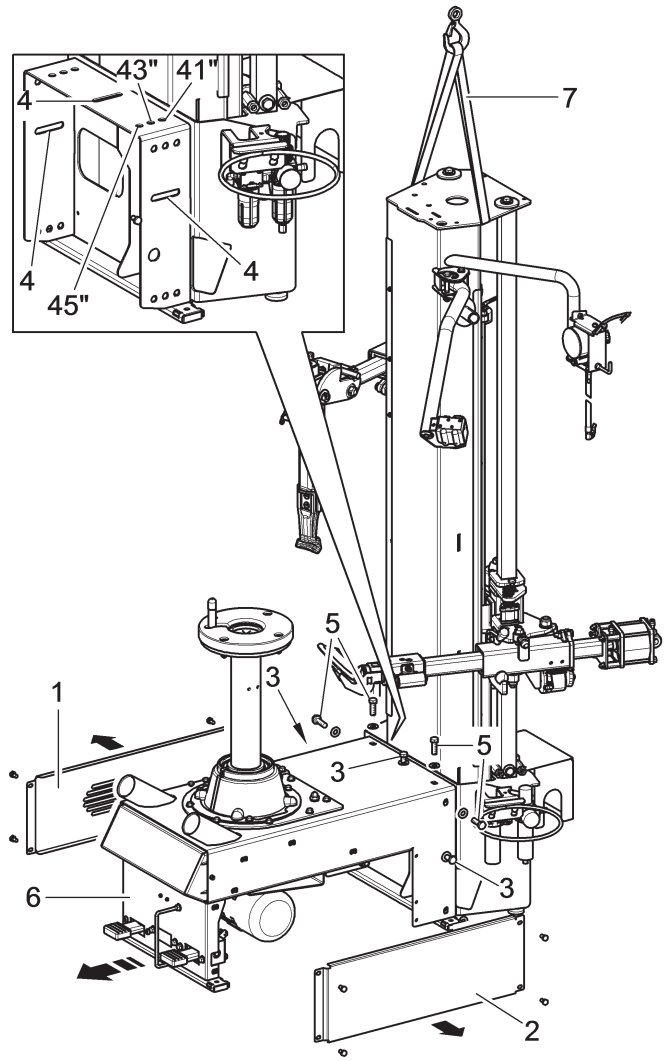
The movement of the base related to the column (Fig. 5 ref. A) occurs with the loosening of bolts securing the base (Fig. 5 ref. B) to the column and with the sliding of the same base in the slots provided up to the required measurement.

MAKE SURE THAT THE TIRE-CHANGER COLUMN IS STABLE: USE A CABLE HELD BY A HOIST AND HOOK THE CABLE TO THE COLUMN ITSELF (FIG. 6 REF. 7).

1. Remove the lateral guards (Fig. 6 ref. 1-2) of the machine.
2. Remove the bolts (Fig. 6 ref. 3) and the nuts near the central slots (Fig. 6 ref. 4) paying attention not to remove the nuts from the proper bolts.
3. Remove the six remaining bolts (Fig. 6 ref. 5).
4. Move the base (Fig. 6 ref. 6) into the required position (to 43" or 45") and if necessary, use a lifting device (Fig. 6 ref. 7).
5. Lock the base three bolts (Fig. 6 ref. 3) with a torque of 80 Nm (60 ft·lbs).
6. Place six bolts (Fig. 6 ref. 5) previously removed and lock them on the bases side with a torque of 80 Nm (60 ft·lbs).
7. Assemble again the lateral guards (Fig. 6 ref. 1-2) of the machine.

AFTER THE ASSEMBLY, CHECK THE CORRECT POSITION OF THE TOOLS. LOCK THE RIM ON THE CHUCK CENTER. WITH THE BEAD BREAKER ARM, CHECK THAT THE DISTANCE BETWEEN THE ROLLER AND THE RIM EDGES (UPPER AND LOWER) IS ALMOST THE SAME. REPEAT ALL THE PROCEDURES STARTING FROM POINT 1 IF THE DISTANCE IS NOT THE SAME.

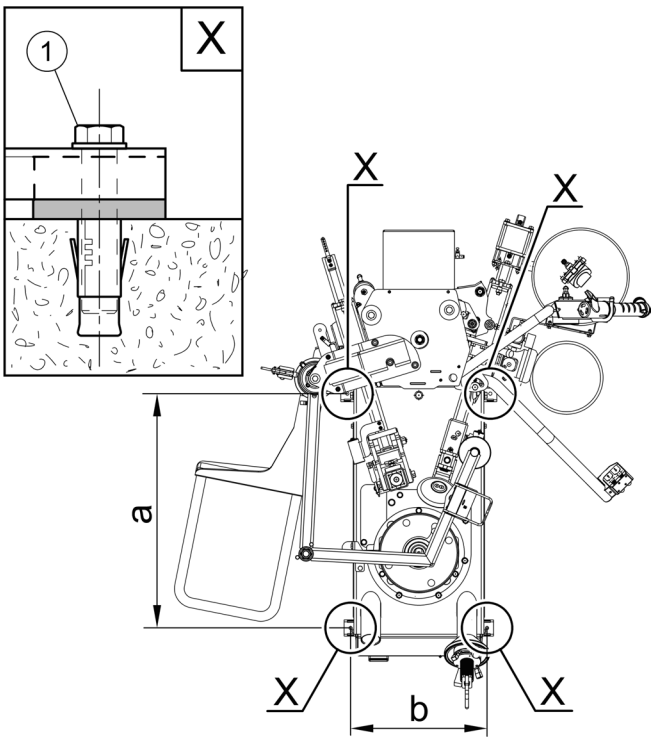
Fig. 6



9.0 ANCHORING SYSTEM

The packed machine is secured to the support pallet through the holes prearranged on the frame and indicated in the figure below. 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 fastening, 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 securing lower surface, as indicated in Fig. 7.

Fig. 7



a = 621 mm / 24.45”
b = 440 mm / 17.32”

- To secure the product to the ground, use anchoring blocks (Fig. 7 ref. 1) with a threaded shank M8 (UNC 5/16) suitable for the floor on which the tire changer will be secured and in a number equal to the number of fixing holes arranged on the bottom frame;
- drill holes in the floor, suitable for inserting the chosen anchors, in correspondence with the holes arranged on the bottom frame;
- insert the anchors into the holes drilled in the floor through the holes on the bottom frame and tighten the threaded elements;
- tighten the anchors on the base frame by applying a torque equal to that indicated by the manufacturer of the anchors.

10.0 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.

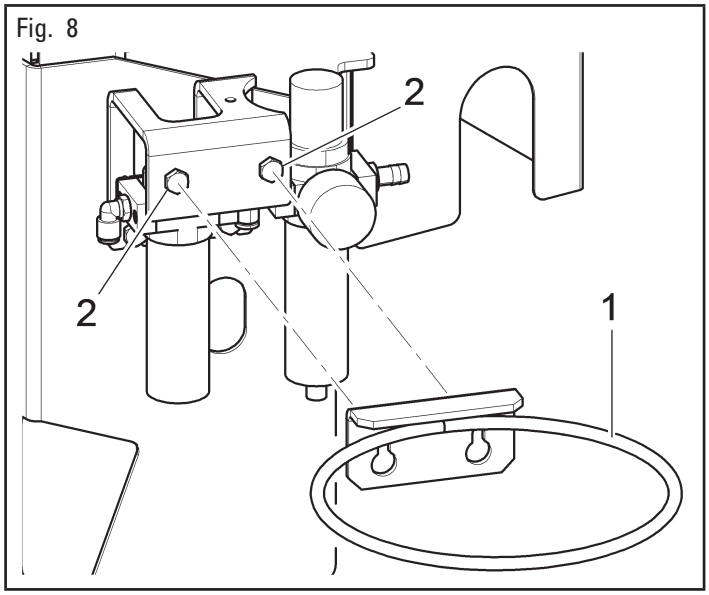
10.1 Assembly procedures

Remove the packaging and free the machine from the wrapping. Lift the machine and position it on the floor.

10.2 Grease holding ring mounting

Mount the grease bucket holder ring (Fig. 8 ref. 1), in the accessory box, using the 2 provided bolts already present on machine body (Fig. 8 ref. 2).

Fig. 8

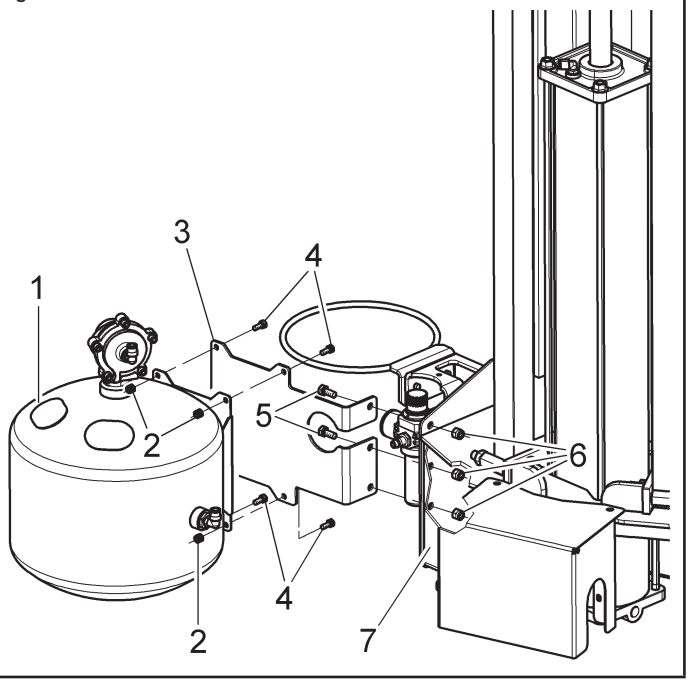


10.3 Tubeless inflation unit mounting

Assemble “Tubeless inflation” unit to the machine keeping to the following instructions:

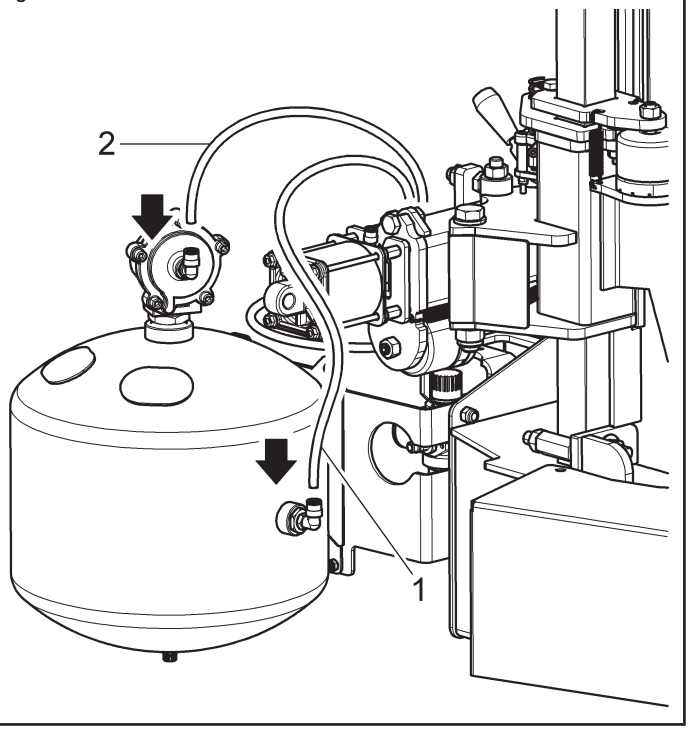
- secure the tank (Fig. 9 ref. 1) to the support flange (Fig. 9 ref. 3) using the bolts (Fig. 9 ref. 4) and nuts (Fig. 9 ref. 2) equipped on issue;
- secure the flange (Fig. 9 ref. 3) to the machine (Fig. 9 ref. 7) using the bolts (Fig. 9 ref. 5) and nuts (Fig. 9 ref. 6).

Fig. 9



Connect the black pipe (Fig. 10 ref. 1) and the blue pipe (Fig. 10 ref. 2) on the provided quick couplings as shown in figure Fig. 10.

Fig. 10

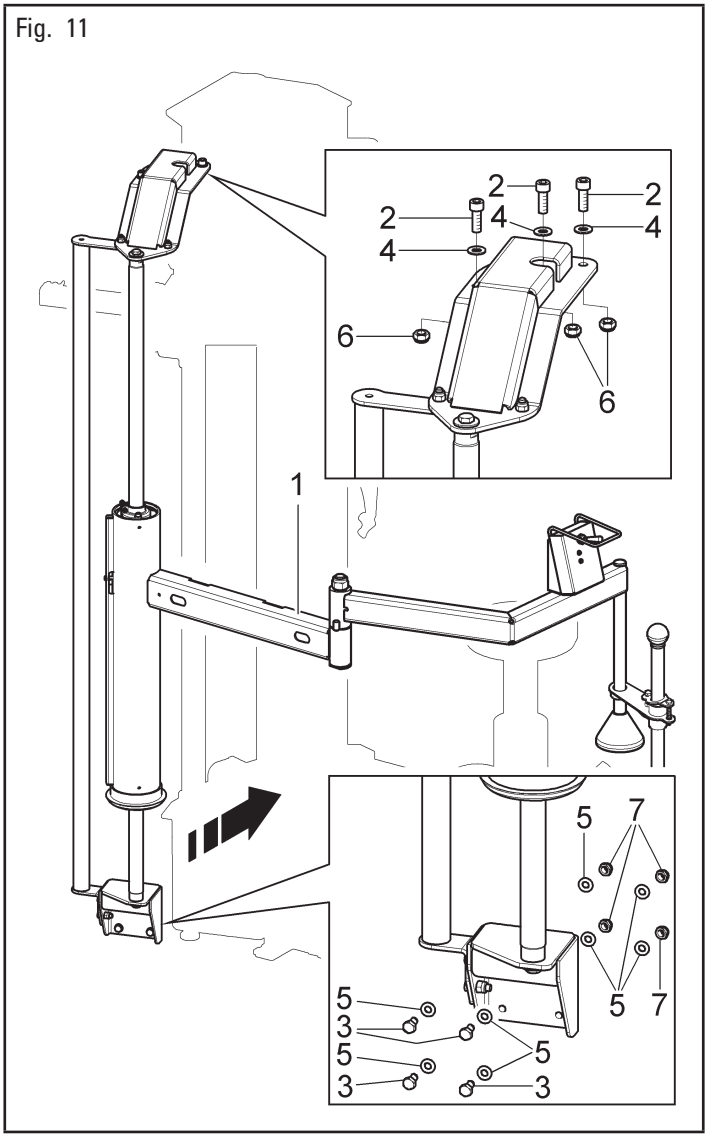


10.4 Rotating bead pressing arm

BEFORE PERFORMING ANY OPERATION, THE POWER SUPPLY OF THE TIRE-CHANGING MACHINE MUST BE DISCONNECTED.

Secure the Device (Fig. 11 ref. 1) to the machine, as indicated in the figure, with bolts (Fig. 11 ref. 2 and 3), washers (Fig. 11 ref. 4 and 5) and nuts (Fig. 11 ref. 6 and 7), supplied.

Fig. 11

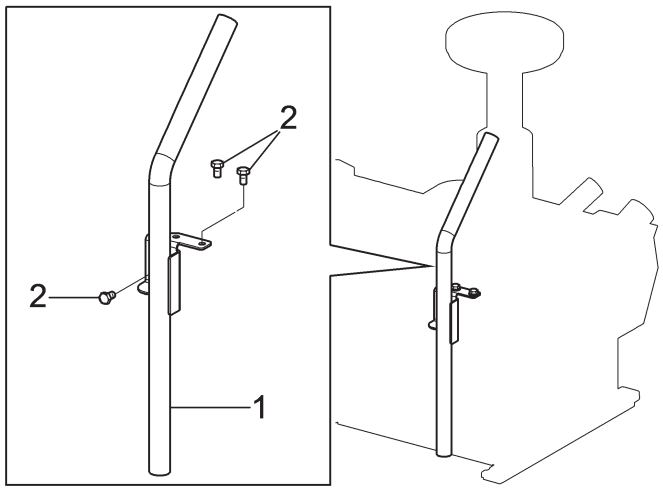


10.5 Wheel lifting device installation

BEFORE PERFORMING ANY OPERATION, THE POWER SUPPLY OF THE TIRE-CHANGING MACHINE MUST BE DISCONNECTED.

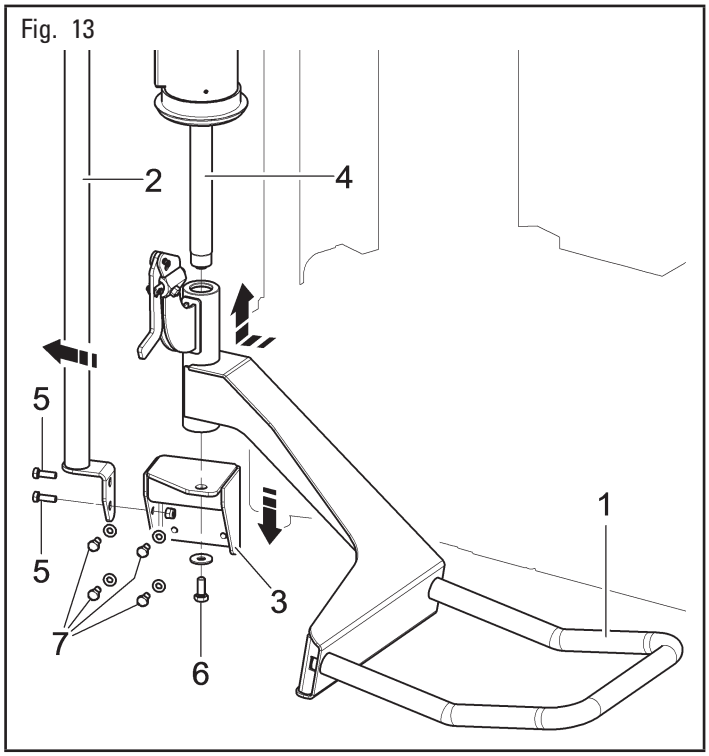
Connect the guide pipe (Fig. 12 ref. 1) to the tire changing machine, using the supplied bolts (Fig. 12 ref. 2).

Fig. 12



Remove the lower bolts (Fig. 13 ref. 5) of the retainer pipe (Fig. 13 ref. 2) and the cylinder fastening bolt (Fig. 13 ref. 6). Remove the bolts (Fig. 13 ref. 7) securing the lower bracket (Fig. 13 ref. 3) to the machine. Extract the bracket downwards (Fig. 13 ref. 3) from the shaft (Fig. 13 ref. 4). Mount the lifting device unit (Fig. 13 ref. 1) to the device as indicated in the figure. At the end connect the retainer pipe again following the operations described above in reverse order.

Fig. 13



10.6 Electrical connections (on model with electric drive unit only)

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

BEFORE CONNECTING THE MACHINE MAKE SURE THAT:

- POWER LINE SPECIFICATIONS CORRESPOND TO MACHINE REQUIREMENTS 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:

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).

FAILURE TO OBSERVE THE ABOVE INSTRUCTIONS WILL IMMEDIATELY INVALIDATE THE WARRANTY.

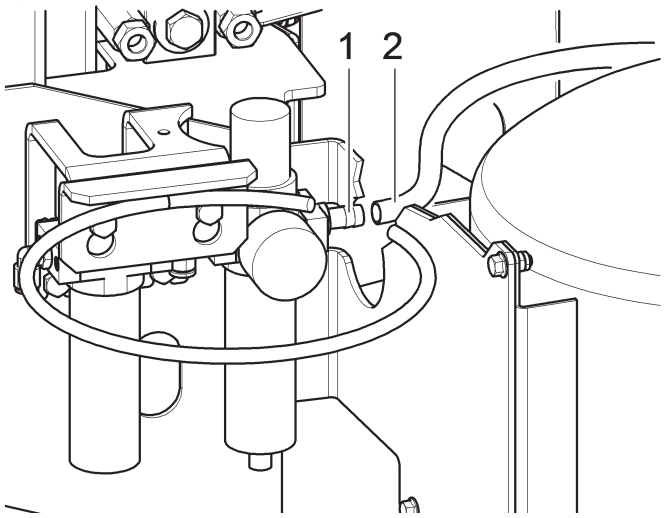
Models	Type	Voltage	Amperage	Poles	Minimum IP rating
Inverter	NEMA L6-20P	200V	20A	2 Poles + Ground	IP 44

10.7 Air connection

EACH PNEUMATIC INTERVENTION MUST BE CARRIED OUT BY PROFESSIONALLY QUALIFIED STAFF.

Connect the tire changer to the workshop compressed air system by means of plug (Fig. 14 ref. 1).
The pressurized pipe coming from the mains must have a section of 1/4x10 (Fig. 14 ref. 2).
The filter unit is already mounted on the machine.

Fig. 14



10.8 Checks

BEFORE STARTING UP THE TIRE-CHANGER, BE SURE TO BECOME FAMILIAR WITH THE LOCATION AND OPERATION OF ALL CONTROLS AND CHECK THEIR PROPER OPERATION (SEE PAR. "CONTROLS").

CARRY OUT A DAILY CHECK OF MAINTAINED-TYPE CONTROLS CORRECT FUNCTIONING, BEFORE STARTING MACHINE OPERATION.

11.0 CONTROLS

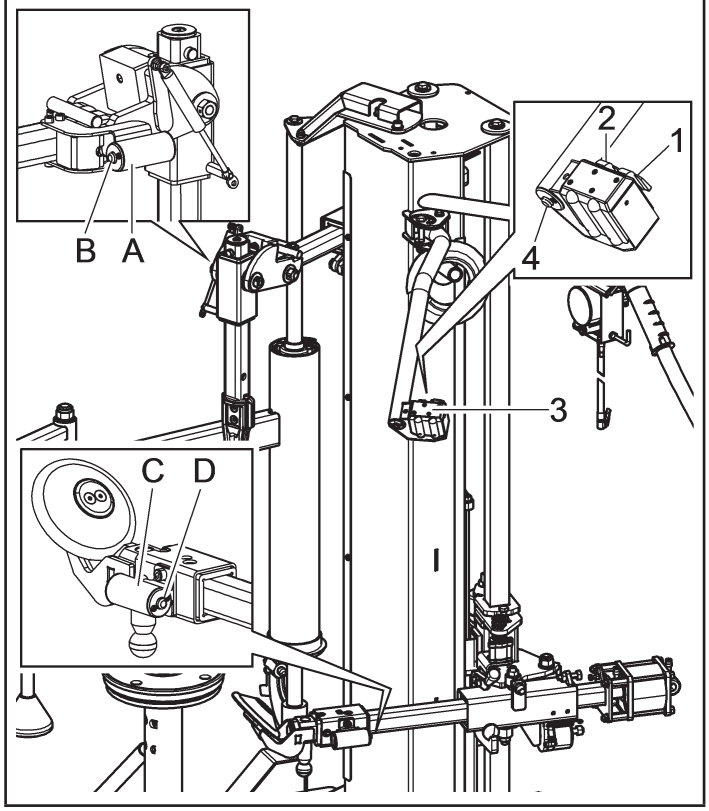
11.1 Control device

It consists of two push buttons with a different function, inserted on a single control block (Fig. 15 ref. 3).
The two pneumatic push buttons present in the control drive the vertical movement of the bead breaker roller arm (Fig. 15 ref. 1) and of the tool arm (Fig. 15 ref. 2).
The vertical control unit is also equipped with a push button for the forward drive of the bead breaking roller (Fig. 15 ref. 4).

- Handle "A": through a thrust and return movement and together with "B" unlocking push button it enables the tool setting on the wheel diameter.
- Handle "C": through a thrust and return movement and together with "D" unlocking push button it enables the bead breaker rollers setting on the wheel diameter.
- Unlocking push button "B"pushed before handle "A" for tool positioning. Releasing the push button, the tool locks itself into the set position.
- Unlocking push button "D"pushed before handle "C" for bead breaker roller positioning. Releasing the push button, the roller locks itself into the set position.

"B" AND "D" PUSH BUTTONS MUST BE PRESSED BEFORE OPERATING THE CORRESPONDING "A" AND "C" HANDLES; OTHERWISE, THE HANDLES DO NOT ALLOW ANY MOVEMENT.

Fig. 15



11.2 Pedalboard

Inflation “pedal A”, with “hands-on” operation, delivers air at controlled pressure (max 4,2 ± 0,2 bar / 60 ± 3 psi).
The pedal has three positions:

1. released position: it closes air outlets.
2. middle stroke position, with “hands-on” operation: it lets air out from inflation pipe connected to the gage;
3. pressed all the way in position: jet of air from the inflation nozzle to assist the beading in of the tire, and, at the same time, the concurrent air leak from inflation pipe.

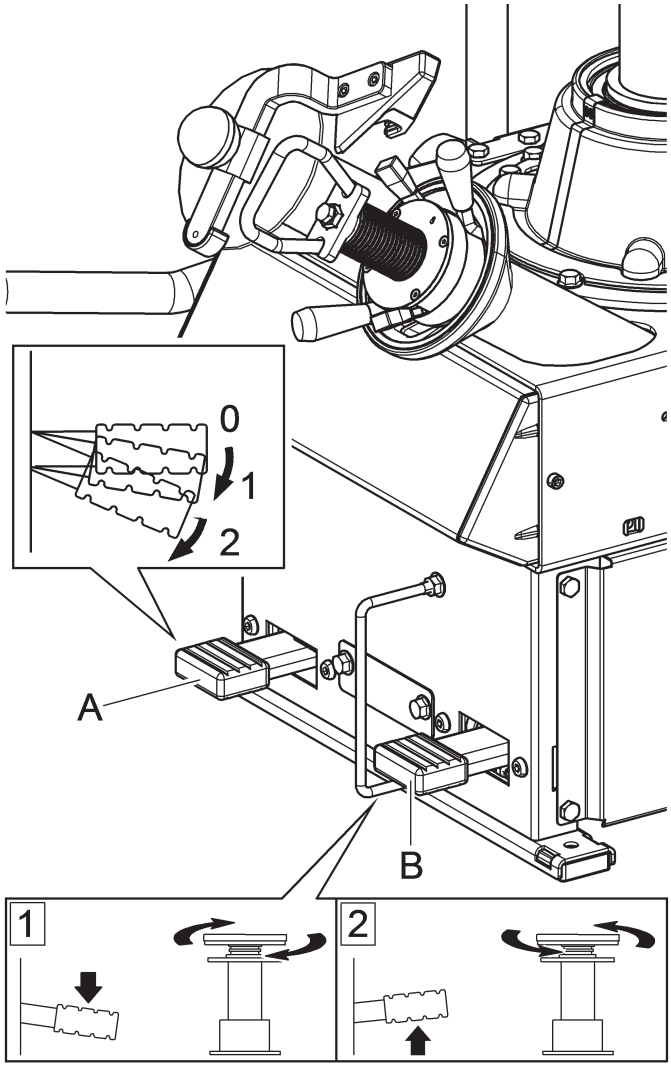
DO NOT CHANGE THE SET OPERATING PRESSURE VALUE BY MEANS OF THE MAXIMUM PRESSURE VALVES. THE MANUFACTURER SHALL NOT BE RESPONSIBLE FOR INJURY OR DAMAGE ARISING FROM UNAUTHORISED CHANGES.

“Pedal B” has two maintained control 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.

Model with electric drive unit only

THE CHUCK UNIT SPEED CAN BE CONTINUOUSLY ADJUSTED UP TO THE MAXIMUM SPEED THROUGH A PROGRESSIVE PRESSURE ON THE PEDAL, ONLY IN CLOCKWISE DIRECTION.

Fig. 16

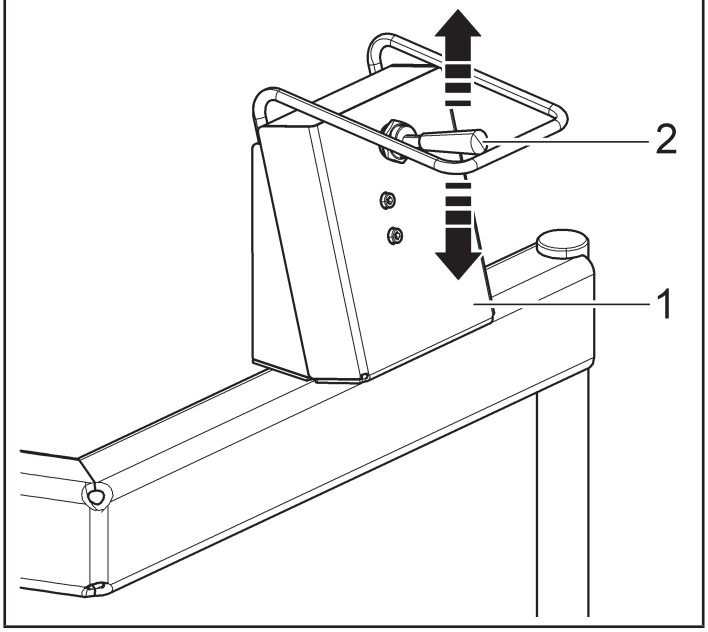


KEY (pedal ref. A)
ref. 1 - Tire inflation with pressure gage
ref. 2 - Tire inflation with pressure gage + inflation nozzle

11.3 Rotating bead pressor arm and wheel lifting device control unit

It is made up of an handle control (Fig. 17 ref. 1), positioned on the device. Using this handle control it's possible to control the vertical shifting of the rotary bead depressing unit (Fig. 1 ref. 18) with lifting device (Fig. 1 ref. 19). Lift the lever (Fig. 17 ref. 2) to operate the upwards movement, and lower the lever (Fig. 17 ref. 2) to perform the downwards movement. The device arms positioning next to the tire is a completely manual operation.

Fig. 17



12.0 USING THE MACHINE

12.1 Precaution measures during tire removal and fitting

Before fitting a tire, observe the following safety rules:

- rim and tire must always be clean, dry and in good condition; if necessary, clean the rims and check that:
  - neither the bead nor the tread of the tire 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 tire beads, using specific tire lubricants only;
- replace the inner tube valve with a new valve, if the tire tube has a metal valve, replace the grommet;
- always make sure that tire and rim sizes are correct for their coupling; on the contrary, never fit a tire unless you are sure it is of the right size (the rated size of rim and tire 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 TIRE TO COMPLETELY DEFLATE.

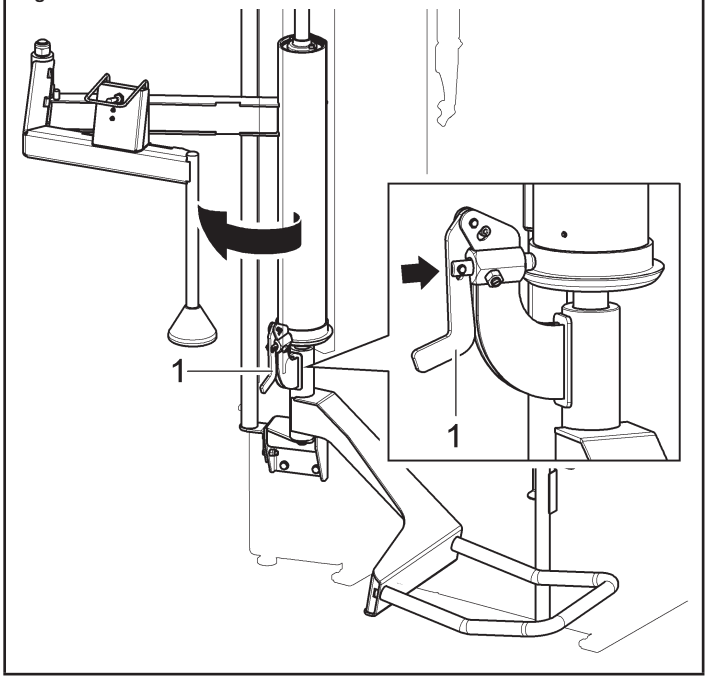
- Establish from which side the tire should be demounted, checking the position of the groove.
- Find the rim locking type.
- Try to establish the special types of wheels, such as "TD" and "AH", in order to improve locking, bead breaking, assembly and disassembly performances.

WHEN HANDLING WHEELS WEIGHING MORE THAN 10 KG (22 lbs) AND/OR WITH A FREQUENCY OF MORE THAN 20/30 WHEELS PER HOUR, THE LIFTING DEVICE SHOULD BE USED.

12.3 Use of the wheel lifting device

MAKE SURE THE CLAMPING HOOK (FIG. 18 REF. 1) IS POSITIONED AS INDICATED IN FIG. 18 AND CLOSE THE DEVICE IN REST POSITION.

Fig. 18



1. After having placed the wheel on the lifting device (Fig. 19 ref. 1), lift the control unit's lever (Fig. 19 ref. 2) and bring the wheel to a level where it can be shifted to the chuck by hand (see Fig. 20).

Fig. 19

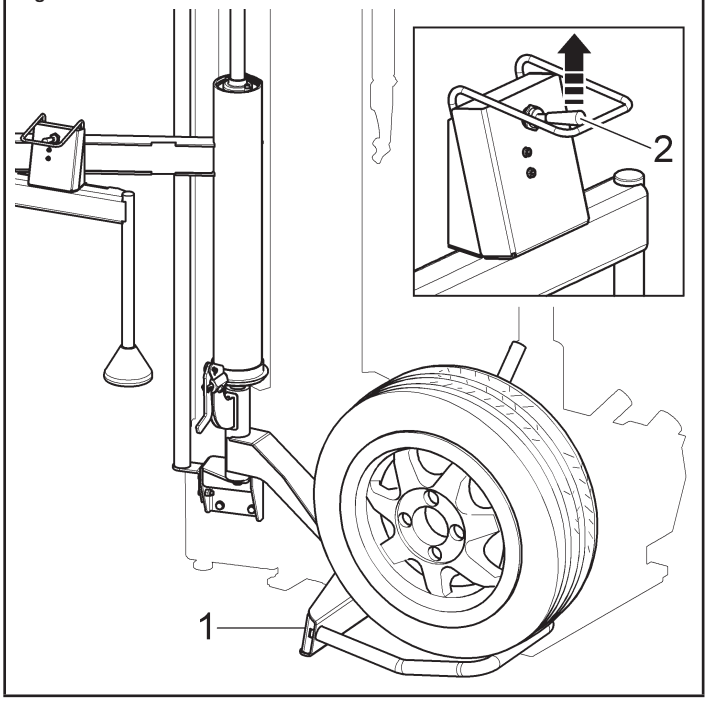
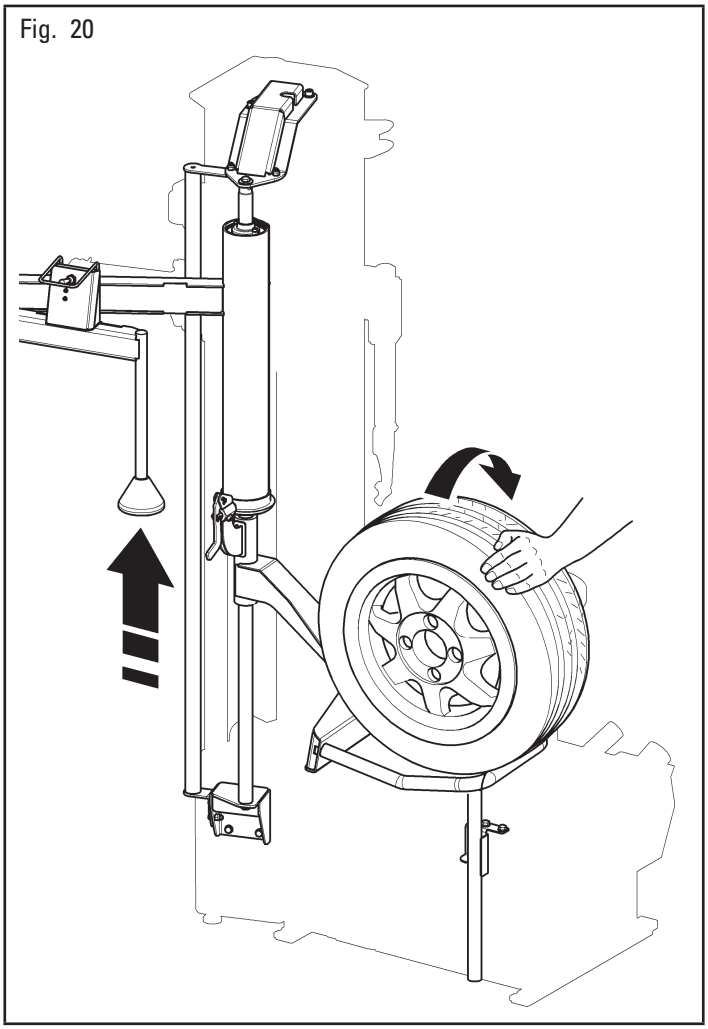


Fig. 20



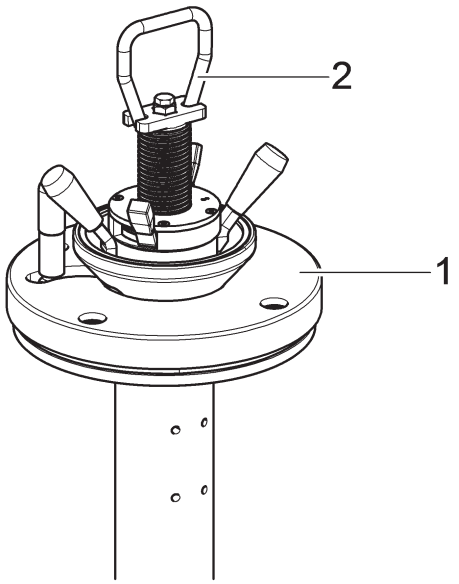
2. Place the wheel on the chuck.
3. Lower the control unit's lever to lower the lifting device.

12.4 Wheel clamping

12.4.1 Locking of car wheels

All wheels must be locked on the rubber plate (Fig. 21 ref. 1) through the central hole using the proper locking device (Fig. 21 ref. 2).

Fig. 21

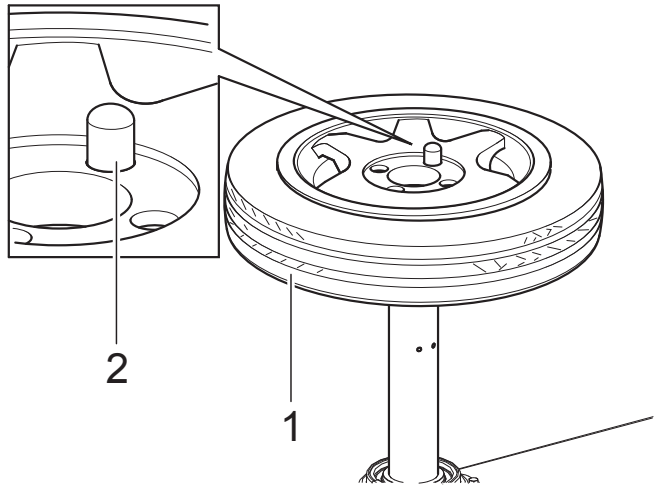


IN CASE OF USE OF RIMS WITHOUT CENTRAL HOLE, IT'S NECESSARY TO USE THE PROPER FIXTURE (AVAILABLE ON DEMAND).

To lock a rim proceed as follows:

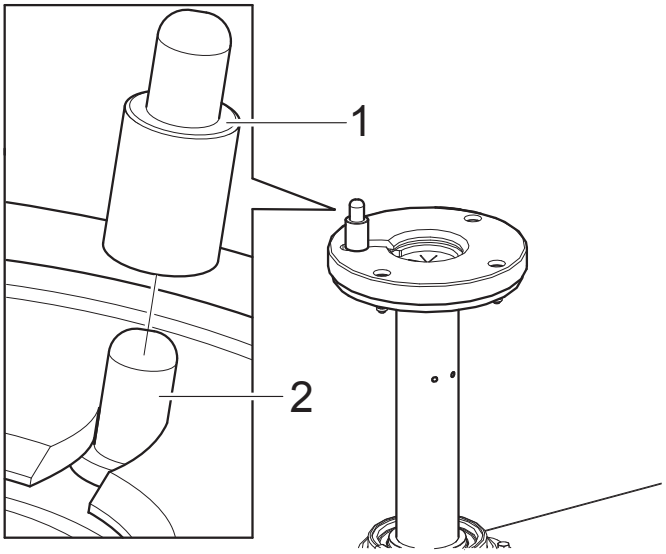
1. Dowel the wheel (Fig. 22 ref. 1) on the locking platform and check that the dragging pin (Fig. 22 ref. 2) enter in a hole placed on the rim hub.

Fig. 22



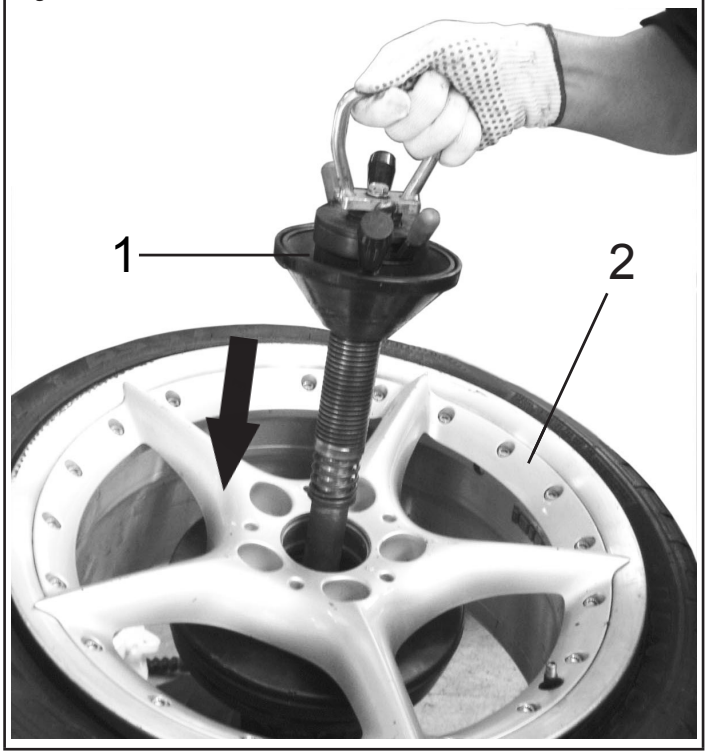
2. If the wheel hub is higher then the dragger (Fig. 23 ref. 2), use the extension (Fig. 23 ref. 1) supplied on issue.

Fig. 23



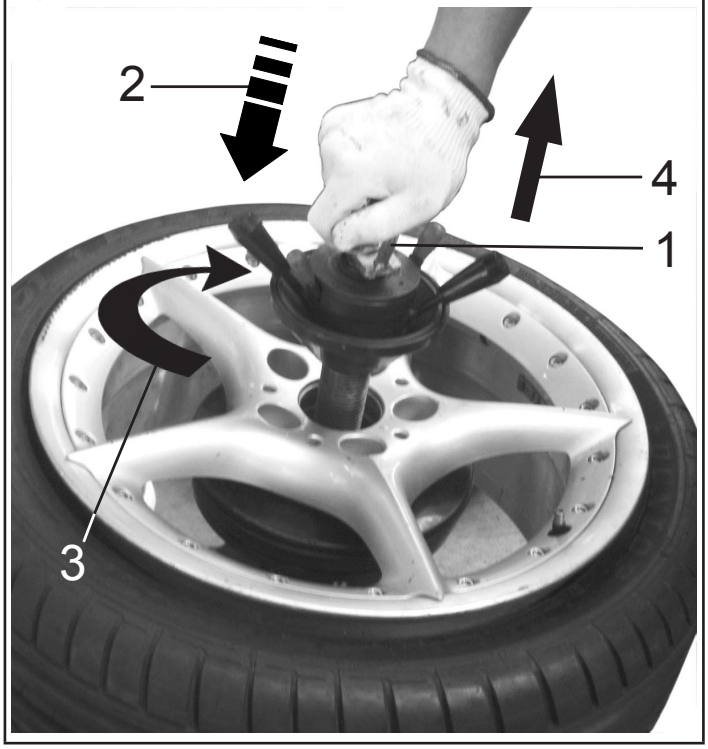
3. Insert the shaft complete with cone (Fig. 24 ref. 1) on the rim (Fig. 24 ref. 2).

Fig. 24



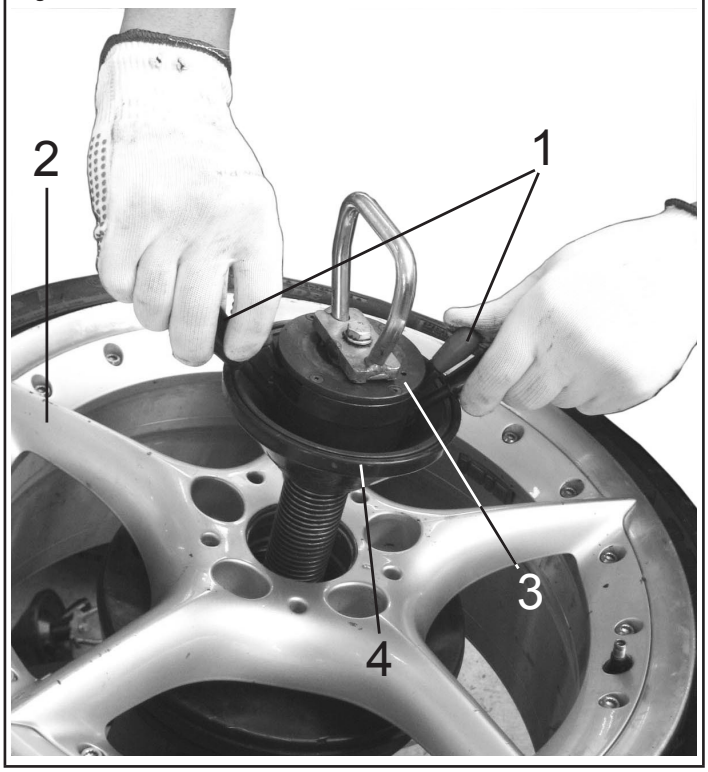
4. Through the proper handle (Fig. 25 ref. 1), push downwards (Fig. 25 ref. 2), turn it through 90° (Fig. 25 ref. 3) and lift the shaft (Fig. 25 ref. 4) to hook it into the hole.

Fig. 25



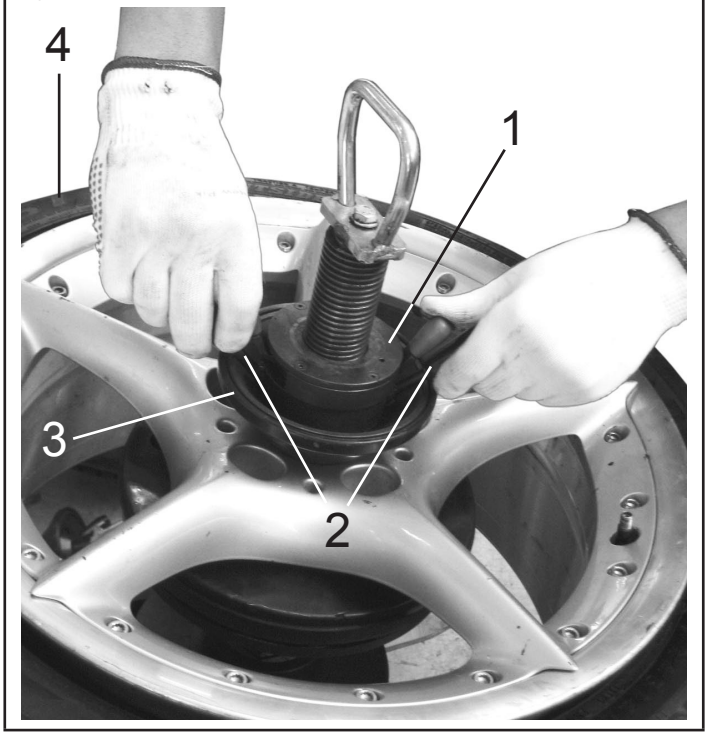
5. Trough the internal little levers (Fig. 26 ref. 1), loose the ring nut and approach ring nut (Fig. 26 ref. 3) and cone (Fig. 26 ref. 4) to the rim (Fig. 26 ref. 2).

Fig. 26



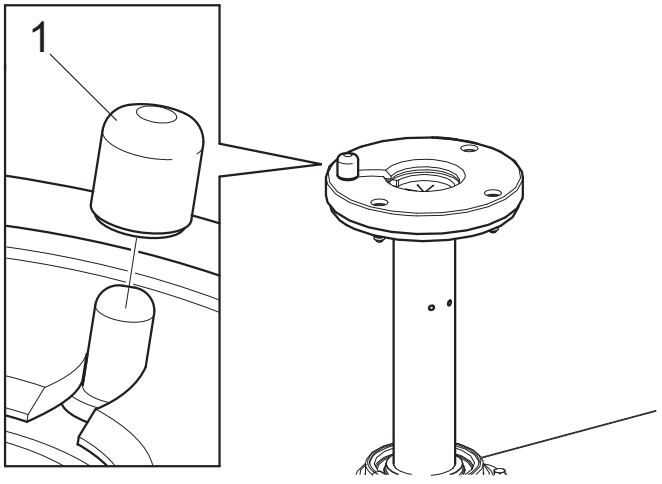
6. Then, turn the ring nut (Fig. 27 ref. 1) through the external levers (Fig. 27 ref. 2) until the cone complete clamping (Fig. 27 ref. 3) on the wheel (Fig. 27 ref. 4).

Fig. 27



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. 28 ref. 1).

Fig. 28

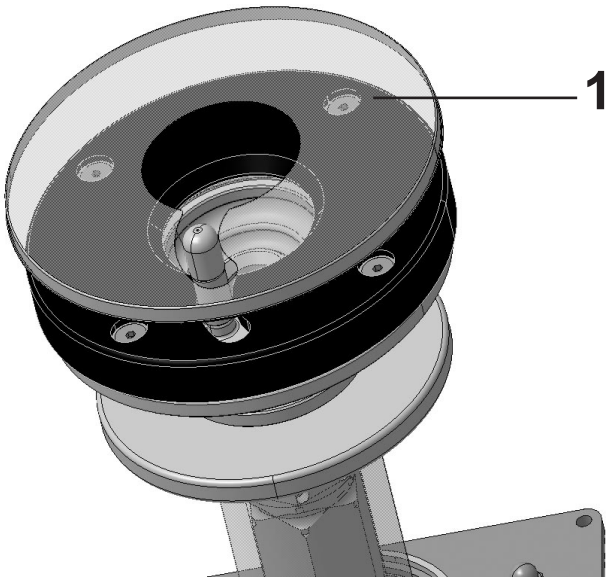


NEVER LEAVE THE WHEEL FITTED ON THE MACHINE FOR A PERIOD LONGER THAN NECESSARY FOR CARRYING WORK AND IN ANY CASE NEVER LEAVE IT UNATTENDED.

12.4.2 Reverse wheel pan protection

In case reversed wheels are used, in order to protect the rim, apply on the rubber platform a protection made of a transparent plastic material available on demand (Fig. 29 ref. 1). We suggest a constant replacement of it and in any case if there are visible damages (see Fig. 29).

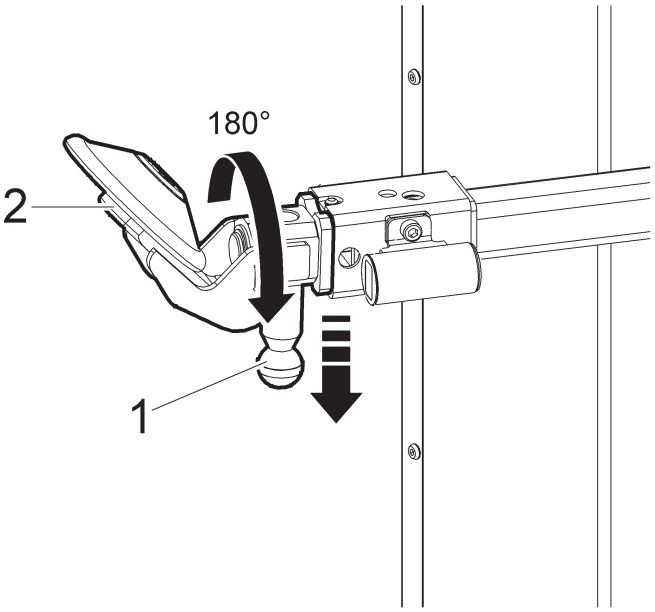
Fig. 29



12.5 Bead breaking through vertical roller

1. After having locked the wheel on the chuck, move the vertical bead breaker roller (Fig. 30 ref. 2) in working position, unlocking the special lever (Fig. 30 ref. 1) and turning it at 180°.

Fig. 30



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

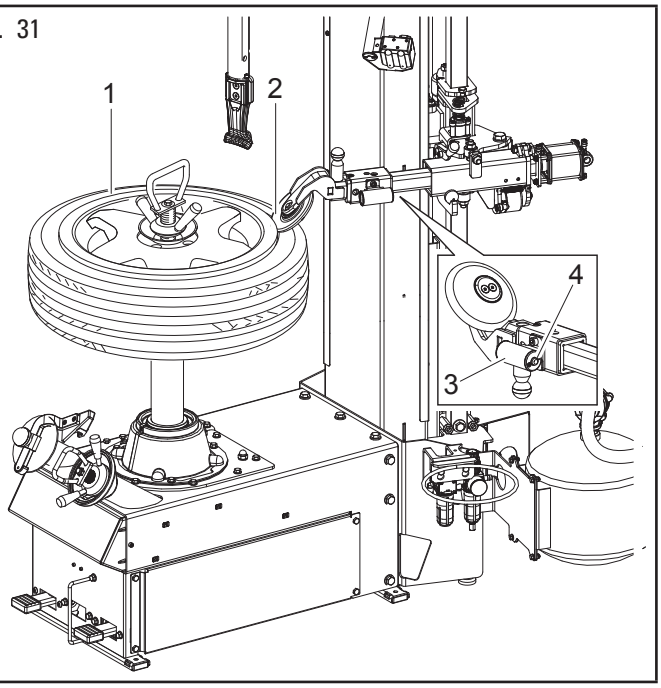
ALWAYS CHECK THAT THE ARM IS CORRECTLY HOOKED.

Move the bead breaker roller close (Fig. 31 ref. 2) to the rim edge (Fig. 31 ref. 1), pressing the push button (Fig. 15 ref. 1).

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

2. Define the roller position on the rim diameter through the handle (Fig. 31 Ref. 3) after the arm has been unlocked with the push button (Fig. 31 Ref. 4) positioned on the handle itself.

Fig. 31

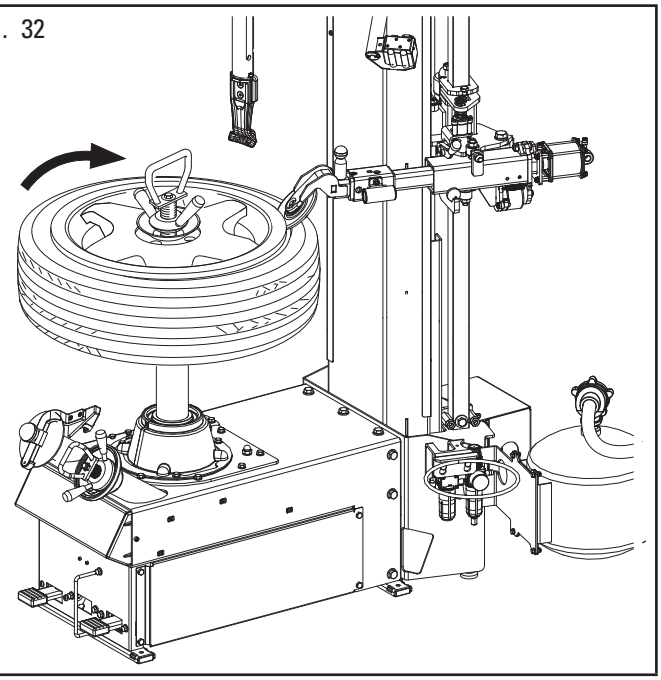


3. Only at this point rotate the wheel clockwise (see Fig. 32) pressing the pedal (Fig. 16 ref. B) and activating the push button at the same time (Fig. 15 ref. 4), keeping it pressed until the bead breaker roller is not inserted in the wheel. Keep on rotating the wheel until the operation is completed (see Fig. 33).

THE BEADING DISC MUST EXERT PRESSURE ON THE TIRE BEAD BUT NEVER ON THE RIM.

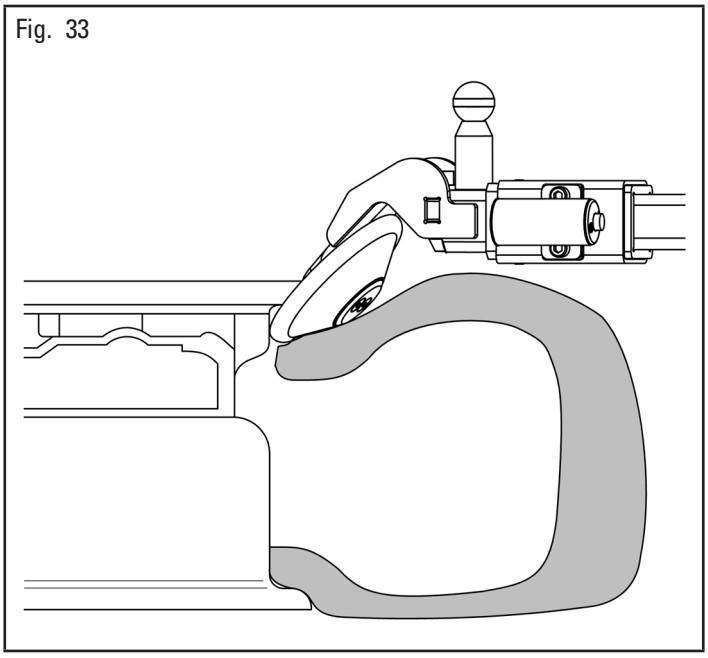
USE VERY CAREFULLY THE VERTICAL BEAD BREAKING ROLLER IN ORDER TO AVOID POSSIBLE HANDS CRUSHING.

Fig. 32



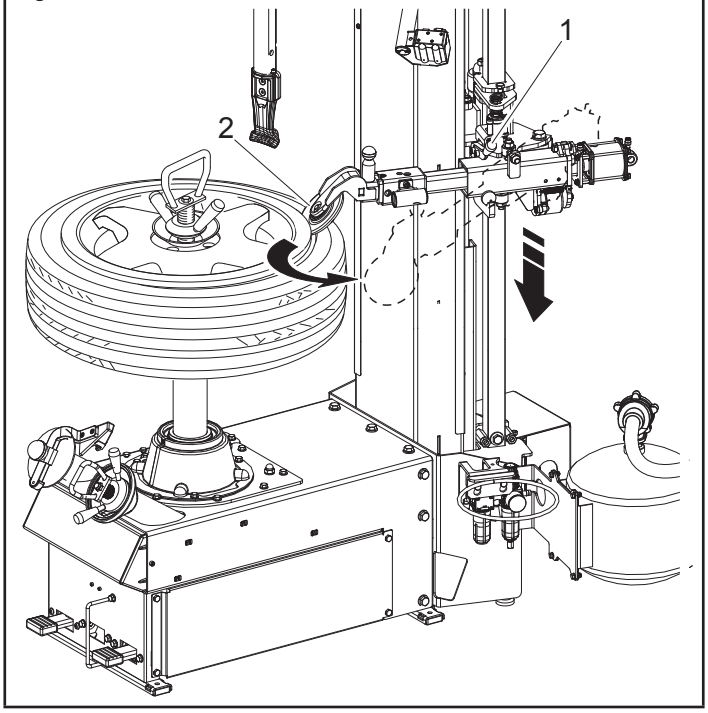
4. Once bead breaking on the upper part has been terminated, disengage the roller from the rim releasing the push button (Fig. 15 ref. 4) and activating the push button Fig. 15 ref. 4

Fig. 33



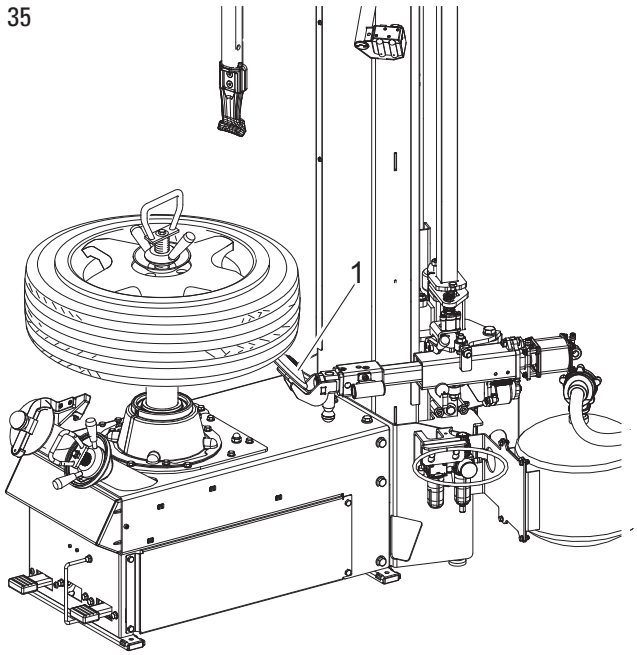
5. Operate lever (Fig. 34 ref. 1) to allow the bead breaker arm roller (Fig. 34 ref. 2) to open and go below the rim without modifying its previously adjusted position.

Fig. 34



6. Manually close the bead breaker roller arm into working position. Turn the bead breaker roller again at 180° as indicated in Fig. 30. Then move the roller closer (Fig. 35 ref. 1) pressing the push button (Fig. 15 ref. 1).

Fig. 35



7. Only at this point rotate the wheel clockwise (see Fig. 36) pressing the pedal (Fig. 16 ref. B) and activating the push button at the same time (Fig. 15 ref. 4), keeping it pressed until the bead breaker roller is not inserted in the wheel. Keep on rotating the wheel until the operation is completed (see Fig. 37).

THE BEADING DISC MUST EXERT PRESSURE ON THE TIRE BEAD BUT NEVER ON THE RIM.

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

Fig. 36

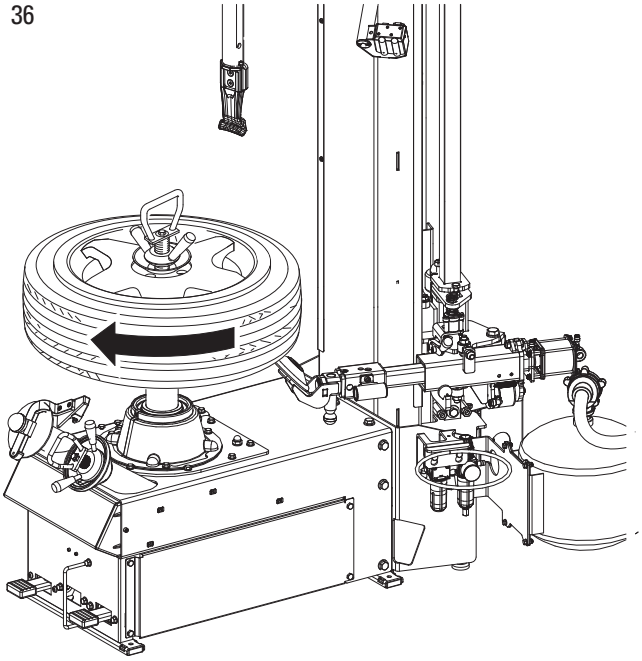
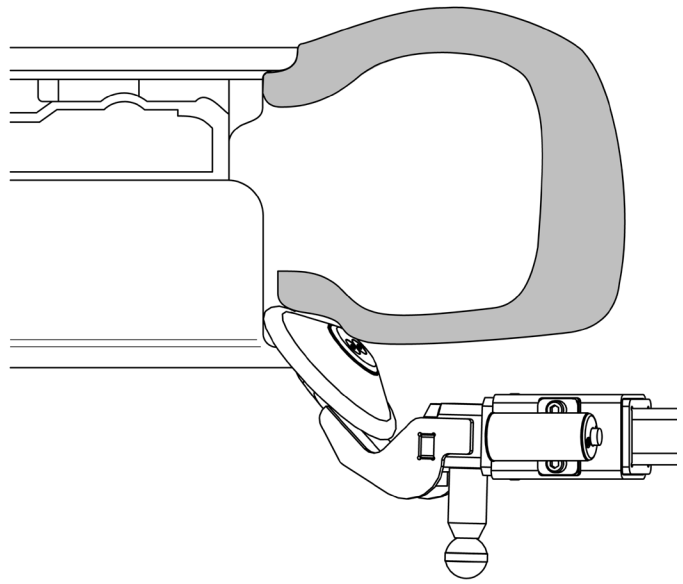


Fig. 37



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

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

8. Once bead breaking on the lower part has been terminated, move the roller to rest position releasing the push button (Fig. 15 ref. 4) and activating the push button (Fig. 15 ref. 1).

12.6 Demounting the tire

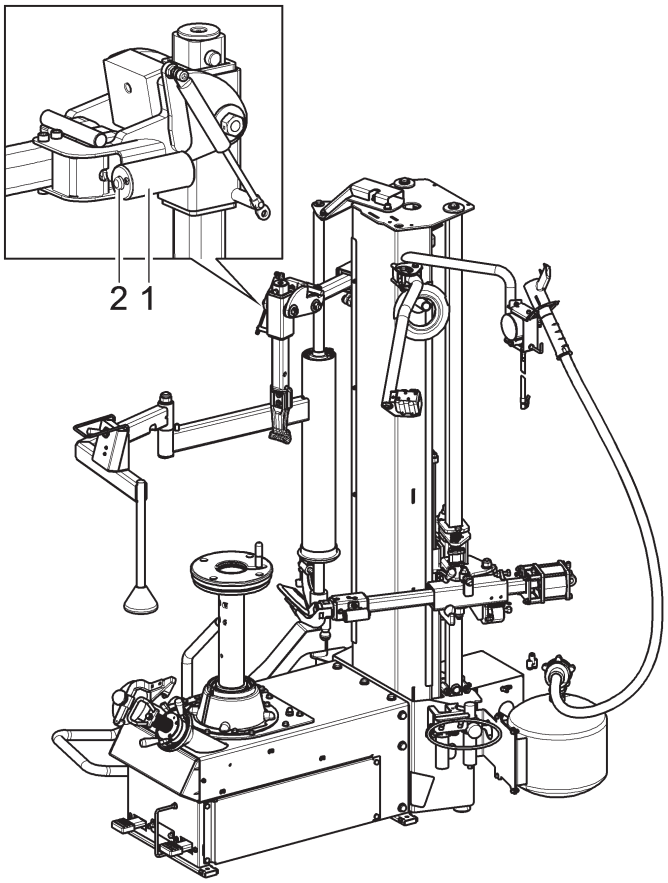
When both beads are broken, the tire can be demounted.

1. Move the tool unit to assembly position.
2. Define the tool position on the rim diameter through the handle (Fig. 38 ref. 1) after the arm has been unlocked with the push button (Fig. 38 ref. 2) positioned on the handle itself.

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

ALWAYS CHECK THAT THE ARM IS CORRECTLY HOOKED.

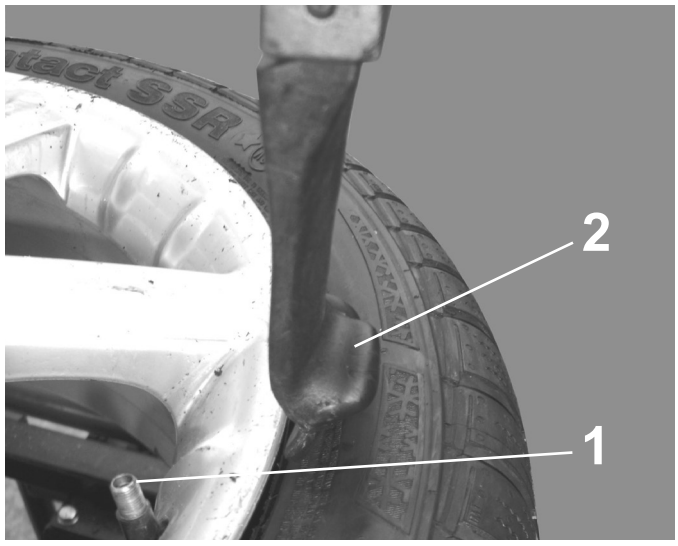
Fig. 38



3. Press the pedal (Fig. 16 ref. A) to rotate the wheel clockwise until the valve stem reaches "hour 1" position (Fig. 39 ref. 1).
4. Position the tool (Fig. 39 ref. 2) just next the rim edge using the provided push button (Fig. 15 ref. 2) (see Fig. 40). While this phase is being carried out, stay just next to a zone in the tire where bead breaking has been effectuated.

USE VERY CAREFULLY THE TOOL HOLDER ARM IN ORDER TO AVOID POSSIBLE HANDS CRUSHING.

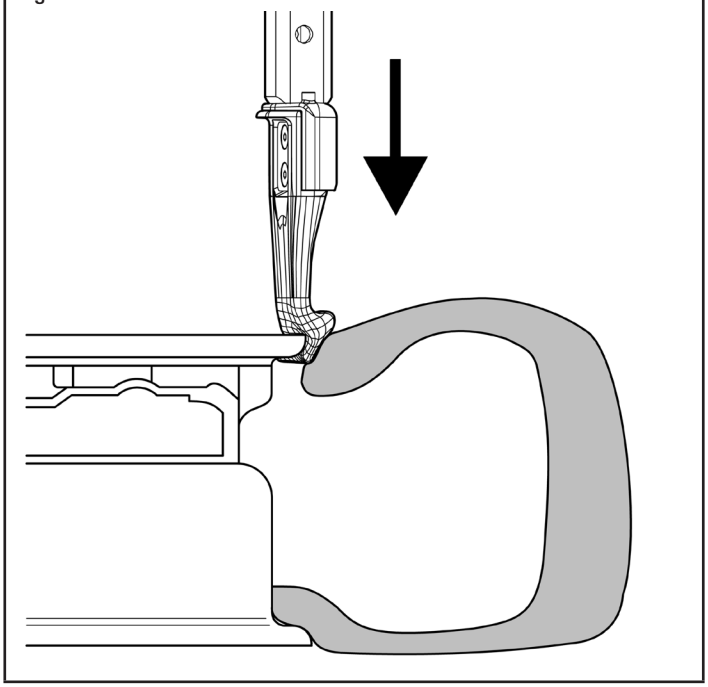
Fig. 39



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

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

Fig. 40



5. Move forward the tool so that it penetrates between rim and tire (see Fig. 41). While this operation is being effectuated, the tool rotates around the rim edge until it hooks the tire bead (see Fig. 42).

Fig. 41

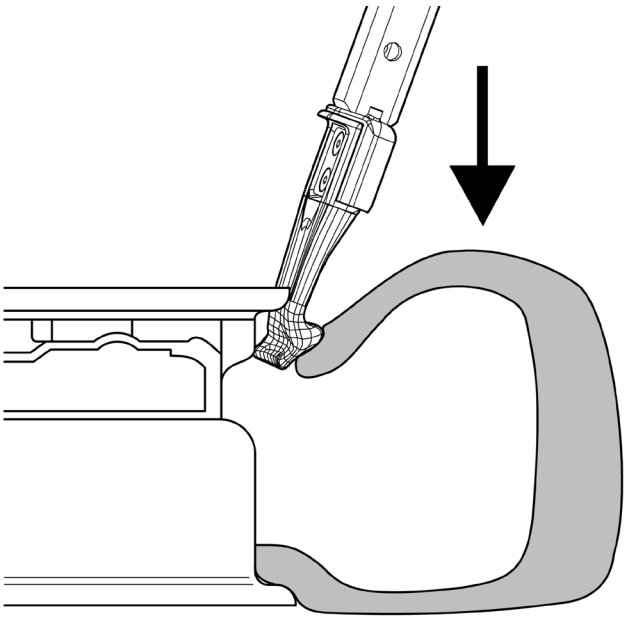
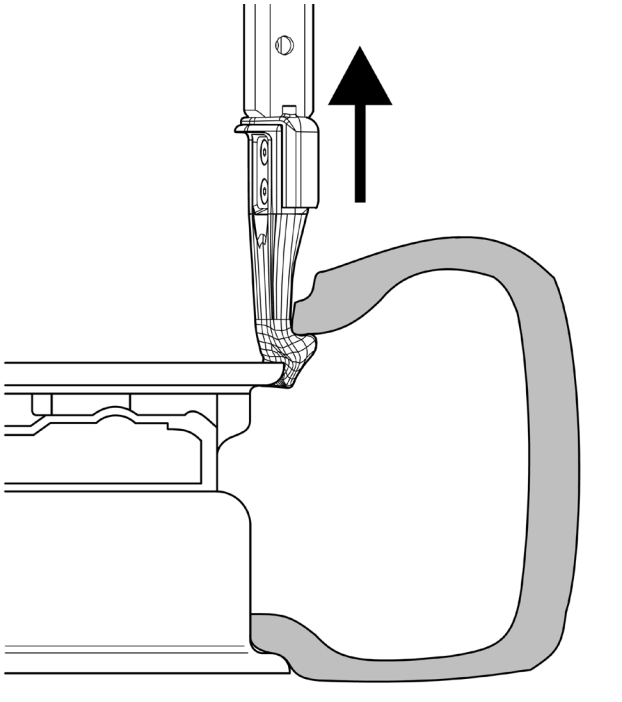


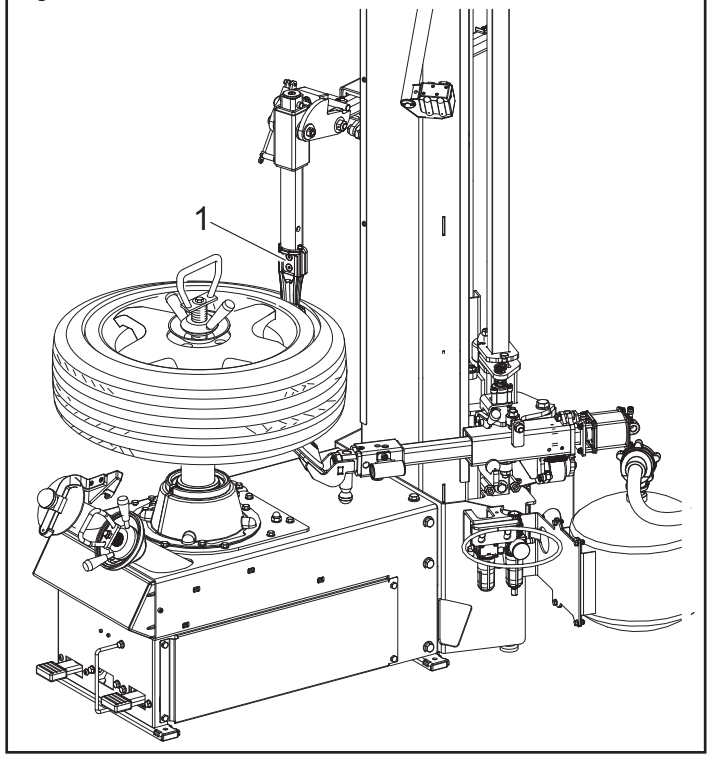
Fig. 42



6. Lift the tool through the provided control (Fig. 15 ref. 2). When the tool reaches a vertical position related to the rim (Fig. 43 ref. 1), rotate the chuck so that the tire enters the rim groove. Keep on raising the tool until the bead is on the rim edge (see Fig. 42).

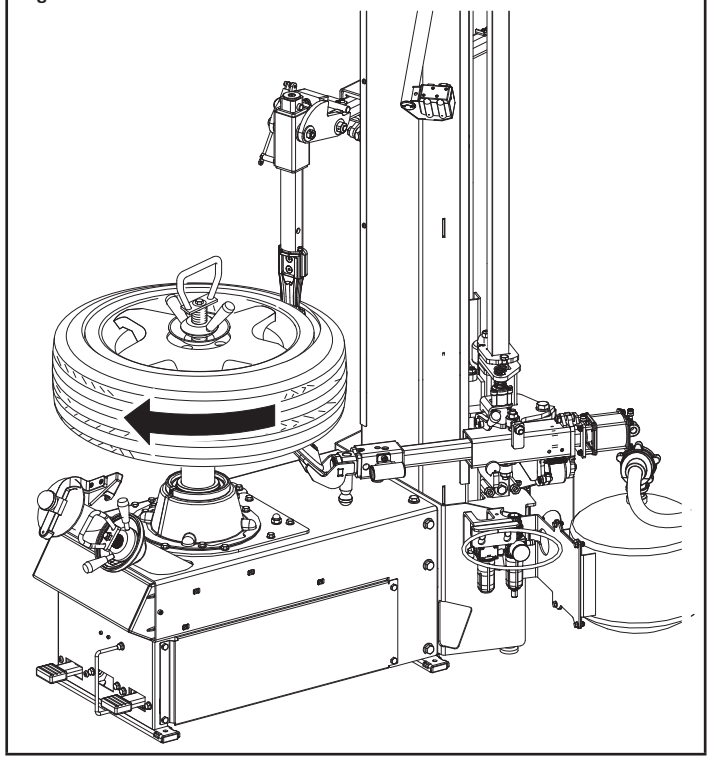
MAKE SURE THE TOOL IS IN DEMOUNTING POSITION (FIG. 42) BEFORE STARTING CHUCK ROTATION.

Fig. 43



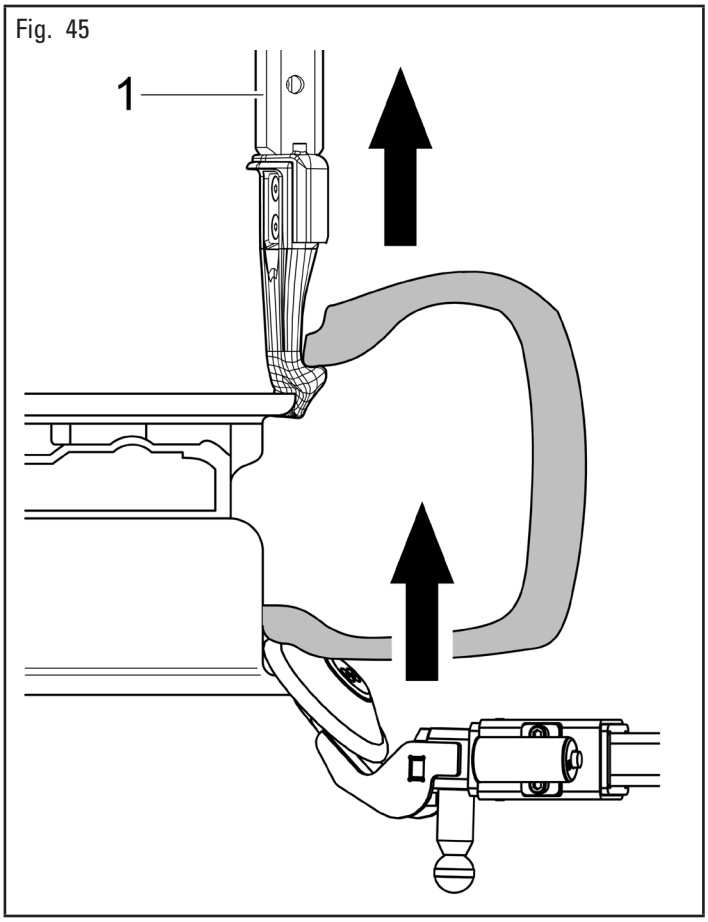
7. Rotate the chuck clockwise until the upper bead is completely disassembled (see Fig. 44).

Fig. 44



8. Lift the tool (see Fig. 45 ref. 1) keeping it coupled to the upper bead of the tire with the help of the bead breaking roller.

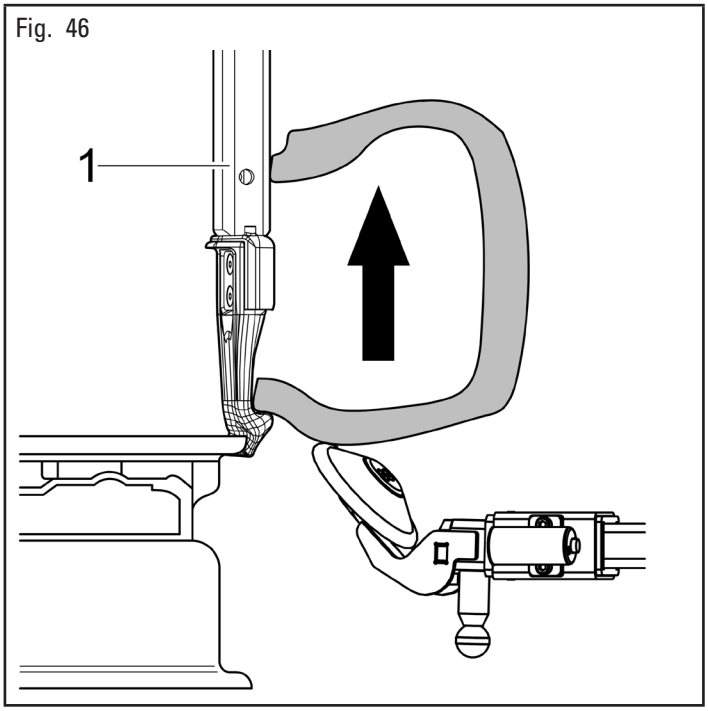
Fig. 45



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

10. Rotate the chuck clockwise until the tire is completely disassembled.

Fig. 46

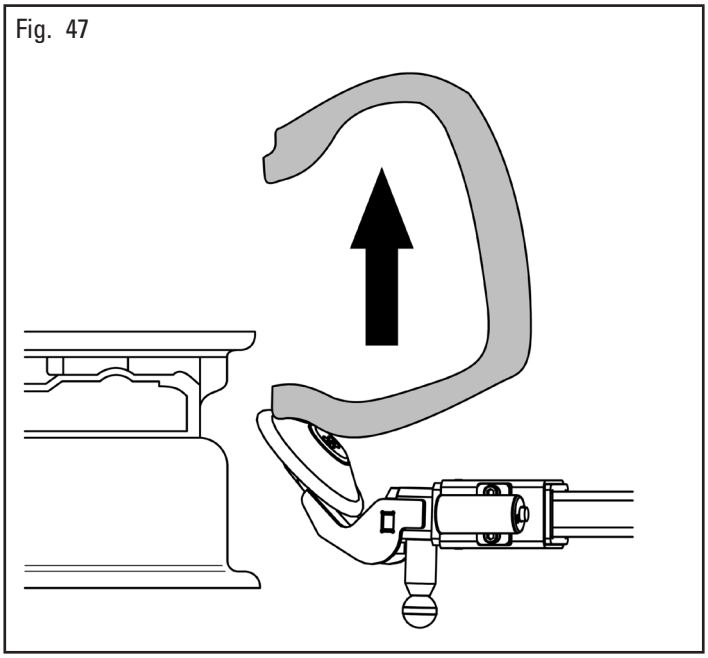


Demounting the lower bead

For disassembly of the lower bead the bead breaker roller can be used as an alternative. Lift the tool and go away from the working area.

1. Lift the roller and the tire just next to the rim edge (see Fig. 47).

Fig. 47



2. Then, let the roller enter through the provided push button (Fig. 15 ref. 4) so that it is inserted between the rim edge and the lower bead (see Fig. 48).

THE BEADING DISC MUST EXERT PRESSURE ON THE TIRE BEAD BUT NEVER ON THE RIM.

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

Fig. 48

3. Then, rotate clockwise and complete bead disassembly (see Fig. 49).

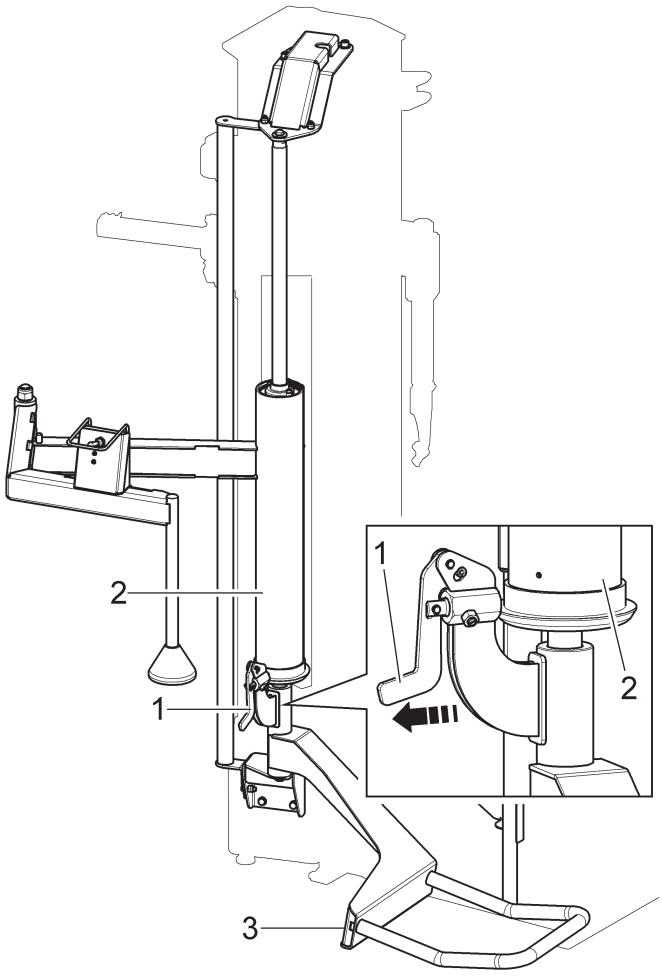
Fig. 49

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

12.7 Tire demounting with rotating bead pressing arm

MAKE SURE THE CLAMPING HOOK (FIG. 50 REF. 1) IS POSITIONED AS INDICATED IN FIG. 50 TO RELEASE THE CYLINDER (FIG. 50 REF. 2) FROM THE LIFTING DEVICE (FIG. 50 REF. 3).

Fig. 50

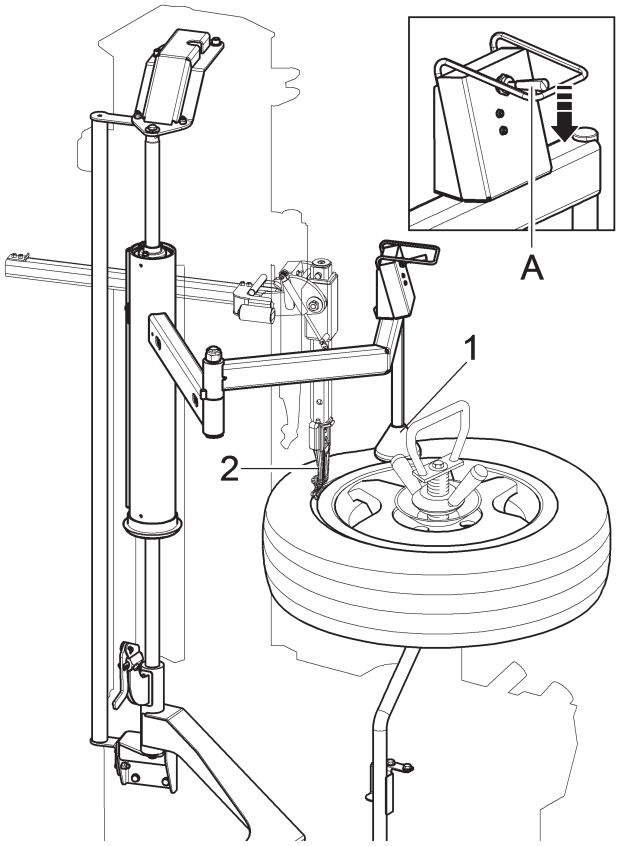


Clamp the rim onto the chuck using the special locking device.

Extraction of the first bead

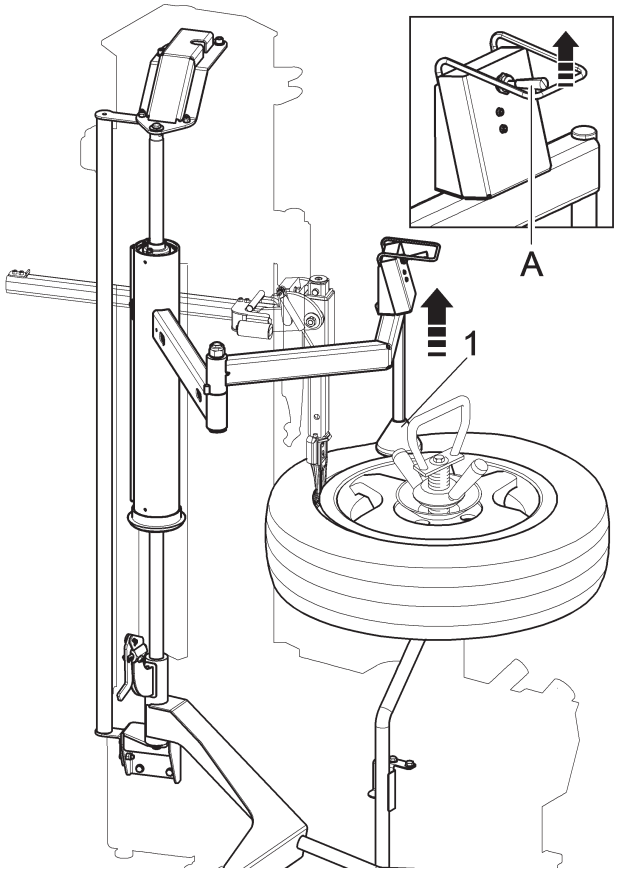
1. Place the roller of the rotating bead depressing roller unit (Fig. 51 ref. 1) as shown in the figure (not far from the tool (Fig. 51 ref. 2)). Lower the tire using the roller of the rotating bead depressing unit (Fig. 51 ref. 1) (by lowering the control unit lever (Fig. 51 ref. A)), until allowing an easy introduction of the tool (Fig. 51 ref. 2) between the tire bead and the rim.

Fig. 51



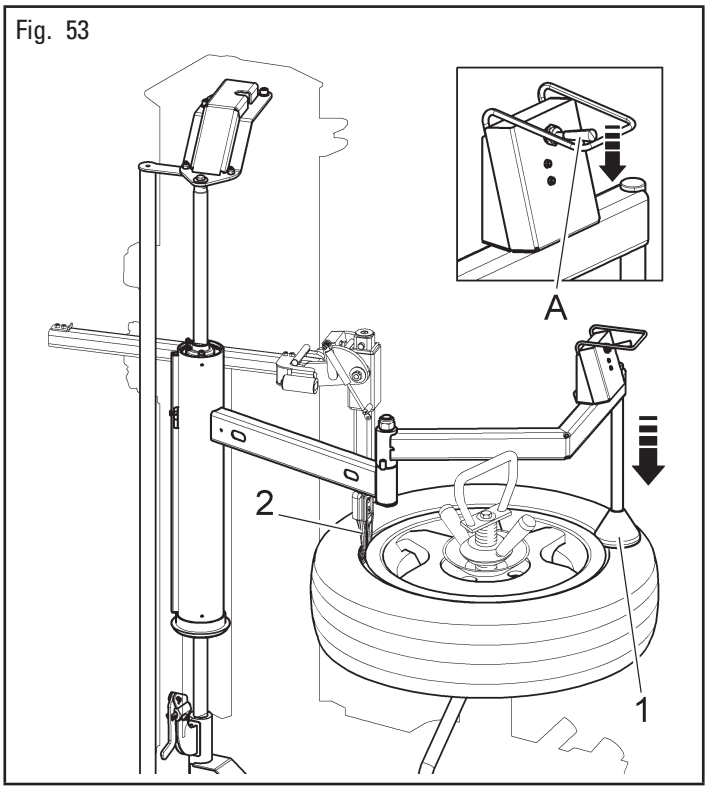
2. Lift the roller of rotating bead depressing unit (Fig. 52 ref. 1) by lifting the lever (Fig. 52 ref. A).

Fig. 52



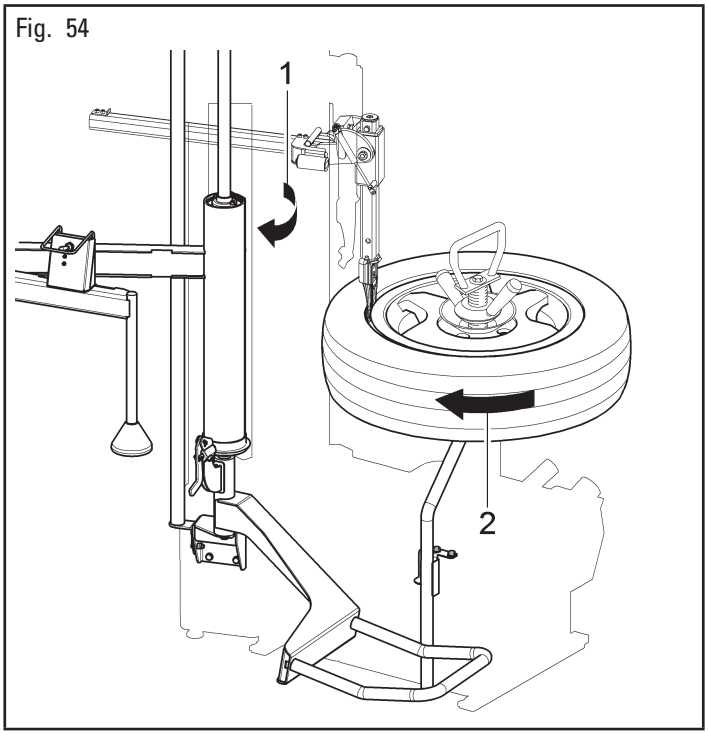
3. Place the roller of the rotary bead depressing unit (Fig. 53 ref. 1) again at about 120° from the machine-tool axis (as in figure) and lower the tire by pressing the lever of the control unit downwards (Fig. 53 ref. A) until the tire bead is placed in correspondence of rim groove.
4. Lift the tool (Fig. 53 ref. 2) in order to let the bead come out of the rim.

Fig. 53



5. Lift the Device and close it again in rest position as indicated in figure (Fig. 54 ref. 1).
6. Carry out first bead's extraction by turning the chuck clockwise (Fig. 54 ref. 2).

Fig. 54



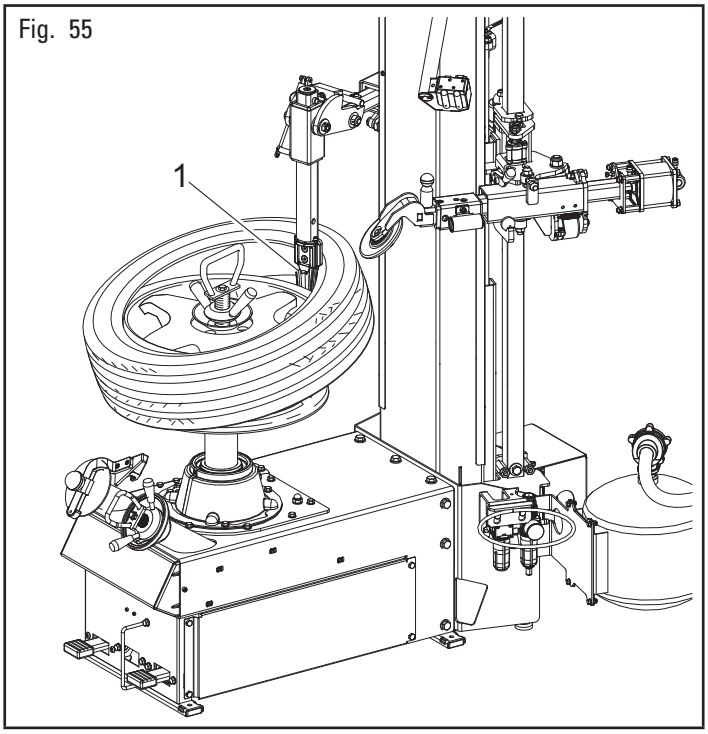
12.8 Mounting the tire

1. Lubricate the tire beads.

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

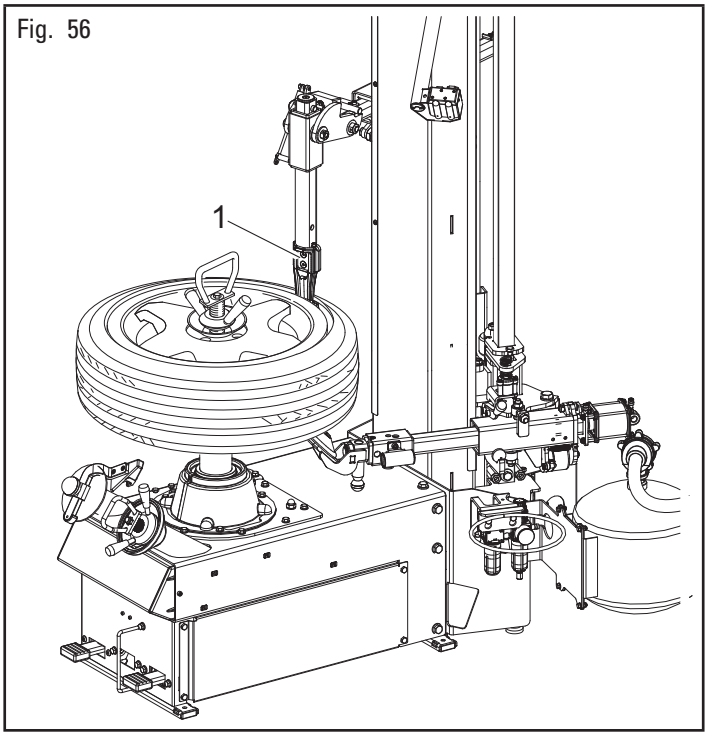
2. Position the tool (Fig. 55 ref. 1) onto the rim edge.

Fig. 55



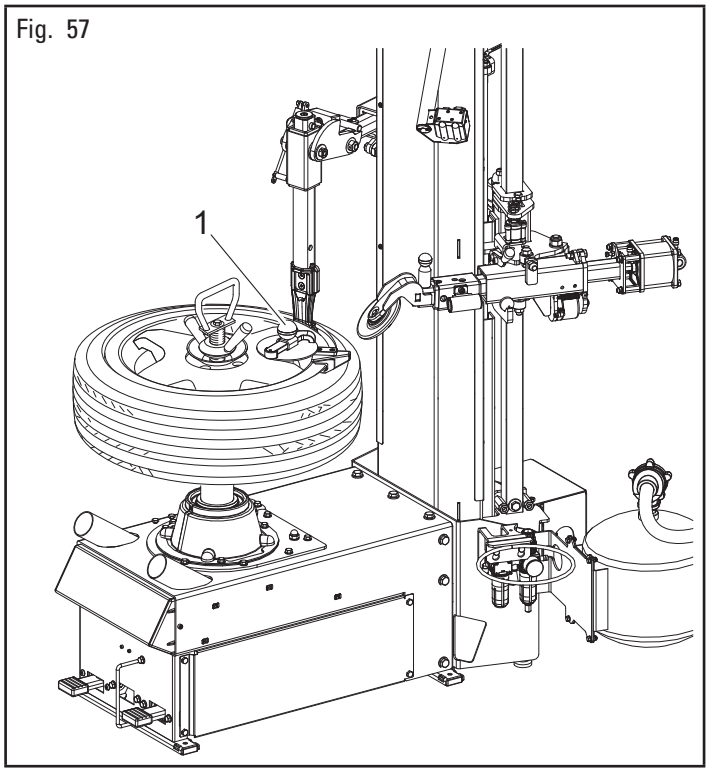
3. Hook the lower bead on the tool then rotate clockwise until the complete assembly.
4. Then, position the upper bead on the tool assembly area (Fig. 56 ref. 1).

Fig. 56



5. Assemble the extension with entrainer near the edge rim (Fig. 57 ref. 1).

Fig. 57

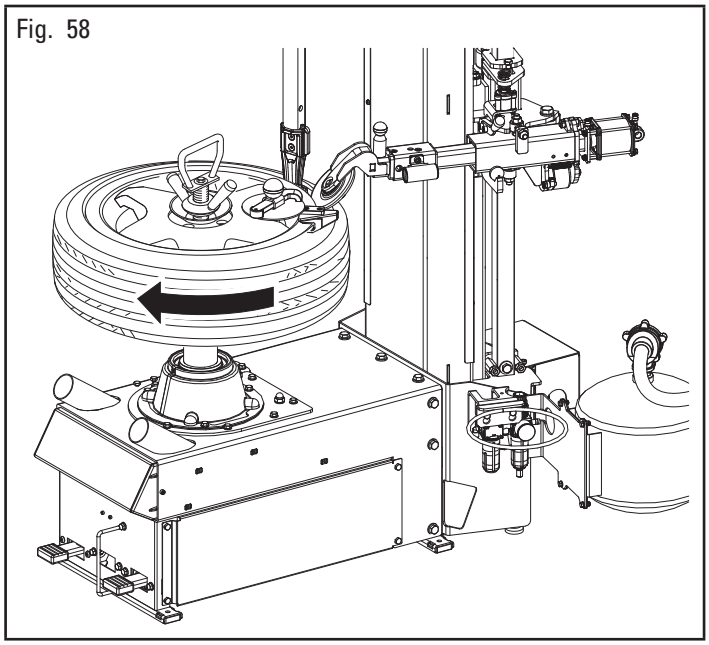


6. Lower the bead breaker roller so that the tire bead is kept at the same height of the rim groove (see Fig. 58).

THE BEADING DISC MUST EXERT PRESSURE ON THE TIRE BEAD BUT NEVER ON THE RIM.

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

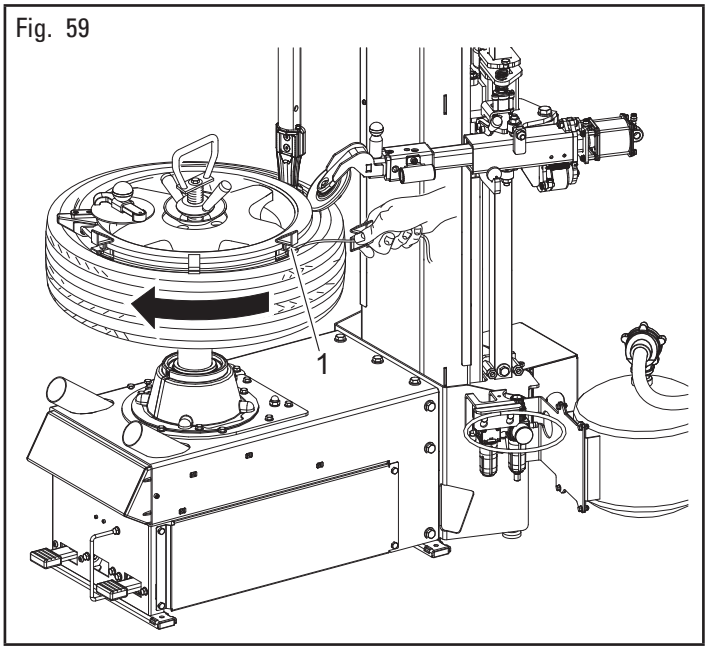
Fig. 58



7. Rotate clockwise until tire complete assembly (see Fig. 59).

FOR THE MOUNTING OF VERY DIFFICULT WHEELS, USE THE EXTENSION OF THE BEAD DEPRESSOR (FIG. 59 REF. 1) (OPTIONAL).

Fig. 59

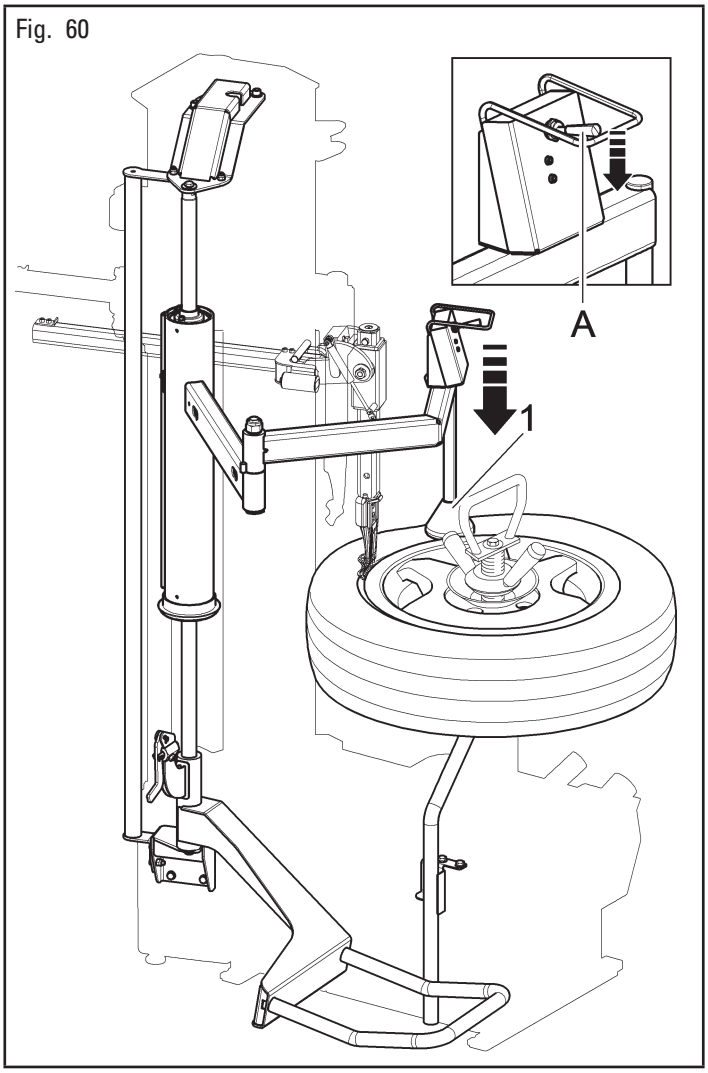


8. When these operations are over move the tool and the bead breaker roller into rest position.

12.9 Tire mounting with rotating bead pressing arm

1. Mount the first bead on the rim. The device is not necessary to complete this operation.
2. Place the bead depressing roller (Fig. 60 ref. 1) as indicated in the figure.
3. Lower the bead depressing roller (Fig. 60 ref. 1) operating the control provided (Fig. 60 ref. A) until the tire bead is placed next to the rim groove.

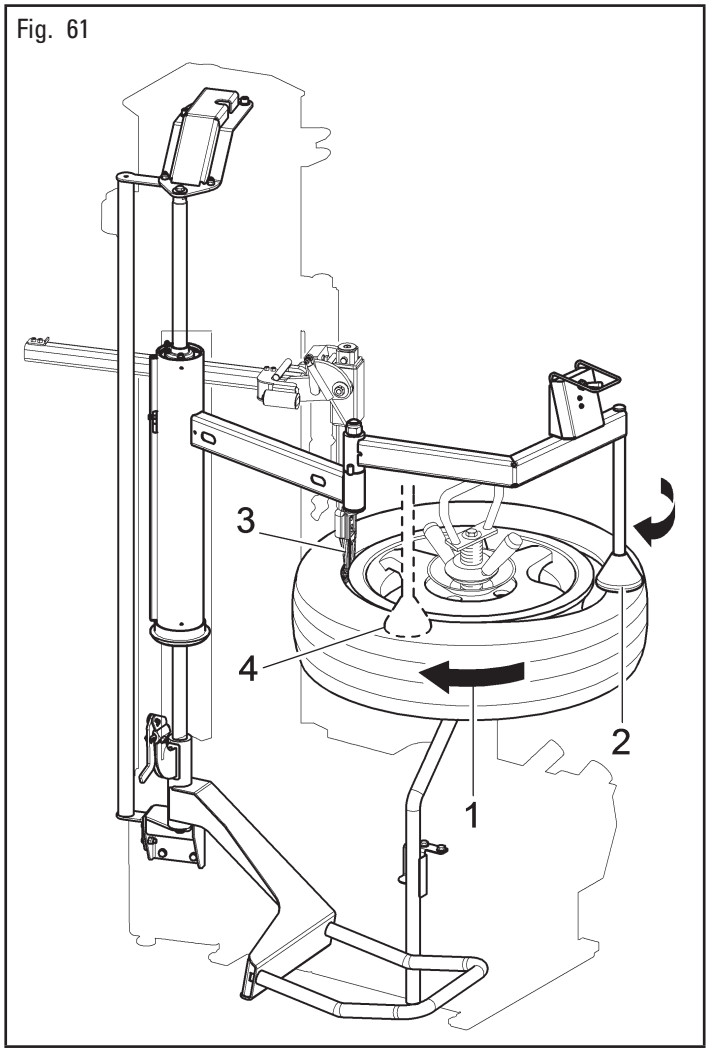
Fig. 60



MAKE SURE THAT THE ENTRAINER IS COMPLETELY FITTED BETWEEN THE RIM SPOKES IN LOWERED POSITION.

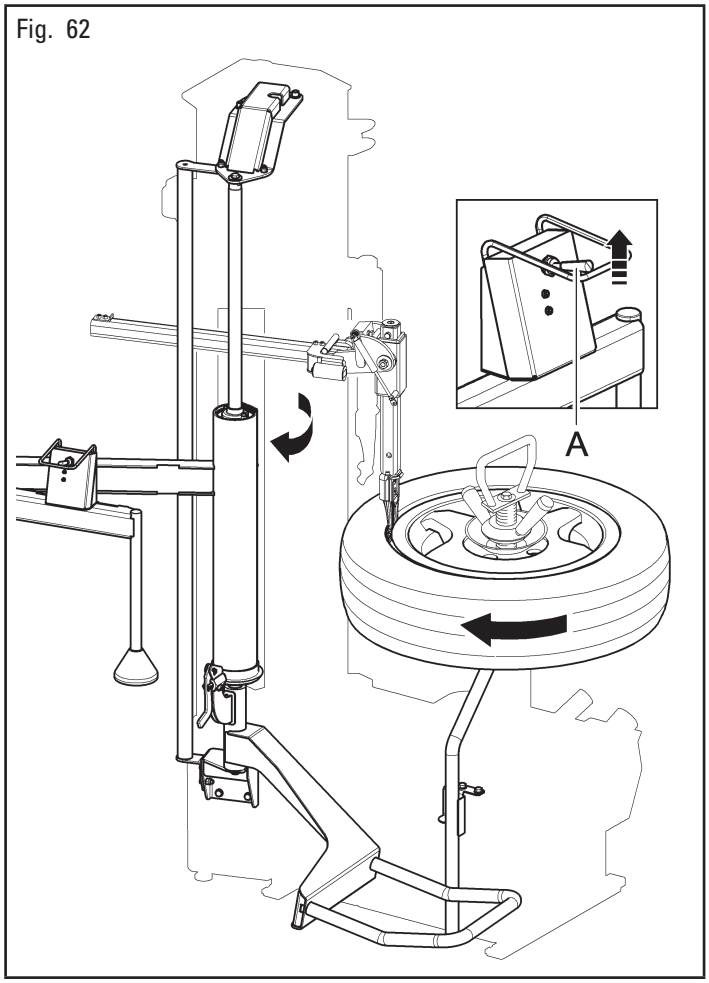
4. Start chuck clockwise rotation (Fig. 61 ref. 1) by means of the proper pedal control: while performing this operation keep a hand on the bead depressing roller (Fig. 61 ref. 2). Such operation, that does not require any physical effort, helps keeping bead depressing roller correct position on the tire.
5. Stop chuck rotation when the bead depressing roller (Fig. 61 ref. 2) is at 9 o'clock (Fig. 61 ref. 4) compared to the mounting tool (Fig. 61 ref. 3).

Fig. 61



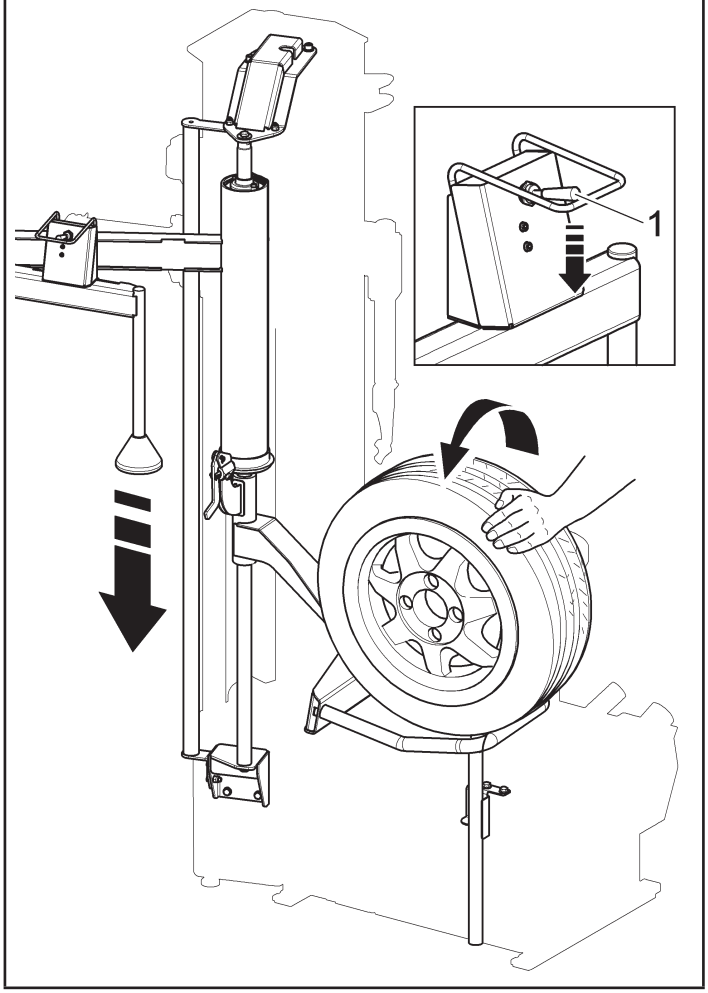
6. End the second bead's introduction by turning the chuck clockwise (see Fig. 62).
7. Lift the Device with the relevant control (Fig. 62 ref. A) and close it again in rest position (see Fig. 62).

Fig. 62



8. Perform all the tire fitting and removal operations and unlock the wheel from the chuck.
9. Lower the Device with the relevant control (Fig. 63 ref. 1) until hooking the lifting device.
10. Raise the lifting device by lifting the control unit's lever again.
11. Place the wheel on the lifting device.
12. Lower the control unit's lever again (Fig. 63 ref. 1) in order to make the lifting device lower and to bring the wheel to the floor keeping a hand on it (see Fig. 63).

Fig. 63



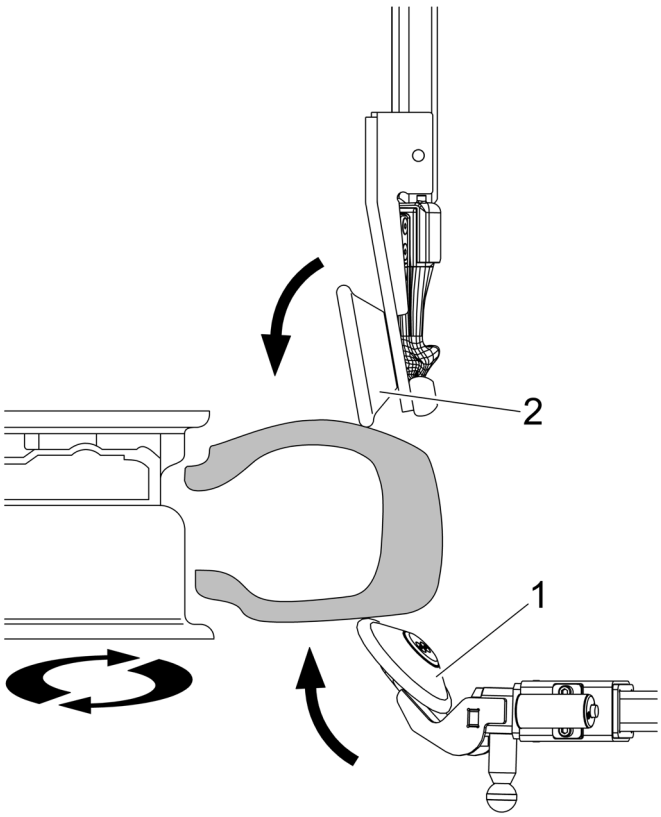
KEEP A HAND ON THE WHEEL DURING ALL LIFTING DEVICE'S RISING AND DESCENT PHASES, TO PREVENT THE WHEEL FROM FALLING FROM THE LIFTER BECAUSE OF IMBALANCES.

12.10 Special use of bead breaker (with the use of the roller fitting for matching - optional)

Besides being used as an aid during the disassembly and assembly, the bead breaker roller, together with the upper additional roller (Fig. 64 ref. 2), can also be used for the optimization (matching) of the tire with the rim. To conduct this operation carry out the following instructions.

- Fit the additional upper roller (Fig. 64 ref. 2) on the tool as indicated in Fig. 64.
- Lock the tire between the bead breaker tool roller (Fig. 64 ref. 1) and the upper additional roller (Fig. 64 ref. 2).
- Turn the motor counterclockwise until the reference point on the tire coincides with the reference point on the rim (usually the valve) (see Fig. 64).

Fig. 64



12.11 Tire inflation

TIRE INFLATING OPERATIONS ARE HAZARDOUS FOR THE OPERATOR. IF NOT PROPERLY EXECUTED THEY CAN CAUSE DAMAGE FOR USERS OF VEHICLES WHERE TIRES ARE FITTED.

STANDARD OR OPTIONAL INFLATING UNITS FITTED ON TIRE CHANGERS ARE EQUIPPED WITH A PRESSURE LIMITING DEVICE WHICH ALMOST ELIMINATES ANY RISK OF TIRE EXPLOSION DURING TIRE INFLATING. AN OUTSTANDING RISK OF EXPLOSION STILL EXISTS. THEN THE FOLLOWING PRECAUTIONS MUST BE RESPECTED:

- OPERATORS SHOULD WEAR SUITABLE PROTECTIVE CLOTHING LIKE: GLOVES, SAFETY EYEWEAR AND EARCAPS.
- BEFORE FITTING A TIRE, CHECK TIRE AND RIM CONDITIONS AS WELL AS THEIR PROPER COUPLING.
- MAKE SURE THAT THE TIRE IS PROPERLY POSITIONED ON THE MACHINE: THE WHEEL OUTER PART MUST NOT BE SECURED ON THE CLAMPS.
- CORRECT WORKING POSITION: DURING TIRE BEADING AND INFLATING THE OPERATOR MUST KEEP BODY AS FAR AS POSSIBLE FROM THE TIRE.
- COMPLIANCE WITH TIRE MANUFACTURER'S SPECIFICATIONS FOR TIRE INFLATION PRESSURE.

IF MEASURED PRESSURE EXCEEDS 4,2 BAR, IT MEANS THAT THE PRESSURE LIMITING VALVE AND/OR PRESSURE GAGE IS NOT WORKING PROPERLY. IN THIS CASE, DEFLATE THE TIRE ON THE SPOT AND CONTACT AN AUTHORIZED SERVICE CENTER TO VERIFY EQUIPMENT OPERATION. MAKE SURE OF PROPER OPERATION BEFORE USING ANY INFLATING EQUIPMENT.

12.11.1 Tire inflation with pressure gage

Connect the inflation device to the tire valve and inflate the same tire using the pedal provided (Fig. 16 ref. A).
Well lubricated beads and rims make the beading in and inflation much safer and easier.

A SAFETY DEVICE IS PRESENT FOR THE ADJUSTMENT OF THE MAXIMUM PRESSURE OF THE SUPPLIED AIR (4.2 ± 0.2 BAR / 60 ± 3 PSI).

In case the beads are not seated at 4.2 ± 0.2 bar (60 ± 3 psi) release all the air from the wheel, remove it from the tire changer and put it in a safety cage to complete the inflation procedure.

12.11.2 Tire inflation with Tubeless inflation device

Some types of tires 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 tire follow these indications:

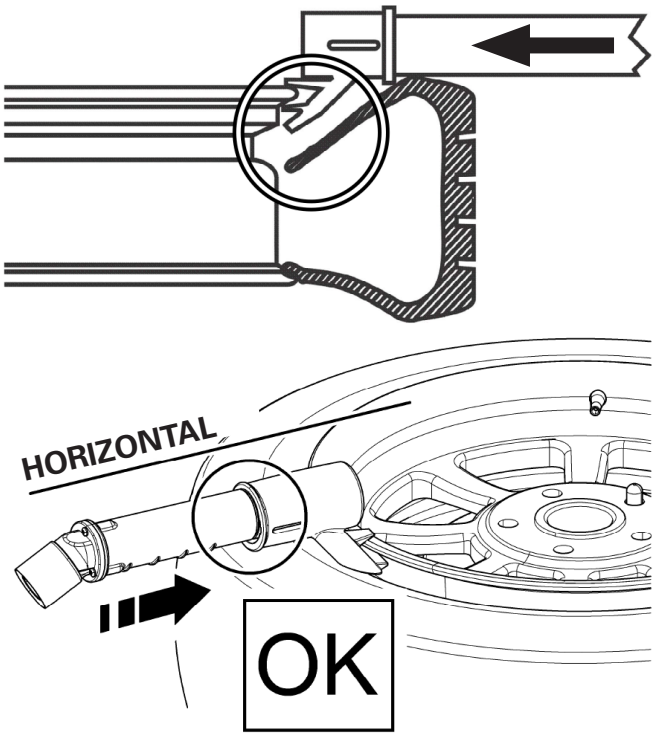
- Remove the valve stem core.
  Removing the valve stem core will allow the tire to inflate faster and the bead to seat easier.
- Connect the inflation terminal to the valve of the tire.

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

- Press the bead blaster pipe on the wheel rim as shown in Fig. 65. Ensure the hose head is pressed in to activate the additional air jet.

THE NOZZLE SHOULD BE HORIZONTAL FOR OPTIMAL PERFORMANCE (FIG. 65).

Fig. 65



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 tire 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 tire with the required pressure.

IF THE TIRE GETS INFLATED TO MUCH, IT IS POSSIBLE TO EXHAUST THE AIR FROM THE TIRE, BY PUSHING THE MANUAL DEFLATING PUSH BUTTON LOCATED UNDER THE PRESSURE GAGE.

- Disconnect the inflation terminal from the valve.

13.0 ROUTINE MAINTENANCE

BEFORE CARRYING OUT ANY ROUTINE MAINTENANCE OR ADJUSTMENT PROCEDURE, DISCONNECT THE EQUIPMENT FROM THE ELECTRICITY SUPPLY USING THE SOCKET/PLUG COMBINATION AND CHECK THAT ALL MOBILE PARTS ARE AT A STANDSTILL.

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.

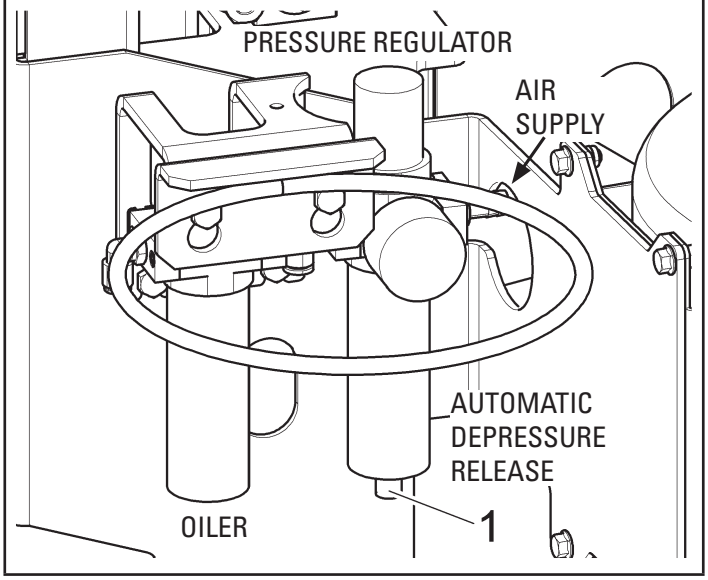
To guarantee the efficiency and correct functioning of the machine, it is essential to carry out daily or weekly cleaning and weekly routine maintenance, as described below.
Cleaning and routine maintenance must be conducted by authorized personnel and according to the instructions given below.

- Disconnect the equipment from the electrical and pneumatic power supplies before carrying out any cleaning operations.
- Disconnect the mains power supply before starting any cleaning or routine maintenance operations.
- Remove deposits of tire powder and other waste materials with a vacuum cleaner.
- Periodically check the calibration of the lubricator of the pressure regulator/oiler unit: 1 oil drop every four complete strokes of chuck jaws.

DO NOT BLOW IT WITH COMPRESSED AIR.

- Do not use solvents to clean the pressure regulator.
- The conditioning unit is equipped with an automatic vacuum-operated drain therefore it requires no manual intervention by the operator (see Fig. 66).

Fig. 66



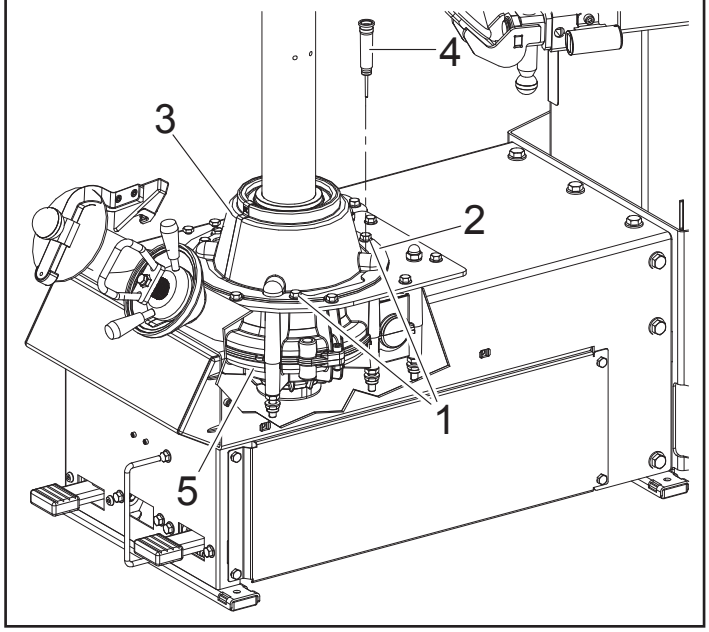
IN ORDER TO ENSURE A GOOD FUNCTIONING AND TO AVOID THE PRESENCE OF CONDENSATION IN THE AIR TREATMENT UNITS WITH SEMI-AUTOMATIC DRAIN, IT'S NECESSARY TO MAKE SURE ABOUT THE CORRECT POSITION OF THE VALVE (FIG. 66 REF. 1), PLACED UNDER THE CAP. TO ACTIVATE A CORRECT DRAIN FUNCTION, THE CAP MUST BE ROTATED IN THE RIGHT WAY.

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 removing the cup of the lubricator filter.
- The use of synthetic oil might damage the pressure regulator filter.
- Clean and periodically oil the roller horizontal rod.
- Grease every month the joints of the roller holding arm and the lower disc and the sliding guides of the mobile guide.
- Periodically, at least monthly, lubricate the arm of the bead breaker roller and of the tool.
- Periodically, at least monthly, lubricate the arm of the bead breaker roller and of the tool.
- Immediately replace worn parts, bead breaking roller, assembly tool.
- Periodically (at least every 100 working hours) check reduction gear lubricating oil level (Fig. 67 ref. 5). Such operation must be effectuated removing the bolts (Fig. 67 ref. 1), removing the flange (Fig. 67 ref. 2), the guard (Fig. 67 ref. 3) and the plug (Fig. 67 ref. 4) on the reduction gear.

Fig. 67



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

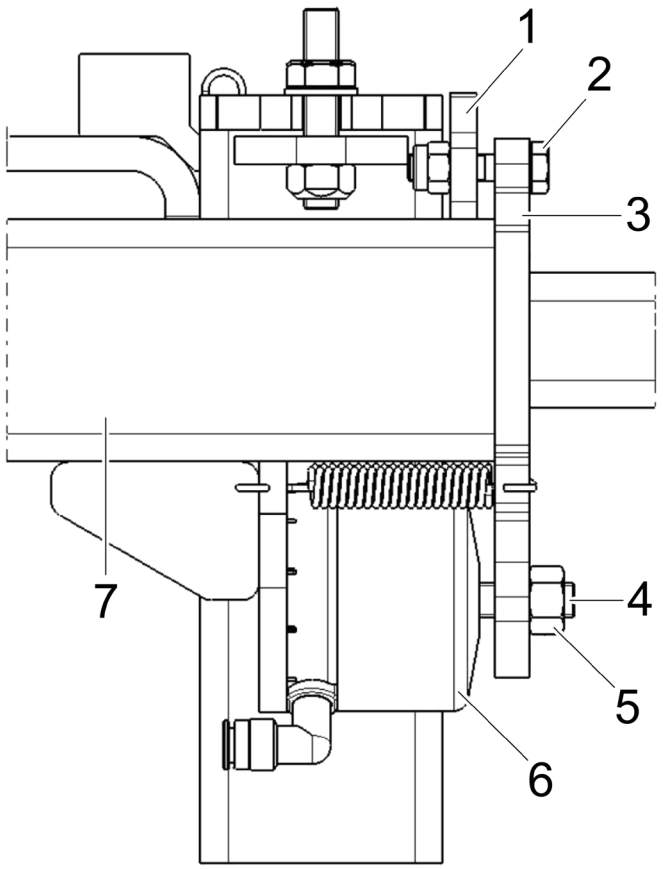
To grease the chuck movement control gearbox, use ESSO GEAR OIL GX140.
Lubricate slides and bolts/nut screws or racks and pinion with a soft brush using lubricant of ESSO GP.

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 Locking mechanism adjustment

In case of fulcrum-type bolts (Fig. 68 ref. 2) with locking mechanism (Fig. 68 ref. 3) fully beating onto bead breaking arm guide (Fig. 68 ref. 7) (not on the adjusting plate (Fig. 68 ref. 1)), carry out locking mechanism adjustment procedure as described below.

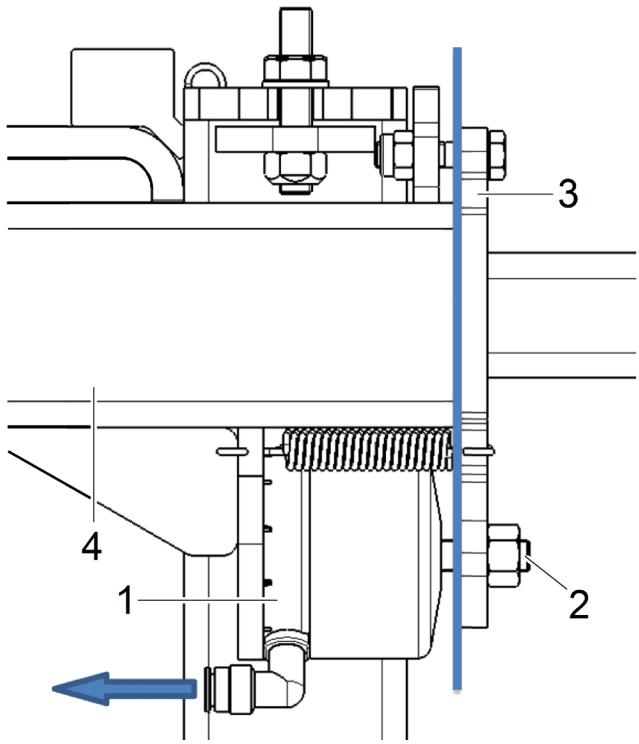
Fig. 68



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

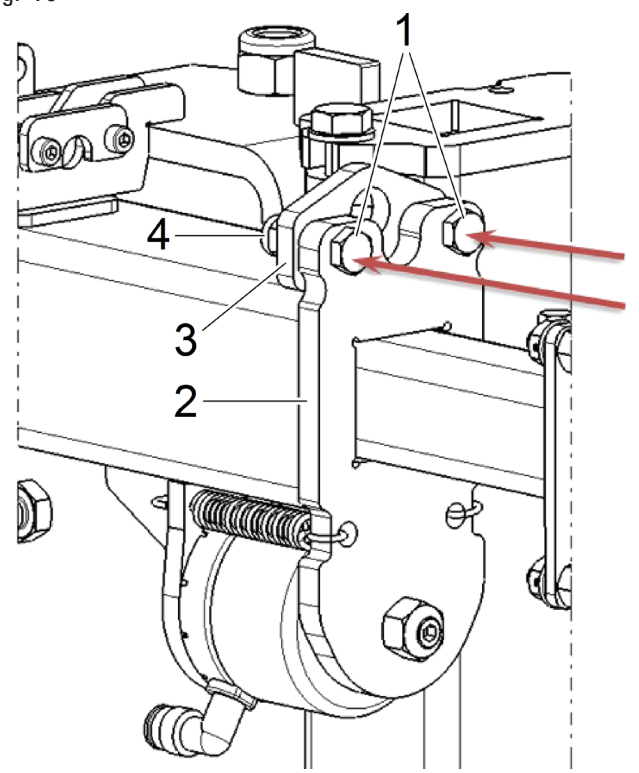
a. Blow off the compressed air from neck's cylinder (Fig. 69 ref. 1). Make locking mechanism (Fig. 69 ref. 3) reach beat position again on the guide support surface (Fig. 69 ref. 4), by turning the adjusting dowel (Fig. 69 ref. 2).

Fig. 69



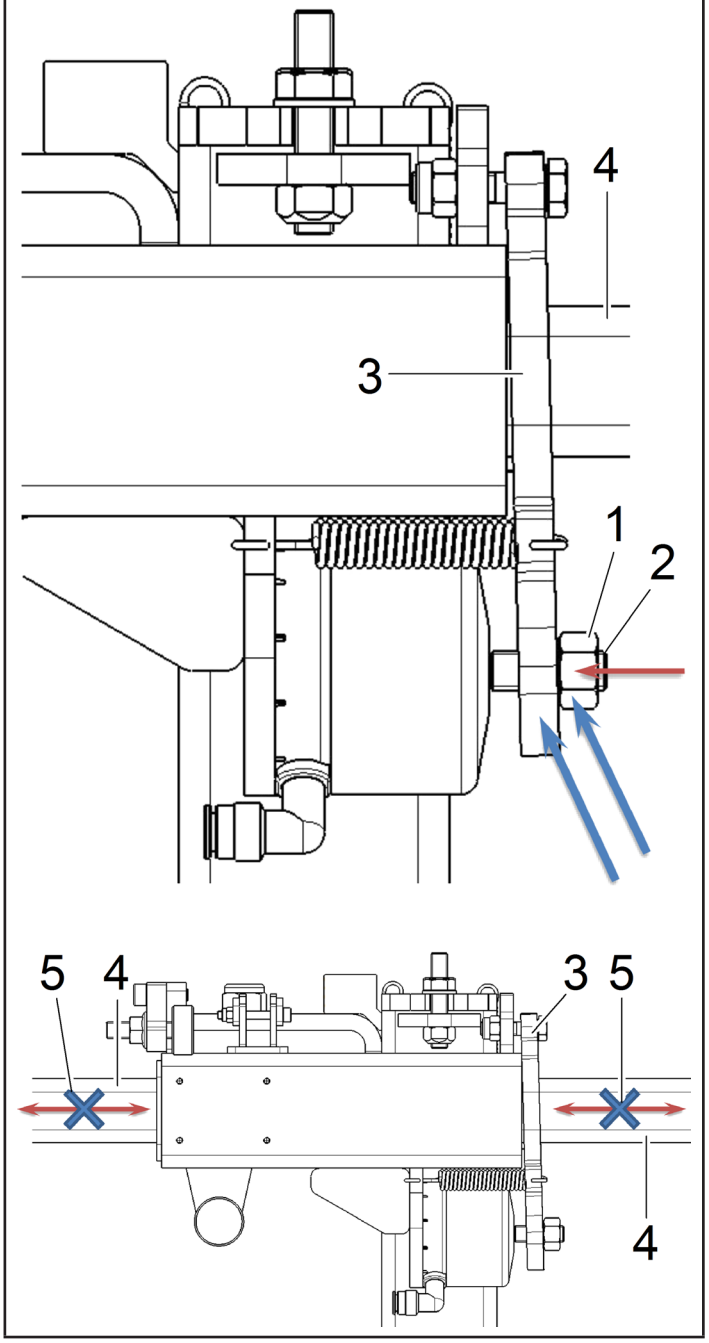
b. Completely screw fulcrum-type bolt (or bolts) (Fig. 70 ref. 1) but without locking them, just making them approach, setting a 0.1 ÷ 0.2 mm play between locking mechanism (Fig. 70 ref. 2) and adjusting plate (Fig. 70 ref. 3), positioning nut (Fig. 70 ref. 4) and letting it rest completely onto adjusting plate.

Fig. 70



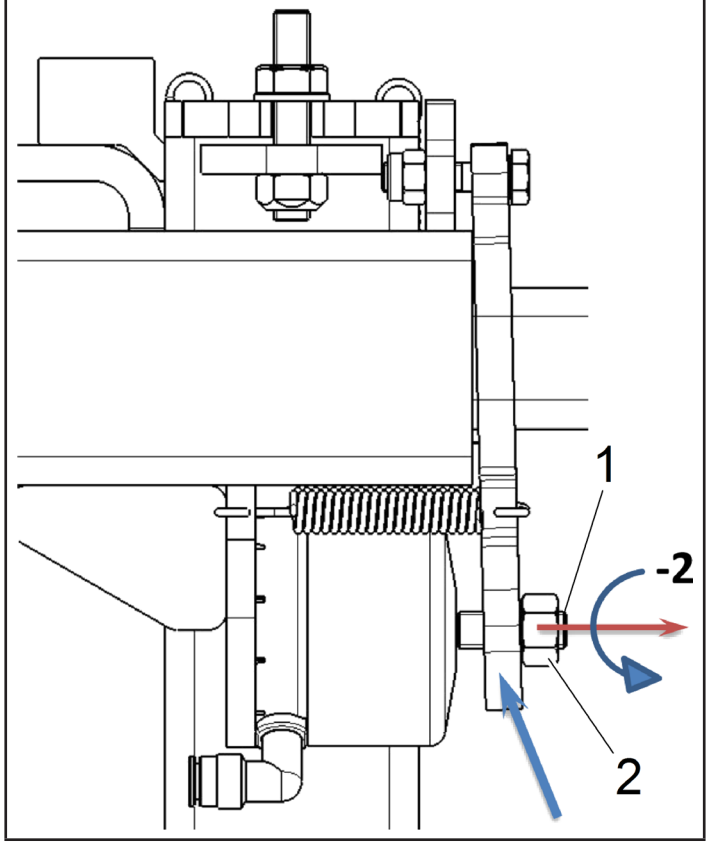
c. Slacken lock nut (Fig. 71 ref. 1) of adjusting dowel (Fig. 71 ref. 2). Then, screw the dowel (Fig. 71 ref. 2) until locking mechanism (Fig. 71 ref. 3) strikes onto arm (Fig. 71 ref. 4), that as a consequence results clamped (Fig. 71 ref. 5).

Fig. 71



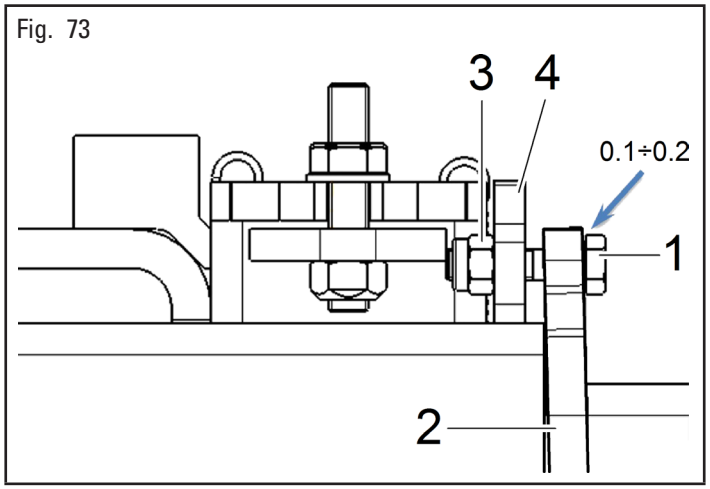
d. Starting from the position reached at point (c), unscrew locking mechanism adjusting dowel counter-clockwise by 2 complete turns (Fig. 72 ref. 1) and lock the relevant counter nut (Fig. 72 ref. 2).

Fig. 72



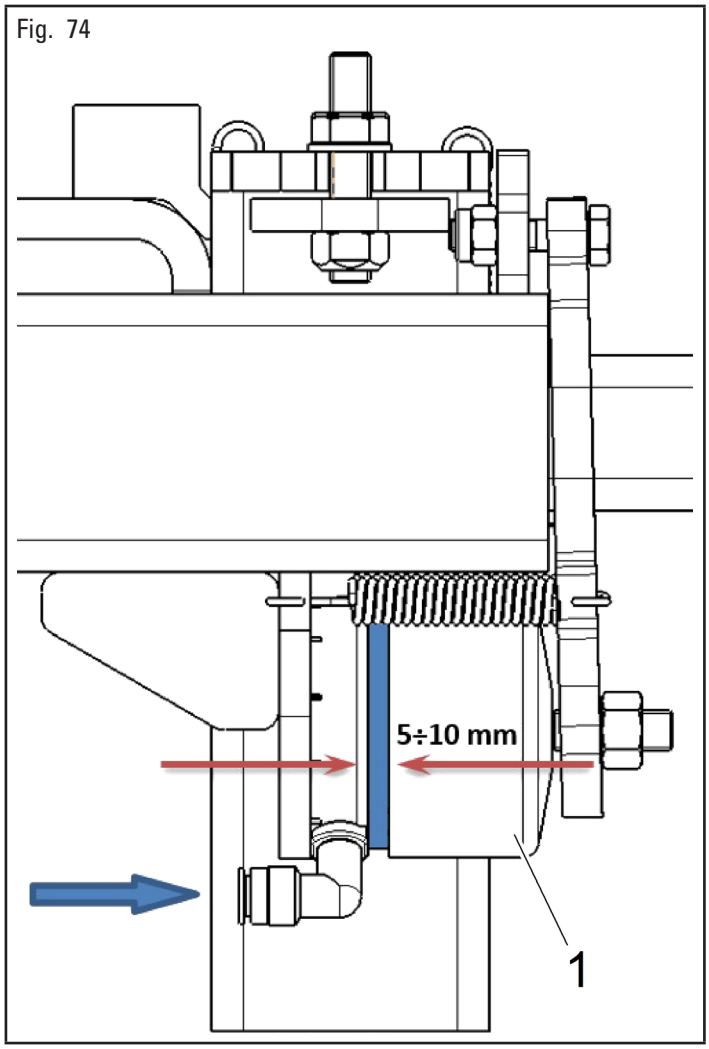
e. Turn fulcrum-type bolt (or bolts) (Fig. 73 ref. 1) in order to reset 0.1 ÷ 0.2 mm play between locking mechanism (Fig. 73 ref. 2) and fulcrum-type screws' head (Fig. 73 ref. 1), letting nut (Fig. 73 ref. 3) rest completely onto adjusting plate (Fig. 73 ref. 4).

Fig. 73



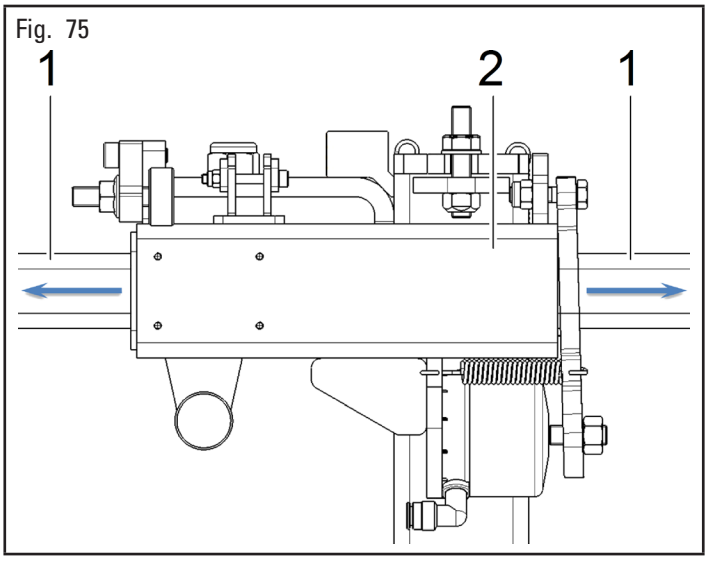
f. Operate cylinder (Fig. 74 ref. 1), supplying it with compressed air, and make sure its stroke is included between 5 ÷ 10 mm.

Fig. 74



g. Blow off cylinder and make sure the arm (Fig. 75 ref. 1) can slide freely in its guide (Fig. 75 ref. 2).

Fig. 75



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

14.0 TROUBLESHOOTING TABLE

Possible troubles which might occur to the tire-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 tire-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.	1. Supply missed. 2. The control push button is broken.	1. Connect the supply. 2. Call for technical assistance. 
Nozzle does not deliver air when the inflation pedal is pressed.	The inflation pedal is badly adjusted.	Call for technical assistance. 
The chuck does not turn (on model with electric drive unit only).	Inverter overload alarm Or Inverter undervoltage alarm Or Inverter overvoltage alarm	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.
	Overtemperature alarm.	Wait until the motor system cools (the machine does not restart if the temperature level does not go below the set safety threshold).
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 counter clockwise direction (on model with electric drive unit only).	Pedalboard microswitch breakage.	Call for technical assistance. 
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 turns slowly even though the motor pedal is not being pressed (on model with electric drive unit only).	Pedalboard reversible de-calibration.	1. Keep the pedal in rest position. 2. Keep the machine connected to the net. 3. Wait for 30 seconds that the pedalboard recalibration automatic attempt ends.
The chuck does not turn (on model with pneumatic drive unit only).	1. Supply missed. 2. The operation pedalboard is broken.	1. Connect the supply. 2. Call for technical assistance. 
The chuck does not reach maximum rotation speed (on model with pneumatic drive unit only).	Wrong pneumatic supply pressure	Adjust supply pressure.

Problem	Possible cause	Remedy
The chuck does not turn in the counter clockwise direction (on model with pneumatic drive unit only).	The operation pedalboard is broken.	Call for technical assistance. 
No movement is generated when the control lever of the rotating bead pressor arm is operated.	1. Supply missed. 2. The supply pipes have not been correctly assembled. 3. The control valve is not working.	1. Check supply. 2. Check pipes fitting. 3. Call for technical assistance. 
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

		Model with electric drive unit	Model with pneumatic drive unit
Motor power (kW)		1.5	/
Power supply	Voltage (V)	220	/
	Phases	1	/
	Frequency (Hz)	60	/
Typical current draw (A)		6	/
Chuck rotation speed (rev/min)		15	/
Chuck rotation speed (rev/min)		/	5-6

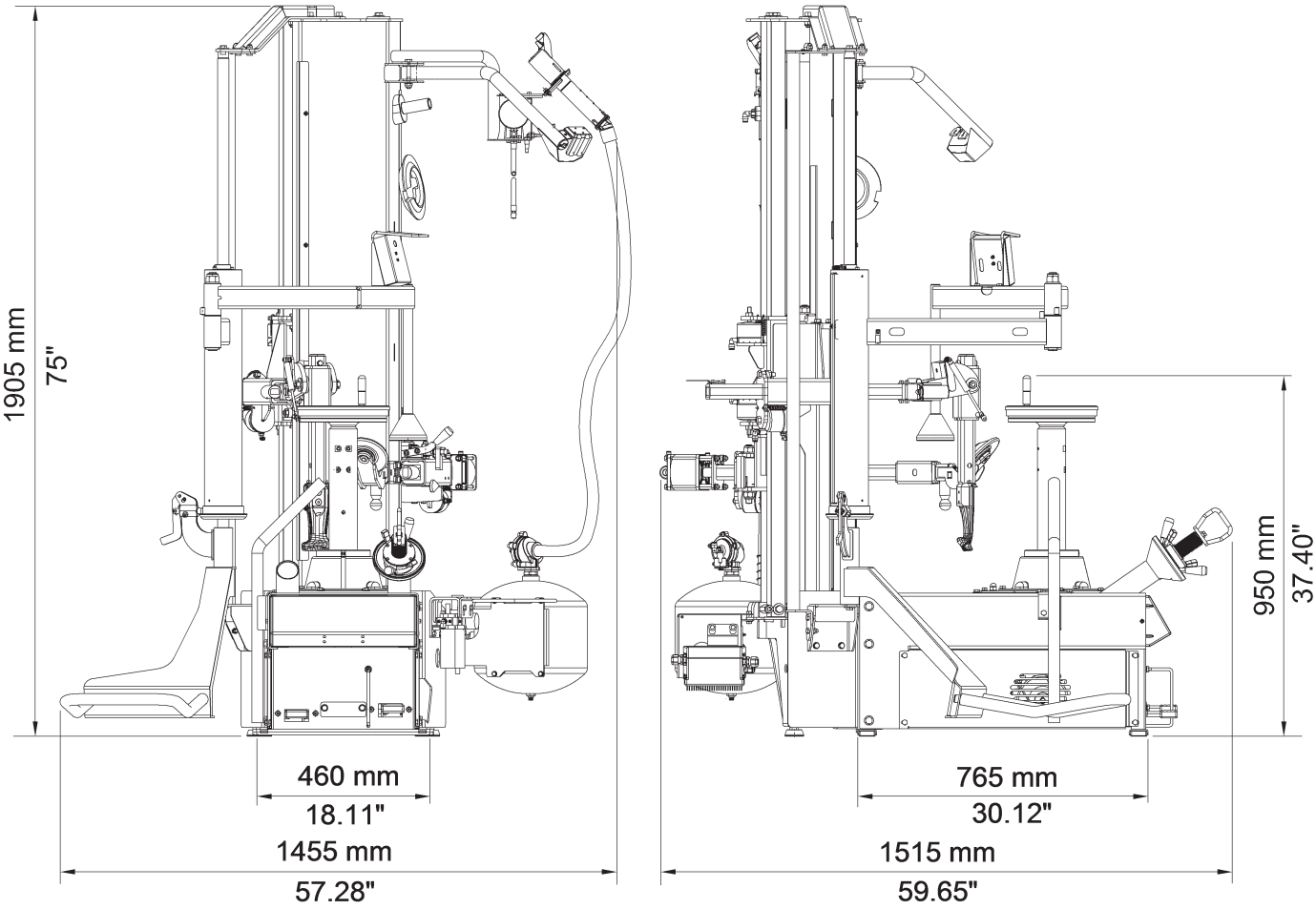
15.2 Technical mechanical data

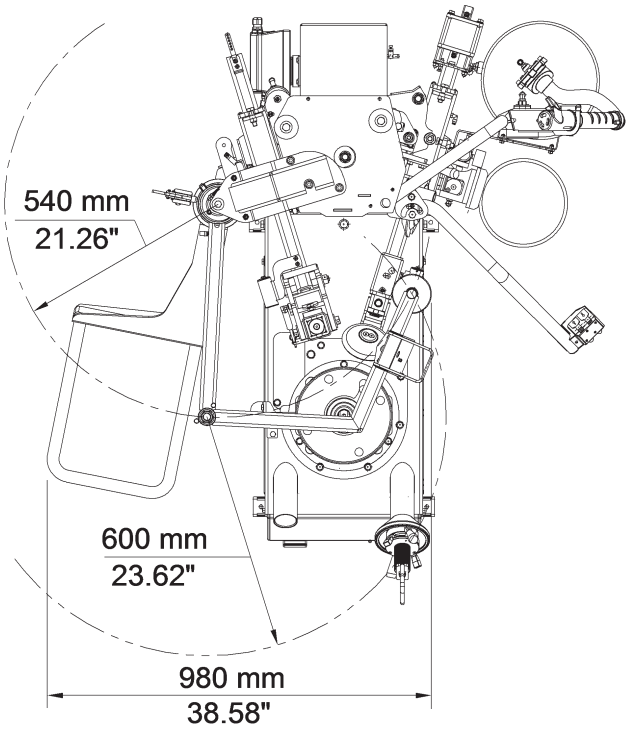
	Model with electric drive unit	Model with pneumatic drive unit
Wheel max. diameter (inches)	41" - 43" - 45"	
Wheel max. width (inches)	15"	
Rim locking diameter (inches)	10"-26"÷12"-28"÷14"-30"	
Bead-breaker power per roller at 10 bar (145 psi) (kg)	1200 (2650 lbs)	
Gear noise (dBA)	76	
Force on the roller of the bead pressing arm rotating at 8 bar (116 psi) (N)	4000 (900 lbf)	
Maximum recommended air supply for pneumatic motor (bar)	/	7 (101 lbs)
Operating pressure (bar)	8 ÷ 10 (116 ÷ 145 psi)	

	Model with electric drive unit	Model with pneumatic drive unit
Weight (Kg)	302 (666 lbs)	305 (672 lbs)

15.3 Dimensions

Fig. 76





16.0 STORING

If storing for long periods 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.

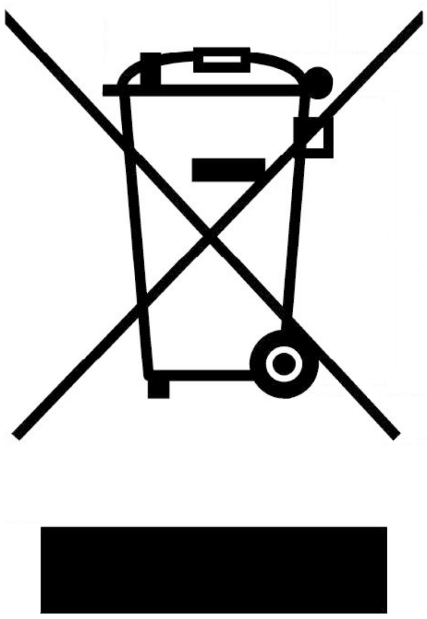
17.0 SCRAPPING

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.

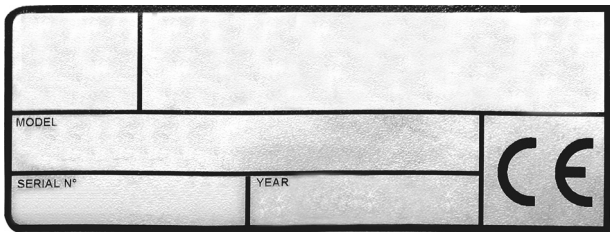
Instructions for the correct management of waste from electric and electronic equipment (WEEE) according to the Italian legislative decree 49/14 and subsequent amendments.

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. 77



18.0 REGISTRATION PLATE DATA



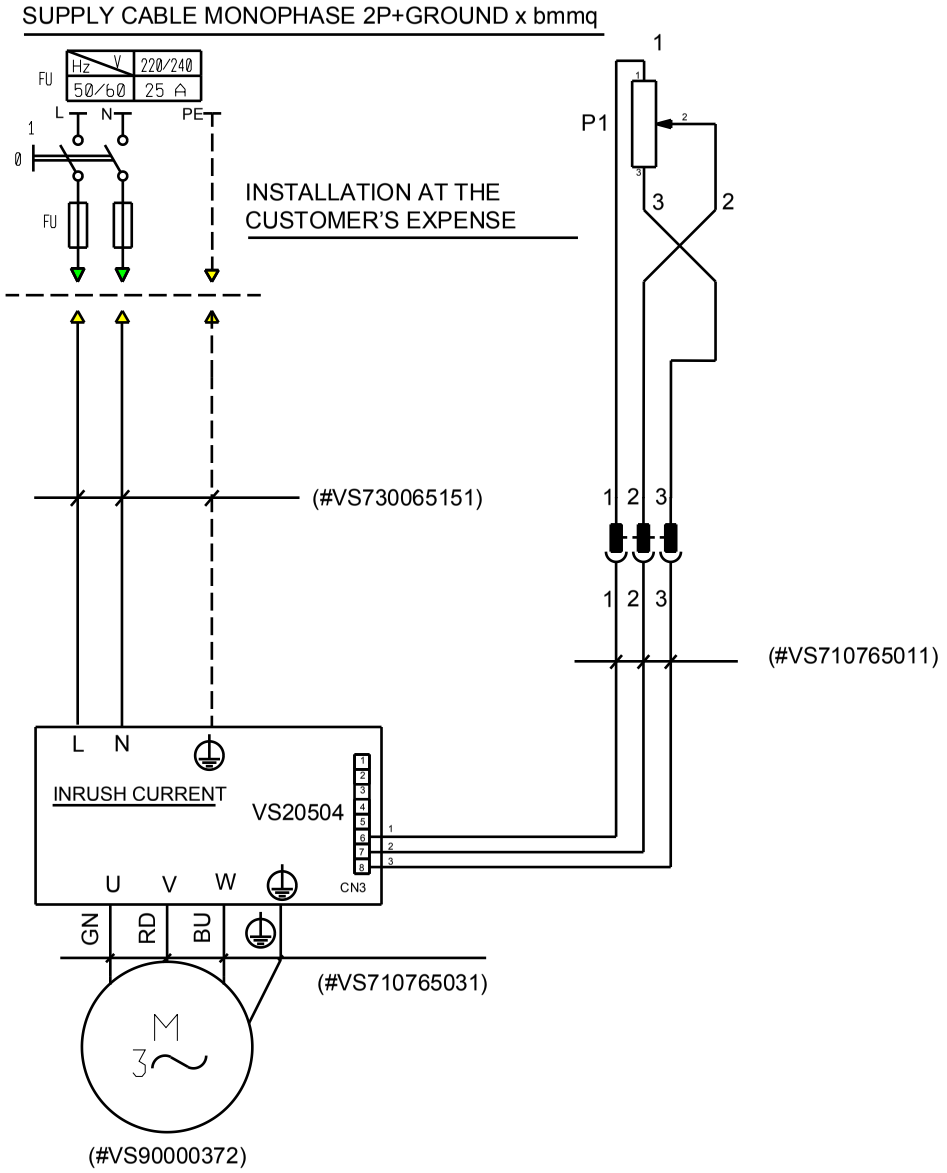
The validity of the Conformity Declaration enclosed to this manual is also extended to products and/or devices the machine model object of the Conformity Declaration can be equipped with.
Said plate must always be kept clean from grease residues or filth generally.

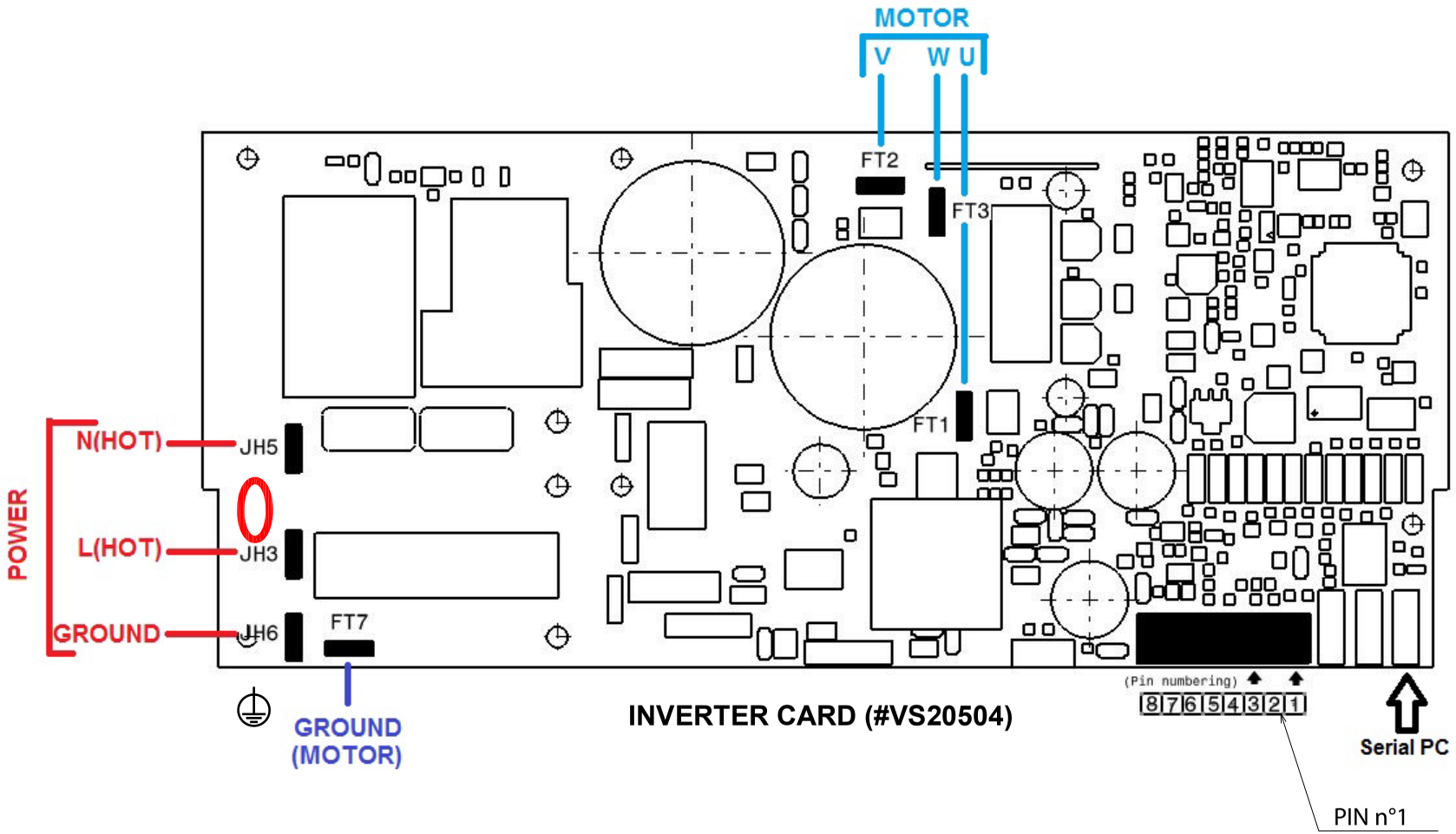
ATTENTION: TAMPERING WITH, CARVING, CHANGING ANYHOW OR EVEN REMOVING MACHINE IDENTIFICATION PLATE IS ABSOLUTELY FORBIDDEN; DO NOT COVER IT WITH TEMPORARY PANELS, ETC., SINCE IT MUST ALWAYS BE VISIBLE.

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

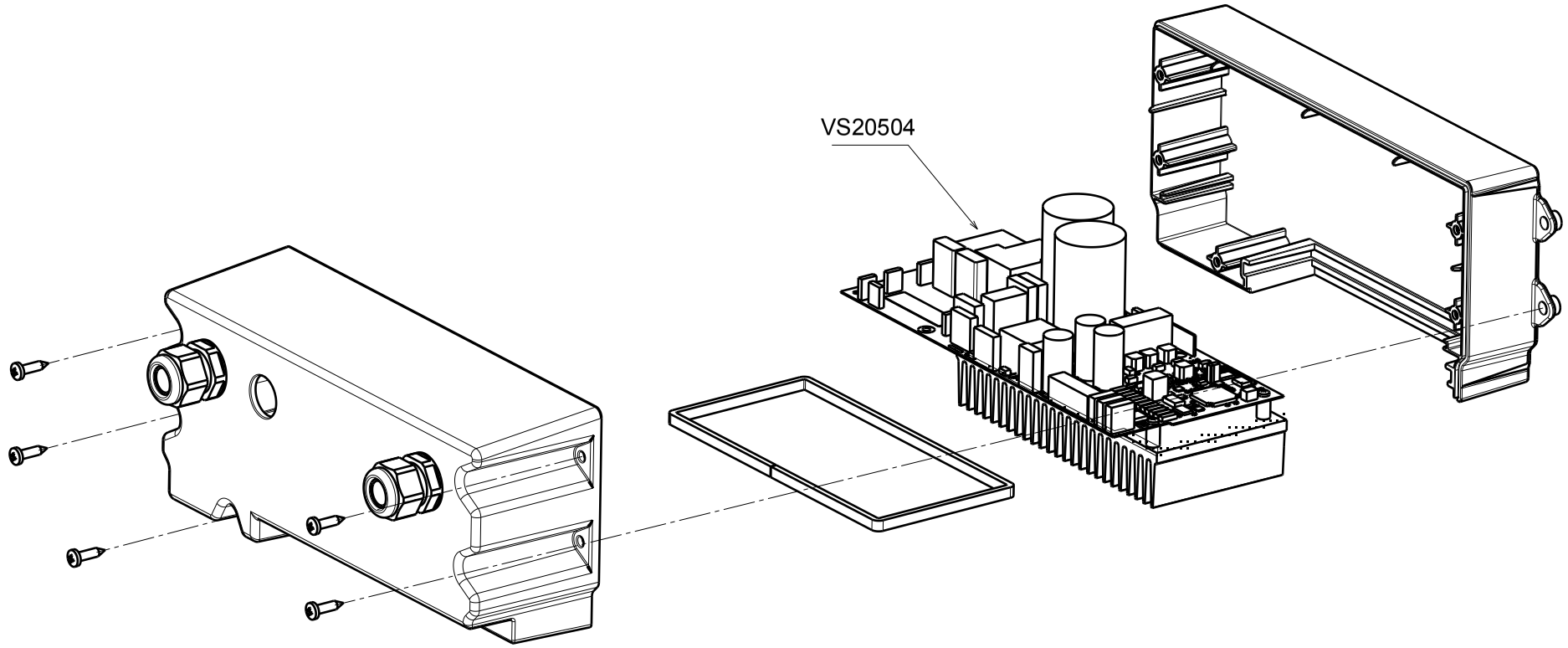
19.0 FUNCTIONAL DIAGRAMS

Here follows a list of the machine functional diagrams.

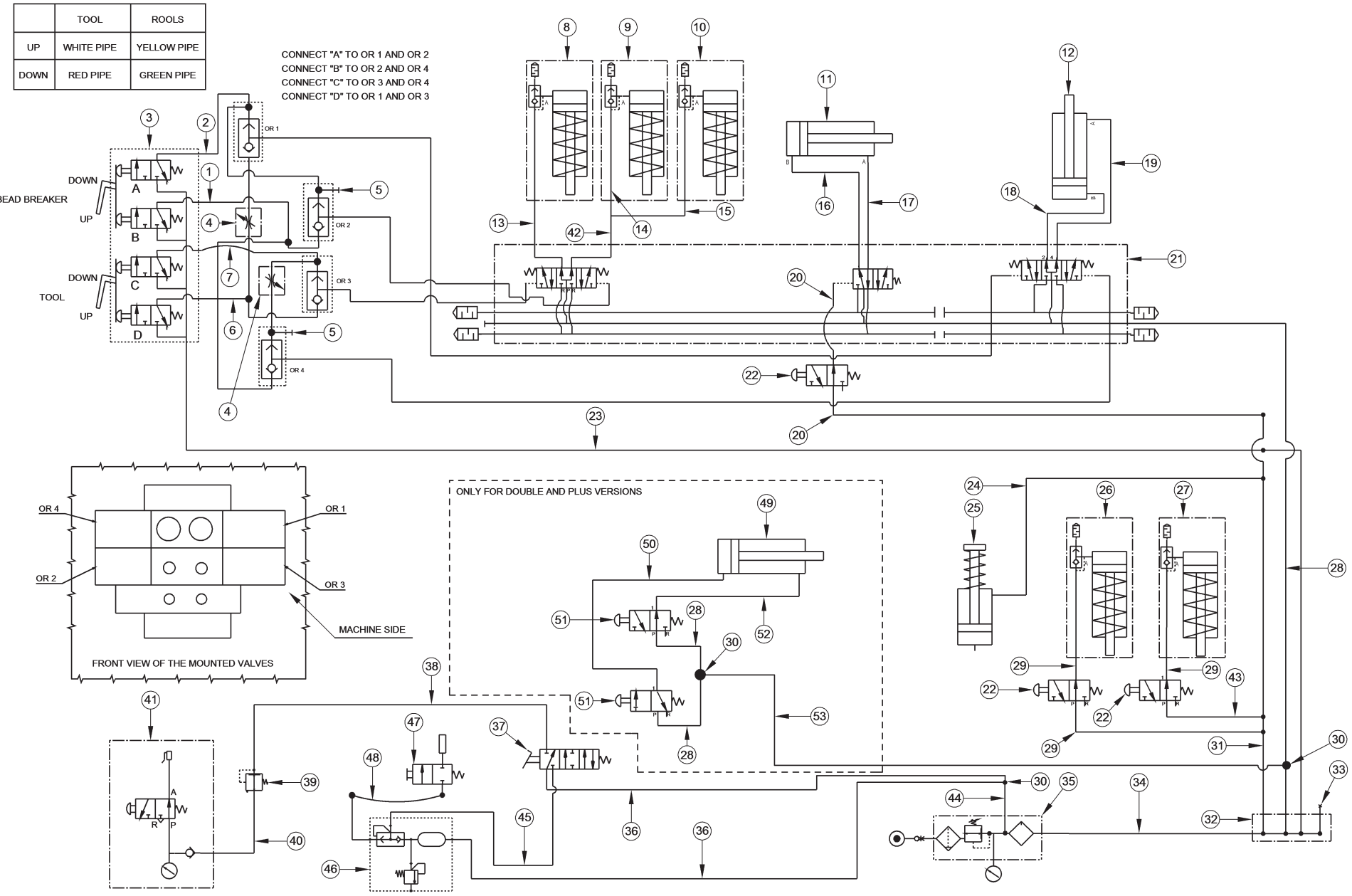

SUPPLY CABLE MONOPHASE 2P+GROUND x bmmq
Hz V 220/240
50/60 25 A
FU
L N PE
1
0
FU
INSTALLATION AT THE
CUSTOMER'S EXPENSE
P1
1
2
3
3 2
(#VS730065151)
1 2 3
1 2 3
(#VS710765011)
L N
INRUSH CURRENT
VS20504
CN3
U V W
GN RD BU
(#VS710765031)
M
3~
(#VS90000372)



INVERTER CARD (#VS20504)


VS20504

Drawing Number A - Rev. 5		VS710705041		Valid for model with electric motorization
N°	**Code**	**Description**	**Description**	**Descripción**
	I	Motor control inverter	Variateur commande moteur	Inversor mando motor
	M	Threephase asynchronous motor	Moteur asynchrone triphasé	Motor asincrónico trifásico
	P1	Motor rotation control potentiometer (clockwise/ counter-clockwise)	Potentiomètre commande rotation moteur (sens horaire / antihoraire)	Potenciómetro comando rotación motor (a izquierda / derecha)
	■	Clamp	Borne	Abrazadera
	CN3	Pedalboard micro inverter connector	Connecteur inverseur micro pédale de direction	Conector inversor micro pedalera


TOOL
ROOLS
UP
WHITE PIPE
YELLOW PIPE
DOWN
RED PIPE
GREEN PIPE
CONNECT "A" TO OR 1 AND OR 2
CONNECT "B" TO OR 2 AND OR 4
CONNECT "C" TO OR 3 AND OR 4
CONNECT "D" TO OR 1 AND OR 3
DOWN
BEAD BREAKER
UP
DOWN
TOOL
UP
A
B
C
D
OR 1
OR 2
OR 3
OR 4
ONLY FOR DOUBLE AND PLUS VERSIONS
MACHINE SIDE
FRONT VIEW OF THE MOUNTED VALVES

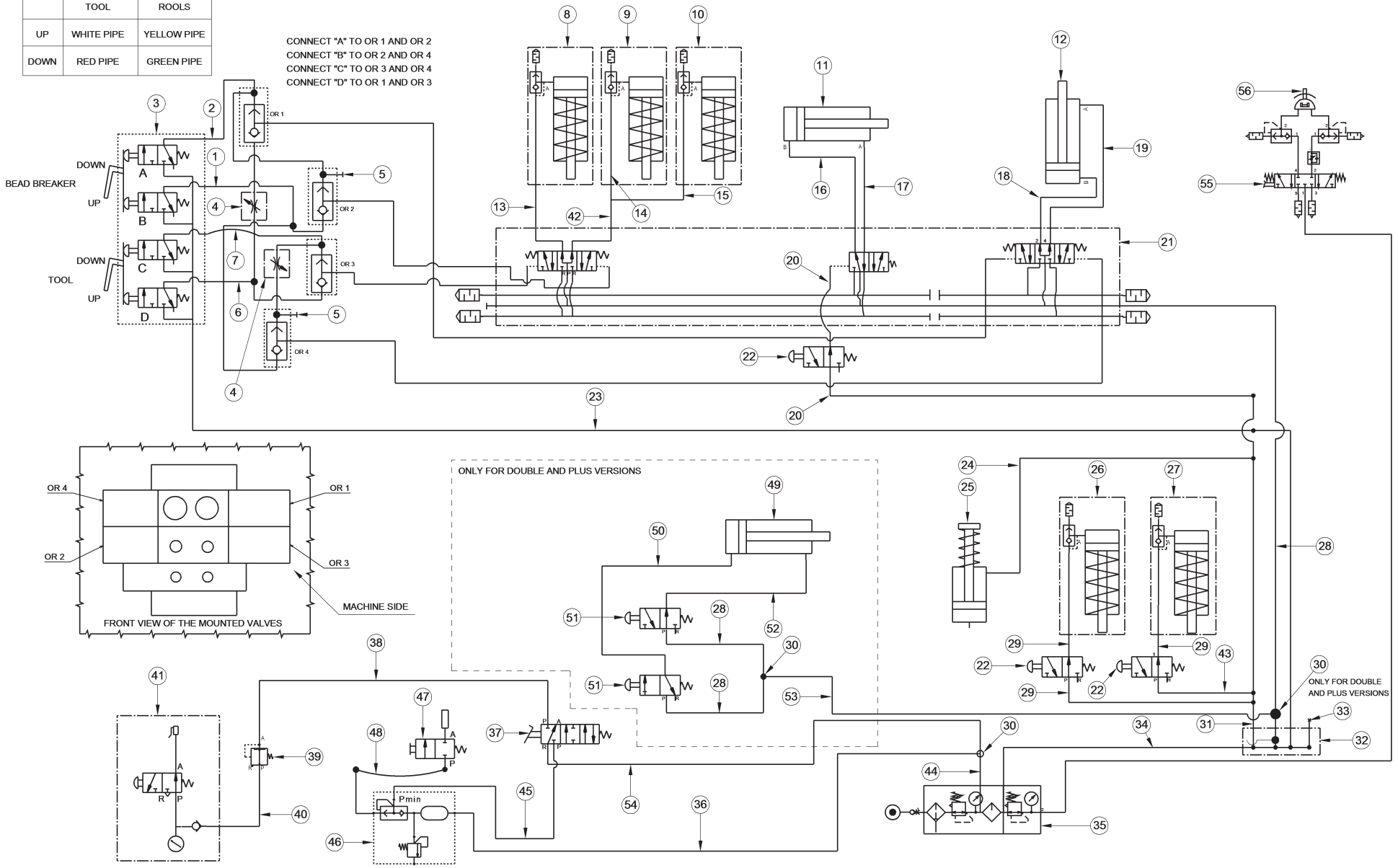
Drawing Number B - Rev. 1		VS710705010		Valid for model with electric motorization
N°	**Code**	**Description**	**Description**	**Descripción**
1		4x2,7 yellow rilsan pipe L=3300	Tuyau rilsan 4x2,7 jaune L= 3300	Tubo rilsan 4x2,7 amarillo L= 3300
2		4x2,7 green rilsan pipe L= 3300	Tuyau rilsan 4x2,7 vert L= 3300	Tubo rilsan 4x2,7 verde L= 3300
3		Control valve	Vanne de commande	Válvula de mando
4	VS399286	Flow regulator	Regulateur de débit	Regulación de flujo
5		Cap	Bouchon	Tapa
6		4x2,7 white rilsan pipe L= 3300	Tuyau rilsan 4x2,7 blanc L= 3300	Tubo rilsan 4x2,7 blanco L= 3300
7		4x2,7 red rilsan pipe L= 3300	Tuyau rilsan 4x2,7 rouge L= 3300	Tubo rilsan 4x2,7 rojo L= 3300
8		Bead breaker vertical neck cylinder (cyl. Ø60)	Cylindre étranglement vertical décolle-talons (cyl. Ø60)	Cilindro estrangulación vertical destalonador (cil. Ø60)
9		Upper tool vertical neck cylinder (cyl. Ø60)	Cylindre étranglement vertical outil supérieur (cyl. Ø60)	Cilindro estrangulación vertical herramienta superior (cil. Ø60
10		Lower tool vertical neck cylinder (cyl. Ø60)	Cylindre étranglement vertical outil inférieur (cyl. Ø60)	Cilindro estrangulación vertical herramienta inferior (cil. Ø60)
11		Bead breaker cam cylinder (cyl. Ø70)	Cylindre came décolle-talons (cyl. Ø70)	Cilindro leva destalonador (cil. Ø70)
12		Arms vertical movement cylinder (cyl. Ø125)	Cylindre mouvement vertical bras (cyl. Ø125)	Cilindro movimiento vertical brazos (cil. Ø125)
13		6x4 black rilsan pipe L=1900	Tuyau rilsan 6x4 noir L= 1900	Tubo rilsan 6x4 negro L= 1900
14		6x4 black rilsan pipe L=300	Tuyau rilsan 6x4 noir L= 300	Tubo rilsan 6x4 negro L= 300
15		6x4 black rilsan pipe L=150	Tuyau rilsan 6x4 noir L= 150	Tubo rilsan 6x4 negro L= 150
16		6x4 black rilsan pipe L=2120	Tuyau rilsan 6x4 noir L= 2120	Tubo rilsan 6x4 negro L= 2120
17		6x4 black rilsan pipe L=2240	Tuyau rilsan 6x4 noir L= 2240	Tubo rilsan 6x4 negro L= 2240
18		8x6 black rilsan pipe L=2370	Tuyau rilsan 8x6 noir L= 2370	Tubo rilsan 8x6 negro L= 2370
19		8x6 black rilsan pipe L=2300	Tuyau rilsan 8x6 noir L= 2300	Tubo rilsan 8x6 negro L= 2300
20		4x2,7 black rilsan pipe L=3300	Tuyau rilsan 4x2,7 noir L= 3300	Tubo rilsan 4x2,7 negro L= 3300
21	VS710611050	Base + valves	Embase + vannes	Base + válvulas
22	VS710590800	NA valve	Vanne NA	Válvula NA
23		6x4 black rilsan pipe L=3300	Tuyau rilsan 6x4 noir L= 3300	Tubo rilsan 6x4 negro L= 3300
24		4x2,7 black rilsan pipe L=300	Tuyau rilsan 4x2,7 noir L= 300	Tubo rilsan 4x2,7 negro L= 300

Drawing Number B - Rev. 1		VS710705010		Valid for model with electric motorization
N°	**Code**	**Description**	**Description**	**Descripción**
25		Parachute cylinder (cyl. Ø30)	Cylindre parachute (cyl. Ø30)	Cilindro paracaída (cil. Ø30)
26		Bead breaker arm neck cylinder (cyl. Ø60)	Cylindre étranglement bras décolle-talons (cyl. Ø60)	Cilindro estrangulación brazo destalonador (cil. Ø60)
27		Tool arm neck cylinder (cyl. Ø60)	Cylindre étranglement bras outil (cyl. Ø60)	Cilindro estrangulación herramienta (cil. Ø60)
28		8x6 black rilsan pipe L= 300	Tuyau rilsan 8x6 noir L= 300	Tubo rilsan 8x6 negro L= 300
29		4x2,7 black rilsan pipe L=1100	Tuyau rilsan 4x2,7 noir L= 1100	Tubo rilsan 4x2,7 negro L= 1100
30	VS325181	V8 union	Raccord à V8	Enlace a V8
31		4x2,7 black rilsan pipe L=1800	Tuyau rilsan 4x2,7 noir L= 1800	Tubo rilsan 4x2,7 negro L= 1800
32		5-ways air distribution frame	Répartiteur air à 5 voies	Tablero distribución aire de 5 vías
33		Optional PLUS92	Option PLUS92	PLUS92 opcional
34		8x6 black rilsan pipe L=430	Tuyau rilsan 8x6 noir L= 430	Tubo rilsan 8x6 negro L= 430
35		Lubricator	Graisseur	Lubrificador
36		8x6 blue rilsan pipe L=430	Tuyau rilsan 8x6 bleu L= 430	Tubo rilsan 8x6 azul L= 430
37	VSB7304000	Inflation pedal valve	Vanne pédales de direction de gonflage	Válvula pedal de inflado
38	VS317009	8x6 blue rilsan pipe L= 400	Tuyau rilsan 8x6 blue L=400	Tubo rilsan 8x6 azul L=400
39		60 PSI balancing valve	Vanne balancement 60 PSI	Válvula balanceo 60 PSI
40		8x6 red rilsan pipe L=3800	Tuyau rilsan 8x6 rouge L=3800	Tubo rilsan 8x6 rojo L=3800
41		Inflation unit with pressure gauge	Groupe gonflage avec manomètre	Grupo inflado con manómetro
42		6x4 black rilsan pipe L=1540	Tuyau rilsan 6x4 noir L= 1540	Tubo rilsan 6x4 negro L= 1540
43		4x2,7 black rilsan pipe L=2600	Tuyau rilsan 4x2,7 noir L= 2600	Tubo rilsan 4x2,7 negro L= 2600
44	VS317009	8x6 blue rilsan pipe L= 650	Tuyau rilsan 8x6 blue L=650	Tubo rilsan 8x6 azul L=650
45		8x6 black rilsan pipe L=2350	Tuyau rilsan 8x6 noir L= 2350	Tubo rilsan 8x6 negro L= 2350
46		Tank unit	Groupe réservoir	Grupo tanque
47		Inflation nozzle	Gicleur de gonflage	Boquilla de inflado
48	VS318011	Screened pipe L= 700	Tuyau retiné L= 700	Tubo retinado L= 700
49	VS710290370	Bead breaking fulcrum-type cylinder	Cylindre décolle-talon point d'appui	Cilindro destalonador fulcro

Drawing Number B - Rev. 1		VS710705010		Valid for model with electric motorization
N°	**Code**	**Description**	**Description**	**Descripción**
50		10x8 black rilsan pipe L=630	Tuyau rilsan 10x8 noir L= 630	Tubo rilsan 10x8 negro L= 630
51	VS710690280	Bead breaking pedal valves unit	Groupe vannes pédal décolle talon	Grupo válvulas pedal destalonador
52		10x8 black rilsan pipe L=540	Tuyau rilsan 10x8 noir L=540	Tubo rilsan 10x8 negro L=540
53		8x6 black rilsan pipe L=1100	Tuyau rilsan 8x6 noir L=1100	Tubo rilsan 8x6 negro L=1100

	TOOL	ROOLS
UP	WHITE PIPE	YELLOW PIPE
DOWN	RED PIPE	GREEN PIPE

CONNECT "A" TO OR 1 AND OR 2
CONNECT "B" TO OR 2 AND OR 4
CONNECT "C" TO OR 3 AND OR 4
CONNECT "D" TO OR 1 AND OR 3



Drawing Number C - Rev. 0		VS710705030		Valid for model with pneumatic motorization
N°	**Code**	**Description**	**Description**	**Descripción**
1		4x2,7 yellow rilsan pipe L=3300	Tuyau rilsan 4x2,7 jaune L= 3300	Tubo rilsan 4x2,7 amarillo L= 3300
2		4x2,7 green rilsan pipe L= 3300	Tuyau rilsan 4x2,7 vert L= 3300	Tubo rilsan 4x2,7 verde L= 3300
3		Control valve	Vanne de commande	Válvula de mando
4	VS399286	Flow regulator	Regulateur de débit	Regulación de flujo
5		Cap	Bouchon	Tapa
6		4x2,7 white rilsan pipe L= 3300	Tuyau rilsan 4x2,7 blanc L= 3300	Tubo rilsan 4x2,7 blanco L= 3300
7		4x2,7 red rilsan pipe L= 3300	Tuyau rilsan 4x2,7 rouge L= 3300	Tubo rilsan 4x2,7 rojo L= 3300
8		Bead breaker vertical neck cylinder (cyl. Ø60)	Cylindre étranglement vertical décolle-talons (cyl. Ø60)	Cilindro estrangulación vertical destalonador (cil. Ø60)
9		Upper tool vertical neck cylinder (cyl. Ø60)	Cylindre étranglement vertical outil supérieur (cyl. Ø60)	Cilindro estrangulación vertical herramienta superior (cil. Ø60
10		Lower tool vertical neck cylinder (cyl. Ø60)	Cylindre étranglement vertical outil inférieur (cyl. Ø60)	Cilindro estrangulación vertical herramienta inferior (cil. Ø60)
11		Bead breaker cam cylinder (cyl. Ø70)	Cylindre came décolle-talons (cyl. Ø70)	Cilindro leva destalonador (cil. Ø70)
12		Arms vertical movement cylinder (cyl. Ø125)	Cylindre mouvement vertical bras (cyl. Ø125)	Cilindro movimiento vertical brazos (cil. Ø125)
13		6x4 black rilsan pipe L=1900	Tuyau rilsan 6x4 noir L= 1900	Tubo rilsan 6x4 negro L= 1900
14		6x4 black rilsan pipe L=300	Tuyau rilsan 6x4 noir L= 300	Tubo rilsan 6x4 negro L= 300
15		6x4 black rilsan pipe L=150	Tuyau rilsan 6x4 noir L= 150	Tubo rilsan 6x4 negro L= 150
16		6x4 black rilsan pipe L=2120	Tuyau rilsan 6x4 noir L= 2120	Tubo rilsan 6x4 negro L= 2120
17		6x4 black rilsan pipe L=2240	Tuyau rilsan 6x4 noir L= 2240	Tubo rilsan 6x4 negro L= 2240
18		8x6 black rilsan pipe L=2370	Tuyau rilsan 8x6 noir L= 2370	Tubo rilsan 8x6 negro L= 2370
19		8x6 black rilsan pipe L=2300	Tuyau rilsan 8x6 noir L= 2300	Tubo rilsan 8x6 negro L= 2300
20		4x2,7 black rilsan pipe L=3300	Tuyau rilsan 4x2,7 noir L= 3300	Tubo rilsan 4x2,7 negro L= 3300
21	VS710611050	Base + valves	Embase + vannes	Base + válvulas
22	VS710590800	NA valve	Vanne NA	Válvula NA
23		6x4 black rilsan pipe L=3300	Tuyau rilsan 6x4 noir L= 3300	Tubo rilsan 6x4 negro L= 3300
24		4x2,7 black rilsan pipe L=300	Tuyau rilsan 4x2,7 noir L= 300	Tubo rilsan 4x2,7 negro L= 300

Drawing Number C - Rev. 0		VS710705030		Valid for model with pneumatic motorization
N°	**Code**	**Description**	**Description**	**Descripción**
25		Parachute cylinder (cyl. Ø30)	Cylindre parachute (cyl. Ø30)	Cilindro paracaída (cil. Ø30)
26		Bead breaker arm neck cylinder (cyl. Ø60)	Cylindre étranglement bras décolle-talons (cyl. Ø60)	Cilindro estrangulación brazo destalonador (cil. Ø60)
27		Tool arm neck cylinder (cyl. Ø60)	Cylindre étranglement bras outil (cyl. Ø60)	Cilindro estrangulación herramienta (cil. Ø60)
28		8x6 black rilsan pipe L= 300	Tuyau rilsan 8x6 noir L= 300	Tubo rilsan 8x6 negro L= 300
29		4x2,7 black rilsan pipe L=1100	Tuyau rilsan 4x2,7 noir L= 1100	Tubo rilsan 4x2,7 negro L= 1100
30	VS325181	V8 union	Raccord à V8	Enlace a V8
31		4x2,7 black rilsan pipe L=1800	Tuyau rilsan 4x2,7 noir L= 1800	Tubo rilsan 4x2,7 negro L= 1800
32		5-ways air distribution frame	Répartiteur air à 5 voies	Tablero distribución aire de 5 vías
33		Optional PLUS92	Option PLUS92	PLUS92 opcional
34		8x6 black rilsan pipe L=430	Tuyau rilsan 8x6 noir L= 430	Tubo rilsan 8x6 negro L= 430
35		Airmotor air treatment unit	Groupe traitement air Airmotor	Grupo tratamiento aire Airmotor
36		8x6 blue rilsan pipe L=1400	Tuyau rilsan 8x6 bleu L= 1400	Tubo rilsan 8x6 azul L= 1400
37	VSB7304000	Inflation pedal valve	Vanne pédales de direction de gonflage	Válvula pedal de inflado
38	VS317009	8x6 blue rilsan pipe L= 400	Tuyau rilsan 8x6 blue L=400	Tubo rilsan 8x6 azul L=400
39		60 PSI balancing valve	Vanne balancement 60 PSI	Válvula balanceo 60 PSI
40		8x6 red rilsan pipe L=3800	Tuyau rilsan 8x6 rouge L=3800	Tubo rilsan 8x6 rojo L=3800
41		Inflation unit with pressure gauge	Groupe gonflage avec manomètre	Grupo inflado con manómetro
42		6x4 black rilsan pipe L=1540	Tuyau rilsan 6x4 noir L= 1540	Tubo rilsan 6x4 negro L= 1540
43		4x2,7 black rilsan pipe L=2600	Tuyau rilsan 4x2,7 noir L= 2600	Tubo rilsan 4x2,7 negro L= 2600
44	VS317009	8x6 blue rilsan pipe L= 650	Tuyau rilsan 8x6 blue L=650	Tubo rilsan 8x6 azul L=650
45		8x6 black rilsan pipe L=2350	Tuyau rilsan 8x6 noir L= 2350	Tubo rilsan 8x6 negro L= 2350
46		Tank unit	Groupe réservoir	Grupo tanque
47		Inflation nozzle	Gicleur de gonflage	Boquilla de inflado
48	VS318011	Screened pipe L= 700	Tuyau retiné L= 700	Tubo retinado L= 700
49	VS710290370	Bead breaking fulcrum-type cylinder	Cylindre décolle-talon point d'appui	Cilindro destalonador fulcro

Drawing Number C - Rev. 0		VS710705030		Valid for model with pneumatic motorization
N°	**Code**	**Description**	**Description**	**Descripción**
50		10x8 black rilsan pipe L=630	Tuyau rilsan 10x8 noir L= 630	Tubo rilsan 10x8 negro L= 630
51	VS710690280	Bead breaking pedal valves unit	Groupe vannes pédal décolle talon	Grupo válvulas pedal destalonador
52		10x8 black rilsan pipe L=540	Tuyau rilsan 10x8 noir L=540	Tubo rilsan 10x8 negro L=540
53		8x6 black rilsan pipe L=1100	Tuyau rilsan 8x6 noir L=1100	Tubo rilsan 8x6 negro L=1100
54	VS317009	8x6 blue rilsan pipe L= 1800	Tuyau rilsan 8x6 blue L=1800	Tubo rilsan 8x6 azul L=1800
55		Pedal	Pédale	Pedal
56		Airmotor	Airmotor	Airmotor

Installer: Please return this booklet to literature package, and give it to the owner/ operator.

Thank You

Trained Operators and Regular Maintenance Ensures Satisfactory Performance of Your Wheel Service Equipment.

Contact Your Nearest Authorized Rotary Wheel Service Equipment Parts Distributor for Genuine Replacement Parts. See Literature Package for Parts Breakdown.

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