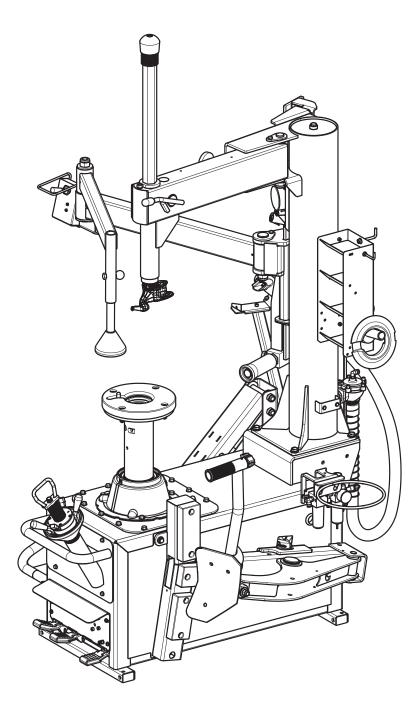


### **R247D.CL Tire Changer**

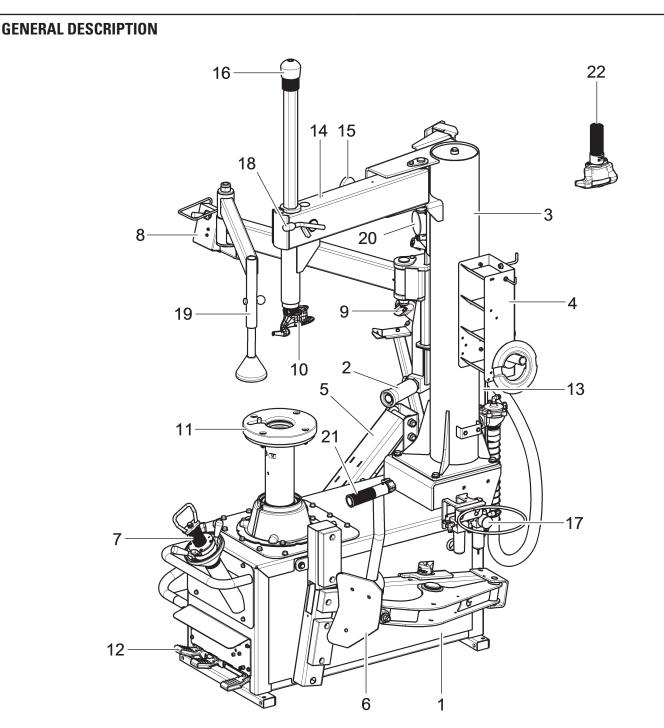


**IMPORTANT** Any damage caused by failure to follow the instructions in this manual or improper machine use shall relieve the manufacturer of all liability.

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#### KEY

- 1 Machine base
- 2 Presser roll
- 3 Column/tank unit
- 4 Tool box
- 5 Lifting device
- 6 Lateral bead breaker
- 7 Locking device
- 8-Bead pressing device operating unit
- 9 Inflating device
- 10 Tire mounting/demounting tool
- 11 Central locking chuck

- 12 Control pedal
- 13 Bead pressing device movement cylinder

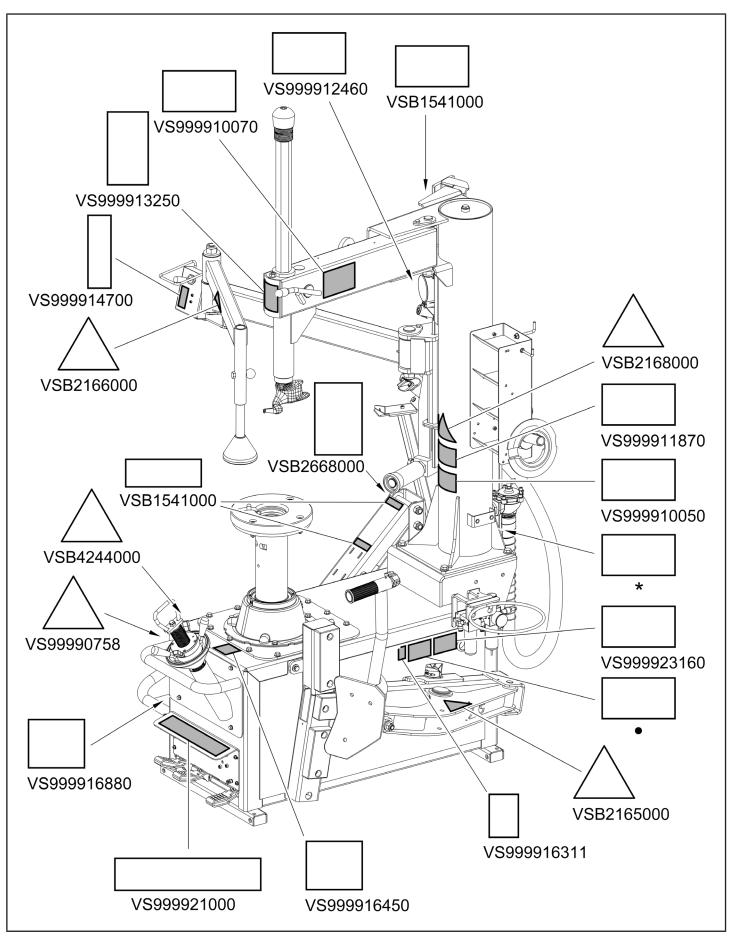
FIG. 1

- 14 Horizontal arm
- 15 Clamping knob for flag arm rotation
- 16 Handle
- 17 Lubricator filter unit
- 18 Tool sliding locking lever
- 19 Presser arm unit
- 20 Pressure gauge unit
- 21 Bead breaking vane control knob
- 22 Balancing plastic tool

#### SYMBOLS USED IN THE MANUAL

Symbols	Description	Symbols	Description
	Read instruction manual.		Warning. Be particularly careful (possible material damages).
	Wear work gloves.		Move with fork lift truck or pallet truck.
	Wear work shoes.		Lift from above.
000	Wear safety goggles.		Technical assistance necessary. Do not perform any intervention.
0	Mandatory. Operations or jobs to be per- formed compulsorily.	Ø	Note. Indication and/or useful information.
	Danger! Be particularly careful.		Caution: hanging loads.

#### **INFORMATION PLATE LOCATION TABLE**



Code numbers of plates		
VSB1541000	Danger plate	
VSB1541000	Danger plate	
VSB2165000	Bead breaker danger plate	
VSB2166000	Bead breaker danger plate	
VSB2168000	Tire burst plate	
VSB2668000	Wheel lifting device danger plate	
VSB4244000	Rotating parts danger plate	
VS99990758	Electricity danger plate	
VS999910050	Protection device use plate	
VS999910070	Head danger indicating plate	
VS999911870	Headphones plate	
VS999912460	Supply pressure indicating plate	
VS999913250	Head use indicating plate	
VS999914700	Bead depressing roll controls plate	
VS999916311	Rubbish skip plate	
VS999916450	Lifting device pedal plate	
VS999916880	Max. capacity load 80 Kg plate	
VS999921000	5 pedals pedalboard plate	
VS999923160	Prop 65 Attention plate	
*	Lifting device serial number plate	
•	Serial number plate	



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 PIC-TURES 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 AC-CESSIBLE PLACE FOR ALL ACCESSORY OPERA-TORS TO CONSULT IT WHENEVER IN DOUBT.



THE MANUFACTURER DISCLAIMS ALL RE-SPONSIBILITY 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 electro-hydraulic 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 tires projected to be used exclusively for the mounting, demounting, and inflation of wheels.



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 RE-SPONSIBLE 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.

	<b>)</b>
$\sim$	

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;
  - roll and presser arm;
  - side bead breaking;
  - inflation;
  - lifting device.

The other drives (presser roll clamping, mounting/demounting tool clamping) cannot be of the "man-operated"-type, seen their function: in these cases safety is guaranteed by compliance with indications or precautions on machine residual risks (warning plates) also mentioned in the user's guide.

• 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.



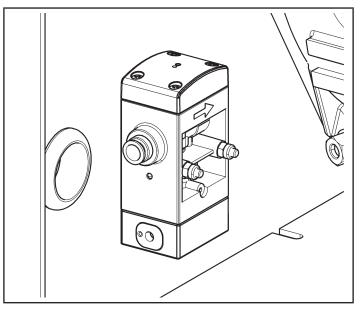
PERIODICALLY CARRY OUT THE MAINTE-NANCE OF THE PROTECTIONS, SHELTERS AND SAFETY DEVICES IN GENERAL, AS INDICATED IN CHAPTER 13. ROUTINE MAINTENANCE.

All machines can also be used for inflating tires and are equipped with the following elements:

- pressure gauge for tire pressure reading, EC-certified and in compliance with 86/217/EEC Standard;
- max. pressure valve fitted on compressed air reservoir (preset see pneumatic diagram) in compliance with 87/404/EEC Standard;

Non-adjustable (balancing valve) pressure limiter (see figure below).

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



#### 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 TABLE" on page 5.

#### 4.0 IMPORTANT SAFETY INSTRUCTIONS

#### 4.1 General safety rules

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.
- 14. To reduce the risk of injury, close supervision is necessary when this product will be used around children. (Pertains to cabinets only.)
- 15. To reduce the risk of injury, never overload the drawers or shelves. Refer to loading instructions.
- 16. To reduce the risk of electric shock or fire, never overload receptacles. Refer to markings for the proper load on receptacles.

#### SAVE THESE INSTRUCTIONS



- 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.
- The machine may be used only in areas free from the danger of explosion or fire.
- The use of only original accessories and spare parts is advised. Our machine is designed to function only with original accessories.
- The installation must be performed by qualified 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.
- 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.



THE MANUFACTURER DENIES ANY RESPON-SIBILITY IN CASE OF DAMAGES CAUSED BY UNAUTHORIZED MODIFICATIONS OR BY THE USE OF NON ORIGINAL COMPONENTS OR EQUIPMENT.



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. Unauthorised personnel must remain outside the working area, as shown in Figure 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.



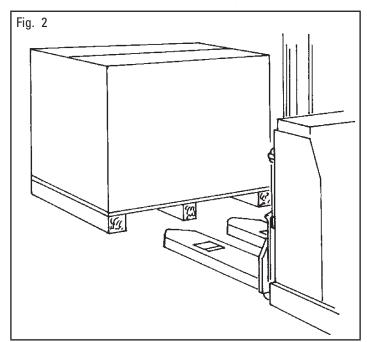
IN CASE OF A CHANCE SUPPLY FAILURE (WHETHER ELECTRICITY OR COMPRESSED AIR), MOVE THE PEDALS TO THE NEUTRAL POSITION.

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





DURING UNPACKING, ALWAYS WEAR GLOVES TO PREVENT ANY INJURY CAUSED BY CON-TACT 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, screws, 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.



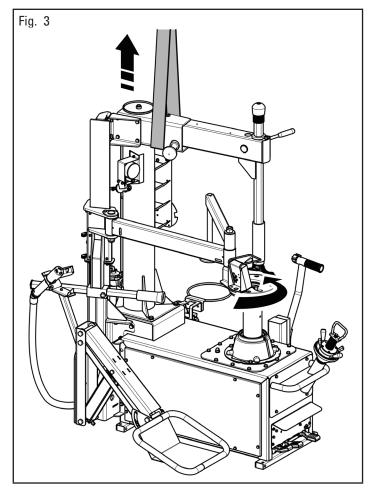
THE BOX CONTAINING THE FIXTURES IS CON-TAINED IN THE WRAPPING. DO NOT THROW IT AWAY WITH THE PACKING.



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:

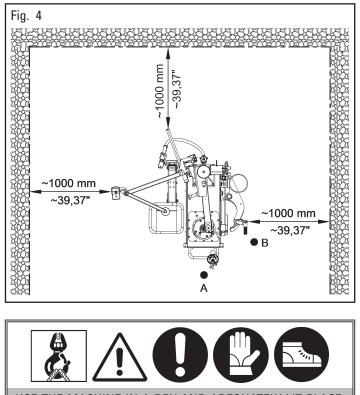
- temperature: 0° + 55° C
- relative humidity: 30 95% (dew-free)
- atmospheric pressure: 860 1060 hPa (mbar).

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 with the chuck, while position B is ideal to follow wheel bead breaking 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 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 fixed 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  $kg/m^2\!.$ 

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

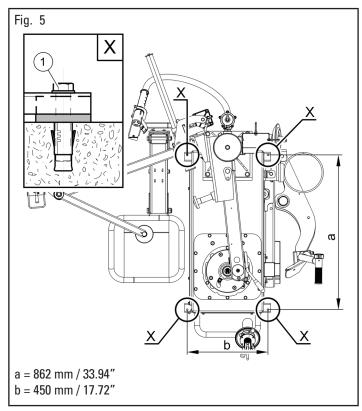
#### 8.3 Lighting

The machine does not require its own lighting for normal working operations.

However, it must be placed in an adequately lit environment. For correct lighting, use lamps having total power 800/1200 Watt as envisaged by UNI 10380.

#### 9.0 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 fix 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 10 mm diameter on the floor by the holes on the bottom floor;
- insert the small blocks (excluded from supply) into the holes;
- fix the machine to the ground with 4 M8x80 mm screws (excluded from supply) (Fig. 5 ref. 1) (or with 4 8x80 mm stud bolts (excluded from supply)). Tighten the screws with an approximate tightening torque of 70 Nm.

#### 10.0 ASSEMBLY AND PREPARATION FOR USE



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.

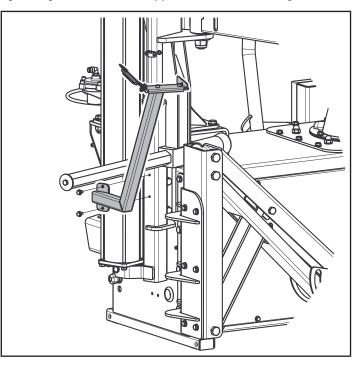
#### 10.1 Fixtures contained in the packing

The packing case contains also the fixtures box. Check that all the parts listed are there.

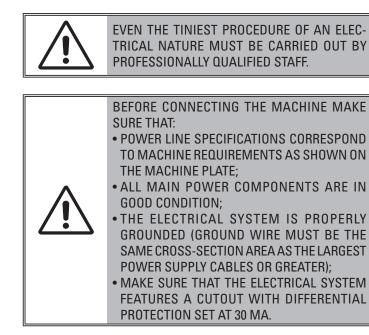
Description	Qty
Bead lifting lever	1
Pin extension	1
Protection with OR	1
Brush	1
Mounting grease	1
Bead breaker vane guard	1
Lever protection	1
Reverse wheels protection	1
Two-faced burnished cone	1
Balancing plastic tool	1

#### 10.2 Assembly procedures

Fit the support for the tubeless inflation gun to the tire changer by tightening the two screws supplied, as shown in the figure below.



#### 10.3 Electrical connections



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 AB-SORPTION 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).

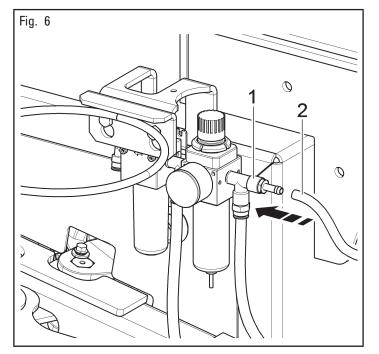
Туре	Voltage	Amperage	Poles	Minimum IP rating
NEMA L6-20P	220 V	16 A	1 Pole + Ground	IP 54

#### 10.4 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. 6 ref. 1).



The pressurized pipe coming from the mains must have a section of 1/4x10 (Fig. 6 ref. 2).

The filter unit is already mounted on the machine.

#### 10.5 Controls



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



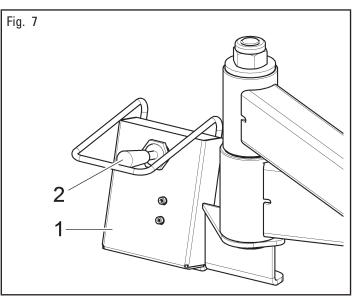
CARRY OUT A DAILY CHECK OF MAINTAINED-TYPE CONTROLS CORRECT FUNCTIONING, BEFORE STARTING MACHINE OPERATION.

#### 11.0 CONTROLS

#### 11.1 Plus device control unit

It is made up of an handle control (Fig. 7 ref. 1), positioned on the device. This handle control allows to operate the vertical translation of the pressor rolls. Lift the lever (Fig. 7 ref. 2) to operate the upwards translation, and lower the lever (Fig. 7 ref. 2) to perform the downwards translation.

Presser roll positioning next to the tire is a completely manual operation.

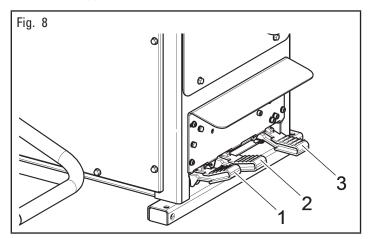


#### 11.2 Pedalboard

The inflation pedal (Fig. 8 ref. 1) has two functions: the delivering of air at controlled pressure (max  $4,2 \pm 0,2$  bar 60 PSI), and a second function of a jet of air from the inflation nozzle to assist the beading in of the tire.

The maintained control pedal (Fig. 8 ref. 2) 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. 8 ref. 3) 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.

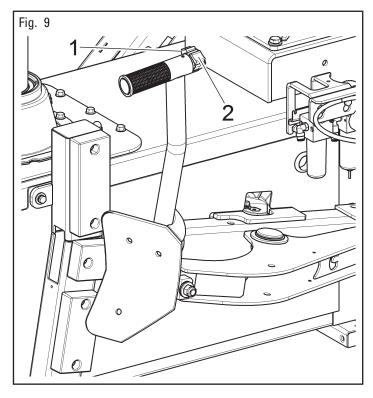




DO NOT CHANGE THE SET OPERATING PRES-SURE VALUE BY MEANS OF THE MAXIMUM PRESSURE VALVES. THE MANUFACTURER SHALL NOT BE RESPONSIBLE FOR INJURY OR DAMAGE ARISING FROM UNAUTHORISED CHANGES.

#### 11.3 Bead breaking vane control knob

The side bead breaker control device consists of a handle placed on the bead breaker itself and equipped with 2 push buttons. The maintained action push button (Fig. 9 ref. 1), when pressed, operates vane progress towards the tire, while maintained action push button (Fig. 9 ref. 2), when pressed, operates vane opening outwards.



#### 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 AND/OR WITH A FREQUENCY OF MORE THAN 20/30 WHEELS PER HOUR, A LIFT-ING DEVICE SHOULD BE USED.

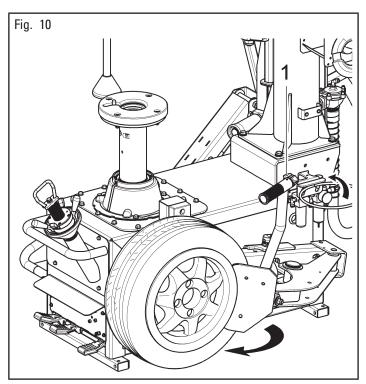
#### 12.3 Bead breaking

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

1. Position the wheel as indicated in Fig. 10 and move the bead breaker tool toward the edge of the rim.



PLACE THE VANE SO THAT IT CAN OPERATE ON TIRE SIDE AND NOT ON THE RIM.



- 2. Move the bead breaker vane closer by pushing the push button (Fig. 10 ref. 1) until the bead has detached. If the bead does not detach the first time, repeat the operation, on different points of the wheel, until it has come away completely.
- 3. Reverse the position of the wheel and repeat the operation on the other side.
- 4. Lubricate the tire carefully along the entire circumference of the bead on both sides.



FAILURE TO LUBRICATE MIGHT CAUSE FRIC-TION BETWEEN THE MOUNTING TOOL AND THE TIRE, AND WOULD CAUSE DAMAGE TO THE TIRE AND/OR THE BEAD.



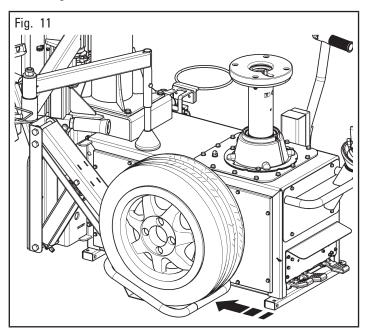
NEVER INSERT ANY PART OF YOUR BODY BETWEEN THE BEAD BREAKER TOOL AND THE TIRE, OR BETWEEN THE TIRE AND THE WHEEL SUPPORT.

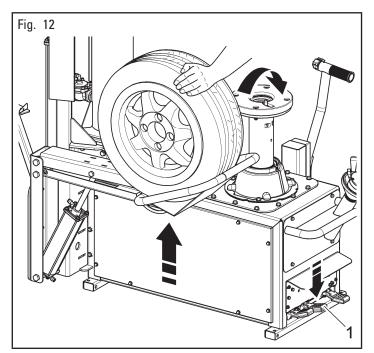
#### 12.4 Use of the lifting device



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

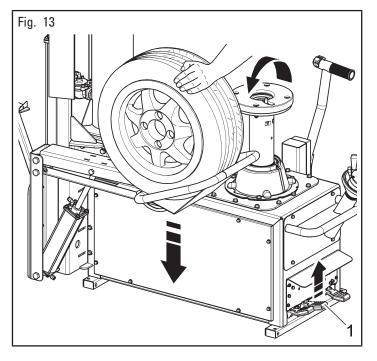
1. After placing the wheel on the lifting plate (see Fig. 11), press the lifting device drive pedal (Fig. 12 ref. 1) downwards and bring the wheel to a level where it can be shifted to the chuck by hand (see Fig. 12).





- 2. Place the wheel on the chuck.
- 3. Lift the pedal (Fig. 8 ref. 2) upwards in order to lower the lifting plate.
- 4. Perform all the tire 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. 8 ref. 2).
- 6. Place the wheel on the lifting plate (see Fig. 12).
- 7. Operate the pedal again (Fig. 13 ref. 1) upwards to make the plate lower and bring back the wheel to the ground keeping a hand on it (see Fig. 13).

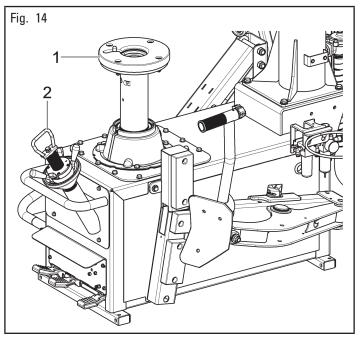


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KEEP A HAND ON THE WHEEL DURING ALL LIFTING DEVICE'S RISING AND DESCENT PHASES, TO PREVENT THE WHEEL FROM FALLING FROM THE LIFTER BECAUSE OF IM-BALANCES.

#### 12.5 Wheel clamping

All wheels must be locked on the rubber plate (Fig. 14 ref. 1) through the central hole using the proper locking device (Fig. 14 ref. 2).

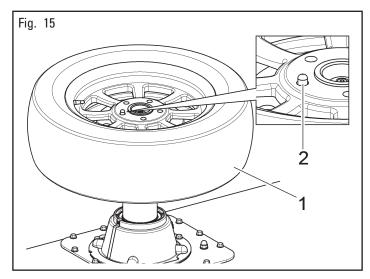




IN CASE OF USE OF RIMS WITHOUT CENTRAL HOLE, IT'S NECESSARY TO USE THE PROPER FIXTURE (AVAILABLE ON DEMAND).

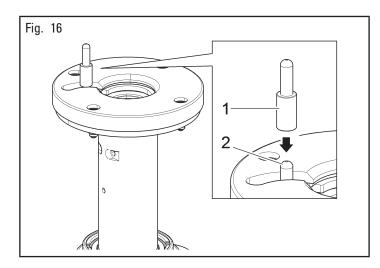
To lock a rim proceed as follows:

1. Dowel the wheel (Fig. 15 ref. 1) on the rubber plate and check that the dragging pin (Fig. 15 ref. 2) enter in a hole placed on the rim hub.



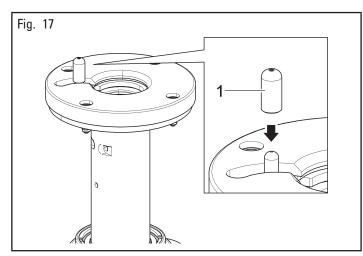


IF THE WHEEL HUB IS HIGHER THEN THE DRAGGING PIN (FIG. 16 REF. 2), USE THE EX-TENSION (FIG. 16 REF. 1) SUPPLIED ON ISSUE.

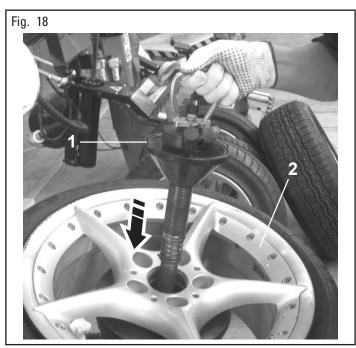




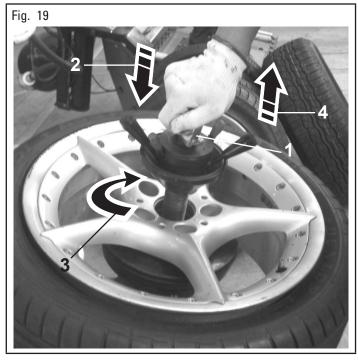
FOR WHEELS WITH ALLOY RIMS, USE THE PROPER PLASTIC GUARD (FIG. 17 REF. 1).



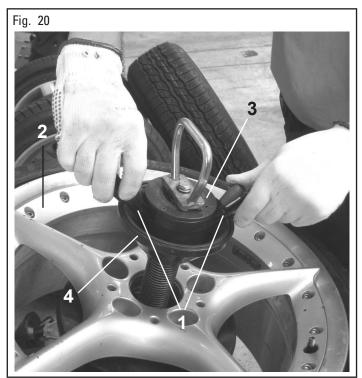
2. Insert the shaft complete with cone (Fig. 18 ref. 1) on the rim (Fig. 18 ref. 2).



3. Through the proper handle (Fig. 19 ref. 1), push down (Fig. 19 ref. 2), turn by 90° (Fig. 19 ref. 3) and lift the shaft (Fig. 19 ref. 4) to hook it into the hole.

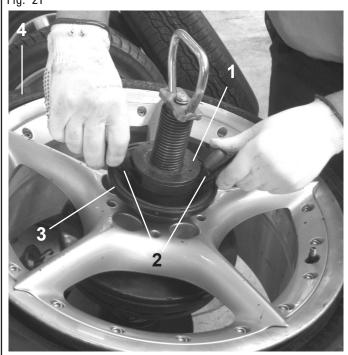


 Trough the internal little levers (Fig. 20 ref. 1), loose the ring nut and approach the ring nut (Fig. 20 ref. 3) and cone (Fig. 20 ref. 4) to the rim (Fig. 20 ref. 2).



5. Then, turn the ring nut (Fig. 21 ref. 1) through the external levers (Fig. 21 ref. 2) until the cone complete clamping (Fig. 21 ref. 3) on the wheel (Fig. 21 ref. 4).

Fig. 21



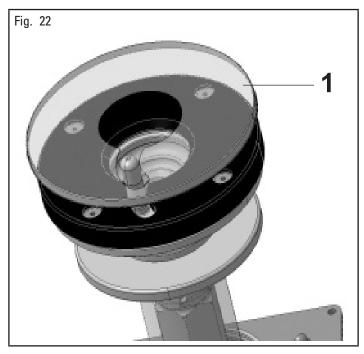
- 6. At the end of the operations, loosen the device releasing first the cone with the external levers and then moving the ring nut and the cone away from the rim with the small levers.
- 7. Lower the shaft to release it from its seat, turn it of 90° on counterclockwise and extract it from the hole through the proper handle.



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

#### 12.5.1 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. 22 ref. 1). We suggest you a constant replacement of it and in any case if there are visible damages (see Fig. 22).



#### 12.6 Demounting



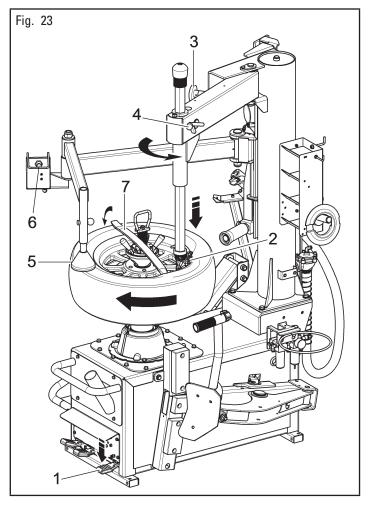
KEEP YOUR HANDS AND BODY AWAY FROM MOUNTING TOOL DURING DISASSEMBLY/ ASSEMBLY OPERATIONS TO AVOID SQUASH-ING DANGER.

Extraction of the first bead

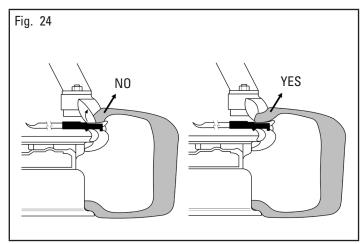
After clamping the wheel, the tire is demounted following the instructions given below, with reference to Fig. 23.

- 1. Push the rotation pedal (Fig. 23 ref. 1) to rotate the wheel clockwise until the valve stem reaches "3 o'clock" position.
- 2. Place the mounting/demounting tool (Fig. 23 ref. 2) on the rim edge through the knob (Fig. 23 ref. 3).
- 3. Block in position operating on the lever (Fig. 23 ref. 4).
- 4. Adjust the tangency point of the tool (Fig. 23 ref. 2) to the rim through the knob (Fig. 23 ref. 3).
- Place the presser cone (Fig. 23 ref. 5) in "6 o'clock" position and press on the tire operating the lever of the control unit (Fig. 23 ref. 6) downwards, until the tire bead is placed next to the rim groove.
- 6. Use the same lever (Fig. 23 ref. 7) to lift the bead onto the right end of the mounting tool (Fig. 23 ref. 2) and position it parallel with the rim plate pressing at the same time on the side of the tire with Plus device (Fig. 23 ref. 5) in "6 o'clock" position.

7. Press the rotation (Fig. 23 ref. 1) pedal to turn the wheel clockwise until the whole bead has been removed from the rim. During the rotation of the wheel, the bead lifting tool (Fig. 23 ref. 7) slides away from the mounting tool moving onto the rim edge.

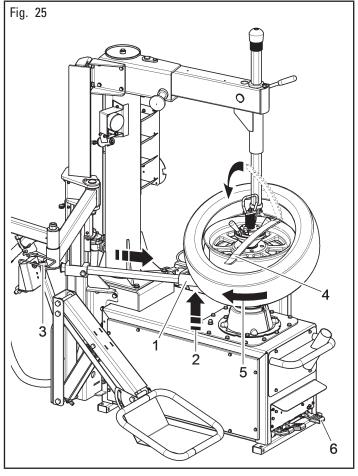


- 8. Remove the inner tube (if fitted).
- 9. When demounting hard tires, it may happen that the bead comes onto the mounting tool with the lip turned. This causes the bead to slide from the lever when clockwise rotation begins. To avoid this problem rotate the wheel slightly anti-clockwise until the bead flattens. Now the clockwise demounting cycle can begin (See Fig. 24).



#### Extraction of the second bead

- 10. Move the bead lifting roll (Fig. 25 ref. 1) close from its position up to approximately 1 cm from rim lower edge.
- 11. Lift the tire (Fig. 25 ref. 2) with the bead lifting roll by lifting control unit lever upwards (Fig. 25 ref. 3).
- 12. Load the second bead on the tool by means of the proper lever (Fig. 25 ref. 4).
- 13. Turn the chuck clockwise (Fig. 25 ref. 5) by pressing the rotation pedal (Fig. 25 ref. 6) and extract the tire from the rim.



14. When these operations are over move the tool, the presser cone and the bead breaker roll into rest position.

If the motor slows down or stops during tire demounting and mounting, make the following checks:

- check that the bead has been lubricated;
- check that the bead has been pushed into the groove;
- check that the right side of the rim has been chosen for demounting or mounting the tire;
- check that the rim groove is not off-center.

#### 12.7 Setting the tool for tire fitting and removal

The tool is locked in position to an hexagon stand through 4 upper horizontal-axis dowels and a lower vertical-axis screw. The adjusting clamps lock the tool in its working position. Adjusting clamps also set head distance from the wheel rim. Head top is concave for smoother positioning. For tool setting a 14" rim with good concentricity degree and standard profile, better if with flat upper edge and proper right angle to its spin axis, is required.

#### 12.7.1 Setting neck travel



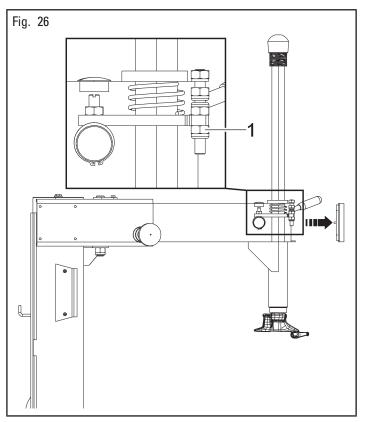
SET THE CLAMPS BEFORE POSITIONING THE HEAD. AT THIS STAGE THE HEAD HAS NOT BEEN SET TO ITS FINAL POSITION YET BUT IT IS CLOSE TO ITS FINAL POSITION BEING LOCKED THROUGH THE UPPER DOWELS.

• Setting neck travel (Fig. 26)

Tire changers equipped with fixed stand and "swing" arm only have a single horizontal clamp setting head distance from the rim in vertical direction.

Release the lever (after removing the cover at swing arm end) and then turn the nut (Fig. 26 ref. 1) to adjust the clamp:

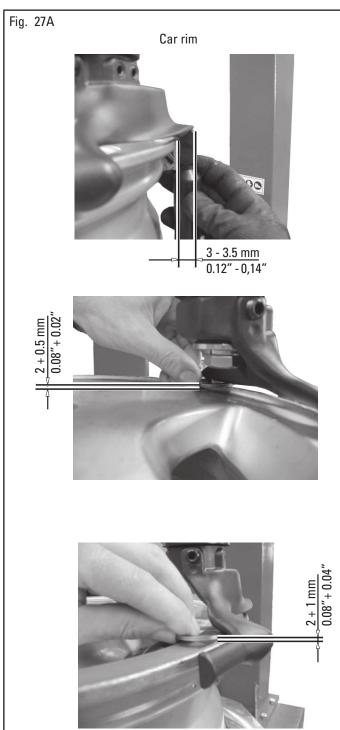
- turn the nut (Fig. 26 ref. 1) clockwise for shorter travel of the tool,
- turn the nut (Fig. 26 ref. 1) anti-clockwise for longer travel of the tool.

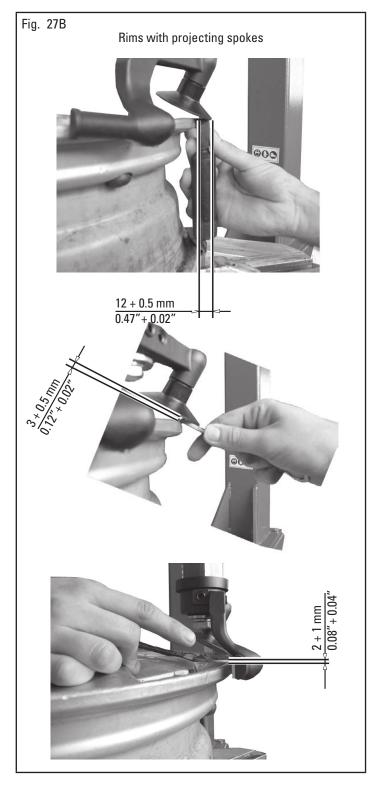


#### 12.7.2 Setting the tool for tire fitting and removal

When finished with clamp adjustment, set head position along its three orthogonal axes using the 14" diameter sample rim. Tighten the dowels and the lower screw firmly to lock the head in position. When finished, correct head working position (equipped with insert) when locked should be as shown in Fig. 27A - 27B. Tighten bolts and nuts to the following torque values:

- lower screw: 70 Nm.
- neck bolts: 40 Nm.





#### 12.8 Mounting the tire



KEEP YOUR HANDS AND BODY AWAY FROM MOUNTING TOOL DURING DISASSEMBLY/ ASSEMBLY OPERATIONS TO AVOID SQUASH-ING DANGER.

To mount the tire, proceed as follows:

1. lubricate the tire's beads,



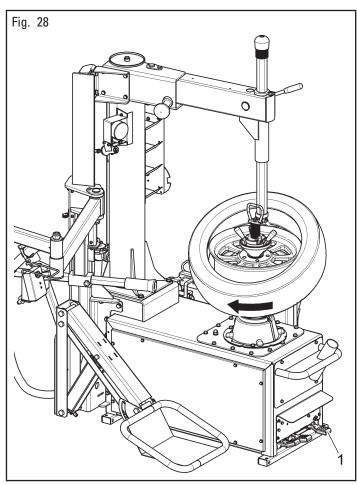
USE ONLY TIRE LUBRICANTS. SUITABLE LU-BRICANTS CONTAIN NO WATER, HYDROCAR-BONS, OR SILICON.

2. place the tire on the rim and place the mounting tool on the outer edge of the rim (Fig. 28).



WHEN PLACING ARM IN WORKING POSITION, DO NOT LEAN HANDS ON THE RIM: DANGER OF SQEEZING BETWEEN HEAD AND RIM.

3. Place the edge of the lower bead on the left-hand part of the mounting tool as in Fig. 28 and turn chuck clockwise by pressing the rotation pedal (Fig. 28 ref. 1) up to complete demounting.



<sup>4.</sup> If an inner tube tire must be fitted, insert the inner tube.

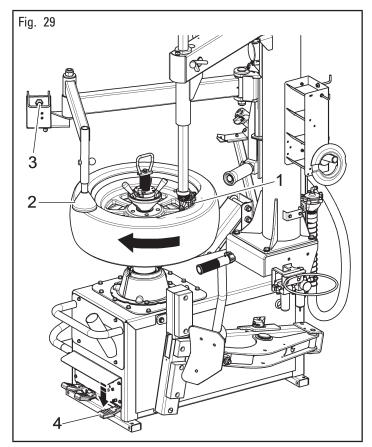


WHEN TIRE IS TUBELESS TYPE, START AS-SEMBLY PROCEDURES WITH VALVE SET AT "4/5 0' CLOCK".



BE VERY CAREFUL, KEEP HANDS AND OTHER BODY PARTS FAR OFF THE HEAD WHEN THE CHUCK IS TURNING: DANGER OF SQUEEZING.

- Then, position the upper bead on the tool assembly area (Fig. 29 ref. 1) taking care first to position the valve stem at "4-5 o'clock". Place the presser cone (Fig. 29 ref. 2) in "6 o'clock" position and press on the tire operating the lever of the control unit (Fig. 29 ref. 3) downwards.
- 6. Rotate clockwise ( 29 ref. 4), until tire complete assembly.
- 7. When these operations are over move the tool and grip-cone into rest position.





BOTH TIRE FITTING AND REMOVAL MUST BE CARRIED OUT WITH THE CHUCK TURNING CLOCKWISE. TURN THE CHUCKING TABLE ANTICLOCKWISE ONLY IF ADJUSTMENTS ARE REQUIRED.



TIRE INFLATING OPERATIONS ARE HAZARD-OUS 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 CLOTH-ING LIKE: GLOVES, SAFETY EYEWEAR AND EARCAPS.
- BEFORE FITTING A TIRE, CHECK TIRE AND RIM CONDITIONS AS WELL AS PROPER COUPLING.
- 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 SPECIFICA-TIONS FOR TIRE INFLATION PRESSURE.



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

#### 12.10 Tubeless tire 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.

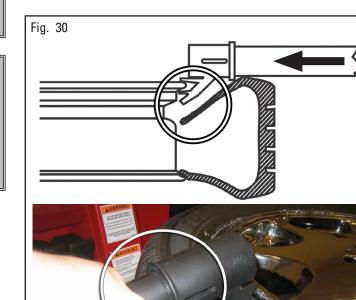


TO IMPROVE THE EFFECTIVENESS OF TUBE-LESS INFLATION SYSTEM, ALWAYS LUBRICATE TIRE BEADS.

• Press the bead blaster hose on the wheel rim as shown in Fig. 30. Ensure the hose head is pressed in to activate the additional air jet.



THE NOZZLE SHOULD BE HORIZONTAL FOR OPTIMAL PERFORMANCE (FIG. 30).



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 PRES-SURE 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 PRES-SURE GAUGE.

• Disconnect the inflation terminal from the valve.

#### 13.0 ROUTINE MAINTENANCE



BEFORE CARRYING OUT ANY ROUTINE MAIN-TENANCE PROCEDURE, DISCONNECT THE MA-CHINE FROM ITS POWER SUPPLY SOURCES, TAKING SPECIAL CARE OF THE ELECTRICAL PLUG/SOCKET CONNECTION.

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.

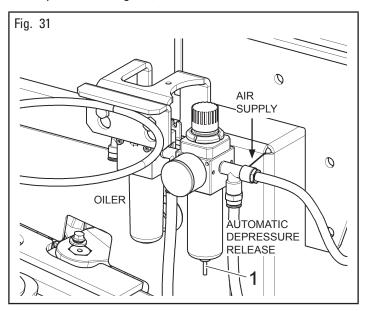
- Disconnect the mains power supply before starting any cleaning or routine maintenance operations.
- Periodically check the calibration of the lubricator of the pressure regulator/oiler unit: 1 oil drop every 11-15 revolutions of self-centring chuck motor.
- Remove deposits of tire powder and other waste materials with a vacuum cleaner.



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.

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

- Do not use solvents to clean the pressure regulator.
- The conditioning unit is equipped with an automatic vacuumoperated drain therefore it requires no manual intervention by the operator (see Fig. 31).





IN ORDER TO ENSURE A GOOD FUNCTIONING AND TO AVOID THE PRESENCE OF CONDEN-SATION IN THE AIR TREATMENT UNITS WITH SEMI-AUTOMATIC DRAIN, IT'S NECESSARY TO MAKE SURE ABOUT THE CORRECT POSI-TION OF THE VALVE (FIG. 31 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 DE-VICES, YOU HAVE TO MAKE SURE THAT THE SUPPLIED AIR IS:

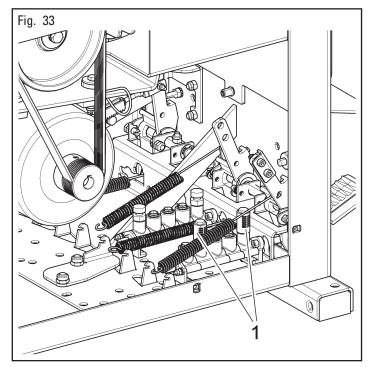
- EXEMPT FROM THE LUBRICATING OIL OF THE COMPRESSOR;
- EXEMPT FROM HUMIDITY;
- EXEMPT FROM IMPURITY.
- Every week and/or when necessary, top up the oil tank using the filler hole provided, closed by a cap or screw, on the lubricator filter.

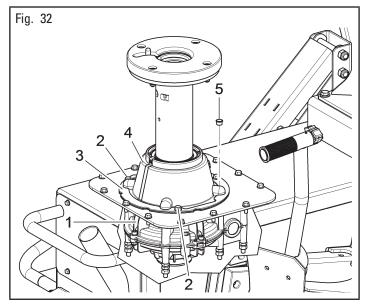
NOTE: This operation should not be carried out by unscrewing the cup of the lubricator filter.

- The use of synthetic oil might damage the pressure regulator filter.
- Replace worn pieces (tool supports, rubber pads, lever guard, mounting tool) immediately.
- Periodically (preferably once a month) make a complete check on the controls, ensuring that they provide the specified actions.
- Every week check operation of the safety device.
- Periodically (at least every 100 working hours) check reduction gear lubricating oil level (Fig. 32 ref. 1). Such operation must be effectuated unscrewing the screws (Fig. 32 ref. 2), removing the flange (Fig. 32 ref. 3), the guard (Fig. 32 ref. 4) and the plug (Fig. 32 ref. 5) on the reduction gear.

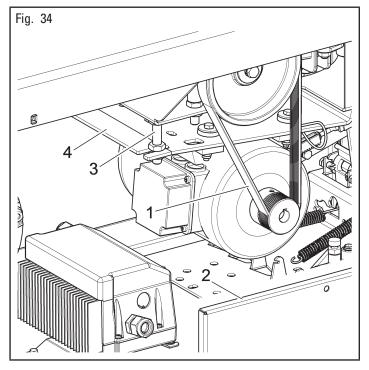
Interventions every 1000 working hours

- Clean and/or replace silencers (Fig. 33 ref. 1):
- 1. Undo the retaining screws and remove the left side of the tire changer or undo the fastening screws to remove the whole pedal support unit from machine front.
- 2. Undo the silencers (Fig. 33 ref. 1) onto the pedal distributor controlling the bead breaker.
- 3. Blow compressed air to clean or replace in case of damages referring to spare parts catalog.
- 4. Fit the silencers onto the distributor.
- 5. Fit the tire changer pedal support or side and secure with the screws.





- Check the transmission belt (Fig. 34 ref. 1) for wear or proper tensioning:
- 1. Undo the corresponding retaining screws and remove tire changer side panel; (Fig. 34 ref. 2);
- To tension up the belt (Fig. 34 ref. 1) Turn the screws (Fig. 34 ref. 3) motor support (Fig. 34 ref. 4);
- 3. Replace the belt (Fig. 34 ref. 1) if worn out using genuine parts;
- 4. Fit the tire changer side panel (Fig. 34 ref. 2) before continuing with assembly and disassembly procedure;





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 screws/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.

#### 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 chuck does not work if pedal is pressed.	1. No voltage available.	<ol> <li>Check that the plug is properly connected and power supply is working.</li> </ol>
	2. Motor faulty.	2. Check for correspondence of electric data of the machine with the mains.
	3. Safety fuses for machine system blown.	3. Check for proper working conditions. Check connections and parts (motors and switches).
The chuck doesn't rotate.	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 rotates slowly but it does not operate on the motor pedal.	Pedalboard reversible de-calibration.	<ol> <li>Keep the pedal in rest position.</li> <li>Keep the machine connected to the net.</li> <li>Wait for 30 seconds that the pedalboard recalibration automatic attempt ends.</li> </ol>
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 does not reach the maximum rotation speed.	The mechanical resistance of the gear- motor 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 rotate in counter- clockwise direction.	Pedalboard microswitch breakage.	Replace microswitch.
The chuck stops during tire assembly/ disassembly.	Transmission belt slow or worn out.	Check for proper working conditions of the transmission belt. Tension up and/or replace, if necessary.
The chuck does not turn in the clockwise or counter clockwise direction in one of the allowed speed.	Microswitch breakage.	Check cables or replace microswitch.
The head gets in contact with the rim during assembly/disassembly.	<ol> <li>Clamping plate not adjusted or faulty.</li> <li>Chuck locking screw loose.</li> </ol>	<ol> <li>Adjust or replace the clamping plate.</li> <li>Tighten the screw.</li> </ol>

Problem	Possible cause	Remedy
Nozzle does not deliver air when the infla- tion pedal is pressed.	The inflation pedal is badly adjusted.	Call for technical assistance.
No movements take place when the ped- als are pressed.	<ol> <li>Supply missed.</li> <li>Inflation pedal unit not set correctly.</li> </ol>	<ol> <li>Check power supply.</li> <li>Call for technical assistance.</li> </ol>
One or more pedals do not return to their	1. Return spring released.	1. Fasten the spring.
original position.	2. Return spring broken.	2. Replace the spring.
Bead breaker pneumatic controls do not work.	<ol> <li>Machine pneumatic system not con- nected.</li> </ol>	1. Check pneumatic connections and supply.
	2. Air lines clogged.	2. Ensure the air filter is clean and undamaged. Clean and/or replace the silencers.
Some single pneumatic devices do not work.	Ensure that device and/or distributor seals are not damaged.	Call for technical assistance.
	LIFTING DEVICE	
No movement is produced when the	1. Supply missing or insufficient.	1. Check supply.
control pedal is operated.	<ol> <li>The supply pipes have not been cor- rectly assembled.</li> </ol>	2. Check pipes fitting.
	3. The control valve is not working.	3. Call for technical assistance.
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 ma- chine, 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.
	BEAD PRESSING DEVICE	
No movement is generated when the	1. Supply missing.	1. Check supply.
control lever is operated.	<ol> <li>The supply pipes have not been cor- rectly assembled.</li> </ol>	2. Check pipes fitting.
	3. The control valve is not working.	3. Call for technical assistance.
When the control lever is operated move- ment arises in one direction only.	The control valve is not working.	Call for technical assistance.

#### 15.0 TECHNICAL DATA

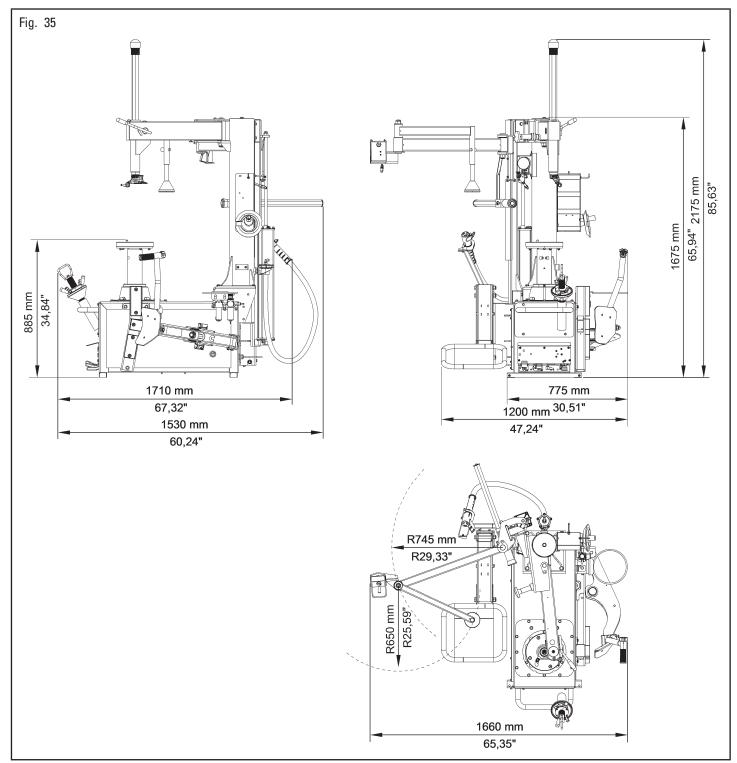
#### 15.1 Technical electrical data

Motor power (kW)		1.5
Power supply	Voltage (V)	220
	Phases	1
	Frequency (Hz)	60
Chuck rotating speed (revolutions/min)		0 - 14

#### 15.2 Technical mechanical data

Maximum tire diameter (mm)	1194 (47")
Max rim width (inches)	15
Chuck max torque (Nm)	1200
Bead-breaker cylinder force at 10 bar (N)	30600
Rim locking diameter (inches)	10 - 30
Wheel maximum weight (kg)	80
Operating pressure (bar)	8 - 10
Weight (Kg)	370

#### 15.3 Dimensions



#### 16.0 STORING

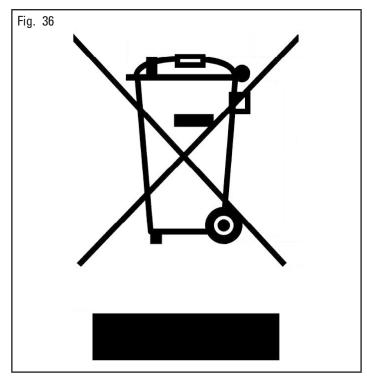
If storing for long periods disconnect the main power supply and take measures to protect the machine from dust build-up. Lubricate parts that could be damaged from drying out. When putting the machine back into operation replace the rubber pads and the mounting tool.

#### 17.0 SCRAPPING

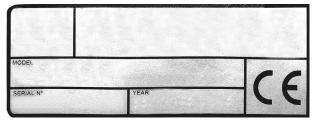
When the decision is taken not to make further use of the machine, it is advisable to make it inoperative by removing the connection pressure hoses. The machine is to be considered as special waste and should be dismantled into homogeneous parts. Dispose of it in accordance with current legislation.

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.

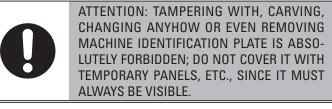


#### 18.0 REGISTRATION PLATE DATA



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.



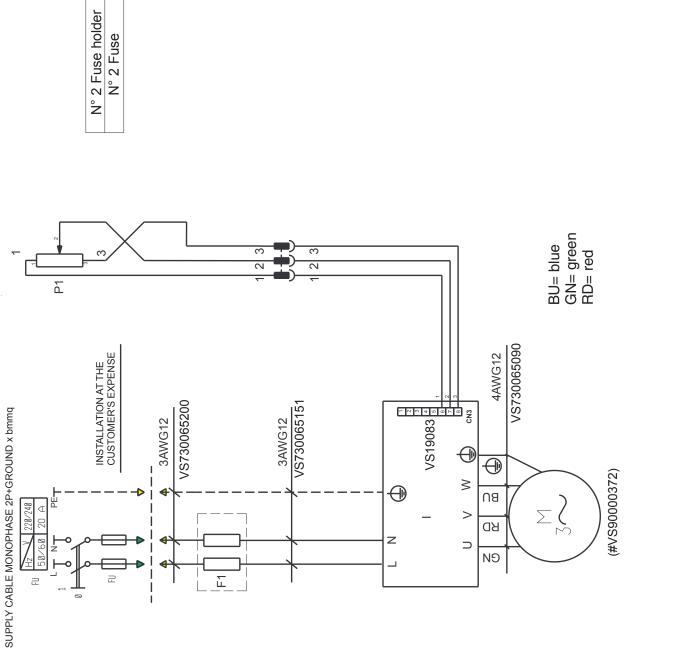
WARNING: Should the plate be accidentally damaged (removed from the machine, damaged or even partially illegible) inform immediately the manufacturer.

#### 19.0 FUNCTIONAL DIAGRAMS

Here follows a list of the machine functional diagrams.

# Table Number A - Rev. 1

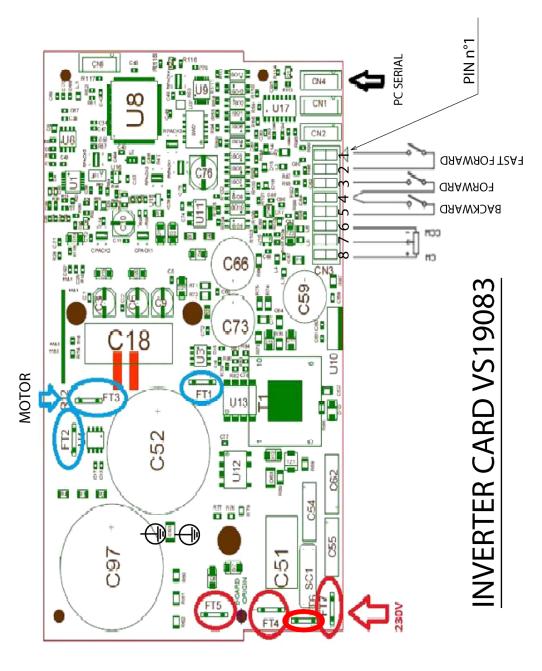
## VS730005140

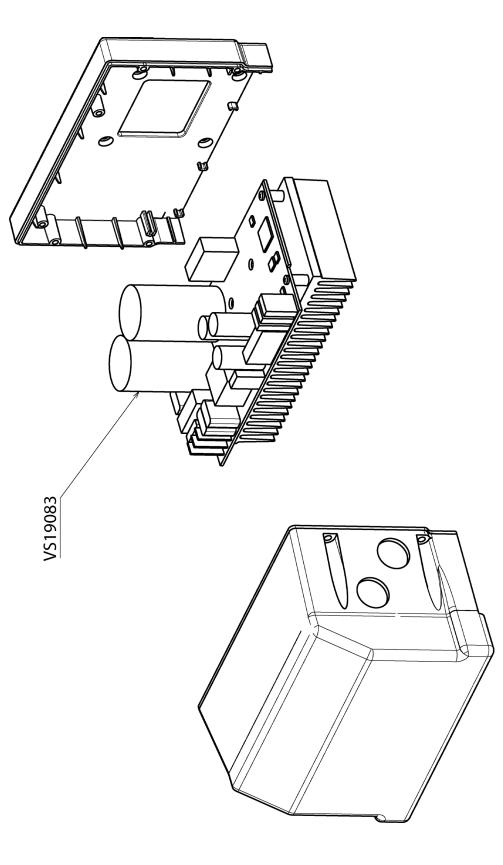


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Table Number A - Rev. 1

### VS730005140





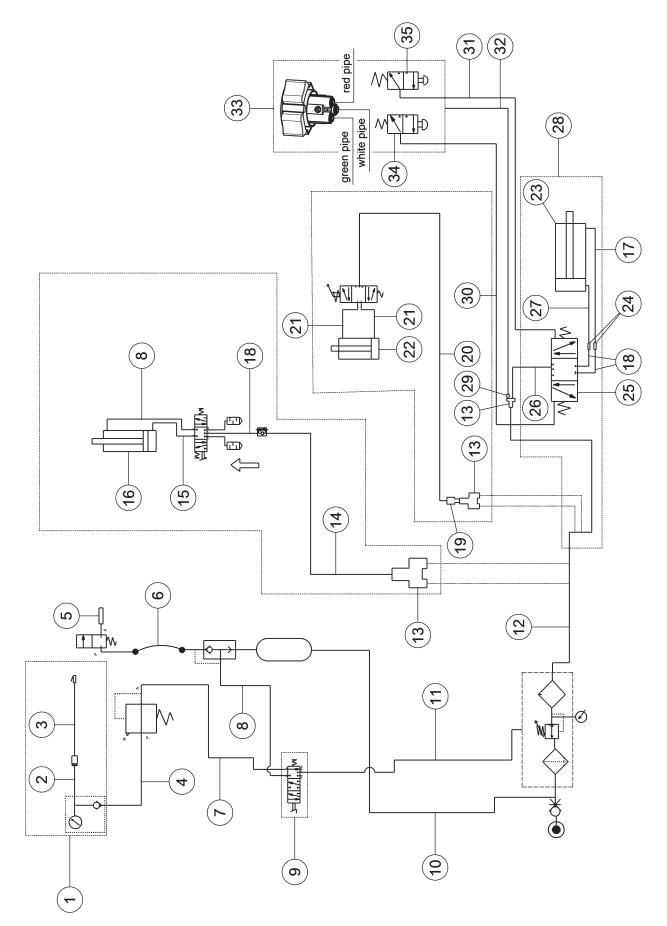
VS730005140

Table Number A - Rev. 1

Table	e Number A - Rev. 1	v.1	VS730005140	
ů	Code	Description	Description	Descripción
	_	Motor control inverter	Variateur commande moteur	Inversor mando motor
	M	Threephase asynchronous motor	Moteur asynchrone triphasé	Motor asincrónico trifásico
	FC1	Ccw rotation control microswitch	Micro-interrupteur rotation anti-horaire	Micro regulador rotación izquierda
	FC2	Cw rotation control microswitch (fast gear)	Micro interrupteur rotation horaire (marche rapide)	Micro interruptor rotación a derecha (marcha veloz)
	FC3	Cw rotation control microswitch (slow gear)	Micro interrupteur rotation horaire (marche lente)	Micro interruptor rotación a derecha (marcha lenta)
	CN3	Pedalboard micro inverter connector	Connecteur variateur micro pédale de direction	Conector inversor micro pedalera



VS730005100



38

WeCodeDescriptionDescription16CodeIndion untrivih pressure gaugeCouope gontlege acce manonitero17VS37008Se for eff sam ppet 1–7000Equip entinaction18VS37008Bef entif sam ppet 1–7000Equip entinaction18VS37008Bef entif sam ppet 1–7000Equip entinaction18VS37008Bef entif sam ppet 1–7000Equip entinaction19VS37008Bef entif sam ppet 1–2000Equip entipole10VS37008Bef entif sam ppet 1–2000Equip entipole10VS37008Bef bef entisam ppet 1–2000Equip entipole10VS37000Bef bef entisam ppet 1–2000Equip entipole10VS37000Bef bef entisam ppet 1–2000Equip entipole11VS37100Bef bef entisam ppet 1–2000Equip entipole12VS37000Bef bef entisam ppet 1–2000Equip entipole13VS37100Bef bef entisam ppet 1–2000Equip entipole14VS37100Bef bef entisam ppet 1–2000Equip entipole15VS37100Bef bef entisam ppet 1–2000Equip entipole16VS37100Bef bef enti	Table	e Number B - Rev. 1	v.1	VS730005100	
indiation unit/with pressure gaugeGroupe goriflage area manométreVS317006Boé red rissan pipe L=1200Vayau risen 806 rouge L=1200VS3770068250Infration pipe unitGroupe tuyau de goriflageVS3770050510Boé red rissan pipe L=2000Tuyau risen 806 rouge L=2000VS3770050Boé bue rissan pipe L=3000Eleteur de goriflageVS370050Boé blue rissan pipe L=3000Uyau rissan 806 blue L=3000VS3770050Boé blue rissan pipe L=3000Uyau rissan 806 blue L=3000VS371007Boé black rissan pipe L=3000Uyau rissan 806 blue	ů	Code	Description	Description	Descripción
VS317008         Bo6 red risan pipe L=1200         Tuyau risan 80.6 conge L=1200           VS373008250         Infration pipe unit.         Groupe tuyau de gonflage           VS373008210         Infration pipe unit.         Groupe tuyau de gonflage           VS37008         86 end risan pipe L=2000         Tuyau risan 86 rouge L=2000           VS37009         B6 blue ritsan pipe L=2000         Tuyau risan 86 noie L=3000           VS371001         B6 blue ritsan pipe L=300         Tuyau risan 86 noie L=300           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noie L=300           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noir L=2000           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noir L=2000           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noir L=2000           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noir L=2000           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noir L=2000           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noir L=2000           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noir L=2000           VS371001         B6 blue ritsan pipe L=300         Tuyau ritsan 86 noir L=2000           VS371001         B6 blue ritsan p	-		Inflation unit with pressure gauge	Groupe gonflage avec manomètre	Grupo inflado con manómetro
VS3730086:56Inflation pipe unitGroupe tuyau de gonflageVS37008B& ede rilsan pipe L=2000Tuyau rilsan & Ki rouge L=2000VS3700810PipeTuyau rilsan & Ki rouge L=2000VS37009B& blue rilsan pipe L=1300Tuyau rilsan & Ki rouge L=2000VS371007B& blue rilsan pipe L=2000Tuyau rilsan & Ki rouge L=2000VS371007B& blue rilsan pipe L=2000Tuyau rilsan & Ki rouge L=2000VS371007B& blue rilsan pipe L=2000Tuyau rilsan & Ki rouge L=300VS371007B& blue rilsan pipe L=3000Tuyau rilsan & Be blue L=1300VS371007B& blue rilsan pipe L=1300Tuyau rilsan & Be blue L=1300VS371007B& blue rilsan pipe L=1300Tuyau rilsan & Be blue L=1300VS371007B& blue rilsan pipe L=1300Tuyau rilsan & Be blue L=1300VS371007B& blue rilsan pipe L=1300Tuyau rilsan & Be onit L=300VS377007B& black rilsan pipe L=1300Tuyau rilsan & Be onit L=300VS377008B& black rilsan pipe L=1300Tuyau rilsan & Be onit L=1300VS377007B& black rilsan pipe L=1300Tuyau rilsan & Be onit L=1300VS377007B& black rilsan pipe L=1300Tuyau rilsan & Be onit L=1300VS377008B& black rilsan pipe L=1300Tuyau rilsan & Be onit L=1300VS377008B& black rilsan pipe L=1300Tuyau rilsan & Be onit L=1300VS377010B& black rilsan pipe L=1300Tuyau rilsan & Be onit L=1300VS377036B& black rilsan pipe L=1300Tuyau rilsan & Be onit L=1300VS377036B& black rilsan pipe L=1300Tuyau rilsan & Be	2	VS317008	8x6 red rilsan pipe L=1200	Tuyau rilsan 8x6 rouge L=1200	Tubo rilsan 8x6 rojo L=1200
VS37006Kof erd rikan pipe L=2000Tuyau rikan & Ko rouge L=2000Inflation nozzleInflation nozzleGieleur de gonflageVS37000810PipeTuyau rikan & Ko foue L=1300VS37000& Bo blue rikan pipe L=2000Tuyau rikan & Ko foue L=2000VS371007& Bo blue rikan pipe L=2000Tuyau rikan & Ko foue L=2000VS371007& Bo blue rikan pipe L=2000Tuyau rikan & Ko foue L=2000VS371007& Bo blue rikan pipe L=2000Tuyau rikan & Ko foue L=2000VS371007& Bo blue rikan pipe L=800Tuyau rikan & Ko foue L=2000VS371007& Bo blue rikan pipe L=800Tuyau rikan & Ko foue L=800VS371007& Bo blue rikan pipe L=800Tuyau rikan & Ko four L=800VS371007& Bo blue rikan pipe L=800Tuyau rikan & Ko four L=800VS371007& Bo black rikan pipe L=800Tuyau rikan & Ko four L=800VS371007& Bo black rikan pipe L=800Tuyau rikan & Ko four L=800VS371007& Bo black rikan pipe L=1900Tuyau rikan & Ko four L=1900VS371007& Bo black rikan pipe L=1900Tuyau rikan & Ko four L=1900VS371007& Bo black rikan pipe L=1900Tuyau rikan & Ko four L=1900VS371007& Bo black rikan pipe L=1900Tuyau rikan & Ko four L=1900VS371007& Bo black rikan pipe L=900Tuyau rikan & Ko four L=1900VS371007& Bob black rikan pipe L=900Tuyau rikan & Ko four L=1900VS371007& Bob black rikan pipe L=900Tuyau rikan & Ko four L=1900VS371007& Bob black rikan pipe L=900Tuyau rikan & Ko four L=1900 </th <th>3</th> <th>VS730096250</th> <th>Inflation pipe unit</th> <th>Groupe tuyau de gonflage</th> <th>Grupo tubo de inflado</th>	3	VS730096250	Inflation pipe unit	Groupe tuyau de gonflage	Grupo tubo de inflado
Inflation nozzleInflation nozzleInflation nozzleVS790050610PipeTuyou rilean Bx6 bleu L=1300VS317007Bx6 blue rilson pipe L=1300Tuyou rilean Bx6 bleu L=1300VS317007Bx6 blue rilson pipe L=2000Tuyou rilean Bx6 bleu L=1300VS317007Bx6 blue rilson pipe L=2000Tuyou rilean Bx6 bleu L=1300VS317007Bx6 blue rilson pipe L=800Tuyou rilean Bx6 bleu L=1300VS317007Bx6 bluek rilson pipe L=800Tuyou rilean Bx6 bleu L=1900VS317007Bx6 bluek rilson pipe L=800Tuyou rilean Bx6 bleu L=1900VS317007Bx6 bluek rilson pipe L=800Tuyou rilean Bx6 bleu L=1900VS317007Bx6 bluek rilson pipe L=800Tuyou rilson Bx6 bleu L=1900VS317007Bx6 black rilson pipe L=800Tuyou rilson Bx6 hoir L=1900VS317007Bx6 black rilson pipe L=1900Tuyou rilson Bx6 hoir L=1900VS317007Bx6 black rilson pipe L=1900Tuyou rilson Bx6 hoir L=1900VS317007Bx6 black rilson pipe L=1900Tuyou rilson Bx6 hoir L=1900VS317007Bx6 black rilson pipe L=2000Tuyou rilson Bx6 hoir L=1900VS317006Bx6 black rilson pipe L=500Tuyou rilson Bx6 hoir L=1900VS317007Bx6 black rilson pipe L=500Tuyou rilson Bx6 hoir L=1900VS317006Bx6 black rilson pipe L=500Tuyou rilson Bx6 hoir L=100VS317006Bx6 black rilson pipe L=500Tuyou rilson Bx6 hoir L=200VS317006Bx6 black rilson pipe L=500Tuyou rilson Bx6 hoir L=200VS317006Bx6 black rilson pipe L=500Tuyou rilson Bx6 hoir L=200	4	VS317008	8x6 red rilsan pipe L=2000	Tuyau rilsan 8x6 rouge L=2000	Tubo rilsan 8x6 rojo L=2000
VS730060810PipeTuyau rilsan sk6 holu – 1300VS3170078k6 holu erilsan pipe L=300Tuyau rilsan 8k6 holu L=1300VS3170078k6 black rilsan pipe L=300Tuyau rilsan 8k6 holu L=1300VS31701010x8 black rilsan pipe L=900Tuyau rilsan 8k6 holu L=1300VS31701010x8 black rilsan pipe L=900Tuyau rilsan 8k6 holu L=1300VS3170108k6 black rilsan pipe L=900Tuyau rilsan 8k6 holu L=1900VS3170078k6 black rilsan pipe L=900Tuyau rilsan 8k6 holu L=1900VS3170078k6 black rilsan pipe L=1900Tuyau rilsan 8k6 holi L=1300VS3170078k6 black rilsan pipe L=1900Tuyau rilsan 8k6 holi L=1300VS3170868k6 black rilsan pipe L=2600Tuyau rilsan 8k6 holi L=1300VS3170866k4 black rilsan pipe L=2600Tuyau rilsan 8k6 holi L=2600VS3170866k4 black rilsan pipe L=2600Tuyau rilsan 8k4 holi L=2600VS3170866k4 black rilsan pipe L=2600Tuyau rilsan 8k4 holi L=2600VS3170866k4 black rilsan pipe L=2600Tuyau rilsan 8k4 holi L=2600VS3170866k4 black rilsan pipe L=2600T	5		Inflation nozzle	Gicleur de gonflage	Boquilla de inflado
VS317006&66 blue risan pipe L=1300Tuyau risan &86 blue L=1300VS317007&66 black risan pipe L=2000Tuyau risan &86 blue L=2000NS317010Bref black risan pipe L=800Vanne pédale de gonflageVS31701010x6 black risan pipe L=800Tuyau risan &86 blue L=1900VS317010Breb blue risan pipe L=800Tuyau risan &86 blue L=1900VS317010Breb blue risan pipe L=800Tuyau risan &86 blue L=1900VS317017Breb blue risan pipe L=1300Tuyau risan &86 blue L=1900VS317007Breb black risan pipe L=1300Tuyau risan &86 blue L=1900VS317007Breb black risan pipe L=1300Tuyau risan &86 blue L=1900VS317007Breb black risan pipe L=1300Tuyau risan &86 blur L=1300VS317007Breb black risan pipe L=500Tuyau risan &86 blur L=1300VS317007Breb black risan pipe L=500Tuyau risan &86 blur L=1300VS317006Breb black risan pipe L=500Tuyau risan &86 blur L=1300VS317006Breb black risan pipe L=500Tuyau risan &86 blur L=1300VS317006Breb black risan pipe L=500Tuyau risan &86 blur L=500VS317006Breb black risan pipe L=500Tuyau risan &86 blur L=500VS317006Breb black risan pipe L=500Tuyau risan &86 bl	9	VS790090810	Pipe	Tuyau	Tubo
VS317007         & & & b black rilsan pipe L=2000         Tuyau rilsan & & m in L=2000           Inflation pedal valve         Varme pédala de gonfilage         Varme pédala de gonfilage           VS317010         10x8 black rilsan pipe L=800         Varme pédala de gonfilage         Varme pédala de gonfilage           VS317010         10x8 black rilsan pipe L=1900         Tuyau rilsan 10x6 noir L=800         Varue rilsan 10x6 noir L=800           VS317007         8x6 black rilsan pipe L=1900         Tuyau rilsan 8x6 noir L=1900         Varue rilsan 8x6 noir L=1900           VS317007         8x6 black rilsan pipe L=1300         Tuyau rilsan 8x6 noir L=1900         Varue rilsan 8x6 noir L=1900           VS317007         8x6 black rilsan pipe L=1300         Tuyau rilsan 8x6 noir L=1300         Varue rilsan 8x6 noir L=1300           VS317007         8x6 black rilsan pipe L=1300         Tuyau rilsan 8x6 noir L=1300         Varue rilsan 8x6 noir L=1300           VS317007         8x6 black rilsan pipe L=1300         Tuyau rilsan 8x6 noir L=1300         Varue rilsan 8x6 noir L=1300           VS317007         8x6 black rilsan pipe L=1300         Tuyau rilsan 8x6 noir L=1300         Varue rilsan 8x6 noir L=1300           VS317007         8x6 black rilsan pipe L=1300         Tuyau rilsan 8x6 noir L=1300         Varue rilsan 8x6 noir L=1300           VS317007         8x6 black rilsan pipe L=500         Tuyau rilsan 8x6 noir L=1	7	VS317009	8x6 blue rilsan pipe L=1300	Tuyau rilsan 8x6 bleu L=1300	Tubo rilsan 8x6 azul L=1300
Inflation pedal valveVanne pédale de gonflageVS31701010x8 black risan pipe L=800Tuyau risan 10x8 noir L=800VS3170078x6 blue risan pipe L=1900Tuyau risan 8x6 hleu L=1900VS3170078x6 black risan pipe L=1800Tuyau risan 8x6 noir L=800VS3170078x6 black risan pipe L=1800Tuyau risan 8x6 noir L=900VS3170078x6 black risan pipe L=1800Tuyau risan 8x6 noir L=900VS3170078x6 black risan pipe L=1800Tuyau risan 8x6 noir L=900VS3170078x6 black risan pipe L=1800Tuyau risan 8x6 noir L=1300VS3170078x6 black risan pipe L=1900Tuyau risan 8x6 noir L=1900VS3170078x6 black risan pipe L=1800Tuyau risan 8x6 noir L=1300VS3170078x6 black risan pipe L=1800Tuyau risan 8x6 noir L=1900VS3170078x6 black risan pipe L=1800Tuyau risan 8x6 noir L=1300VS3170866x8 reluctionTuyau risan 8x6 noir L=1900VS3170866x8 reluctionTuyau risan 8x6 noir L=200VS3170866x8 reluctionTuyau risan 8x6 noir L=200VS3170866x8 reluctionTuyau risan 8x6 noir L=200VS3170866x8 reluctionTuyau risan 6x4 noir L=200VS3170866x8 reluctionTuyau risan 6x4 noir L=200VS3170866x8 reluctionTuyau risan 6x4 noir L=200VS3170866x8 reluctionCylindre Plu	8	VS317007	8x6 black rilsan pipe L=2000	Tuyau rilsan 8x6 noir L=2000	Tubo rilsan 8x6 negro L=2000
VS317010IOx8 black rilsan pipe L=800Tuyau rilsan 10x6 noir L=800VS3170058x6 black rilsan pipe L=1900Tuyau rilsan 8x6 blac L=1900VS3170078x6 black rilsan pipe L=800Tuyau rilsan 8x6 noir L=800VS3170078x6 black rilsan pipe L=1900Tuyau rilsan 8x6 noir L=800VS3170078x6 black rilsan pipe L=1900Tuyau rilsan 8x6 noir L=1300VS3170078x6 black rilsan pipe L=600Tuyau rilsan 8x6 noir L=500VS3170078x6 black rilsan pipe L=500Tuyau rilsan 8x6 noir L=500VS3170066x4 black rilsan pipe L=200Tuyau rilsan 8x6 noir L=500VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2100VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2100VS31700710x6 cilsan pipe L=2600Tuyau rilsan 6x4 noir L=2100VS3170066x4 black rilsan pipe L=2600<	6		Inflation pedal valve	Vanne pédale de gonflage	Válvula pedal de inflado
VS3170098x6 blue rilsan pipe L=1900VS3170078x6 black rilsan pipe L=800Tuyau rilsan 8x6 noir L=900VS3170078x6 black rilsan pipe L=1300Tuyau rilsan 8x6 noir L=300VS3170078x6 black rilsan pipe L=1300Tuyau rilsan 8x6 noir L=1900VS3170078x6 black rilsan pipe L=1300Tuyau rilsan 8x6 noir L=1900VS3170078x6 black rilsan pipe L=1900Tuyau rilsan 8x6 noir L=1900VS3170078x6 black rilsan pipe L=1900Tuyau rilsan 8x6 noir L=1900VS3170078x6 black rilsan pipe L=100Tuyau rilsan 8x6 noir L=1900VS3170078x6 black rilsan pipe L=500Tuyau rilsan 8x6 noir L=1900VS3170078x6 black rilsan pipe L=500Tuyau rilsan 8x6 noir L=1900VS3170078x6 black rilsan pipe L=500Tuyau rilsan 8x6 noir L=500VS3170066x4 black rilsan pipe L=500Tuyau rilsan 8x6 noir L=50VS3170066x4 black rilsan pipe L=500Tuyau rilsan 6x4 noir L=500VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600 <th>10</th> <th>VS317010</th> <th>10x8 black rilsan pipe L=800</th> <th>Tuyau rilsan 10x8 noir L=800</th> <th>Tubo rilsan 10x8 negro L=800</th>	10	VS317010	10x8 black rilsan pipe L=800	Tuyau rilsan 10x8 noir L=800	Tubo rilsan 10x8 negro L=800
VS3170078k black rilsan pipe L=800Tuyau rilsan 8k noir L=800VS325181V8 unionRaccord à V8VS3251078k black rilsan pipe L=1300Tuyau rilsan 8k6 noir L=1300VS3170078k black rilsan pipe L=1900Tuyau rilsan 8k6 noir L=1300VS3170078k black rilsan pipe L=1900Tuyau rilsan 8k6 noir L=1900VS3170078k black rilsan pipe L=500Tuyau rilsan 8k6 noir L=1900VS3170078k6 black rilsan pipe L=50Tuyau rilsan 8k6 noir L=1900VS3170066k4 black rilsan pipe L=50Tuyau rilsan 8k6 noir L=50VS3170066k4 black rilsan pipe L=50Tuyau rilsan 8k6 noir L=50VS3170066k4 black rilsan pipe L=50Tuyau rilsan 8k4 noir L=50VS3170066k4 black rilsan pipe L=2600Tuyau rilsan 6k4 noir L=3100VS3170066k4 black rilsan pipe L=2600Tuyau rilsan 6k4 noir L=2100VS3170066k4 black rilsan pipe L=2600Tuyau rilsan 6k4 noir L=2100 </th <th>1</th> <th>VS317009</th> <th>8x6 blue rilsan pipe L=1900</th> <th>Tuyau rilsan 8x6 bleu L=1900</th> <th>Tubo rilsan 8x6 azul L=1900</th>	1	VS317009	8x6 blue rilsan pipe L=1900	Tuyau rilsan 8x6 bleu L=1900	Tubo rilsan 8x6 azul L=1900
VS325181V8 unionRaccord à V8VS3170078x6 black rilsan pipe L=1300Tuyau rilsan 8x6 noir L=1300VS3170078x6 black rilsan pipe L=1300Tuyau rilsan 8x6 noir L=1900VS3170361friting cylinderCylindre soulèvateurVS31703610x6,5 elastolan pipe L=600Tuyau elastolan 10x6,5 L=600VS3170378x6 black rilsan pipe L=50Tuyau elastolan 10x6,5 L=600VS3170378x6 black rilsan pipe L=50Tuyau elastolan 10x6,5 L=600VS3170366-8 reductionReduction 6-8VS3170366-8 reductionTuyau rilsan 8x6 noir L=500VS3170366-8 reductionTuyau rilsan 8x6 noir L=500VS3170366-8 reductionTuyau rilsan 8x6 noir L=500VS3170366-8 reductionTuyau rilsan 6x4 noir L=500VS3170366-4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS3170366-4 black rilsan pipe L=2600Cylindre PlusVS317047006-4 black rilsan pipe L=2600VS31705700<	12	VS317007	8x6 black rilsan pipe L=800	Tuyau rilsan 8x6 noir L=800	Tubo rilsan 8x6 negro L=800
VS3170078x6 black rilsan pipe L=1300VS3170078x6 black rilsan pipe L=1900VS3170078x6 black rilsan pipe L=1900Lifting cylinderCylindre soulèvateurVS31703610x6,5 elastolan pipe L=600VS3170378x6 black rilsan pipe L=600VS3170378x6 black rilsan pipe L=50VS3170366-8 reductionVS3170066-8 reductionVS3170066x4 black rilsan pipe L=300VS3170066x4 black rilsan pipe L=300VS3170066x4 black rilsan pipe L=300VS31700610x9 rilsan 6x4 noir L=2600VS31700610x9 rilsan 6x4 noir L=2600VS3170066x4 black rilsan pipe L=2600VS3170066x4 black rilsan pipe L=2600VS3170066x4 black rilsan pipe L=3100VS3170066x4 black rilsan pipe L=3600VS3170066x4 black rilsan pipe L=3600VS3170066x4 black rilsan pipe L=2600VS3170066x4 black rilsan pipe L=2600 <th>13</th> <th>VS325181</th> <th>V8 union</th> <th>Raccord à V8</th> <th>Enlace a V8</th>	13	VS325181	V8 union	Raccord à V8	Enlace a V8
V3170078x6 black rilsan pipe L=1900Tuyau rilsan 8x6 noir L=1900Ifting cylinderCylindre soulèvateurV317036Lifting cylinderVS3170078x6 black rilsan pipe L=600VS3170078x6 black rilsan pipe L=500VS3170066-8 reductionVS3170066-8 reductionVS3170066-4 black rilsan pipe L=3100VS3170066x4 black rilsan pipe L=3100VS3170066x4 black rilsan pipe L=300VS31700610 visan 6x4 noir L=300VS31700610 visan 6x4 noir L=2600VS31700610 visan 6x4 noir L=2600VS3251810 visan 6x4 noir L=2600VS3251810 visan 6x4 noir 0x4 visan 6x4 noir 0x8VS32521810 visan 6x4 noir 0x8VS32521810 visan 6x4 noir 0x8VS32521810 visan 6x4 noir 0x8 <th>14</th> <th>VS317007</th> <th>8x6 black rilsan pipe L=1300</th> <th>Tuyau rilsan 8x6 noir L=1300</th> <th>Tubo rilsan 8x6 negro L=1300</th>	14	VS317007	8x6 black rilsan pipe L=1300	Tuyau rilsan 8x6 noir L=1300	Tubo rilsan 8x6 negro L=1300
Image: constraint of the soule of the source of	15	VS317007	8x6 black rilsan pipe L=1900	Tuyau rilsan 8x6 noir L=1900	Tubo rilsan 8x6 negro L=1900
VS31703610x6,5 elastolan pipe L=600Tuyau elastolan 10x6,5 L=600VS3170078x6 black rilsan pipe L=50Tuyau rilsan 8x6 noir L=50VS3170066-8 reductionReduction 6-8VS3170066x4 black rilsan pipe L=3100Tuyau rilsan 6x4 noir L=3100VS3170066x4 black rilsan pipe L=3100Tuyau rilsan 6x4 noir L=3100VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS31700610x8 cylinderCylindre PlusVS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS31700610x8 cylinderCylindre PlusVS31700610x8 reductionCylindre PlusVS31700610x8 reductionCylindre décolle-talon latéralVS31700610x8 reductionReduction 10x8VS32521810x8 reduction valveVanne commande décolle-talons latéral	16		Lifting cylinder	Cylindre soulèvateur	Cilindro levantador
VS3170078x6 black rilsan pipe L=50Tuyau rilsan 8x6 noir L=50VS3250546-8 reductionReduction 6-8VS3170066x4 black rilsan pipe L=3100Tuyau rilsan 6x4 noir L=3100VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS3170066x4 black rilsan pipe L=2600Cylindre PlusVS31700610x cylinderCylindre PlusVS31700610x cylinderCylindre PlusVS31700610x bead breaking cylinderCylindre décolle-talon latéralVS32521810x reductionReduction 10x8VS32521810x bead breaker control valveVanne commande décolle-talon slatèral	17	VS317036	10x6,5 elastolan pipe L=600	Tuyau elastolan 10x6,5 L=600	Tubo elastolan 10x6,5 L=600
VS3250546-8 reductionVS3250546-8 reductionVS3170066x4 black rilsan pipe L=3100VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS3170066x4 black rilsan pipe L=2600VS3170068x4 black rollVS32521810x8 reductionVS32521810x8 reductionVS32521810x8 reductionVS32521810x8 reductionLateral bead breaker control valveVanne commande décolle-talons latèral	18	VS317007	8x6 black rilsan pipe L=50	Tuyau rilsan 8x6 noir L=50	Tubo rilsan 8x6 negro L=50
VS3170066x4 black rilsan pipe L=3100Tuyau rilsan 6x4 noir L=3100VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600VS3170066x4 black rilsan pipe L=2600Cylindre PlusNS317005Plus cylinderCylindre PlusNS31700510x8 reductionCylindre PlusNS31700510x8 reductionCylindre décolle-talon latéralNS32521810x8 reductionReduction 10x8NS32521810x8 reductionVanne commande décolle-talons latèral	19	VS325054	6-8 reduction	Reduction 6-8	Reducción 6-8
VS3170066x4 black rilsan pipe L=2600Tuyau rilsan 6x4 noir L=2600Plus cylinderPlus cylinderCylindre PlusLater bead breaking cylinderCylindre décolle-talon latéralVS32521810x8 reductionReduction 10x8VS325218Lateral bead breaker control valveVanne commande décolle-talons latèral	20	VS317006	6x4 black rilsan pipe L=3100	Tuyau rilsan 6x4 noir L=3100	Tubo rilsan 6x4 negro L=3100
Nus cylinder     Cylindre Plus       Later bead breaking cylinder     Cylindre décolle-talon latéral       VS325218     10x8 reduction       Reduction     Reduction 10x8       Lateral bead breaker control valve     Vanne commande décolle-talons latèral	21	VS317006	6x4 black rilsan pipe L=2600	Tuyau rilsan 6x4 noir L=2600	Tubo rilsan 6x4 negro L=2600
Later bead breaking cylinder     Cylindre décolle-talon latéral       VS325218     10x8 reduction       Reduction     Reduction 10x8       Lateral bead breaker control valve     Vanne commande décolle-talons latèral	22		Plus cylinder	Cylindre Plus	Cilindro Plus
VS325218     10x8 reduction     Reduction 10x8       Lateral bead breaker control valve     Vanne commande décolle-talons latèral	23		Later bead breaking cylinder	Cylindre décolle-talon latéral	Cilindro destalonador lateral
Lateral bead breaker control valve Vanne commande décolle-talons latèral	24	VS325218	10x8 reduction	Reduction 10x8	Reducción 10x8
	25		Lateral bead breaker control valve	Vanne commande décolle-talons latèral	Válvula mando destalonador lateral

Table	Table Number B - Rev. 1	v.1	VS730005100	
ů	Code	Description	Description	Descripción
26	VS317007	8x6 black rilsan pipe L=170	Tuyau rilsan 8x6 noir L=170	Tubo rilsan 8x6 negro L=170
27	VS317036	10x6,5 elastolan pipe L=350	Tuyau elastolan 10x6,5 L=350	Tubo elastolan 10x6,5 L=350
28		Bead breaker unit on ground level + manual control	Groupe décolle-talons ou sol + commande manuelle	Grupo destalonador a tierra + mando manual
29	VS325193	4/8 adapter union	Raccord adapteur 4/8	Enlace adaptador 4/8
30	VS317028	4x2,7 green rilsan pipe L=1820	Tuyau rilsan 4x2,7 vert L=1820	Tubo rilsan 4x2,7 verde L=1820
31	VS317027	4x2,7 red rilsan pipe L=1820	Tuyau rilsan 4x2,7 rouge L=1820	Tubo rilsan 4x2,7 rojo L=1820
32	VSBMP7000	4x2,7 white rilsan pipe L=1750	Tuyau rilsan 4x2,7 blanc L=1750	Tubo rilsan 4x2,7 blanco L=1750
33	VSB2358000	Control valve	Vanne commande	Válvula mando
34		Vane closing	Fermerture palette	Cerrado paleta
35		Vane opening	Ouverture palette	Abertura paleta

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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