

Smontagomme universale 14" - 26"

Universal truck tyre changer 14" - 26"

Demonte-pneus universel 14" - 26"

Universelle LKW-Reifenmontiermaschine 14" - 26"

Desmontadora de neumaticos universal 14" - 26"

Cod. 4-104099B del 11/2017

TRANSLATION OF ORIGINAL INSTRUCTIONS (ITALIAN)

TABLE OF CONTENTS

GENERAL INFORMATION	34
TECHNICAL DATA.....	34
GENERAL SAFETY REGULATION	34
SAFETY DEVICES.....	34
TRANSPORT.....	35
UNPACKING	35
INSTALLATION	35
LAYOUT OF FUNCTIONAL PARTS.....	37
IDENTIFYING WARNING SIGNALS.....	38
IDENTIFYING CONTROLS	39
WORKING POSITION.....	40
CORRECT OPERATION CHECKS.....	40
OPERATION	41
Wheel locking.....	41
Tubeless and supersingle wheels	43
Tubed wheels.....	48
Wheels with split ring	53
ORDINARY MAINTENANCE.....	58
TROUBLE SHOOTING	59
MOVING THE MACHINE.....	60
STORING	60
SCRAPPING A MACHINE.....	61



GENERAL INFORMATION

This tyre changer has been specifically designed to demount and mount truck, bus and commercial van tyres, with rims from 14" to 26" and a maximum 1500 mm diameter.

Any other use is improper and therefore not authorized. Before beginning any kind of work on or with this machine, carefully read and understand the contents of these operating instructions.

The producer shall not be liable for any injury to persons or damage to things caused by improper use of this machine.

KEEP THIS MANUAL NEAR THE MACHINE AND CONSULT IT AS NEEDED DURING OPERATIONS.

TECHNICAL DATA

Pump motor.....	1,1 kW
Gear-box motor.....	1,8 kW
Handles rim from	14" - 26"
Max. wheel diameter	1500 mm
Max. wheel width	760 mm
Weight (with standard accessories).....	585 kg
Acoustic pressure level (at work).. LpA <	70 dbA

GENERAL SAFETY REGULATIONS

The use of this machine is reserved to specially trained and authorized personnel. Any unauthorized changes or modifications to the machine, in particular to its electric system, relieve SICE Spa from all liability. Removing or tampering with the safety devices installed on this machine is in violation of European Safety Regulations.

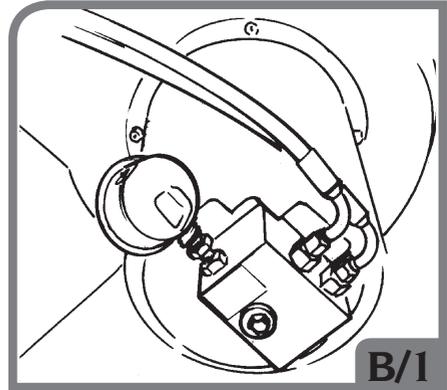


Any work, however minor, on the electric system must be done exclusively by professionally qualified personnel.

SAFETY DEVICES

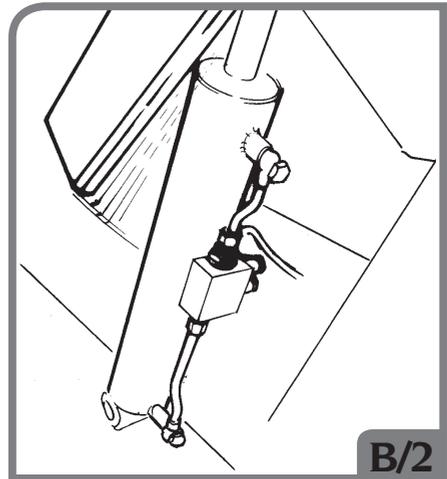
The tyre changer has a number of safety devices designed to guarantee the utmost operator safety:

1. Check valve on the spindle opening hydraulic line (inside the swivel connector, see fig. B/1). This prevents the wheel from falling from the spindle if the hydraulic line is accidentally broken.



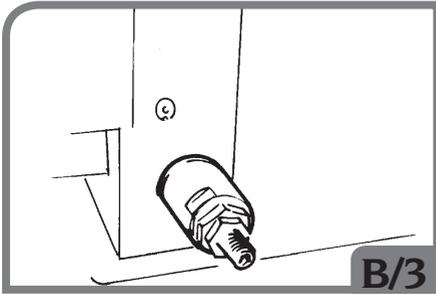
2. Pilot operated dual seal check valve (see Fig. B/2).

This prevents the spindle carrier arm from dropping if the hydraulic circuit accidentally breaks.



3. Pressure relief valve factory set at 130 bar $\pm 5\%$ (See Fig. B/3).

This limits the pressure in the hydraulic circuit and ensure correct operation of the plant.



4. Pump motor overload cut-out (inside the electric enclosure).

This cuts in if the motor overheats to prevent it from burning out.

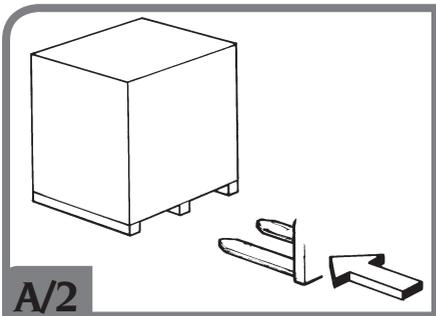
CAUTION!

Removing or tampering with safeties is in violation of European Safety Regulations and relieves manufacturer of any and all liability for injury to persons to damage to things caused or referable to such acts.

TRANSPORT

The machine is delivered in a wooden crate with pallet

The machine must be handled with a fork-lift truck with the forks positioned as shown in the figure A/2.



Shipping weight for the machine is 660 kg.

UNPACKING

Once the packing material has been removed, check the machine visually for any signs of damage.

Keep the packing materials out of the reach of children as they can be a source of danger.

N.B.: Keep the packing for possible future transport.

INSTALLATION

Installation place

Choose the place the machine is to be installed in compliance with current work place safety regulations. The floor should not be broken or uneven so that the machine will be stable and the platform rollers can move freely.

If the installation is outdoor, it must be protected by some kind of roofing against rain.

The following work environment conditions are applicable:

Relative humidity: from 30-95% without condensation;

Temperature: from 0-55° C.



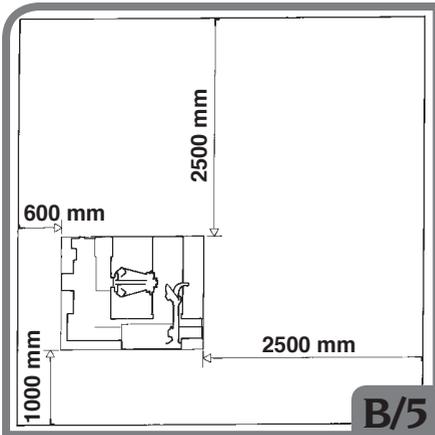
ATTENTION!

The machine must not be operated in explosive atmospheres.

Workplace requirements

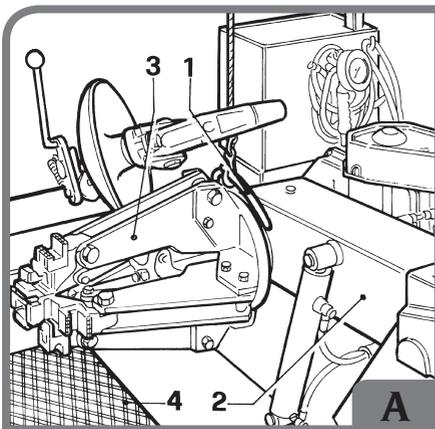
Maximum machine space requirements are 2085x 1820 mm with a minimum distance from walls as shown in the diagram (B/5).

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CAUTION! These measurements are also the tyre changers working range. Persons other than specially trained and authorized operators are expressly forbidden to enter this area.

Position the tyre changer lifting it with the specific bracket (1, Fig. A) with the tool carrier arm (2, Fig. A) lowered all the way, the spindle (3, Fig. A) closed and the tool carrier slide (4, Fig. A) at its stop close to the arm.



It is not essential to anchor the machine to the floor. However, the floor must be smooth and permit the platform rollers to

move freely.

Electric hook-up

Before making any electric hook up, check to be certain that the mains voltage corresponds to that stamped on the voltage tag (attached to the cord near the tyre changer's plug).

It is absolutely essential that :

- the system is equipped with a good grounding circuit.
- The machine is connected to a power supply line circuit breaker set for 30 mA.
- The current instake is adequately protected against overcurrents with fuses or automatic magneto-thermic switch with rated values as shown in the table B/8.

Note the required power draw as highlighted on the data plate fixed to the tyre changer. Check to make sure the shop electric wiring circuit is dimensioned sufficiently to carry this.

Power supply: 380V - 3Ph. - 50/60Hz

Fuse: 20A AM

Remote control switch: 20A



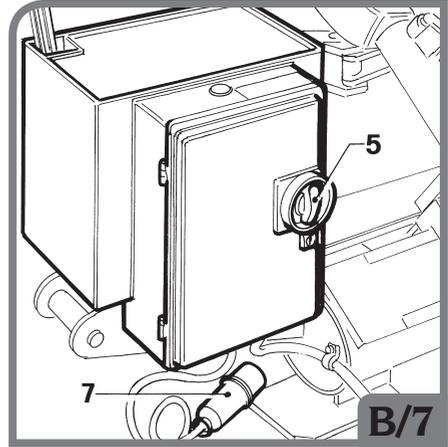
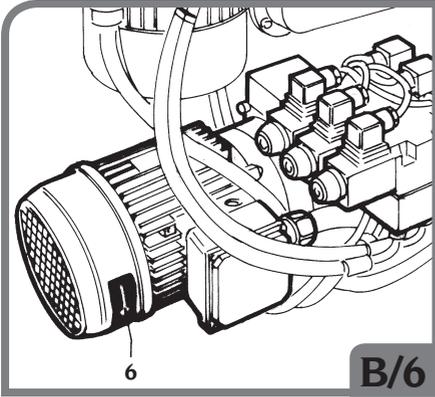
Work on the electric system, even if minor, must be done exclusively by professionally qualified personnel.

Manufacturer shall not be liable for any injury to persons or damage to things caused by failure to comply with these regulations and can cancel warranty coverage.

SENSE OF ROTATION CHECKS

Connect the machine to the mains, switch "ON" (5, fig. B/7) and check that the gearbox motor rotation corresponds to the indicating arrow (6, fig. B/6).

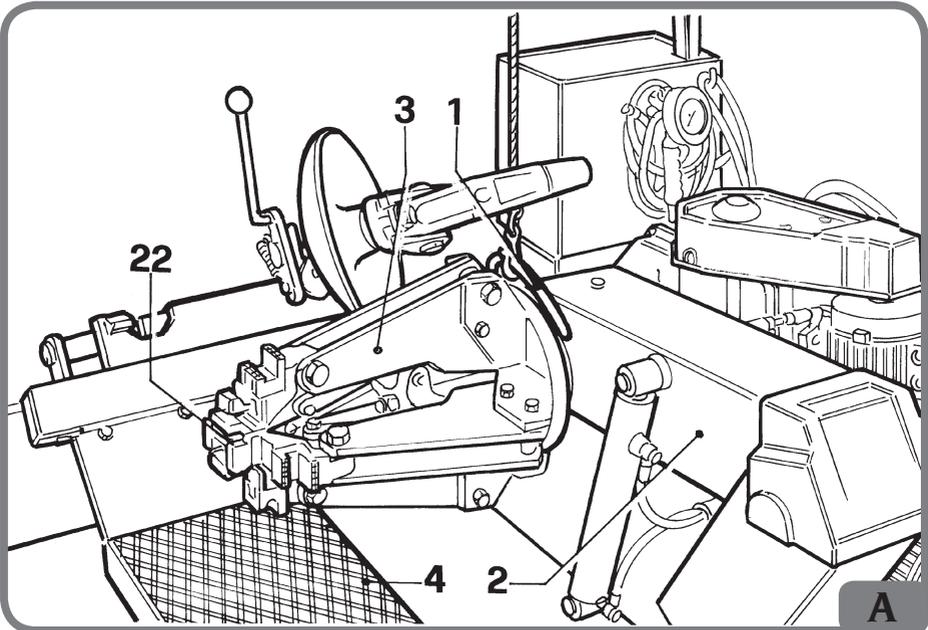
If not, switch two wires in the plug (7, Fig. B/7).



LAYOUT OF FUCTIONAL PARTS

FIG. A

- 1 - Lifting bracket
- 2 - Self-centering chuck holding arm
- 3 - Self-centering chuck
- 4 - Sliding table
- 22 - Jaw



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FIG. C

- 8 - Handler
- 9 - Switch
- 10 - Pedal

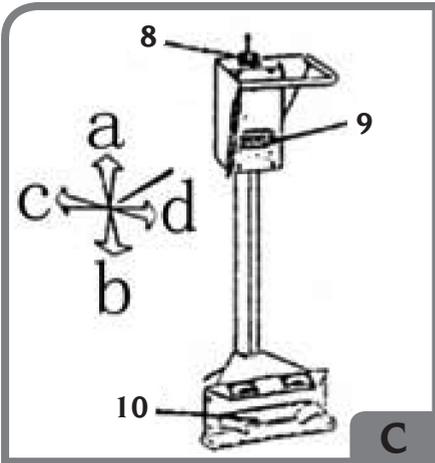
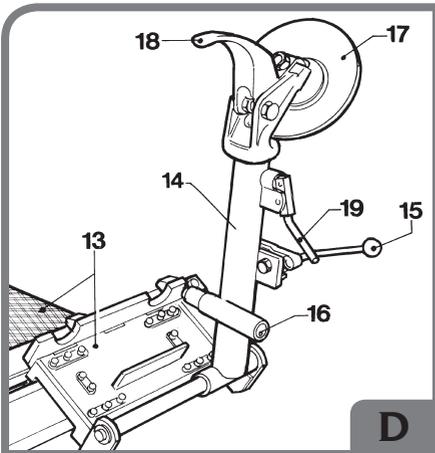


FIG. D

- 13 - Carriage
- 14 - Tool holding arm
- 15 - Arm lever
- 17 - Bead breaking disk
- 18 - Tool
- 19 - Tool handle



WARNING!

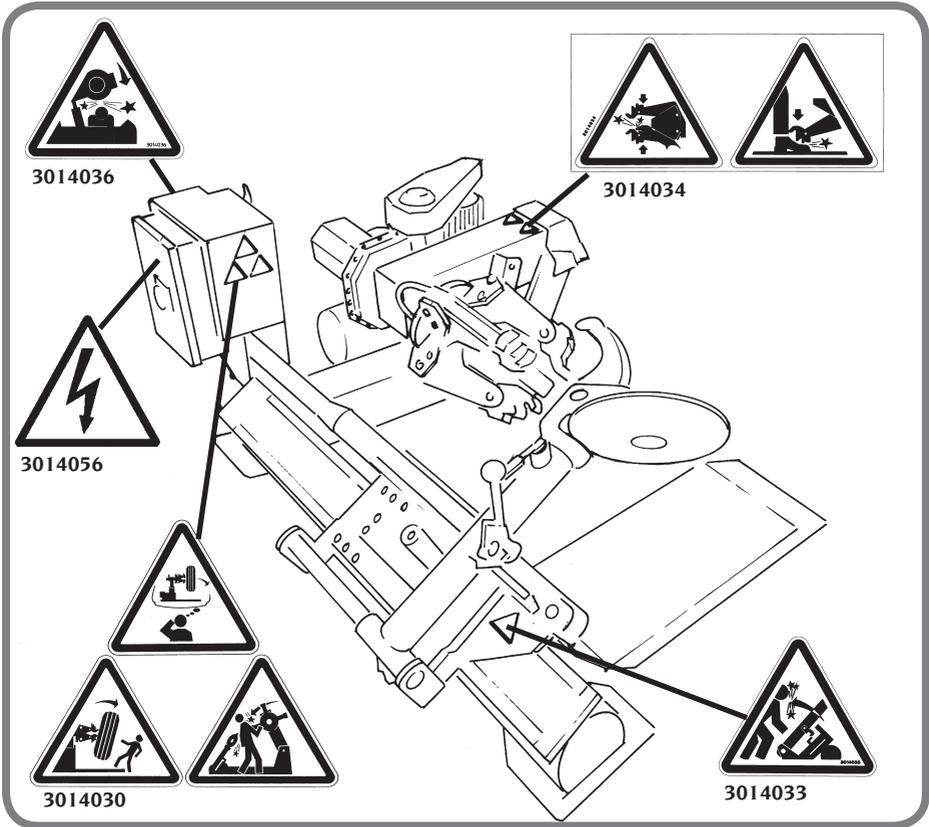
During all operations, keep hands and other parts of the body as far as possible from moving parts of the machine. Necklaces, bracelets and too large clothes, can be dangerous for the operator.

IDENTIFYING WARNING SIGNALS



WARNING:

Unreadable and missing warning labels must be replaced immediately. Do not use the tyre changer if one or more labels are missing. Do not add any object that could prevent the operator from seeing the labels. Use the code in this table to order labels you need.



IDENTIFYING CONTROLS

The mobile control centre (fig. C) enables the operator to work at any position around the machine. On this mobile control centre the following controls are located:

-The lever (8, fig. C) which in position a lifts the chuck arm and in position b lowers it; in position c moves the tool holder arm and the sliding table towards the self-centering chuck and in position d moves them away.

(Note: in order to memorise this operation, there is a hole in the lever guard corresponding to position c).

-The chuck switch (9, fig. C) when moved upwards, opens the arms of the self-centering chuck (LOCKING), and when moved down, closes the arm of the self-centering chuck (UN-LOCKING).

-The pedal (10, fig. C) when pressed on the left or right side rotates the self-centering chuck in the same direction as shown by the arrows placed on the foot pedal.

NOTE: all the controls are very sensitive and small movements of the machine can be done with precision.

The tyre changer also has:

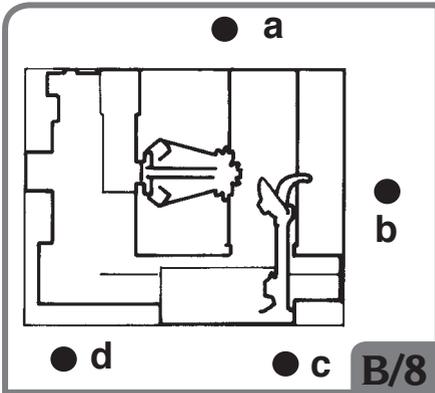
Lever (15, Fig. D) to tip the tool carrier arm (14, Fig. 4) from its work to its non-working position and vice-versa.

Handle (19, Fig. D) that permits alternative use of the bead-breaking disk (17, Fig. D) or the hooked tool (18, Fig. D).



WORKING POSITION

The diagram B/8 illustrates the various working positions (A,B,C,D) referred to in the following pages describing how to use the tyre changer. Use of these positions ensures greater precision, speed and safety for those using the machine.



CORRECT OPERATION CHECKS

Before using the tyre changer, a number of checks should be made to ensure it works correctly.

CAUTION! The operations described here should be done with the tool carrier arm in its non-working position.

First use lever (15, Fig. D) to tip the arm to this position.



CAUTION!

Do not move your face close to the tool carrier arm when you release it to tip it as needed.

1) Move the joystick (8, Fig. C) up (a): the spindle carrier arm (2, Fig. A) should lift; move the joystick down (b): the arm

should lower.



DANGER!

When the spindle carrier arm is lowered, there is always a potential for crushing anything in its movement range.

Always work from the position given in the instructions keep well out of the working range of the various moving arms.

Move the joystick towards the left (c): the tool carriage and the mobile platform (13, Fig. D) should move towards the spindle (3, Fig. A); move the joystick towards the right (d) the carriage and platform should move away from the spindle.

2) Turn switch lever (9, Fig. C) towards the top: the spindle arms (3, Fig. A) should open; move the lever down and the spindle arms should close.



DANGER!

When the spindle arms open or closed, there is always a potential for crushing anything in their movement range.

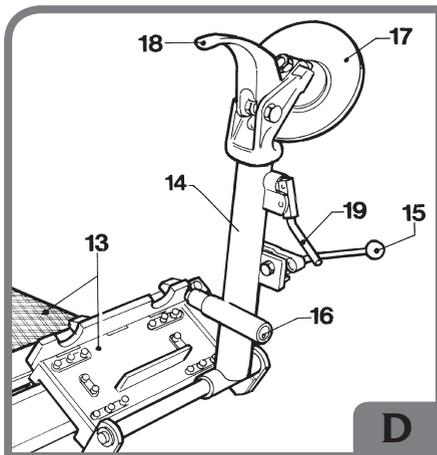
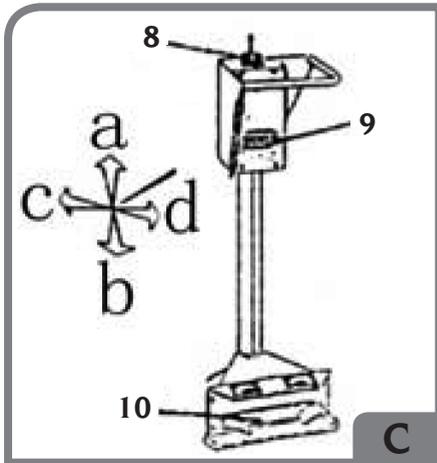
Always work from the position given in the instructions keep well out of the spindle's working range.

3) Depress the right pedal (10, Fig. C): the spindle (3, Fig. A) should turn clockwise; depress the left pedal: the spindle should turn anticlockwise.

4) Check to be certain the hydraulic circuit is working correctly:
- move switch lever (9, Fig. C) towards the top until the spindle arms are fully

extended.

- hold the switch lever in this position (top) and check if the pressure shown on the gauge on the swivel fitting is 130 bar $\pm 5\%$.
If the pressure shown is not as indicated here, DO NOT USE the tyre changer and call your nearest Assistance Centre.



OPERATION

Wheel locking



WARNING!

In locking the wheel, make sure that clamps are properly positioned on the rim, so as to prevent the tyre from falling

1) Take the mobile control unit to work position B.

2) Pull the tool-holder arm (14, fig. D) into the upright position.

3) Operating from the mobile control centre, move the sliding table (13, fig. D) away from the self-centering chuck and place the wheel in vertical position on the sliding table.



DANGER!

This operation can be extremely dangerous.

Do it manually only if you are certain you can keep the wheel balanced.

For large and heavy tyres an adequate lifting device must be used.

4) Continuing to operate from the mobile control centre, lift or lower the arm in order to centre the self-centering chuck (3, fig. A) relative to the rim.

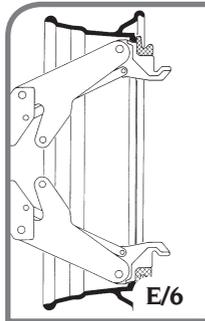
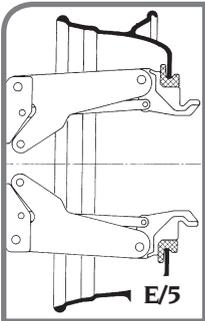
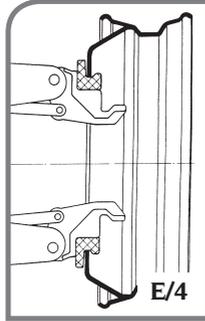
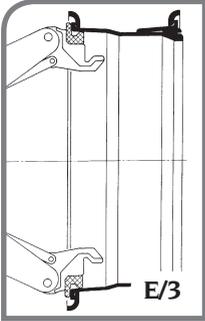
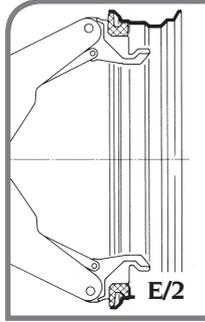
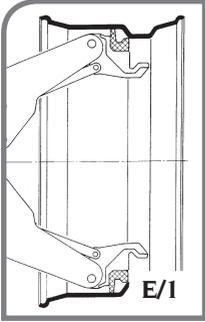
5) With the jaws (22, fig. A) in the closed position, move the wheel on the sliding table to the self-centering chuck. Operate the chuck switch (9, fig. C) to open the self-centering chuck and lock onto the inside wheel rim.

The most convenient locking position on the rim may be selected according to figs **E/1 - E/2 - E/3 - E/4 - E/5 and E/6.**

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Always remember that the safest locking is on the central flange.

N.B. for rims with channel, clamp the wheel so that the channel is near the outside of the rim (fig. E/1)..



DANGER!

Do not vary the work area with a wheel clamped on the tyre changer and lifted up from the floor.

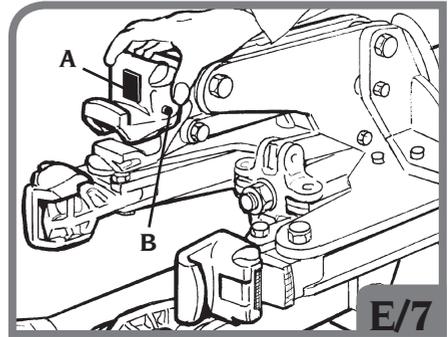
Light-alloy rim locking

Is available a **set of clamps**, especially designed for operating **on light alloy rims** without damaging them.

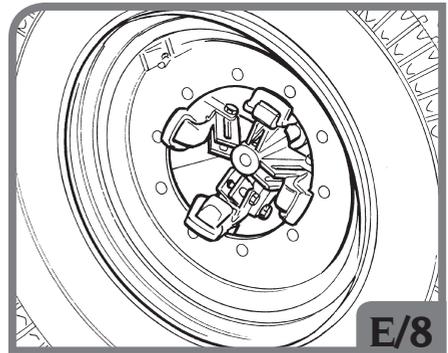
This clamps are to be inserted (bayonet-like mounting) into the clamp support of the self-centering chuck (see fig. E/7).

Tighten screw **B, Fig. E/7** by hand to lock the clamp.

The clamps are supplied with three different types of plastic insert (**A, Fig. E/7**), which must be used to suit the thickness of the rim flange.



Lock the rim as illustrated in **fig. E/8**.



Specially-made **alloy-rim pliers** are also available on request, for operating on **light alloy rims** without damaging them.

TUBELESS AND SUPER-SINGLE WHEELS

BEAD BREAKING

1) Lock the wheel on the self-centering chuck, as previously described, and ensure that the tyre is deflated.

2) Take the mobile control unit to work position C.

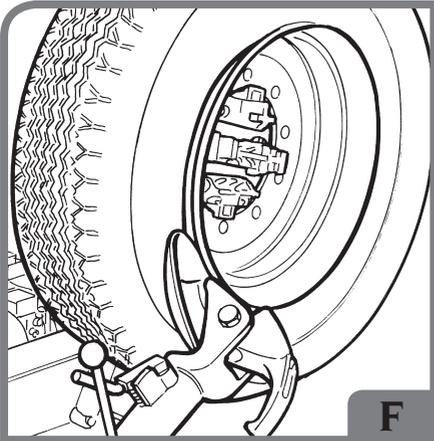
3) Lower the tool-holder arm into its working position and allow it to lock.



DANGER!

Always check to be certain that the arm is corrected hooked to the carriage.

4) Operating from the mobile control centre, manoeuvre the wheel until the outside of the rim skims the bead-breaker disk (fig. F).



DANGER!

The bead breaker disk must NOT be pressed against the rim but against

the tyre bead.

5) Rotate the wheel and at the same time, advance the bead-breaker plate with small forward movements following the profile of the rim, with the plate.

6) Continue until the first bead is fully detached.

To facilitate this operation, lubricate the bead and the edge of the rim with tyre lubricant whilst the wheel is rotated.



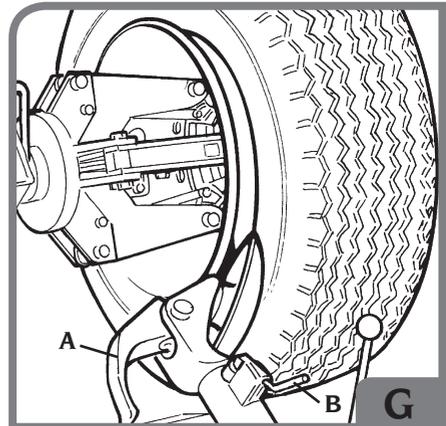
CAUTION!

To avoid all risk, lubricate the beads turning the wheel clockwise if you are working on the outside plane and anticlockwise if working on the inside plane.

N.B.: Remember that the stronger the tyre's adherence to the rim, the slower must be the disk's penetration.

7) Bring the tool carrier arm back from the edge of the rim.

Release the hook, raise the arm to its non-working position, shift it and rehook it in its second work position (Fig. G).



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DANGER!

Do not hold your hands on the tool when you bring it back to its work position. Your hand(s) could be trapped between the tool and the wheel.

8) Push the double headed tool lever (**B**, **fig. G**) and turn the head 180° until it locks automatically.

9) Take the mobile control unit to work position D.

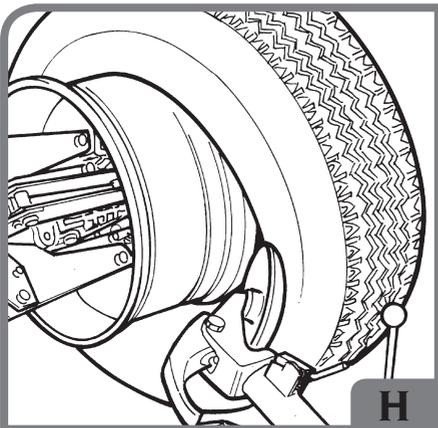
10) Repeat the operation previously described until the second bead is completely broken.

N.B.: During the bead breaking, the claw (**A**, **fig.G**) can be lowered so that it is out of the way.

DEMOUNTING

Tubeless tyres can be demounted in two ways:

a) If the tyre is not difficult to demount, once the beads have been loosened, use the bead disk to push against the inside plane of the tyre until both beads come off the rim (**See Fig. H**).



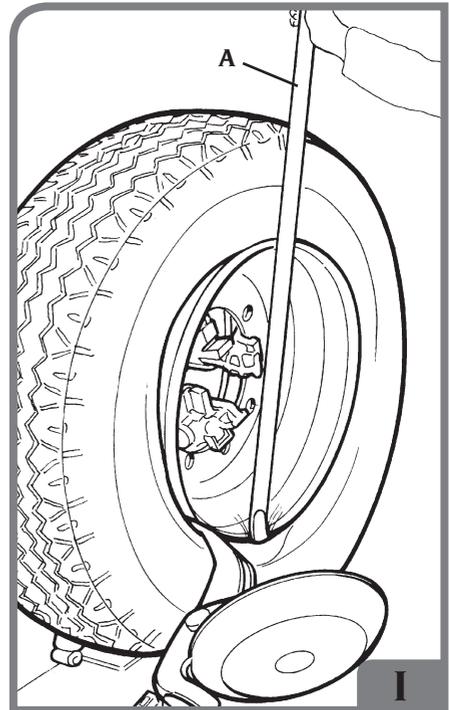
b) With Supersingle or very hard tyres the procedure described above cannot be used.

The hook tool will have to be used as follows:

1) Transfer the tool carrier arm to the outside plane of the tyre.

2) Take the mobile control unit to work position C.

3) Rotate the wheel and at the same time move the hook tool forward inserting it between rim and bead until it is anchored to the bead (**See Fig. I**).



4) Move the rim 4-5 cm from the tool taking care that it does not unhook from the bead.

5) Move the hook tool towards the outside until the red reference dot is by the outside edge of the rim.

6) Take the mobile control unit to

position B.

7) Insert lever (A, Fig. I) between rim and bead at the right of the tool.

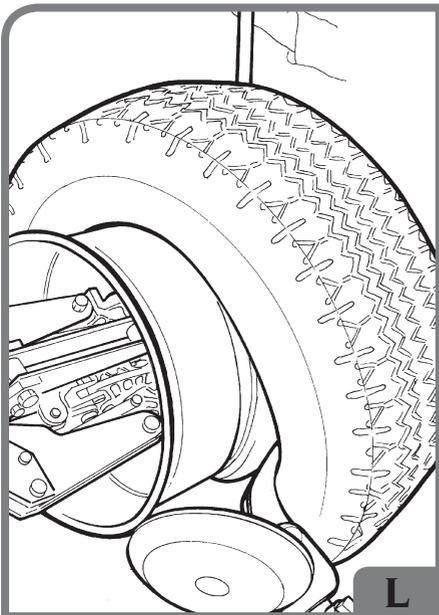
8) Press down on the lever and lower the wheel to bring the edge of the rim about 5 cm from the hooked tool.

9) Turn the wheel anticlockwise pressing down on lever until the bead is completely off.

10) Move the tool carrier arm to its non-working position and then move it to the inside plane of the wheel.

11) Take the mobile control unit to work position D.

12) Turn the hook tool 180° and insert it between rim and bead (see Fig. L). Move it until the bead is by the edge of the rim (best to do this with the wheel turning).



13) Move the rim about 4-5 cm from the

tool making sure the hook does not detach from the rim.

14) Take the mobile control unit to work position B.

15) Move the hook tool so that its red reference dot is about 3 cm inside the rim.

16) Insert lever LA (A, Fig. I) between rim and bead at the right of the tool.

17) Press down on the lever and lower the wheel to bring the edge of the rim about 5 cm from the hooked tool.

Turn the wheel anticlockwise pressing down on lever until the tyre comes completely off the rim.



DANGER!

When the beads come off the rim, the tyre will fall. Check to make sure there are no bystanders in the work area.

MOUNTING

Tubeless tyres can be mounted using either the bead breaker disk or the hook tool.

If the tyre is not problematic, use the bead loosener disk.

If the tyre is very rigid, the hook tool must be used.

TYRE MOUNTING WITH THE DISK

Follow these steps:

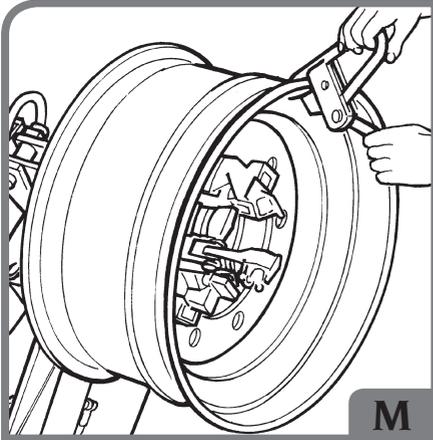
1) If the rim has been removed from the spindle, put it back on the spindle as described in the section on "Clamping the wheel".

2) Lubricate both beads and the rim with tyre manufacturer recommended lubricant.

3) Attach the clip to the outside edge of

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the rim at the highest point (**See Fig. M**).



CAUTION!

Make sure the clip is firmly attached to the rim.

4) Take the mobile control unit to work position B.

5) Put the tyre on the platform and lower the spindle (make sure the clip is at the high point).

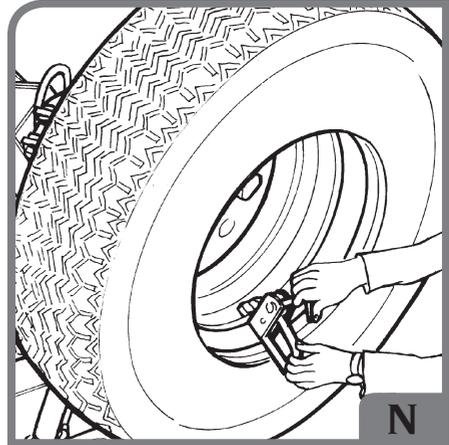
6) Lift the rim with the tyre hook to it and turn it anticlockwise about 15-20 cm. The tyre will be positioned tilted across the rim.

7) Take the mobile control unit to work position C.

8) Position the bead loosener disk against the second bead of the tyre and turn the spindle until the clip is at the low point (at 6 o'clock).

9) Move the disk away from the wheel.

10) Remove the clip and replace it at 6 o'clock outside the second bead (See Fig. N**).**



11) Turn the spindle clockwise 90° to bring the clip to 9 o'clock.

12) Move the disk forward until it is about 1-2 cm inside the edge of the rim. Begin to turn the spindle clockwise checking to make sure that, with a 90° turn, the second bead begins to slip into the centre well.

13) When the bead is fully mounted, move the tool away from the wheel, tip it to its non-working position and remove the clip.

14) Position the platform under the wheel, lower the spindle until the wheel rests on the platform.

15) Take the mobile control unit to work position B.

16) Close the arms of the spindle completely. Support the wheel to prevent it falling off.



DANGER!

This operation can be extremely dangerous.

Do it manually only if you are certain you can keep the wheel balanced. For large and heavy tyres an ad-

equate lifting device must be used.

17) Move the platform to remove the wheel from the spindle.

18) Remove the wheel.

NB: If the tyre permits it, the operation described above can be speeded up by mounting both beads at the same time:

- Follow the steps described under points 1-5 described above but instead of attaching the clip to just the first bead (refer to point 5) clip it to both.

- Lift the rim with the tyre hooked to it and turn it anticlockwise 15-20 cm (clip at 10 o'clock).

- Follow the steps described in points 12-18 above.

MOUNTING WITH THE HOOKED TOOL

1) Follow the steps described in points 1-6 for mounting with the disk.

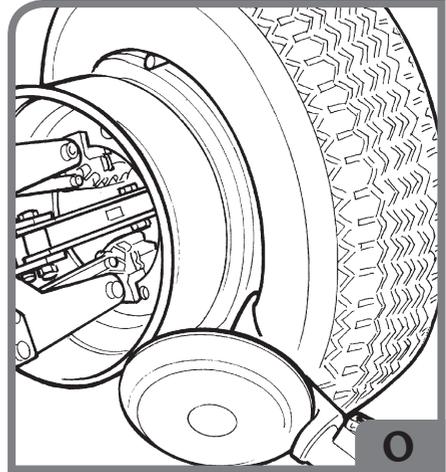
2) Move the tool carrier arm to its non-working position.

Move it to the inside plane of the tyre and rehook it at this position.

3) Check to make sure the hook tool is positioned on the wheel side.
If not, press lever and turn it 180°.

4) Take the mobile control unit to work position D.

5) Move the tool forward until the red reference dot is lined up with the outside edge of the rim and about 5 mm from it (**See Fig. O**).



6) Take the mobile control unit to work position C.

7) Move to the outside of the wheel and check the exact position of the tool visually and adjust it as needed.

Then turn the spindle clockwise until the clip is at the bottom (6 o'clock).
The first bead will be on the rim.

8) Remove the clip.

9) Take the mobile control unit to work position D.

10) Remove the tool from the tyre.

11) Move the tool carrier arm to its non-working position.

Move it to the outside plane of the tyre and rehook it in this position.

12) Turn the tool 180° with lever.

13) Attach the clip at the bottom (6 o'clock) outside the second bead.

14) Take the mobile control unit to work position C.

15) Turn the spindle clockwise to about

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90° (clip at 9 o'clock).

16) Bring the tool forward until the red reference dot is lined up with the outside edge of the rim and about 5 mm from it.

Begin to turn the spindle clockwise and check if, after about 90° of rotation the second bead has started to slip into the centre well.

Continue turning until the clip is at the bottom (6 o'clock).

The second bead will now be mounted on the rim.

17) Follow the steps described in points 13-18 for mounting with the disk since this will ensure that the wheel is removed correctly from the machine.

TUBED WHEELS

BEAD BREAKING

WARNING: Unscrew the bush which fixes the valve when deflating the tyre so that the valve, coming in the inside of the rim, is not an obstacle during bead breaking.

Follow all the steps described previously for bead breaking tubeless tyres.

With tubed tyres, however, stop disk movement as soon as the bead has loosened to avoid damaging the tube inflation valve.

DEMOUNTING

1) Take the mobile control unit to work position C.

2) Tip the tool carrier arm to its non-working position.

Move it to the outside plane of the wheel and rehook it in this position.

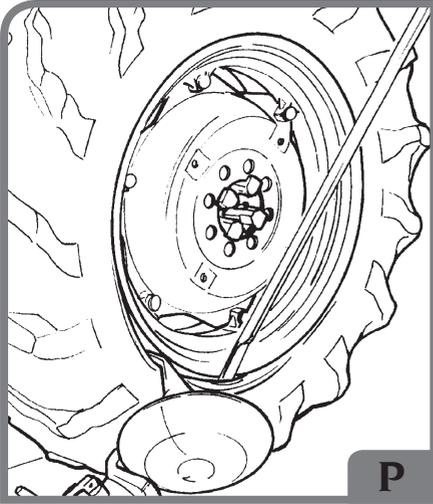
3) Rotate the wheel and at the same time move the hook tool forward inserting it between rim and bead until it is anchored to the tool.

4) Move the rim 4-5 cm from the tool taking care that it does not unhook from the bead.

5) Move the hook tool towards the outside until the red reference dot is by the outside edge of the rim.

6) Take the mobile control unit to work position B.

7) Insert lever (**see Fig. P**) between rim and bead at the right of the tool.



8) Press down on the lever and lower the wheel to bring the edge of the rim about 5 mm from the hooked tool.

9) Turn the wheel anticlockwise pressing down on lever until the bead is completely off.

10) Move the tool carrier arm to its non-working position.

Lower the spindle until the tyre is pressed down against the platform .

As the platform is moved slightly towards the outside, the tyre will open a little and thus create enough space to remove the inner tube.

11) Remove the inner tube and lift the wheel back up.

12) Take the mobile control unit to work position D.

13) Move the tool carrier arm to the inside plane of the tyre, turn the hook tool 180° and lower the arm to its work position.

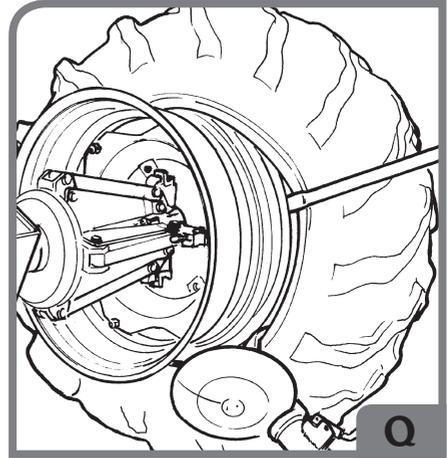
Insert it between rim and bead and move it until the bead is by the from edge of the rim (best to do this with the wheel turning).

14) Move the rim about 4-5 cm from the tool making sure the hook does not detach from the rim.

15) Portarsi con la colonnetta mobile in posizione di lavoro B.

16) Move the hook tool so that its red reference dot is about 3 cm inside the rim.

17) Insert lever between rim and bead at the right of the tool (**See Fig. Q**).



18) Press down on the lever and lower the wheel to bring the edge of the rim about 5 cm from the hooked tool.

Turn the wheel anticlockwise pressing down on lever until the tyre comes completely off the rim.



DANGER!

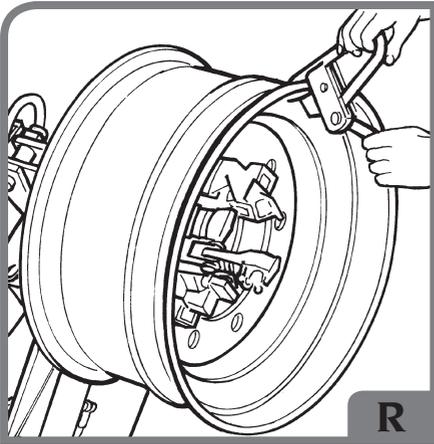
When the beads come off the rim, the wheel will fall.

Check to make sure there are no bystanders in the work area.

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MOUNTING

- 1) If the rim has been removed from the spindle, put it back on the spindle as described in the section on "Clamping the wheel".
- 2) Lubricate both beads and the rim with tyre manufacturer recommended lubricant.
- 3) Attach the clip to the outside edge of the rim at the highest point (**See Fig. R**).



CAUTION!

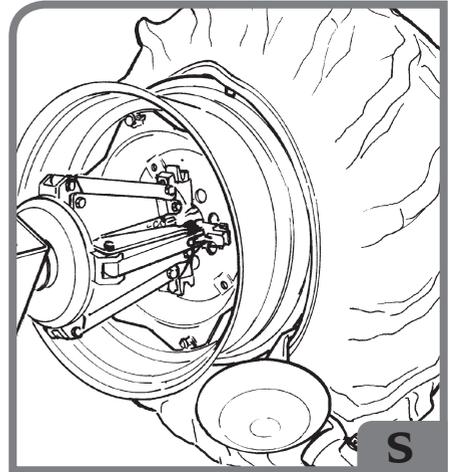
Make sure the clip is firmly attached to the rim.

- 4) **Take the mobile control unit to work position B.**
- 5) Put the tyre on the platform and lower the spindle (make sure the clip is at the high point) to hook the first bead on the clip.
- 6) Lift the rim with the tyre hook to it and turn it anticlockwise about 15-20 cm. The tyre will be positioned tilted across the rim.
- 7) Move the tool carrier arm to its non-

working position.

Move it to the inside plane of the tyre and rehook it in this position.

- 8) Check to make sure the hook tool is positioned on the wheel side. If not, press lever and turn it 180°.
- 9) **Take the mobile control unit to work position D.**
- 10) Move the tool forward until the red reference dot is lined up with the outside edge of the rim and about 5 mm from it (**See Fig. S**).



- 11) **Take the mobile control unit to work position C.**
- 12) Move to the outside of the wheel and check the exact position of the hook visually and adjust it as needed. Then turn the spindle clockwise until the clip is at the bottom (6 o'clock). The first bead will be on the rim. Remove the clip.
- 13) **Take the mobile control unit to work position D.**
- 14) Remove the tool from the tyre.
- 15) Move the tool carrier arm to its non-

working position.

Move it to the outside plane of the tyre.

16) Turn the tool 180° with lever.

17) Take the mobile control unit to work position B.

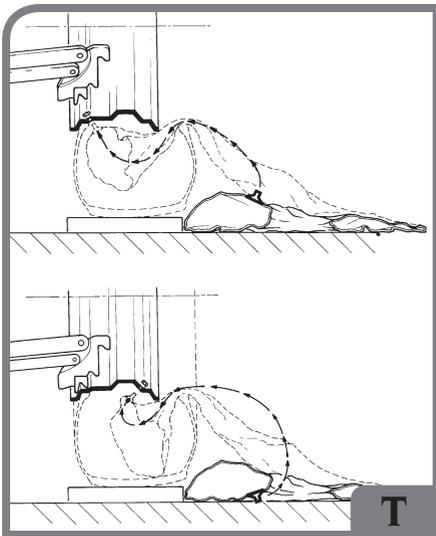
18) Turn the spindle until the valve hole is at the bottom (6 o'clock).

19) Move the platform under the wheel and lower the spindle until the tyre is pressed down against the platform .

As the platform is moved slightly towards the outside, the tyre will open a little and thus create enough space to insert the inner tube.

NB: The valve hole may be asymmetrical to the centre of the rim. In this case position and insert the inner tube as shown in Fig. T.

Insert the valve through the hole and fix it with its locking ring.



20) Place the inner tube in the centre well of the rim.

NB: to facilitate this, turn the spindle clockwise.

21) Turn the spindle until the valve is at the bottom (6 o'clock).

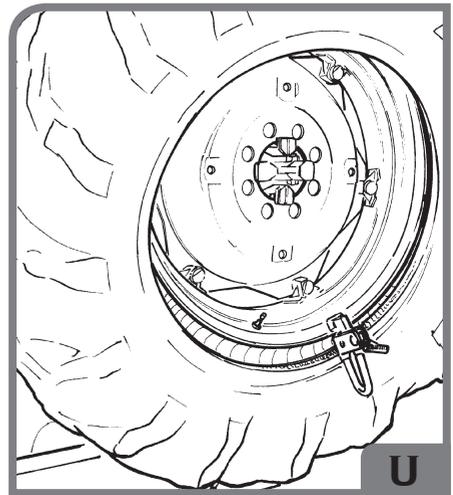
22) Inflate the inner tube a little (until it has no folds) so as not to pinch it while mounting the second bead.

23) Attach an extension to the valve and then remove the locking ring.

NB: The purpose of this operation is to allow the valve to be loose so that it is not ripped out during second bead mounting.

24) Take the mobile control unit to work position C.

25) Lift the wheel again and attach the PC clip outside the second bead about 20 cm to the right of the valve (**See Fig. U**).



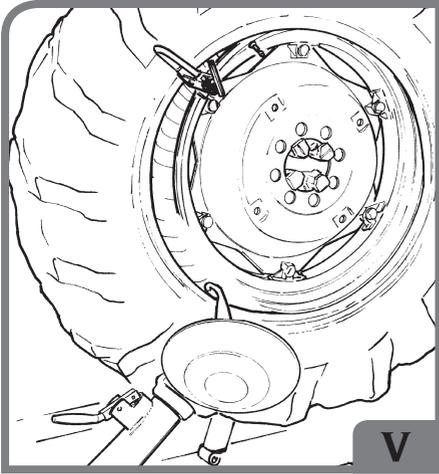
26) Turn the spindle clockwise until the clip is at 9 o'clock.

27) Move the tool carrier arm to its working position.

28) Bring the tool forward until the red reference dot is lined up with the outside edge of the rim and about 5 mm from it.

UK

29) Turn the spindle clockwise until the tyre is completely mounted on the rim (see Fig. V).



30) Remove the clip. Remove the hook tool by turning the spindle anticlockwise and moving it towards the outside.

31) Tip the tool carrier arm to its non-working position.

32) Position the platform directly under the wheel and lower the spindle until the wheel rests on the platform.

33) Take the mobile control unit to work position B.

34) When the wheel is resting on the platform, check to make sure the valve is perfectly centered with its hole.

If it is not, turn the spindle slightly to adjust the position.

Fix the valve with its locking ring and remove the extension.

35) Close the arms of the spindle completely. Support the wheel to prevent it falling off.



DANGER!

This operation can be extremely dangerous.

Do it manually only if you are certain you can keep the wheel balanced.

For large and heavy tyres an adequate lifting device must be used.

36) Move the platform to release the wheel from the spindle.

37) Remove the wheel.

WHEELS WITH SPLIT RING

BEAD BREAKING AND DEMOUNTING

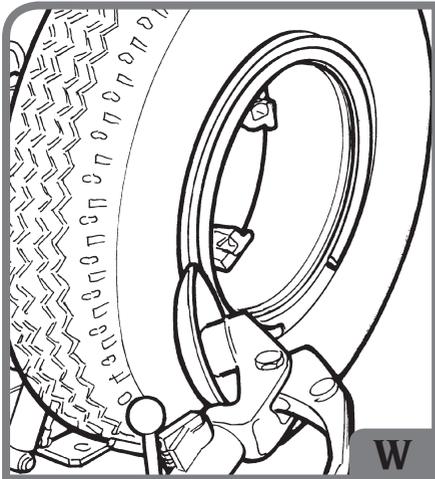
WHEELS WITH 3-PIECE SIDE RINGS

1) Clamp the wheel on the turntable, as previously described, and ensure that it is deflated.

2) Move the mobile control unit to working position C.

3) Lower the tool holder arm into its working position until it hooks with the ratchet.

4) Position the bead breaker disc flush with the side ring, see Fig. W.



5) Turn the turntable and advance the bead breaker disc with small forward movements following the side ring profile until the first bead is completely detached.

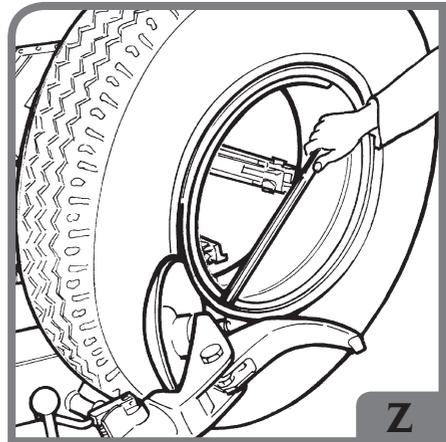
N.B.: lubricate during this operation.



CAUTION

For wheels with an inner tube, be extremely carefully when stopping the bead breaker disc from moving forward immediately after the bead is detached to prevent damaging the valve and the inner tube.

6) Repeat the operation, making the bead breaker disc move forward against the side ring (see fig. Z) until the locking ring is freed, which will be removed using the side ring lever or with the help of the bead breaker disc.



7) Remove the side ring.

8) Move the tool holder arm away from the rim edge.

Release the ratchet and lift the arm to the non-working position.

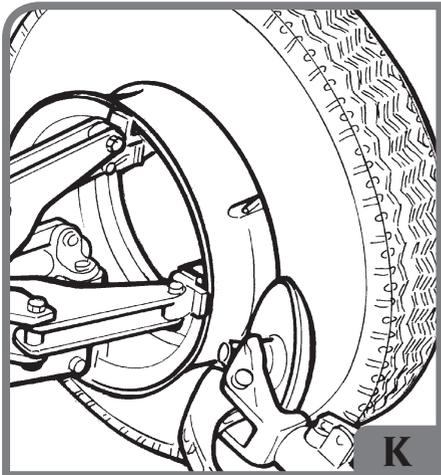
Move the tool holder arm to the inner side of the wheel.

9) Press the tool rotation lever and turn it 180°, the tool will lock automatically. Lower the arm to the working position.

10) Turn the turntable and advance the bead breaker disc with small forward move-

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ments following the side ring profile until the second bead is completely detached. **N.B.:** lubricate during this operation. Continue to push the tyre, moving the bead breaker disc forward until about half the tyre has come out of the rim (see **Fig. K**).



11) Move the tool holder arm to the non-working position.

12) Move the mobile platform directly under the tyre.

13) Lower the turntable until the tyre rests on the platform.

14) Move the mobile control unit to working position B.

15) Move the platform outward until the tyre is completely removed from the rim, making sure the valve is in its seat.

WHEELS WITH 5-PIECE SIDE RINGS

1) Clamp the wheel on the turntable, as previously described, and ensure that it is deflated.

2) Move the mobile control unit to working position C.

3) Lower the tool holder arm into its working position until it engages with the ratchet.

4) Using the control lever, position the wheel so that the bead breaker disc skims the outer edge of the shoulder side rim.

5) Turn the turntable and at the same time move it forward until detaching the side ring from the rim, being careful not to damage the O-ring.

6) Repeat the operation, making the bead breaker disc move forward against the side ring (see **fig. Z**) until the locking ring is freed, which will be removed using the side ring lever or with the help of the bead breaker disc.

7) Remove the O-ring.

8) Move the tool holder arm away from the rim edge. Release the ratchet and lift the arm to the non-working position. Move the tool holder arm to the inner side of the wheel.

9) Press the tool rotation lever and turn it 180°, the tool will lock automatically. Lower the arm to the working position.

10) Move the mobile control unit to working position D.

11) Turn the turntable and lower it at the same time in order to insert the bead breaker disc between the bead and the

rim edge.

Only when the bead starts to detach, move the disc forward until positioning the external bead flush with the eternal rim edge.

N.B.: Lubricate during this operation.

12) Tilt the tool holder arm to the non-working position.

13) Move the mobile control unit to working position B.

14) Move the mobile platform directly under the tyre.

15) Lower the turntable until the tyre rests on the platform.

16) Move the platform outward until the tyre (with the attached side ring) comes off the rim.

17) Remove the rim from the turntable.

18) Position the tyre on the platform with the side ring turned towards the turntable.

19) Clamp the side ring on the turntable as described for WHEEL CLAMPING.



CAUTION

The tyre is not fastened securely to the side ring.

Any strain on it during positioning and/or clamping could cause it to detach and fall.

20) Move the mobile control unit to working position D.

21) Lift the wheel.

22) Return the tool holder arm to the working position.

23) Position the turntable so the bead breaker disc is perfectly lined up with the tyre bead.

24) Turn the turntable and at the same time move the bead breaker disc forward until the tyre exits the side ring completely.



CAUTION!

When the beads come off the rim, the tyre will fall.

Make sure that no one is accidentally located in the work area.

MOUNTING

WHEELS WITH 3-PIECE SIDE RINGS

1) Move the turntable arm to the non-working position.

If the rim has been removed from the turntable, reclamp it as described in the "WHEEL CLAMPING" paragraph.

N.B.: If the wheel has an inner tube, position the rim with the valve slot at the bottom (at 6 o'clock).

2) Lubricate the tyre beads and rim using the recommended soapy solution.

3) Move the mobile control unit to working position B.

4) Move the mobile platform outward in order to place the tyre on it.

N.B.: If the wheel has an inner tube, position the tyre with the valve at the bottom (at 6 o'clock).

5) Lower or lift the turntable in order to exactly centre the rim to the tyre.

6) Move the platform inward to make the

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rim enter the tyre.

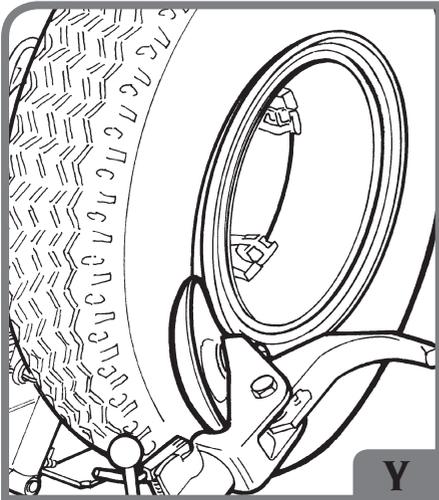
CAUTION: If the tyre has an inner tube, push the valve inside so it will not be damaged.

Move forward with the platform until the rim is completely inserted in the tyre.

7) Move the tool holding arm to the external side then lower it to the working position with the bead breaker disc turned towards the wheel.

N.B.: If the tyre is not inserted sufficiently on the rim, move the turntable until the tyre bead is positioned in correspondence of the bead breaker disc. Move the disk forward (and at the same time turn the turntable) until it is completely inserted.

8) Put the side ring on the rim and then install the locking ring with the help of the bead breaker disc as shown in **Fig. Y**.



9) Move the tool holder arm to its non-working position and completely close the turntable clamps being careful to support the wheel to keep it from falling.



This operation can be extremely dangerous!

Perform it manually if you are absolutely certain you can maintain the wheel equilibrium only.

For heavy, large sized wheels you MUST use a suitable lifting device.

10) Move the platform to move the wheel away from the turntable.

11) Remove the wheel.

WHEELS WITH 5-PIECE SIDE RINGS

1) Move the tool holder arm to the non-working position.

If the rim has been removed from the turntable, reclamp it as described in the "WHEEL CLAMPING" paragraph.

2) Lubricate the tyre beads and rim using the recommended soapy solution.

3) Move the mobile control unit to working position B.

4) Move the mobile platform outward in order to place the tyre on it.

5) Lower or lift the turntable in order to exactly centre the rim to the tyre.

6) Move the platform inward to make the rim enter the tyre. Move it forward until it is completely inserted.

7) Insert the shoulder side ring on the rim (with the lock ring already mounted).

N.B.: If the rim and the side ring have slits for fixing devices, make sure they are lined up with each other.

8) Move the mobile control unit to working position C.

9) Move the tool holder arm to the external side then lower it to the working position with the bead breaker disc turned towards the wheel.

N.B.: If the shoulder side ring is not inserted sufficiently on the rim, move the turntable until the tyre bead is positioned in correspondence of the bead breaker disc. Move the disk forward (and at the same time turn the turntable) until the sealing O-ring seat is “uncovered”.

10) Lubricate the O-ring and insert it in its seat.

11) Move the mobile control unit to working position B.

12) Put the locking ring on the rim with the help of the bead breaker disc as shown in **Fig. Y**.

13) Move the tool holder arm to its non-working position and completely close the turntable clamps being careful to support the wheel to keep it from falling.



CAUTION

This operation can be extremely dangerous!

Perform it manually if you are absolutely certain you can maintain the wheel equilibrium only.

For heavy, large sized wheels you MUST use a suitable lifting device.

14) Move the platform to move the wheel away from the turntable.

15) Remove the wheel.



CAUTION

Do not inflate the tyre with the wheel still mounted on the turntable.

Tyre inflation is dangerous and should only be done by removing the wheel from the turntable and placing it inside a safety cage.

ORDINARY MAINTENANCE



WARNING!

Each maintenance operation must be effected only after the disconnection of the plug from electric network.

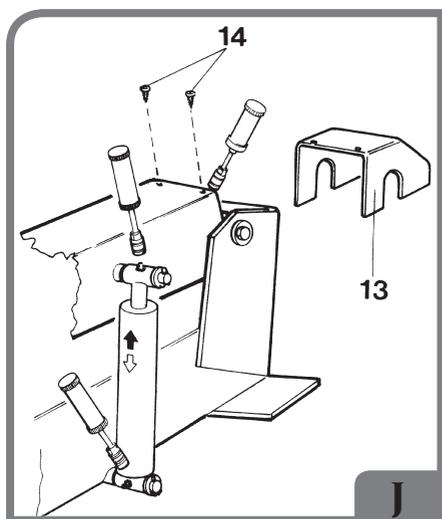
To ensure that this tyre changer works perfectly over the years, carry out the routine maintenance schedule described below:

1) Lubricate the following parts from time to time, after a thorough cleaning with naphtha:

- the various swivels on the spindle
- the tool bracket slide runner
- the carriage guide plate

2) Grease the spindle bracket lift cylinder from time to time and also its swivel. Add the grease through the grease nipples (**Fig. J**) using ordinary lubricating grease.

NB: To reach the grease nipple on the bracket, remove the plastic cap by removing the two self-tapping screws as shown in **Fig. J**.



3) From time to time **check** the oil level in the hydraulic power pack. Use the dipstick under the reservoir cap.

If necessary top up with Esso Nuto H46 or similar hydraulic oil (eg, Agip Oso 46, Shell Tellus Oil 46, Mobil DTE 25, Castrol Hyspin AWS 46, Chevron RPM EP Hydraulic Oil 46, BP Energol HLP).

4) From time to time **check** the oil level in the gear unit which, when the tool carrier bracket is completely lowered at end travel, should not show the sight glass on the gear casing as completely empty.

If necessary top up with Esso Spartan EP 320 or similar oil (eg, Agip FI REP 237, BP GRX P 320, Chevron Gear Compound 320, Mobil Gear 632, Shell Omala Oil 320, Castrol Alpha SP 320).

NB: If the oil in the gear unit or the hydraulic power pack has to be changed, note that the gear unit casing and the power pack reservoir have specific drain plugs.

5) Periodically **check** the horizontal carriage; play between the guides and slide shoes (**5 Fig. J/1**) must be evident.

N.B.: There may be some slight mechanical play at the tool-holder arm during assembly and disassembly operations.

For longer component working life, it is advisable to adjust the slide shoes as described below:

TOOL-HOLDER CARRIAGE SLIDE SHOE ADJUSTMENT

a) Disconnect the machine from the mains.

b) Lift the tool-holder arm to the outside working position.

c) Loosen the four nuts (**1 Fig. J/1**) for

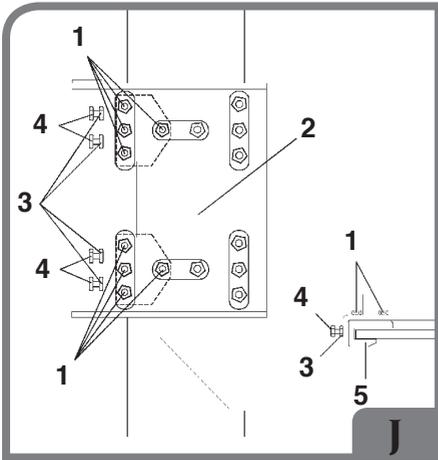
each lower slide shoe of the carriage (2 **Fig. J/I**).

d) Loosen the four register locking nuts (3 **Fig. J/I**)

e) Screw each of the four slide shoe register screws (4 **Fig. J/I**) a quarter turn.

f) Tighten the lower slide shoe locking nuts (1 **Fig. J/I**).

g) Tighten the four register locking nuts (3 **Fig. J/I**)



N.B.: If the adjustment is insufficient, and there is still play, adjust the screws further, repeating the procedure described above until all mechanical play has been eliminated.



WARNING!

Dispose of the used oil following the present legislation on the matter.

TROUBLE SHOOTING

After having switched the general button on the electric pack, the general warning light does not light on and no control can function.

CAUSAS

- 1) The power plug is not inserted.
- 2) No power from the mains electric supply.

REMEDIES

- 1) Insert the plug correctly in its socket.
- 2) Reset the mains electric supply.

After having switched the general button on the general warning light also switches on but the motor on the hydraulic power pack does not function.

CAUSAS

- 1) The magneto-thermic switch for motor protection is working.

REMEDIES

- 1) Call for technical aid to see what is the problem and restore the machine.



WARNING!

If, inspite of the above mentioned indications the tyre changer does not work properly, do not use it and call for technical assistance.

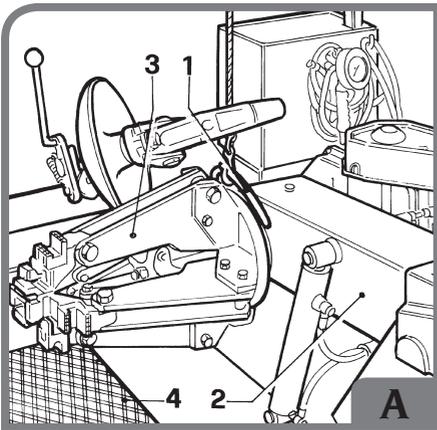
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MOVING THE MACHINE

The tyre changer has got a fork (**1, Fig. A**) which has been positioned there on purpose for moving the machine.

Follow these instructions:

- 1)** Low the turntable holding arm (**2, Fig. A**) completely down.
- 2)** Close completely the jaws of the chuck (**3, Fig. A**).
- 3)** Bring the sliding table (**4, Fig. A**) at the end of its travel, near the arm.
- 4)** Insert into the lifting fork a hoisting belt (at least 60 mm wide and of a length sufficient to bring the hook of the belt above the tyre changer).
- 5)** With the special belt ring bring the 2 ends of the belt together and lift with a sufficiently strong lifting truck.



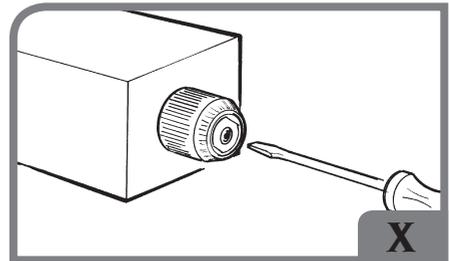
STORING

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

- 1)** Close the jaws of the chuck; low the chuck holding arm down; low the tool holding arm down, in working position.
- 2)** Disconnect the machine from all power sources.
- 3)** Grease all the parts that could be damaged if they dry out:
 - the chuck
 - the slot of the tool holding arm
 - the slides of the carriage
 - the tool

Empty oil/hydraulic fluid reservoirs and wrap the machine in a sheet of protective plastic to prevent dust from reaching the internal working parts.

- If the machine is to be working again after a long storing period, it is necessary to:
- put the oil into the reservoirs again.
 - with a turnscrew press the pin on the middle of the electro-valves of the hydraulic power pack (**see Fig. X**) in order to manually unlock the electro-valves which could be locked after a long period of inactivity.
 - restore the electric connection.



SCRAPPING A MACHINE

If the machine is to be scrapped, remove all electrical, electronic, plastic and metal parts and dispose of them separately in accordance with current provisions as prescribed by law.

ENVIRONMENTAL INFORMATION

The disposal procedure described below only applies to machines with the symbol of the waste bin with a bar across it on their



data plates 

This product may contain substances that can be hazardous to the environment and to human health if it is not disposed of properly.

We are therefore providing you with the information below in order to prevent these substances from being released into the environment, and to improve the use of natural resources.

Electrical and electronic equipment must never be disposed of in the usual municipal waste but must be separately collected for their proper treatment.

The crossed-out bin symbol, placed on the product and on this page, reminds the user that the product must be disposed of properly at the end of its life.

Thus, the hazardous consequences that non-specific treatments of the substances contained in these products, or improper use of parts of them, may have on the environment or on human health are prevented. Furthermore, this helps to recover, recycle and reuse many of the materials contained in these products.

Electrical and electronic manufacturers and distributors set up proper collection and treatment systems for these products for this purpose.

At the end of the product's working life, contact your supplier for information about disposal procedures.

When you purchase this product, your supplier will also inform you that you may return another worn-out appliance to him free of charge, provided it is of the same type and has provided the same functions as the product just purchased.

Any disposal of the product performed in a different way from that described above will be liable to the penalties provided for by the national regulations in force in the country where the product is disposed of.

Further measures for environmental protection are recommended: recycling of the internal and external packaging of the product and proper disposal of used batteries (only if contained in the product).

With your help, we can reduce the amount of natural resources used to produce electrical and electronic equipment, minimise the use of landfills to dispose of old products, and improve quality of life by preventing the discharge of potentially hazardous substances into the environment.



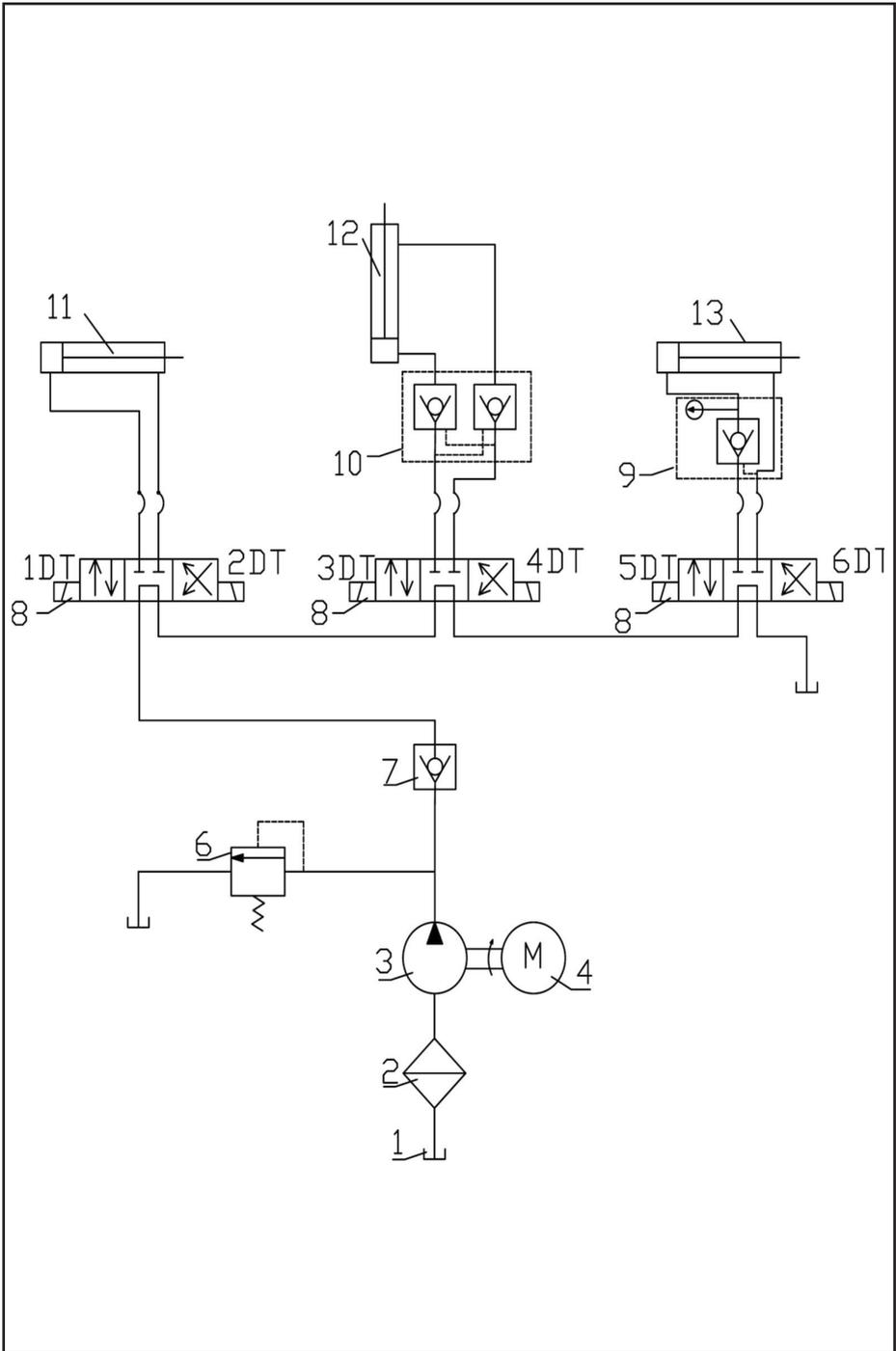
WARNING!

If this machine catches fire, use dust or CO² extinguishers only.

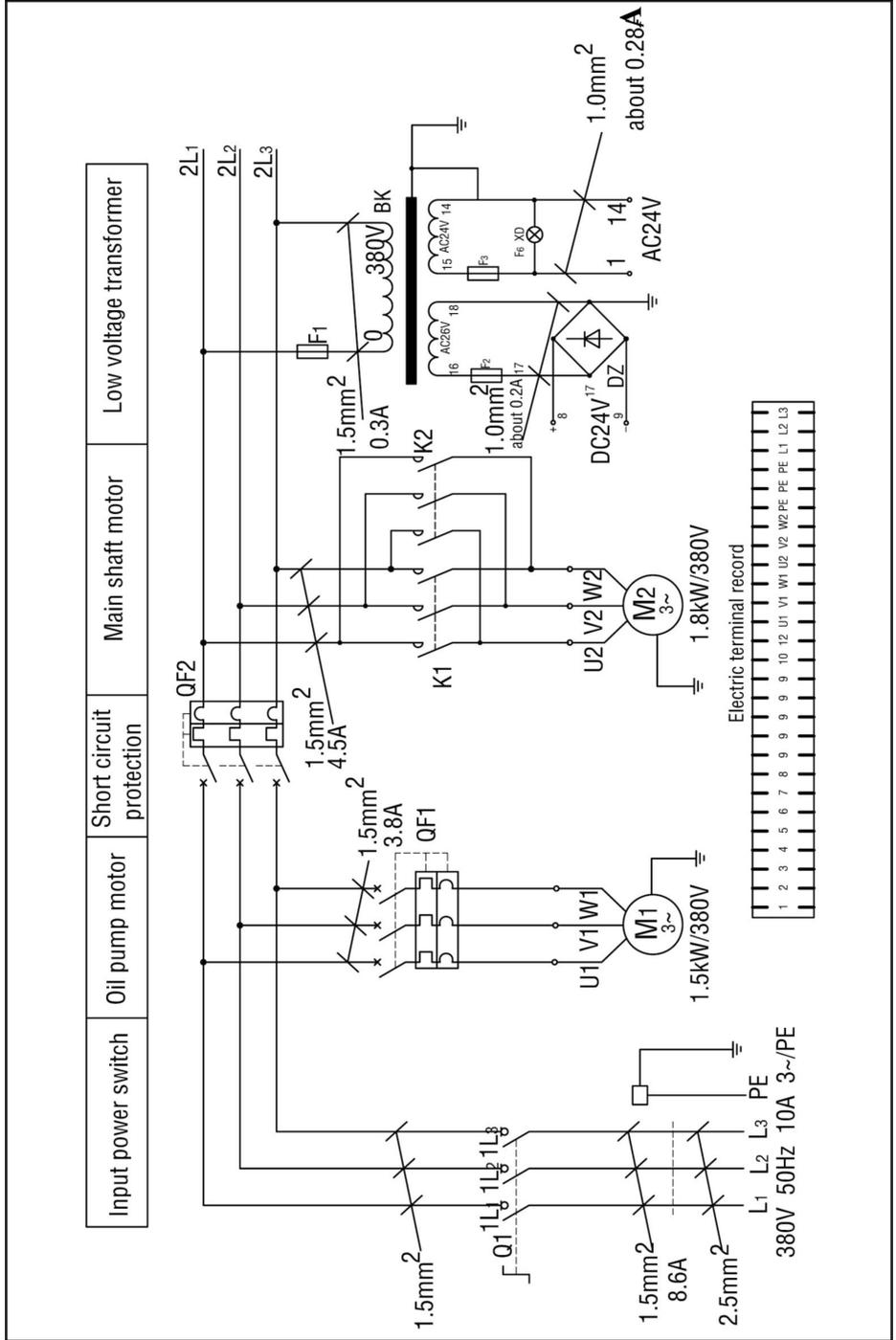


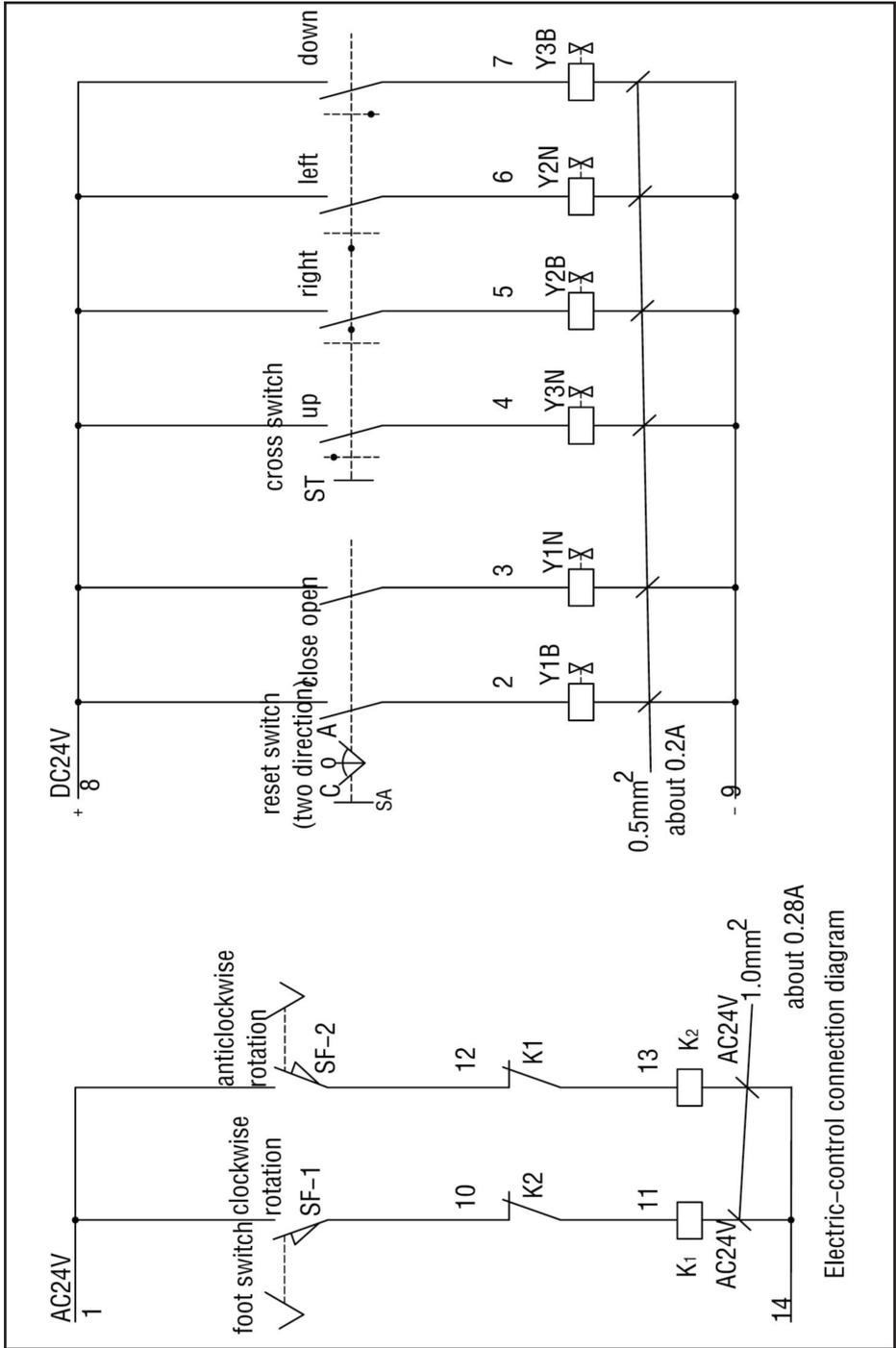
**SCHEMA PNEUMATICO ED ELETTRICO
 HYDRAULIC AND ELECTRICAL DRAWING
 SCHÉMA HYDRAULIQUE ET ÉLECTRIQUE
 ELEKTRISCHE UND HYDRAULISCHE DIAGRAMM
 DIAGRAMA ELÉCTRICO E HIDRÁULICO**

Hydraulic drawing	Electrical drawing
01 oil tank	
02 filter	M1 pump motor
03 oil pump	M2 main shaft motor
04 motor	BK transformer
05 solenoid valve	QF1 circuit breaker
06 overflow valve	QF2 circuit breaker
07 One-way valve	K1 AC contactor
08 solenoid valve	K2 AC contactor
09 valve	SA toggle switch
10 oil guide	ST cross switch
11 hydraulic oil tank	SF-1 main switch
12 hydraulic lock	SF-2 main switch
13 hydraulic oil tank	Y1、Y2、Y3 solenoid valve coil
14 hydraulic oil tank	Q1 power switch
15 hydraulic oil tank	

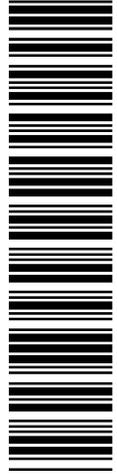


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IT - Dichiarazione CE di conformità - Dichiarazione di conformità UE*
EN - EC Declaration of conformity - EU Declaration of conformity*
FR - Déclaration EC de conformité - Déclaration UE de conformité*
DE - EG – Konformitätserklärung - EU-Konformitätserklärung*
ES - Declaración EC de conformidad - Declaración UE de conformidad*



COMIM - Cod.4-104099B del 11/2017



- IT** Quale fabbricante dichiara che il prodotto: **SG 14"-26"**
al quale questa dichiarazione si riferisce e di cui abbiamo costituito e deteniamo il relativo fascicolo tecnico è conforme alle seguenti normative e Direttive:
*: Valida solo per macchine marcate CE
- EN** As producer declare that the product: **SG 14"-26"**
to which this statement refers, manufactured by us and for which we hold the relative technical dossier, is compliant with the following standards and Directives:
*: Valid only for EC-marked machines
- FR** Déclarons que le matériel: **SG 14"-26"**
objet de cette déclaration, dont nous avons élaboré le livret technique, restant en notre possession, est conforme aux normes et Directives suivantes :
*: Valable uniquement pour les machines avec marquage CE
- DE** Erklärt hiermit dass das product: **SG 14"-26"**
Worauf sich die vorliegende Erklärung bezieht und dessen technische Akte diese Firma entwickelt hat und innehält, den anforderungen folgender normen und Richtlinien entspricht:
*: Gilt nur für EG-gekennzeichnete Maschinen
- ES** Declara que el producto: **SG 14"-26"**
al cual se refiere la presente declaración y del que hemos redactado y poseemos el correspondiente expediente técnico, se conforma a las siguientes normas y Directivas:
*: Válida sólo para máquinas con marcado CE

Conforme a:/Conforms to:/Conforme à:/ Entspricht:/Conforme a: EN ISO/IEC 17050-1 - EN ISO/IEC 17050-2