



HD600

Cod.4-100696 - 1.0 del 04/03

Italiano

Manuale d'uso

English

Operator's manual

Français

Manuel d'utilisation

Deutsch

Betriebsanleitung

Español

Manual de uso

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Italiano

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Français

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Español

Elaborazione grafica e impaginazione

Ufficio Pubblicazioni Tecniche

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DESCRIPTION

Fig. 1

- 1 Master switch
- 2 Clamp
- 3 Outside tool roller
- 4 Clamp locking key
- 5 Roller arm
- 6 Control levers
- 7 Inside tool roller
- 8 Mobile arm

Dimensions: **fig.2**

INTENDED USE

This manual constitutes an integral part of the product.

It is intended to provide the owner and operator with effective, safe instructions for the COMMISSIONING, USE (SAFETY IN USE) and MAINTENANCE.

CONSERVE THIS MANUAL WITH CARE, CLOSE TO THE MACHINE, FOR ANY FURTHER CONSULTATION BY THE OPERATORS.

The **HD600** model tyre changer has been designed for the de mounting and mounting of tubeless truck and bus tyres on their relative rims.

This machine must only be used for the purpose for which it has been specifically designed.

All other uses must be considered IMPROPER and thus UNREASONABLE.

The manufacturer cannot be considered responsible for any damage caused by improper, incorrect or unreasonable use.

GENERAL SAFETY RULES

The machine must only be used by specially trained and specifically authorised personnel. Any tampering with or modification to the equipment not authorised by the manufacturer in advance relieves the manufacturer of responsibility for any damage deriving from or traceable to such procedures. Removal of or tampering with the safety devices is a breach of EUROPEAN REGULATIONS on safety at work.

The machine may only be used in places free from explosion or fire hazards.

Safety devices

- The logical layout of the controls avoids any hazardous errors on the part of the operator.
- All functions controlled by the control levers are disabled when the control is released (dead-man principle).



CAUTION

Tampering with or removing any safety device is absolutely forbidden.

TRANSPORT

While the machine is still in its packaging, it may only be handled using a pallet truck or a fork-lift truck, inserting the forks in the slots provided underneath the packaging or crate (fig.3).

If the machine is not in its packaging, take the following precautions:

- Protect the sharp edges at the ends with suitable material (Pluribol or cardboard).
- Do not use metal cables for lifting.
- Sling with at least 450 cm long straps having more than 1000 kg capacity.

Handling and storing the machine

When handling the machine without packaging, use only the anchor points provided. Machines in their packaging must be stored in a dry place, with ventilation if possible. Place the packs far enough apart to allow the information provided on the sides of the packaging to be read easily.



CAUTION

To avoid damage, never place other items on top of the packaging.

Gripping the various projecting parts of the structure in a manner not recommended here is absolutely forbidden.

Temperature of storage environment for machines in packaging: -25°C / +55°C

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UNPACKING

After removing the external packaging provided to protect the machine from damage in transit, check that the machine is intact by examining all parts for visible damage. If damage is noted, or if just unsure, **DO NOT USE THE MACHINE** and contact a skilled professional (your dealer).

Packaging materials (plastic bags, expanded polystyrene, nails, screws, pieces of wood, etc.) must never be left within the reach of children since they are potentially dangerous. Dispose of these materials at the specific collection points if they are pollutant and not biodegradable.

The box containing the accessories is inside the packaging DO NOT THROW THIS OUT WITH THE

INSTALLATION



CAUTION

When choosing the installation site, comply with the current regulations as regards safety at work.

Each machine must be installed on a stable, rigid floor.

The spaces necessary for work must be left.



CAUTION

If the machine is installed outdoors, it must be protected with a suitable shelter.

Working environment conditions:

- Relative humidity: 40 - 95%
- Temperature: 0° - 45°

INSTALLATION AREA

An area of 390x465 cm is required for installation of the machine.

From the control position, the operator has a good view of the machine and the surrounding area.

He must keep unauthorised persons and objects which might cause hazards outside this area.

The machine must be installed on a horizontal surface, preferably on concrete or ceramic tile coverings.

Avoid loose or unstable surfaces.

The surface on which the machine is installed must withstand the loads transmitted during operation.



CAUTION

The machine must be fixed to the floor using screws and screw anchors only if wheels with weight in excess of 500 kg are changed.

ASSEMBLY AND COMMISSIONING

After unpacking the various components and checking them for damage or any anomalies, follow the instructions provided below to assemble the various components.

Tools required for installation:

- n°1 screwdriver
- n°1 spanner 13

Fasten the control column to the base using the fixing screws.

Electrical connection

Even small jobs on the electrical equipment must be performed by professionally qualified staff.

In standard versions, the machine's power supply system is THREE-PHASE + EARTH at 380V or 220V.

The machine is pre-set in the factory for the voltage specifically requested by the customer.

Any change to the power supply voltage cannot be made by the user; call in the professionally qualified staff, your dealer or authorised service centre.

The electricity supply lead must consist of a cable with minimum gauge 4 mm², 3 poles + earth to be connected to terminals L1-L2-L3 of the control panel.

Before connecting the power supply wires to the control panel terminal board, proceed as follows:

- Check that the power supply voltage is 380 Volts (or 220 Volts).
- Check the condition of the wires and that the earth wire is present.
- Check that an automatic circuit breaker protecting against overcurrents is located upstream of the machine together with a residual current operated device (rated at 30 mA).

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- Connect the cable to the machine with the greatest care, in accordance with the regulations in force.

The dimensions of the electrical connection must be suitable for the machine's power absorption specified on the relative nameplate.

In normal operation, the wheel must turn clockwise; otherwise, reverse two wires in the power supply plug.

The manufacturer will not accept responsibility for any damage deriving from failure to follow the instructions provided above, which may also cause the guarantee to become null and void.

LAY-OFFS

If the machine is to be out of use for a long period, disconnect it from the power sources, empty the tank containing the hydraulic fluid, and protect those parts which might be damaged by dust. Grease the parts which might also be damaged if they dry out.

SCRAPPING

If the machine is to be decommissioned, it must be made unusable by removing the electrical, electronic, hydraulic and plastic parts; the rest must then be disposed of as ferrous material.

The electrical material (cables) must be scrapped as copper.

Care must also be taken to make safe those parts which might be potential dangers, such as:

- hydraulic fluid tank
- electric motor

Consider the category of each item with regard to the recommended disposal procedure



CAUTION

Users are reminded that in all cases they are obliged to comply with the laws on SCRAPPING in force in the country of use.

ADVICE AND WARNINGS ON HYDRAULIC FLUID

Disposing of spent fluid

Never pour spent fluid down sewers, underground passages or into watercourses; collect it and consign it to specialised companies for collection and disposal.

Fluid leaks or spills

Limit the spread of the spilt material with absorbent material such as soil or sand, then degrease with solvents, preventing the formation or stagnation of vapours.

Precautions for the use of hydraulic fluid

- Avoid prolonged contact with the skin.
- Avoid the formation of fluid mists or their spread into the atmosphere.

Take the following precautions:

- Avoid splashes (wear suitable clothing or protective screens on machines).
- Wash yourself frequently using soap and water; do not use irritant products or solvents.
- Never dry your hands using dirty or oily rags.
- Change your clothes if they are soaked in fluid.
- Never smoke or eat with oily hands.
- Wear gloves resistant to oily minerals.
- Wear goggles in case of splashes.
- Wear aprons resistant to mineral oils.
- Use an aspirator in case of formation of fluid mists.

Hydraulic fluid: first-aid guidance

- Swallowing: no treatment is needed.
- Aspiration of liquid: in case of spontaneous vomiting, take the affected person to hospital urgently.
- Inhalation: if large amounts of strong vapours or mists are inhaled, take the affected person into the open air.
- Eyes: rinse the eyes with plenty of water
- Skin: wash with soap and water.

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TECHNICAL DATA

- Three-phase electrical power supply: 380/220 V 50/60 Hz

JAW GEAR MOTOR

- Three-phase electric motor 4 poles B3 380/220 V 50/60 Hz: 0.75 KW

HYDRAULIC POWER UNIT

- Three-phase electric motor 4 poles B14 380/220 V 50/60 Hz: 1.5 KW

min. max.

- Width: 1496 mm 1777 mm

- Length: 1160 mm 1371 mm

- Height: 1226 mm

- Weight: 400 Kg

- Hydraulic fluid tank capacity: litri 6

min. max.

- Operating temperature: 0°C 45°C

- Humidity range: 57/95% a 40°C

SERVICE CHARACTERISTICS

min. max.

- Clamping on flange: 140 mm 300 mm

- Max. tyre diameter: 1300 mm

- Max. tyre width: 600 mm

- Max rim diameter: 22.5"

ROUTINE MAINTENANCE

To guarantee the machine's efficiency and correct operation, it is essential to comply with the manufacturer's instructions with regard to cleaning and regular routine maintenance.



CAUTION

Cleaning and routine maintenance must be carried out by authorised personnel in accordance with the MANUFACTURER's instructions provided below:

- check the tank fluid level; top up if necessary using API CI S32 fluid or an equivalent.



CAUTION

Any top-ups or fluid changes using fluid of qualities different from those indicated may reduce the machine's lifetime and impair its performance.

- Clean all moving parts (jaw unit).
- Keep the machine and the working area clean to prevent dirt from infiltrating working parts.
- Grease all parts fitted with grease nipples regularly.



IMPORTANT

The operator MUST NEVER vary the relief valve trigger pressure value and MUST NEVER vary the setting value of the pressure limiter.

The manufacturer declines all responsibility for injury or damage due to failure to follow this rule.



CAUTION

No maintenance work must be carried out until the plug has been disconnected from the electrical mains.



CAUTION

Never clean by blowing with compressed air.

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TROUBLESHOOTING TABLE

(PROBLEM, POSSIBLE CAUSE, REMEDY)

When the control levers are used, the fuses blow

Power wire connected to earth.

- ➡ Check the wires.

Inverter has short-circuited.

- ➡ Replace the inverter.

Motor has short-circuited.

- ➡ Replace the motor.

The bead breaker cylinder force is inadequate

Breakage on gear pump hydraulic line.

- ➡ Replace the line.

Cylinder seals worn.

- ➡ Replace the seals.

The jaw of the turntable will not turn in any circumstances

Inverter faulty.

- ➡ Replace the inverter.

Control lever faulty.

- ➡ Replace the control lever.

The jaw of the turntable does not turn (motor buzzes)

The motor is operating on two phases only.

- ➡ Check the wires on the plug or on the inverter.
- ➡ Replace the inverter or the remote switches.
- ➡ Replace the motor..

The jaw of the turntable has no rotation force

Belt tension inadequate.

- ➡ Adjust the belt tension/replace the belt.

The bead breaker cylinder is pressing too hard against the tyre.

- ➡ Lubricate the bead.

INSTRUCTIONS FOR USE

CONTROL MODULE COMMANDS

- 4 position joystick (A, fig.4) with the following functions:
 - its horizontal movement controls travel of the tool carriage;
 - its vertical movement controls raising/lowering of the spindle arm.
- Pedals (A, fig.4a) used to rotate the spindle clockwise or anti-clockwise.



WARNING

Do not position the control module in a place where water can collect.

POSITIONING AND CLAMPING THE WHEEL

- Tilt the roller arms back.
- Place the wheel vertically on the machine table.
- Secure the wheel onto the clamp (by tightening the clamp by hand, with the aid of the key provided, see fig. 5).



CAUTION

If the machine malfunctions, retreat to a safe distance and turn the master switch to 0.



CAUTION

Make sure that the jaw of the turntable correctly and firmly clamps on every gripping point (see Fig. 6).



CAUTION

A fork-lift truck or a crane should be used when handling wheels weighing more than 500 kg.



CAUTION

Do not leave the wheel clamped on the jaw of the turntable for periods longer than the normal operating pauses.

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LUBRICATING TYRES

Before fitting or removing the tyre, lubricate the beads carefully to protect them against possible damage and to facilitate fitting and removal operations.

For the zones to be lubricated, refer to the diagrams.

Bring especially heavy tyres as close as possible to the base before completing removal.

- Raise the wheel to the ascent ramp using the control lever (Fig. 4), and move the turntable towards the wheel.
- Position the turntable on the same axis as the centre of the wheel, so that the rim can be blocked on the inside or in the most appropriate position.
- Tighten the clamp with the key provided.
- The lower shoulder of the rim must always be facing outward to aid removal of the tyre.

DEMOUNTING TUBELESS WHEELS

- Deflate the tyre.
- After placing the wheel on the clamp, and tightening it with the key provided, lift the wheel using the control (fig. 4) until the roller on the bead-breaker arm just touches the edge of the rim.
- Break the bead of the deflated tyre, moving the arm+clamp assembly from left to right a little at a time, as the clamp rotates continuously (clockwise). Continue this operation, following the profile of the rim with the outside roller until the bead is completely broken (fig. 7).
- Lubricate the tyre bead and the edge of the rim with the special grease and repeat the bead-breaking operation from the inside of the wheel, using the inside roller, moving the arm+clamp assembly from right to left a little at a time, as the clamp rotates continuously (clockwise). Continue this operation, following the profile of the rim with the inside roller until the bead is completely broken (fig. 8).

MOUNTING TUBELESS TYRES

- Fix the mounting clamp on the front edge of the rim and place both the beads of the tyre beyond the clamp (fig. 9).
- Use the outside roller to push against the tyre (after lubricating the beads and the edge of the rim), moving the arm+clamp assembly from left to right a little at a time, as the clamp rotates continuously. Continue this operation until the tyre bead has been completely inserted (fig. 10).

N.B.

For correct mounting without damage, the beads and the shoulder of the rim should be lubricated generously.

FIRE-FIGHTING EQUIPMENT

The machine consists of a variety of very different parts, so the measures to be taken in case of fire must also be different.

When choosing the most suitable extinguisher, follow the table below:

	Dry materials	Inflammable liquids	Electrical fires
Water	YES	NO	NO
Foam	YES	YES	NO
Dry chemical	YES*	YES	YES
CO ₂	YES*	YES	YES

YES* Use only if more appropriate extinguishers are not on hand and when the fire is small.



CAUTION

The information provided in this table is of a general nature and is intended to provide users with general guidance. Ask suppliers about the possible uses of each type of extinguisher.

EXTRAORDINARY MAINTENANCE

(FOR REPAIR ENGINEERS ONLY)

- a) After the first few working hours, check and tighten unions, bolts and nuts (if necessary) using the driving torques stated in the table.

TORQUE WRENCH SETTING WITH DYNAMOMETRIC WRENCH FOR SCREW AND NUTS WITH PG METRIC THREADING

M	6	8	10	12	14	16	18	20	22	24	27	30
Nm	10	25	50	87	138	210	289	412	559	711	1049	1422
Kgm	1	2,6	5,1	8,9	14,1	21,5	29,5	42	57	72	107	145

- b) Check the transmission belt and stretch it if necessary by adjusting the motor support tie-rods.



CAUTION

Extraordinary maintenance work must only be carried out by specialist technical staff. Before any servicing work on the hydraulic system, place the machine in rest position with the mobile arm lowered and the jaw of the turntable closed.

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ELECTRIC WIRING

Fig.11

IG	Master switch
F1	4A fuse
F2	4A fuse
K1-K2	Contactor
SL	Indicator light
Y1-2-3-4	Solenoid valve
PE	Earth wire
M2	Clamp motor
M1	Hydraulic power unit motor
PA	Emergency stop button
SA	Lever control

HYDRAULIC DIAGRAM

Fig.12

01	6 lt. tank
02	Filter
03	2.8 gear pump
04	Coupling
05	1.1 kW electric motor
06	Relief valve, max. 110 bar
07	Clamp travel solenoid valve
08	Clamp arm solenoid valve
09	Clamp arm lifting solenoid valve
10	Clamp travel cylinder
11	Cylinder clamping valve



HD600

Cod.4-100696 - 1.0 del 04/03

Italiano

Illustrazioni e schemi

English

Illustrations and diagrams

Français

Illustrations et schémas

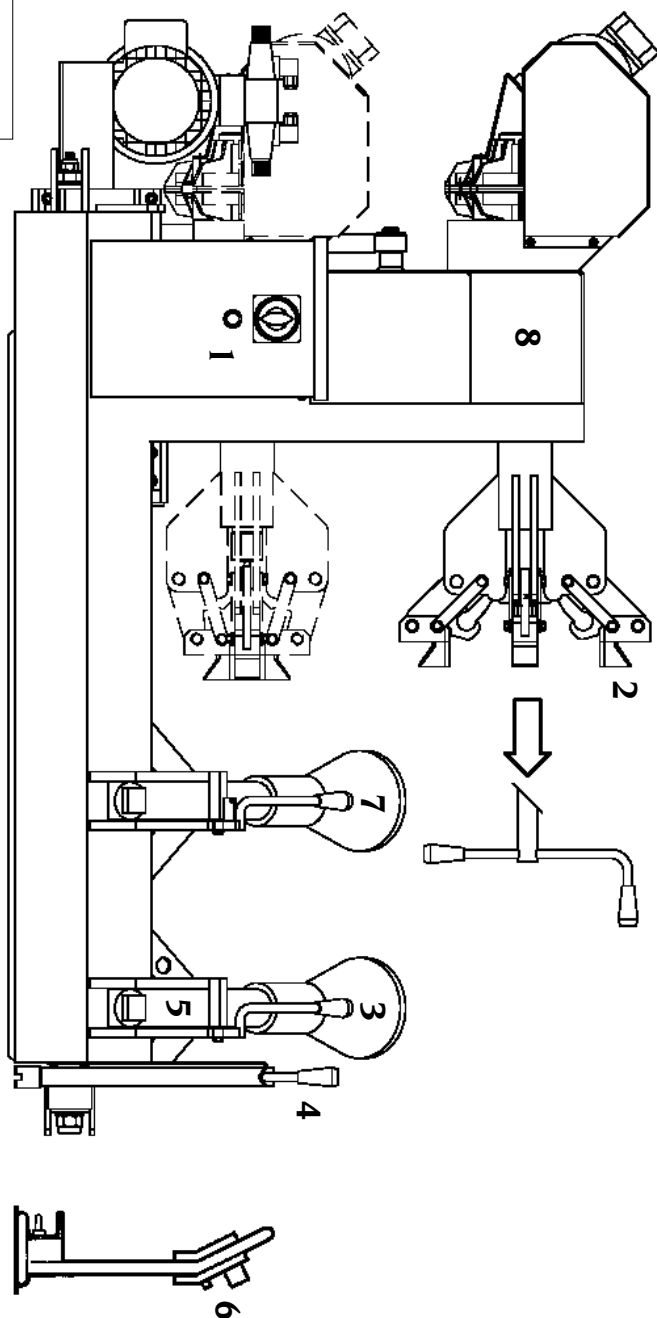
Deutsch

Bilder und Zeichnungen

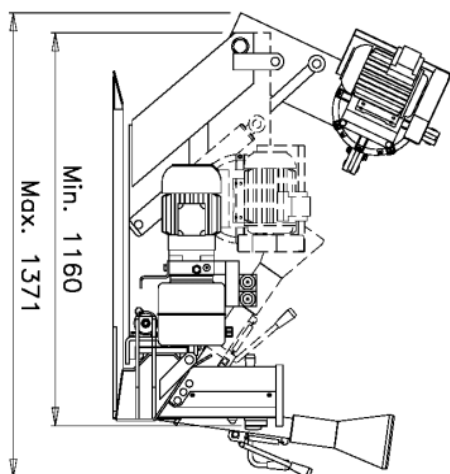
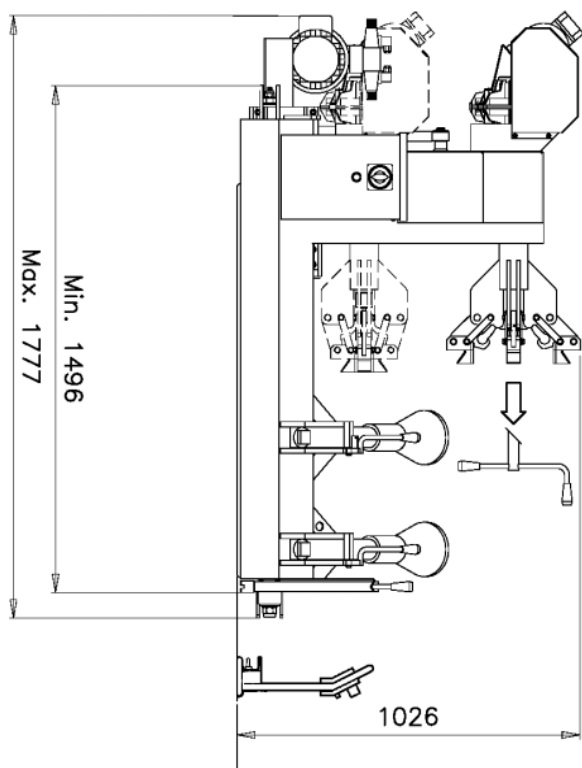
Español

Ilustraciones y esquemas

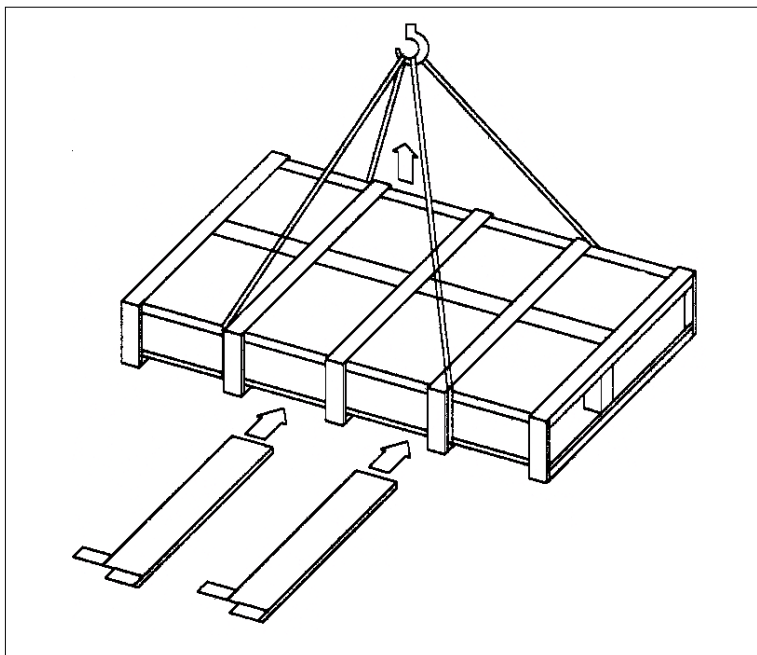
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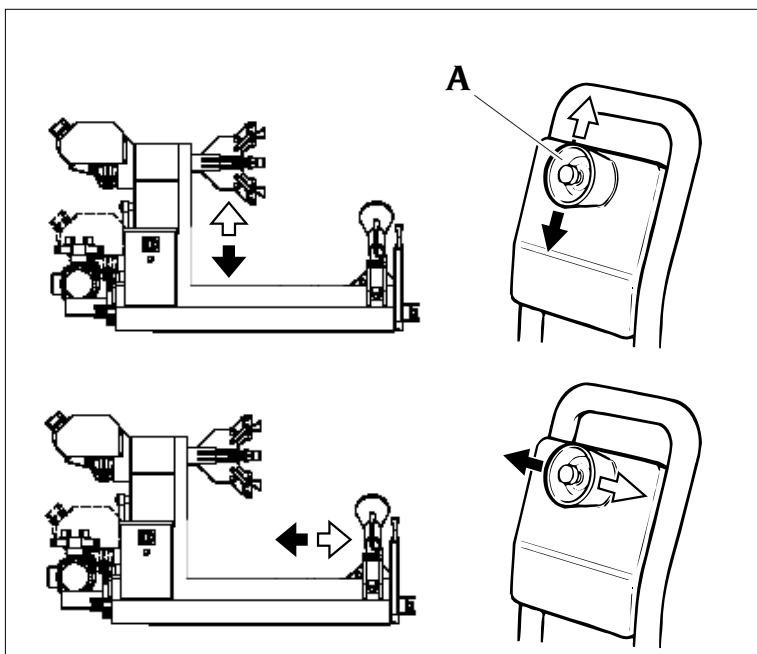
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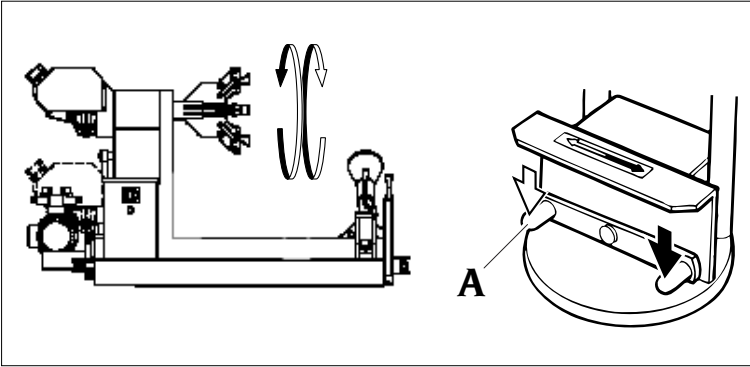


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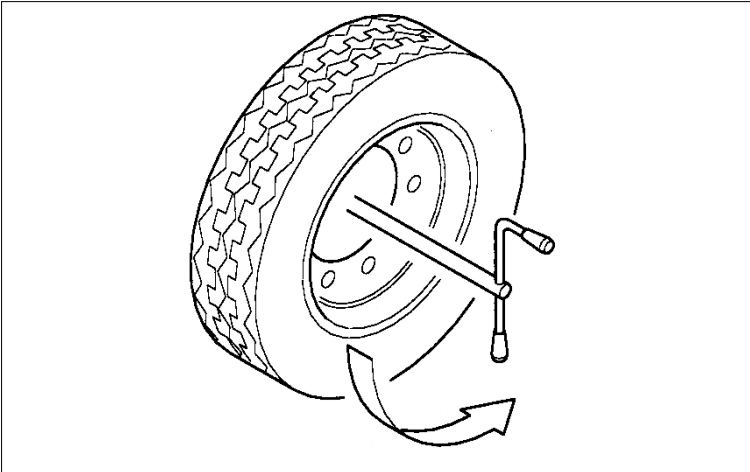


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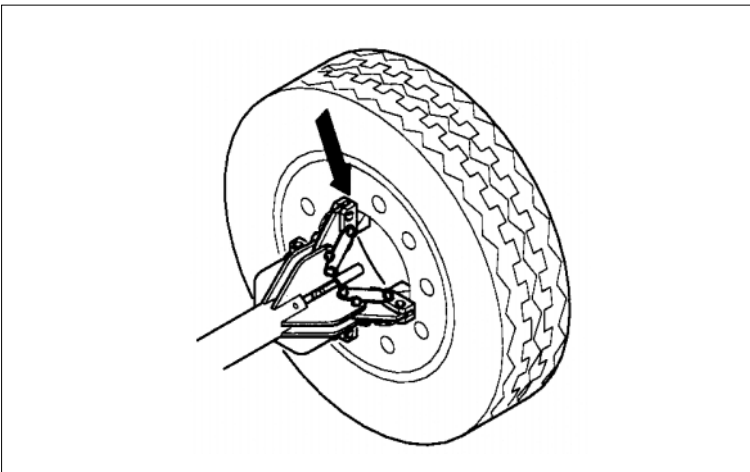




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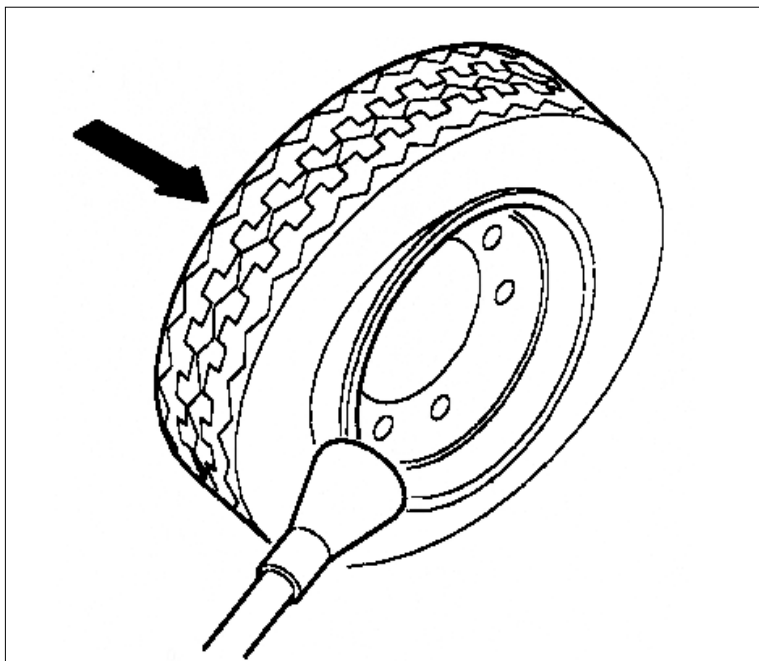


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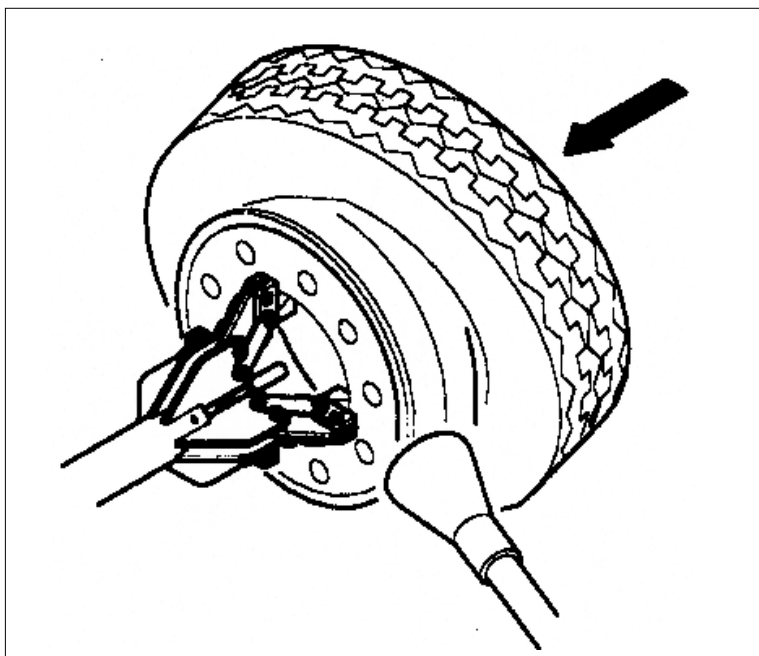


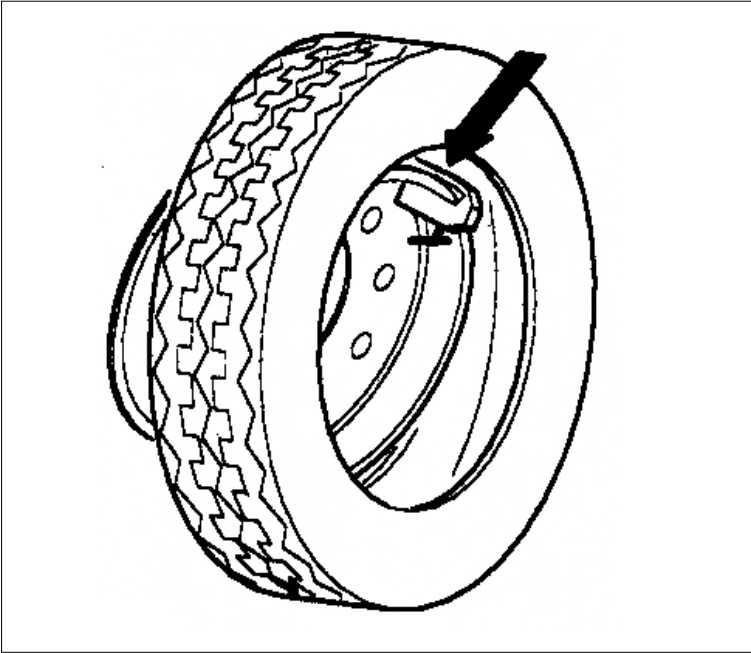
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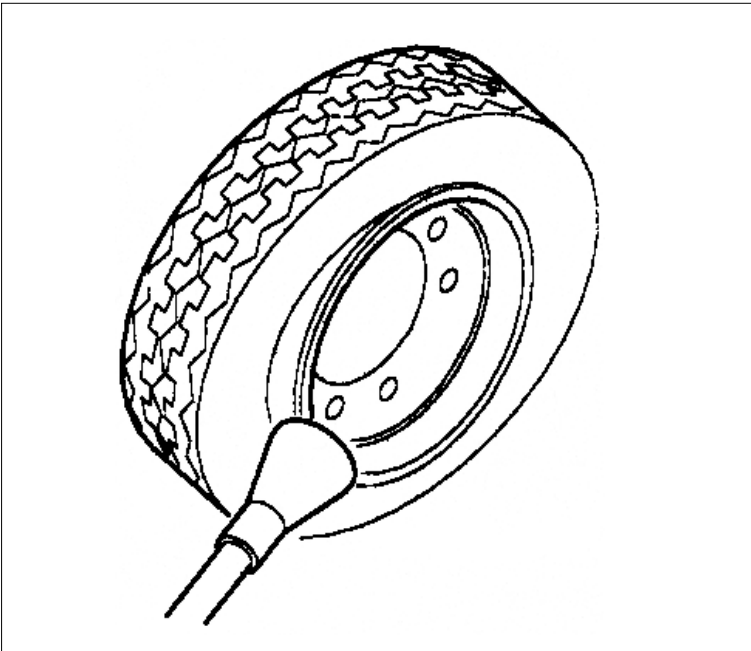


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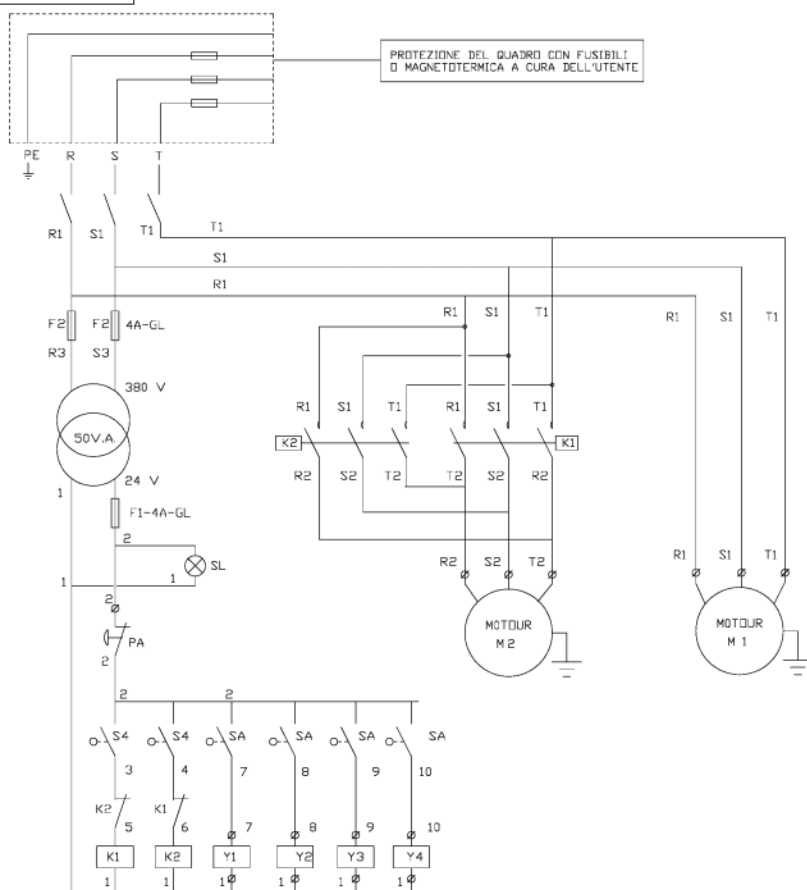




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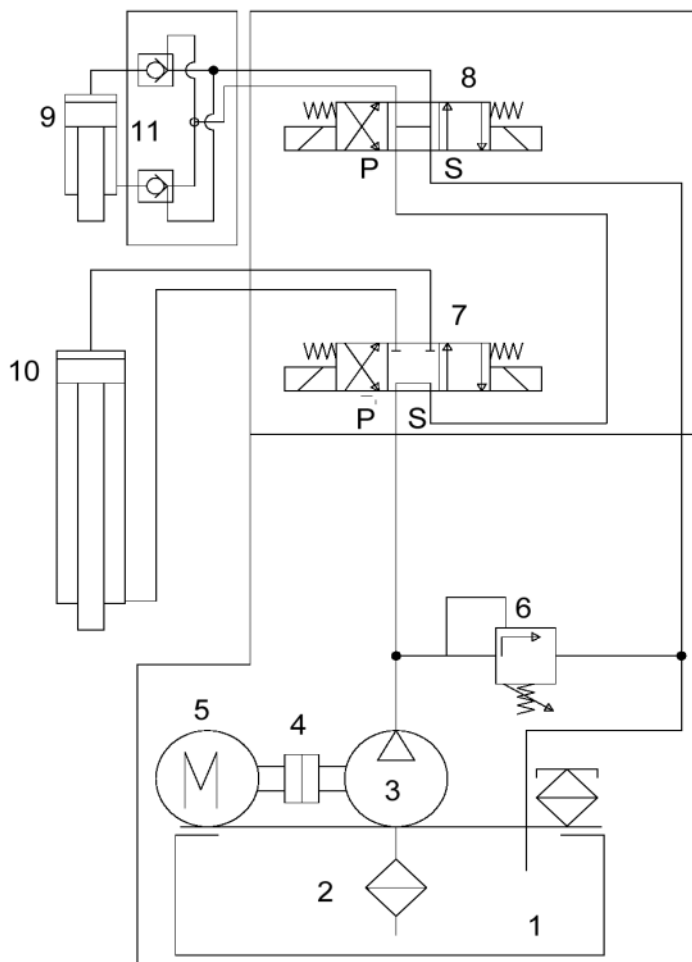


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1	7	1	8	1	9	1	10	2	R1	S1	T1	R2	S2	T2	R	S	T
Y1			Y2		Y3		Y4	PA	MOTORE 1		MOTORE 2		LINEA V. 380				

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EC statement of conformity

We, CORGHI SPA, Strada Statale n°9, Correggio (RE), ITALY, do hereby declare, that the product
HD600 tyre changer

to which this statement refers, conforms to the following standards or to other regulatory documents:

EN 292, 09/91

according to directives:

- 98/37/EC;
- 89/336/EEC amended with directives 92/31/EEC

Correggio, 01 / 03 / 03



.....
CORGHI S.p.A.
M. Frattesi

IMPORTANT: The EC Conformity Declaration is cancelled if the machine is not used exclusively with CORGHI original accessories and/or in observance of the instructions contained in the user's manual.

The form of this statement conforms to EN 45014 specifications.

Déclaration CE de conformité

Nous, CORGHI SPA, Strada Statale 468, n° 9, Correggio (RE) Italy, déclarons que le matériel
démonte-pneus HD600

objet de cette déclaration est conforme aux normes et/aux documents légaux suivants:

EN 292 du 09/91

Sur la base de ce qui est prévu par les directives:

- 98/37/EC;
- 89/336/CEE modifié par la directive 92/31/CEE.

Correggio, 01 / 03 / 03



.....
CORGHI S.p.A.
M. Frattesi

IMPORTANT : La déclaration CE de conformité est considérée comme nulle et non avenue dans le cas où la machine ne serait pas utilisée exclusivement avec des accessoires originaux CORGHI et/ou, dans tous les cas, conformément aux indications contenues dans le Manuel d'utilisation.

Le modèle de la présente déclaration est conforme à ce qui est prévu par la EN 45014.

CE - Konformitätserklärung

CORGHI SPA, Strada Statale 468, Nr. 9, Correggio (RE), ITALY, erklärt hiermit, daß das Produkt

Reifenmontiermaschine HD600


worauf sich die vorliegende Erklärung bezieht, den Anforderungen folgender Normen und/oder normativer Dokumente entspricht:

EN 292 vom 09/91

auf Grundlage der Vorgaben durch die Richtlinien:

- 98/37/EC;
- 89/336/EWG mit Änderung durch die Richtlinien 92/31/EWG.

Correggio, 01 / 03 / 03


.....

CORGHI S.p.A.
M. Fratesi

WICHTIG: Die CE-Konformitätserklärung verliert ihre Gültigkeit, falls die Maschine nicht ausschließlich mit CORGHI-Originalzubehör und/oder unter Mißachtung der in der Betriebsanleitung aufgeführten Gebrauchsanweisungen verwendet wird.

Das Modell der vorliegenden Erklärung entspricht den Anforderungen der in EN 45014 aufgeführten Vorgaben.

Declaración CE de conformidad

La mercantil CORGHI SpA abajo firmante, con sede en Strada Statale 468 n° 9, Correggio (RE), Italia, declara que el producto:

desmontagoma HD600


al cual se refiere la presente declaración, se conforma a las siguientes normas y/o documentos normativos:

EN 292 de 09/91

a tenor de lo dispuesto en la Directiva:

- 98/37/EC;
- 89/336/CEE, modificada por la Directiva 92/31/CEE.

Correggio, 01 / 03 / 03


.....

CORGHI S.p.A.
M. Fratesi

IMPORTANTE: La declaración de conformidad CE deja de tener validez en el caso en que la máquina no sea utilizada exclusivamente con accesorios originales CORGHI y/o, en cualquier caso, con arreglo a las indicaciones contenidas en el Manual de Empleo.

El modelo de la presente declaración se conforma a lo dispuesto en la EN 45014.

Dichiarazione CE di conformità

Noi CORGHI SPA, Strada Statale 468 n°9, Correggio (RE), ITALY, dichiariamo che il prodotto

smontagomme HD600

al quale questa dichiarazione si riferisce è conforme alle seguenti norme e/o documenti normativi:

EN 292 del 09/91

in base a quanto previsto dalle direttive:

- 98/37/CEE;
- 89/336/CEE modificata con la direttiva 92/31/CEE.

Correggio, 01 / 03 / 03



.....
CORGHI S.p.A.

M. Frattesi

IMPORTANTE: La dichiarazione CE di conformità decade nel caso in cui la macchina non venga utilizzata unicamente con accessori originali CORGHI e/o comunque in osservanza delle indicazioni contenute nel Manuale d'uso.

Il modello della presente dichiarazione è conforme a quanto previsto nella EN 45014.



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