



AGS/52L (2005)

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Italiano	Manuale d'uso	3
English	Operator's manual	33
Français	Manuel d'utilisation	63
Deutsch	Betriebsanleitung	93
Español	Manual de uso	123

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Italiano

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Español

Elaborazione grafica e impaginazione

Ufficio **P**ubblicazioni **T**ecniche

CONTENTS

INTRODUCTION	35
TRANSPORT AND STORAGE.....	36
Handling	36
INSTALLATION	37
Installation clearances	37
Ambient conditions in the place of work	37
Anchoring the machine to the ground	37
ELECTRICAL HOOK-UP	38
SAFETY REGULATIONS	39
CHARACTERISTICS OF THE HEAVY DUTY TYRE CHANGERS	41
TECHNICAL BRIEF.....	41
MACHINE KIT	42
OPTIONAL ACCESSORIES	42
SPECIFIED CONDITIONS OF USE	43
MAIN OPERATING PARTS	44
Key to danger warning decals.	46
CONTROL MODULE COMMANDS.....	47
WHEEL CLAMP OPERATION	48
TYRE LUBRICATION	49
DEMOUNTING TRACTOR TYRES.....	50
MOUNTING TRACTOR TYRES.....	51
DEMOUNTING TUBELESS AND SUPERSINGLE TYRES.....	51
MOUNTING TUBELESS AND SUPERSINGLE TYRES	51
DEMOUNTING EARTHMOVING EQUIPMENT TYRES AND TYRES WITH RIM RINGS.....	52
MOUNTING EARTHMOVING EQUIPMENT TYRES AND TYRES WITH RIM RINGS.....	52
TYRE RETREADING.....	52
STOPPING THE MACHINE.....	52
TROUBLE SHOOTING	53
MAINTENANCE	55
SCRAPPING.....	56
OIL - WARNINGS AND RECOMMENDATIONS	57
RECOMMENDED FIRE-EXTINGUISHING EQUIPMENT.....	58
GLOSSARY	59
ELECTRICAL SYSTEM DIAGRAM	60
HYDRAULIC SYSTEM DIAGRAM.....	61

INTRODUCTION

The purpose of this manual is to furnish the owner and operator with a set of practical and safe instructions for the use and maintenance of the AGS/52L(2005) heavy duty tyre changers.

Follow all the instructions carefully and your tyre changer will assist you in your work and give lasting and efficient service in keeping with CORGHI traditions.

The following paragraphs define the levels of danger regarding the machine associated with the warning captions found in this manual:

DANGER

Refers to immediate danger with the risk of serious injury or death.

WARNING

Dangers or unsafe procedures that can cause serious injury or death.

ATTENTION

Dangers or unsafe procedures that can cause minor injuries or damage to property.

Read these instructions carefully before using the machine. Keep this manual and the illustrated material supplied with the machine in a folder near the place of operation, where it is readily accessible for consultation by the machine operator.

The technical documentation supplied is considered an integral part of the machine; in the event of sale all relative documentation must remain with the balancing machine.

The manual is only valid for the machine model and serial number indicated on the nameplate applied to the machine itself.



WARNING

Adhere to the contents of this manual: Corghi declines all liability in the case of actions not specifically described and authorised in this manual.

NOTE

Some of the illustrations in this manual have been taken from photographs of prototypes; the standard production model may differ slightly in certain respects.

These instructions are for the attention of persons with basic mechanical skills. We have therefore condensed the descriptions of each operation by omitting detailed instructions regarding, for example, how to loosen or tighten the fixing devices on the machine. Do not attempt to perform operations unless properly qualified and with suitable experience. In case of need, please contact our nearest authorised Service Centre for assistance.

TRANSPORT AND STORAGE

The packed tyre changer must be stored in a dry and suitably ventilated place. Set down each pack with sufficient clearance to read the indications on the sides of the packaging material.



WARNING

Do not stack other goods on top of the packing or damage may result.

- Packing dimensions (fig.1)

- Depth 1700mm
- Width 2120mm
- Height 1030mm

- Weight

- AGS/52L(2005) with packing..... 955kg
- AGS/52L(2005) 855kg

- Machine barycentre (fig.2)

- Width 1200mm
- Depth 1340mm

- Ambient storage temperature:..... -25° ÷ +55° C

Handling



WARNING

Perform all assembly and handling operations scrupulously as described. Failure to observe these recommendations could result in damage to the machine and jeopardise the personal safety of the operator.



WARNING

Before moving the machine check its barycentre and weight to make sure they are compatible with the lifting equipment you are about to use.

To move the packed machine insert the forks of a pallet truck in the channels in the base of the pallet (fig.2).



ATTENTION

It is not permitted to move the packed machine with a crane or hoist (fig. 3).

When moving the machine without its packing use lifting brackets A fig.4.



ATTENTION

Never attempt to use makeshift lifting points on mechanical parts that project from the machine structure.

When moving the machine after it has been installed position it as shown in fig.5 to assure that the load is balanced correctly.If necessary, disconnect the hydraulic power pack.

INSTALLATION



WARNING

Carry out the unpacking, assembly and installation operations described in this heading with great care.

Failure to observe these instructions may result in damage to the machine and injury to the operator or other persons.

Remove the original packing material, after having positioned it as shown on the outside and keep intact so that the machine can be safely shipped at a later date if necessary.

Installation clearances



WARNING (radio versions only)

Before installation, ensure that there are no machines working on the same frequency band within a 200 m radius of the chosen spot.

If there is interference, a different frequency band must be used.



WARNING

Choose the place of installation in strict observance of local regulations regarding safety in the workplace.

The machine must be placed on a stable and rigid floor to avoid the risk of structural deformation.

Position the machine so that it can be easily accessed from all sides. In particular, make sure that the minimum operating clearances around the machine are as specified in fig.6:

- at the front to permit unimpeded wheel loading and unloading;
- at the rear to provide good visibility of the work area.

IMPORTANT: for correct, safe use of the equipment, users must ensure a lighting level of at least 300 lux in the place of use.



ATTENTION

If the machine is to be installed outdoors, it must be properly protected from adverse weather by a roof.

Ambient conditions in the place of work

- Relative humidity: 30 - 95% (without condensation)
- Temperature: 0° - 55°C



WARNING

The machine must not be operated in potentially explosive atmospheres.

Anchoring the machine to the ground

If required, you can anchor the machine to the ground using the M10 anchor bolts in the places shown in fig.7.

ELECTRICAL HOOK-UP

The AGS/52L(2005) must be fed with three phase current plus neutral. Specify the supply voltage required at the time of the order.



WARNING

All operations required for the electrical hook-up of the machine must be carried out exclusively by a qualified electrician.

- The electrical supply must be suitably sized in relation to:
 - absorbed power specifications indicated on the machine dataplate.
 - the distance between the machine and the power supply hook-up point, so that voltage drops under full load do not exceed 4% (10% in the case of start-up) below the rated voltage specified on the dataplate.
- The user must equip the machine with the following:
 - a dedicated power plug in compliance with the relevant electrical safety standards.
 - a suitable circuit-breaker (residual current set to 30 mA) on the mains connection
 - power line fuses in accordance with specifications in the main wiring diagram of this manual.
 - a suitable earthing system installed on the workshop mains line
- To prevent unauthorised use of the machine, always disconnect the mains plug when the machine is not used (switched off) for extended periods of time.
- If the machine is connected directly to the power supply by means of the main electrical panel and without the use of a plug, install a key-operated switch or suitable lock-out device to restrict machine use exclusively to qualified personnel.



WARNING

A good ground connection is essential for the correct functioning of the machine. NEVER connect the machine ground wire to a gas pipe, water pipe, telephone cable or other unsuitable objects.

En

SAFETY REGULATIONS

This machine is for professional use only.



WARNING

This machine must not be used by more than one operator at a time



WARNING

Failure to observe these instructions and the relative danger warnings can cause serious injury to the operator or other persons.

Do not use the machine until you have read and understood all the danger/warning/attention notices in this manual.

This machine must be used only by qualified and authorised personnel. A qualified operator is construed as a person who has read and understood the manufacturer's instructions, is suitably trained, and is conversant with safety and adjustment procedures to be adhered to during operations. Operators are expressly forbidden from using the machine under the influence of alcohol or drugs capable of affecting physical and mental capacity.

The following conditions are essential:

- read and understand all the instructions on how to use the machine;
- have a thorough knowledge of the capacities and characteristics of the machine;
- keep unauthorised persons well clear of the area of operation;
- make sure that the machine has been installed in compliance with established legislation and standards;
- make sure that all machine operators are suitably trained, that they are capable of using the machine correctly and that they are adequately supervised during work;
- do not touch power lines or the inside of electric motors or other electrical equipment until the power has been disconnected;
- read this manual carefully and learn how to use the machine correctly and safely;
- always keep this manual in a place where it can be readily consulted when working with the machine and do not fail to refer to the manual whenever in need of confirmation or explanations.



WARNING

Do not remove or deface the Safety, Danger or Instruction decals. Replace any missing or illegible Safety, Danger or Instruction decals. Replacement decals can be obtained from your nearest CORGHI dealer.

- When using and carrying out maintenance on the machine, observe the unified industrial accident prevention regulations for high voltage industrial equipment and rotating machinery.
- Any unauthorised alterations made to the machine automatically release the manufacturer from any liability in the case of damage or accidents as a result of such alterations. Specifically, tampering with or removing the machine's safety devices is a breach of the regulations for industrial accident prevention.



WARNING

During work and maintenance operations, always tie up long hair and do not wear loose clothing, ties, necklaces, wristwatches or any other items that may get caught up in the moving parts.



WARNING

Keep unauthorised persons well clear of the area of operations (fig.8).



WARNING

Before performing maintenance work on the hydraulic plant set the machine to its rest position (fig.5) with the spindle arm lowered and the spindle completely closed.

CHARACTERISTICS OF THE HEAVY DUTY TYRE CHANGERS

The AGS/52L(2005) are electro-hydraulic tyre changers, designed using technology patented exclusively by CORGHI S.p.A.

The machines are designed to handle all types of wheels with one- piece rim (with centre well or rim ring) and within the weight and dimensional limits specified in the heading TECHNICAL BRIEF.

The machines are solidly constructed and offer particularly compact dimensions in consideration of its operational capacity. The machines operate with the wheel held vertically; operator commands are transmitted from a remote control module.

TECHNICAL BRIEF

- Maximum width 1880 mm
- Maximum length 2185 mm
- Maximum height 1640 mm
- 2 speed gear motor 1.3 - 1.85 kW
- Hydraulic pump motor 1.5 kW
- Machine weight 855 kg
- Rim sizes handled: from 11" to 56"
- Maximum wheel diameter 2200 mm
- Maximum wheel weight 1000 kg
- Maximum wheel width 980 mm
- fluid tank capacity 7,6 l
- Oil type OSO 32
- Noise level:
 - Weighted noise level A (L_{pA}) in working position..... < 70 dB(A)

The stated noise levels are emission levels and do not necessarily represent safe operating levels. Although there is a relationship between emission levels and exposure levels, this cannot be used reliably to establish whether or not further precautions are necessary. The factors which determine the level of exposure to which the operator is subjected include the duration of the exposure, the characteristics of the workplace, other sources of noise, etc. The permitted exposure levels may also vary from country to country. However, this information will enable the machine's user to make a more accurate evaluation of the hazard and risk.

MACHINE KIT

- Cod. 217617 Bead guide lever
The bead guide lever guides the bead of the tyre and keeps it in the centre well of the wheel.
- Cod. 219244 Rim gripper
The rim gripper, fixed firmly to the edge of the wheel before mounting, facilitates the task of lifting the tyre, inserting it into the centre well, and holding it in position.
- Cod. 236906 Bead lifting lever
The bead lifting lever keeps the bead on the tool during demounting of tractor tyres.
- Cod. 5-300329(4) Set of 4 extensions with jaws - 56"
The set of 4 jaw rods is for use with rims without wheel disc or with a diameter exceeding 36". The maximum operating capacity is 56".
- Cod. 435443 Grease gun
The syringe type grease gun is for recommended monthly greasing of all moving parts of the machine.

OPTIONAL ACCESSORIES

Please refer to relevant accessories catalogue.

En

SPECIFIED CONDITIONS OF USE

The AGS/52L(2005) tyre changers are designed exclusively for the mounting and demounting of tyres.



WARNING

Any other operations carried out on the machine are considered improper use and shall be construed as negligence.



DANGER

The manufacturer has not allowed for inflation on the machine.

If the operator decides to use his own equipment to partially fit the tyre bead on the machine, the pressure of 0.5 bar must NEVER be exceeded (unless the tyre manufacturer specifies lower pressures) as specified by UNI 10588, 09/96.



ATTENTION

Do not clean or wash wheels mounted on the machine with compressed air or water jets.



WARNING

When working with the machine it is strongly recommended to avoid using equipment or tools not manufactured by CORGHI.

Figure 10 shows the safety distances and the positions assumed by the operator during the various stages of work with the machine.

- A Positioning the wheel on the spindle
- B Inside bead breaking
- C Outside bead breaking, tyre mounting and demounting

MAIN OPERATING PARTS



WARNING

Get to know your machine: the best way to prevent accidents and obtain top performance from the machine is to ensure that all operators know how the machine works.

Learn the function and location of all commands.

Carefully check that all the commands on the machine are working properly.

To avoid accidents and injury, the machine must be installed properly, operated correctly and serviced regularly.

Fig.11

- A Master switch
- B Control module
- C Pressure gauge
- D Lifting bracket
- E Hydraulic power pack
- F Spindle
- G Bead breaker disk
- H Bead breaker tool
- I Spindle rotation speed switch
- L Arm locking hooks
- M Tool arm
- N Tool head

Start the machine by setting the master switch (A, fig.11) to the ON position and make sure that the hydraulic power pack motor is turning in the direction shown by the arrow (A, fig.12) on the motor casing.

If the motor is turning in the wrong direction stop the machine immediately and set up the motor for the correct direction of rotation to avoid damaging the pump assembly.

The entire machine uses low voltage power (24 V) except for the hydraulic power pack, which is fed with mains voltage. On the switch I fig. 11a to change the speed of the spindle from 4 rpm to 8 rpm. The two speeds help you get the most flexible use from the machine.

- high speed for smaller wheels;

- low speed for larger wheels.

NOTE

For the correct use of the machine and the increased life of its components, the tool holder traverse control (B fig. 15) must be used only for approach maneuvers only. All other operations must be performed with the spindle holder carriage traverse control only (A fig. 14).



WARNING

Make sure that all components of the hydraulic circuit are properly tightened. Caution: oil sprayed from leaking connections at high pressure can cause serious injury.

En



WARNING

Do not activate the tool arm (M, fig.11) lift command if the tool head (N, fig.11) is not installed.

The machine is fitted with a series of devices that ensure the safety of the operator.

1. The spindle arm is fitted with a microswitch that blocks the arm during its descent travel if it encounters an obstacle.
2. There is a semicircular guard on the rear of the spindle arm that prevents the risk of crushing between the fixed arm and the moving arm.
3. The spindle is fitted with four plates that prevent crushing between the spindle flanges.
4. The carriage with bushing has a safeguard to prevent crushing between the carriage traverse cylinder and carriage with bushing.
5. A rubber safeguard is fitted on the tool arm (casing with tools) to prevent crushing between the tool arm (casing with tools) and machine base.

NOTE

To work on small diameter wheels, slide off the tool head and position it in the second engagement hole (fig.13). This will optimise the position of the tool head with respect to the centre of the spindle.



WARNING

To prevent accidents during use of the standard or optional accessories, ensure that the mechanical parts applied are fitted correctly and properly fixed to the components. Keep a firm grip on manual accessories during work.



WARNING

Always check that the size of the tyre is compatible with the size of the wheel before proceeding with assembly.

Key to danger warning decals.



NEVER place your hands, arms or any other part of the body inside the table top while it is closing.



During descent of the self-centering device, whether with the wheel fitted or with the device open, keep at a safe distance to avoid the risk of crushing.



NEVER get between the tool head and the rim or wheel secured on the table top.



During adjustment of the tool head (weight 27 kg), keep your hands away from the point where the tool head rod strikes the casing.



Keep at a safe distance during tilting of the tool head in order to avoid crushing.



Before carrying out any operation with the tools make certain that the arm locking hooks are completely fastened.



For safety reasons, do not leave the wheel fixed on the table top during work breaks.

CONTROL MODULE COMMANDS

- Four-position joystick (A fig.14), with the following functions:
 - horizontal movement: controls spindle carriage traverse;
 - vertical movement: controls ascent and descent of the spindle carrier arm;
- Two position button (B fig. 15) controlling tool head carrier traverse.
- Two position button (A fig. 15) for opening and closing of the spindle.
- Pedals (A fig. 16) for clockwise or counter-clockwise rotation of the spindle.



WARNING

When clamping a wheel on the machine keep the button pressed to make sure you reach the maximum pressure (100 bar). Check the pressure reading on the pressure gauge (C fig.11).



WARNING

Clamping tests of the distributor/table top must be carried out with the wheel fitted.



WARNING

During work, keep a check on the pressure of the table top.

NOTE

Keep a check on pressure readings also during tyre mounting and demounting operations; to avoid problems of the wheel shifting position and loosening keep the clamping button pressed.



WARNING

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

WHEEL CLAMP OPERATION

The machine's movements are operated by a high-pressure hydraulic circuit. The pressure of this circuit can be adjusted by turning the special knob (A fig.17) as shown in the table below.

	pressure adjustment range	standard working pressure
AGS/52L(2005)	from 60 to 100 bar	100 bar

The pressure settings of the machine can be read from the pressure gauge (C fig.11) by operating the spindle-open control until it reaches its limit stop or by clamping a rim.

NOTE

When working on alloy rims it is good practice to use the optional jaws (fig.18) in order to avoid scratching or denting the wheel. To prevent the wheel from rotating on the jaws fit the anti-slip pin in one of the wheel fixing holes. (A fig.19).



WARNING

Should the machine behave strangely, move a safe distance from it and switch the machine main switch (I fig.11a) to the 0 position.



WARNING

Make certain that clamping of the wheel is carried out correctly at each clamping point of the table top and that clamping is secure.



WARNING

It is expressly forbidden to attempt to alter operating pressure of the relief valves. The manufacturer declines all liability for damage resulting from tampering with these valves.

When working with delicate or particularly thin rims the working pressure should be reduced; in the case of particularly thick rims presenting difficulty in tyre demounting, set the pressure to the maximum value.

Adjust the spindle opening using the "close/open" command (A fig.15) according to the type of wheel you are about to clamp (see the examples in fig.20). If the wheel is more than 36" in diameter at the clamping position, insert the relevant extension jaws (A fig.21). For wheels with diameter less than 20", slide off the tool carrier arm (C fig.21), position it in the second hole and lock it with the safety bolt (E fig.21).

Position the wheel vertically on the machine platform.

Use the two controls (A fig.14 and A fig.15) to set up the spindle so that the ends of the jaws are just touching the edge of the rim. Now clamp the rim with the spindle jaws, choosing the innermost section of the rim in relation to its shape as the clamping point.

En



DANGER

Given size and weights of earthmoving equipment tyres and to guarantee safe working conditions, the machine operator must be assisted by a second operator to keep the wheel vertical.

When handling wheels weighing more than 500 kg use a fork lift truck or a crane. Never leave the tyre clamped on the spindle except during the normal pauses in the sequence of operating procedures.



DANGER

When working with wheels of diameter greater than 1500 mm or weighing more than 200 kg, adhere to the following safety recommendations when positioning the wheel on the platform and clamping it on the spindle:

- Tilt the tool carrier arm back.
- Install the anti-fall wheel restraint (A fig.22) in its receptacle.
- Load the wheel on the platform in a vertical position (Fig.22) so that the outside of the wheel is up against the guard.
- Use the spindle correctly to load and clamp the wheel.
- Remove the guard and proceed with mount/demount operations.

N.B. These safety procedures must be followed when loading or unloading a wheel from the machine.

TYRE LUBRICATION

Before mounting or demounting tyres apply plenty of tyre manufacturer approved rubber lubricant to the beads to protect them from possible damage and facilitate mount/demount procedures.

The following figures show the areas of the tyre requiring lubrication: figure 23a (mounting tubeless tyres), 23b (demounting tubeless tyres) and 23c (mounting tyres with inner tube and rim ring).



WARNING

Under no circumstances must lubricants containing hydrocarbons (oils of various kinds) or other substances which retain their lubricating effect over time be used.



WARNING

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

DEMOUNTING TRACTOR TYRES

Clamp the wheel on the spindle.

Use the joystick to lift the wheel so that the bottom edge of the rim is just touching the bead breaker disk (B fig.21).

With the tyre deflated turn the self-centering chuck continuously little by little using the special control. Set high rotation speed on the speed switch to break the bead more quickly.

N.B. With radial tyres with soft walls or high-shoulder rims, position the bead breaker disk well down between rim and bead and move as far as the centre well.

Once the bead has been broken, apply a liberal amount of manufacturer approved rubber lubricant or soap solution to the bead and drop centre while the wheel is turning.

Return the tool arm to the front. To reduce transfer time, use the special control.

Repeat the bead breaking procedure on the front of the wheel.

Rotate the tool head to start demounting the first bead.

Bring the wheel up against the special tool (A fig.24) using the joystick until the bead is properly engaged.

Now stretch the tyre by moving the rim away from the tool to force the bead into the drop centre.

Place the lever (B fig.24) between the bead and rim on the rh side of the tool to prevent the bead from slipping off the tool.

Match the outside edge of the rim with the reference dot (C fig.24) on the tool.

Bring the rim up against the tool and turn the spindle counter- clockwise until the front bead comes completely off the rim.

Lower the wheel onto the platform and move the rim back to create the space necessary to pull the inner tube out easily (fig.25).

Refer to figure 26 to demount the back bead. Insert the tool between the back bead and the rim; move the wheel back towards the operator until the bead is completely up against the front edge of the rim.

Insert the lever between bead and rim and turn the spindle counter-clockwise until the tyre is completely off the rim.

MOUNTING TRACTOR TYRES

N.B. When you have completed the demount procedure, the tool and the rim should be in the exact position required to start the mounting operation (fig.27). If this is not the case, position the tool so that the reference dot (C fig.24) is level with the edge of the rim (fig.27).

Attach the gripper to the front edge of the rim (A fig.21).

Move the back bead over the gripper and turn the wheel clockwise until it is completely mounted.

Lower the wheel onto the platform to facilitate insertion of the inner tube (fig.25).

Position the tool by the valve with the reference dot (C fig.24) level with the edge of the rim (fig.28) and tighten the gripper (A fig.28) above the tool. Now turn the wheel clockwise. Use the bead guiding tool (A fig.29) inserted into the appropriate hole (B fig.28) to mount the tyre on the rim (fig.29). The bead guiding lever is used to guide the bead into the wheel drop centre.

N.B. When mounting and demounting tyres we recommend applying a generous coating of tyre manufacturer approved rubber lubricant to the beads and the wheel drop centre.

DEMOUNTING TUBELESS AND SUPERSINGLE TYRES

Break the front bead and hold the bead in the drop centre. Lubricate the bead and the shoulder of the drop centre (fig.30)

Break the rear bead (fig.31).

If the rim has a sloping shoulder, such as the 15° type, continue with bead breaking (fig.32) until the tyre comes completely off the rim (only with tyres up to 13" wide).

This operation will be safer and easier if done with the optional TUBELESS roller (A fig.33). The roller can also be used to break the front bead. To demount very stiff canvas reinforced Supersingle tyres or tubeless tyres with very wide-shoulder rims, apply liberal amounts of approved rubber lubricant and follow the procedures described previously for tractor tyres.

MOUNTING TUBELESS AND SUPERSINGLE TYRES

To mount tubeless tyres, attach the gripper (fig.34) to the front edge of the rim. Place both beads beyond the gripper and position the tool reference dot level with the rim edge. Turn the spindle clockwise. Check to make sure that the beads are correctly positioned in the drop centre.

N.B. To prevent damage to the beads and/or rim during mounting, apply a liberal coating of tyre manufacturer approved rubber lubricant to both beads and the rim shoulder. To mount the beads separately (tubeless and supersingle tyres) follow the procedure described above for "MOUNTING TRACTOR TYRES".

DEMOUNTING EARTHMOVING EQUIPMENT TYRES AND TYRES WITH RIM RINGS

Position the bead breaker disk just above the rim. Rotate the tyre and press the disk gently up against the front bead until the rim ring is loosened. Extract the rim ring with the lever (A, fig.35).

Repeat bead breaking on the back as shown in figure 37 and push the tyre forward until it comes off the rim with or without the rim ring.

N.B. With very stiff tyres or where the bead has become blocked on the rim ring, demount the tyre with the rim ring still attached (fig.35). To remove it, clamp it on the spindle (fig.36) like any ordinary rim and break the bead from the back.

To break both the front and back beads properly, it is essential to insert the bead breaker disk between rim and bead and continue until you are just touching the drop centre.

MOUNTING EARTHMOVING EQUIPMENT TYRES AND TYRES WITH RIM RINGS

Bring the tyre towards the rim and align tyre and rim centrally. Mount the second bead with the bead breaking disk.

Insert the rim ring and secure it with its locking ring (fig.38).

If the tyre is tubeless, insert the seal ring between rim and rim ring.

If the tyre has an inner tube, insert it before mounting the tyre on the rim. Lay the inner tube evenly around the tyre, inflating it slightly to assist this operation.

TYRE RETREADING

After aligning the tyre with the rim on the self-centering chuck, set the rotation speed at minimum using the special switch, then adjust the optimal tread pattern speed using the knob (C fig. 6).

N.B. The retreading operation must be carried out from the wheel loading side (clockwise rotation).

N.B. The minimum rotation speed is obtained with the wheel rotating clockwise.

STOPPING THE MACHINE

You can disconnect the electricity supply to the machine by turning the master switch (A fig.11) on the electrical box to the 0 position.

All commands on the control module are deactivated as soon as the operator releases them (deadman commands).

En

TROUBLE SHOOTING

The machine does not start

No electrical power

- ☛ Connect the power

Motor defender/s tripped

- ☛ Reset the defender/s

Blown transformer fuse

- ☛ Change the fuse

Leaking oil

Loose fitting

- ☛ Tighten

Cracked pipe

- ☛ Renew pipe

A control remains ON

Switch faulty

- ☛ Clean or renew switch

Solenoid valve jammed

- ☛ Clean or renew solenoid valve

Pressure drop on spindle actuator cylinder

Directional control valve is leaking

- ☛ Renew directional control valve

Worn seals

- ☛ Renew seals

Power loss during spindle rotation

Slack belt

- ☛ Tighten

Motor stops during operation

Motor defender has tripped

- ☛ Open the electrical cabinet using the specially supplied wrench, then reset the defender that has tripped by pressing the black button (A fig. 39 for spindle motor defender, B fig. 39 for electro-hydraulic power pack motor defender); remember to close the cabinet when you have finished.

Tool carrier arm disengages

Arm locking detent is incorrectly adjusted

- ☛ Call the service centre

The machine fails to perform a manoeuvre

Solenoid valve not receiving power

- ☛ Check electrical connections to the solenoid

Solenoid valve blocked

- ☛ Clean or renew

Transformer fuse is blown

- ☛ Change the fuse

No hydraulic oil pressure

Pump is broken

- ☛ Renew pump

Hydraulic power pack is running noisily

Pump/motor coupling is worn

- ☛ Renew the coupling

Machine moves jerkily

Hydraulic oil level is low

- ☛ Top up the oil

Faulty switch

- ☛ Renew the switch



WARNING

The “Spare parts” handbook does not authorise the user to carry out work on the machine with the exception of those operations explicitly described in the user's manual, but enables the user to provide the technical assistance service with precise information, in order to reduce delay.

MAINTENANCE



WARNING

Corghì declines all liability for claims deriving from the use of non-original spares or accessories.



WARNING

Before making any adjustments or carrying out maintenance, disconnect the electrical supply from the machine and make sure that all moving parts are suitable immobilised.



WARNING

Do not remove or modify any parts of this machine except in the case of service interventions.



WARNING

Before loosening hydraulic fittings or pipes, make sure that the fluid is not pressurised. Caution: oil sprayed from leaking connections at high pressure can cause serious injury.



ATTENTION

Keep the work area clean.

Do not clean the machine with compressed air or jets of water.

When cleaning the area avoid raising dust as far as possible.

To ensure that your machine provides lasting duty and high efficiency:

- clean the spindle and the guide pins once a week with environmentally friendly solvents;
- grease (fig.40a-b-c-d) all moving parts on the machine at least once a month (refer to the lubrication and greasing chart);
- clean the filter cartridge approximately every 1500 hours of duty;
- check the oil level in the hydraulic power pack tank (refer to the lubrication and greasing chart) (fig.40e) and top up with AGIP OSO 32 or equivalent oil (check the oil level with the cylinders in the retracted position): we recommend a complete oil change every 1500 hours of operation or once a year.

PRODUCER	OIL TYPE	
	AGIP	ARNICA 68
ESSO	OSO 32	INVAROL EP 68
FINA	HYDRAN 32	IDRAN HV 68
SHELL	TELLUS OIL 32	TELLUS T OIL 68
API	CIS 32	HS 68



ATTENTION

Top-ups or oil changes with oils other than the recommended type can have negative effects on the machine's lifetime and level of performance.



WARNING

It is expressly forbidden to attempt to alter operating pressure of the relief valves or the pressure limiter.

The manufacturer declines all liability for damage resulting from tampering with these components.

SCRAPPING

If the machine is to be scrapped, remove all electrical, electronic, and plastic components and dispose of them separately, as provided for by local legislation.

OIL - WARNINGS AND RECOMMENDATIONS

Disposal of used oil

Do not dispose of used oil into sewage mains, storm drains, rivers or streams. Contact a specialised firm for disposal.

Oil spills and leaks

Cover oil spills with earth, sand or similar absorbent material. When the oil has been removed, degrease the area with suitable solvents taking care to disperse solvent fumes. Dispose of residual cleaning material in accordance with current legislation.

Precautions when using oil

- Avoid contact with the skin.
- Avoid the formation and diffusion of oil mist
- Apply the following hygiene measures:
 - Protect personnel and equipment from oil splashes (wear suitable clothing, install screens on the machine).
 - Wash frequently with soap and water; do not use cleaning products or solvents that irritate the skin or remove its natural protective oil.
 - Do not dry hands with dirty or greasy rags.
 - Change clothing if impregnated with oil and in any event at the end of each work shift.
 - Do not smoke or eat when your hands are greasy.
- Apply the following preventive and protective measures:
 - Wear lined industrial gloves designed to resist mineral oils.
 - Use safety goggles to protect the eyes.
 - Use aprons that resist mineral oil.
 - Use protective screens to protect from oil splashes.

Oil: First Aid procedures

- Ingestion: seek medical attention immediately and provide information on the type of oil ingested
- Inhalation: for exposure to high concentrations of fumes or oil mist, move the affected person to the open air and seek medical attention immediately.
- Eyes: bathe with plenty of running water and seek medical attention immediately.
- Skin: wash with soap and water.

RECOMMENDED FIRE-EXTINGUISHING EQUIPMENT

When choosing the most suitable fire extinguisher consult the following table:

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



WARNING

The indications in this table are of a general nature. They are designed as a guideline for the user. The applications of each type of extinguisher will be illustrated fully by the respective manufacturers on request.

En

GLOSSARY

Barycentre

The centre of the mass of a body at which the weight force is concentrated - the centre of gravity.

Wheel with drop centre

A one-piece wheel, without moveable or detachable parts, on which a tyre is mounted.

Wheel with rim ring

Wheel with one side open to receive the tyre.

Inside/outside bead breaking

Lifting the tyre bead from the edge of the rim.

Control module

Remote control unit with joystick to command all machine manoeuvres required for tyre mounting/demounting.

Spindle

Spindle equipped with jaws to centre the wheel and support its weight.

Bead breaker disk

Tool that effectively breaks the tyre bead off the rim.

Tool

Specially shaped tool for mounting and demounting tyres.

Arm locking hook

Specially shaped part with a fulcrum and a detent designed to engage with a corresponding element.

Tool carrier arm

The tool carrier arm holds the tool head.

Tool head

Tool assembly for bead breaking and demounting of the tyre.

Pump unit

Unit comprising the hydraulic pump and an electric motor.

Retreading

Operation that restores the tread pattern on a worn tyre.

Jaw

Mechanical part with a hooked nose to restrain or pull the wheel.

Bead

The two edges of the tyre, thicker than the side walls, designed to seat on the edge of the rim.

Tubeless tyre

A tyre designed for use without an inner tube.

Supersingle

A wide section tyre used in alternative to twin wheels.

Lock ring

A half ring made of steel with the function of blocking the rim ring in position.

Rim ring

External ring restraining the bead when the tyre is mounted on the rim.

Seal ring

Rubber seal that prevents air escaping from the inflated tyre.

ELECTRICAL SYSTEM DIAGRAM

AGS/52L(2005)

Fig.43

AP1	Connection unit+diode board	SQ6	Pedal unit spindle anti-clockwise rotation microswitch
AP2	Relay board	SQ7	Safety microswitch
AP3	L.F. receiver board	ST1	Motor overload cut-out
AP4	H.F. receiver board	ST2	Motor overload cut-out
AP5	L.F. transmitter board	TC1	Power supply transformer
AP5	H.F. transmitter board	V1	Diode
FR1	Turntable overload cut-out	VC1	Diode bridge
FR2	Control unit overload cut-out	W1	Antenna
FU....	Fuse	XB1	Power supply connector
GB1	Battery	XB2	Solenoid valve connector
HL1	Indicator light	XB3	Pedal unit connector
KA1	Magnetic relay	XS1	Power supply plug
KM1	Turntable contactor	XT1	Terminal board
KM2	Turntable contactor	YV1	LH carriage solenoid valve
KM3	Control unit contactor	YV2	RH carriage solenoid valve
KM4	Control unit contactor	YV3	Arm UP solenoid valve
KM5	Control unit contactor	YV4	Arm DOWN solenoid valve
M1	Turntable motor	YV5	By-pass solenoid valve
M2	Control unit motor	YV6	Spindle OPEN solenoid valve
M3	Capacity regulator motor	YV7	Spindle CLOSE solenoid valve
QS1	Master switch	YV8	Tool FORWARD solenoid valve
QS2	16A polarity switch	YV9	Tool BACK solenoid valve
SB1	Spindle open/close switch	YV10	LH tool solenoid valve
SB2	LH/RH tool or 2nd speed or arm UP/DOWN switch	YV11	RH tool solenoid valve
SB3	Tool arm UP/DOWN switch	YV12	Tool 1 rotation solenoid valve
SB4	Tool 1 and 2 rotation switch	YV13	Tool 2 rotation solenoid valve
SB5	Capacity regulation switch	YV14	Tool UP solenoid valve
SQ1	LH carriage control module micro-switch	YV15	Tool DOWN solenoid valve
SQ2	RH carriage control module micro-switch	YV16	1st speed solenoid valve
SQ3	Arm UP or tool forward control module	YV17	2nd speed solenoid valve
SQ4	Arm DOWN or tool back control module	YV18	Spindle clockwise rotation solenoid valve
SQ5	Pedal unit spindle clockwise rotation microswitch	YV19	Spindle anti-clockwise rotation solenoid valve

HYDRAULIC SYSTEM DIAGRAM

AGS/52L(2005)

Fig.46

- 1 Power pack motor
- 2 Oil pump
- 3 Intake filter
- 4 Tank
- 5 Pressure relief valve
- 6 Double solenoid valve
- 7 Drainage valve (normally open)
- 8 Complete long cylinder (carriage traverse)
- 9 Complete short cylinder (tool arm lift)
- 10 Cylinder Ø40 (tools traverse)
- 11 Spindle cylinder
- 12 Pressure gauge
- 13 Distributor
- 14 Power pack cylinder hose Ø40 R
- 15 Rilsan black PA11 hose Ø6x1 L 2000
- 16 Power pack cylinder hose Ø40M
- 17 Nipple 1/4"-1/4" Ø2
- 18 Rigid pipe Ø8x1
- 19 Power pack cylinder hose Ø120
- 20 Power pack cylinder R lift hose
- 21 Power pack cylinder M traverse hose
- 22 Power pack cylinder R traverse hose
- 23 Power pack cylinder M lift hose
- 24 Drainage plug
- 25 Filler plug



AGS/52L(2005)

Cod.4-327490 - 1.0 del 10/05

Italiano

Illustrazioni e schemi

English

Illustrations and diagrams

Français

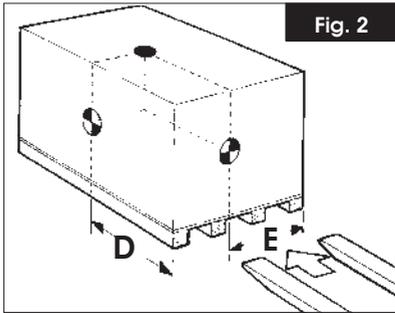
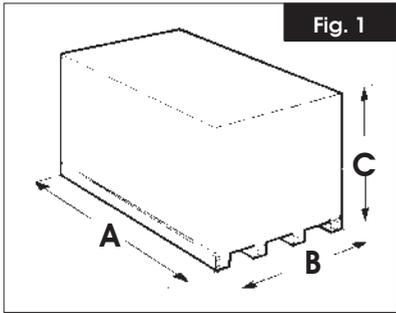
Illustrations et schémas

Deutsch

Bilder und Zeichnungen

Español

Ilustraciones y esquemas



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B	2120
C	1030
D	1200
E	1340

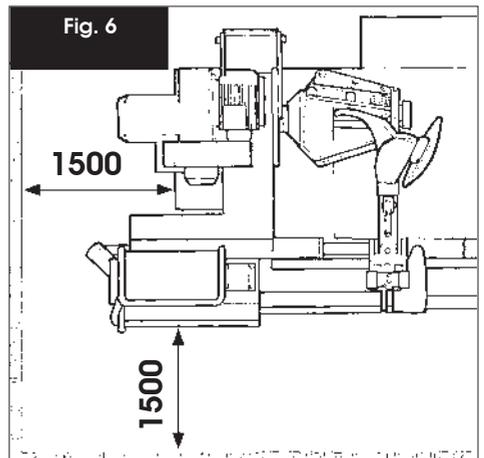
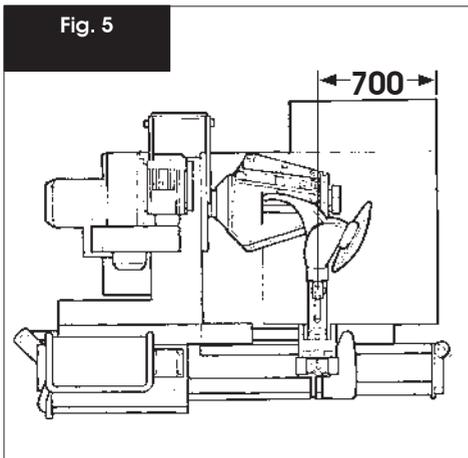
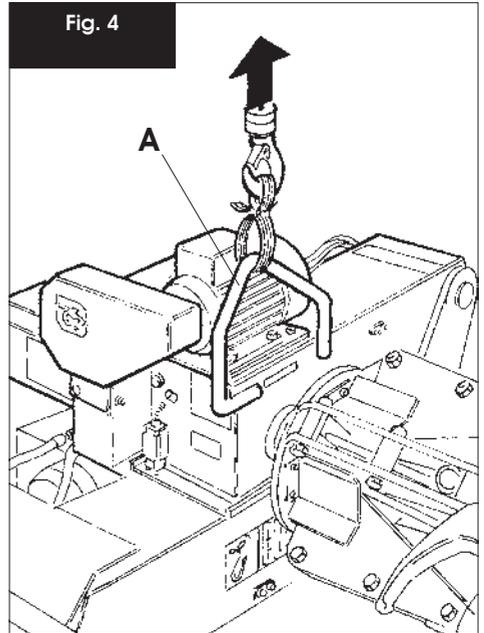
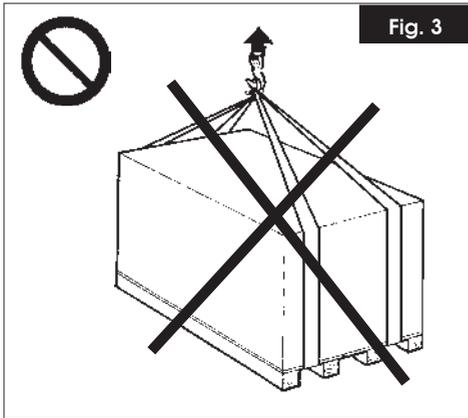


Fig. 7

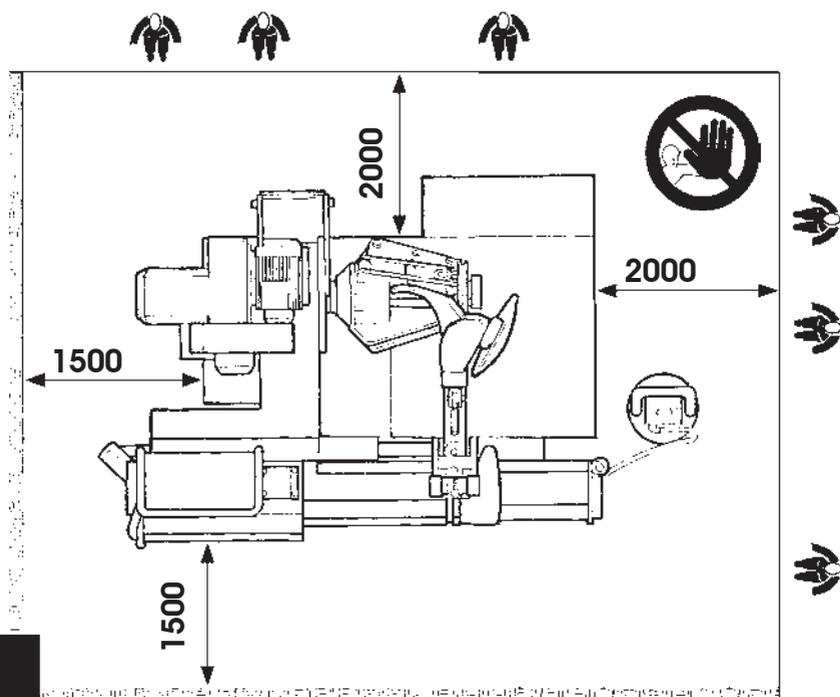
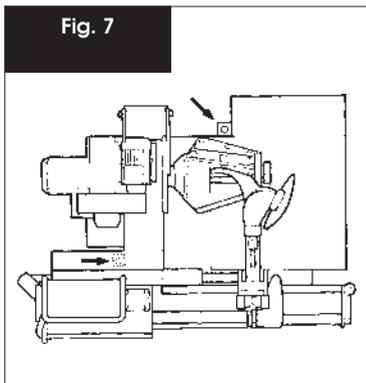


Fig. 9

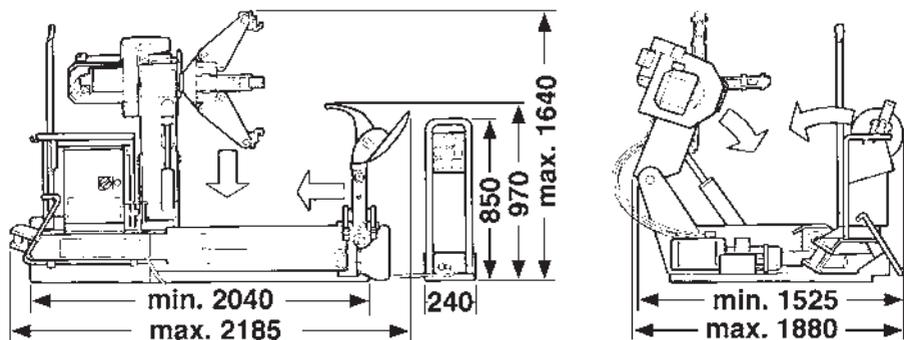
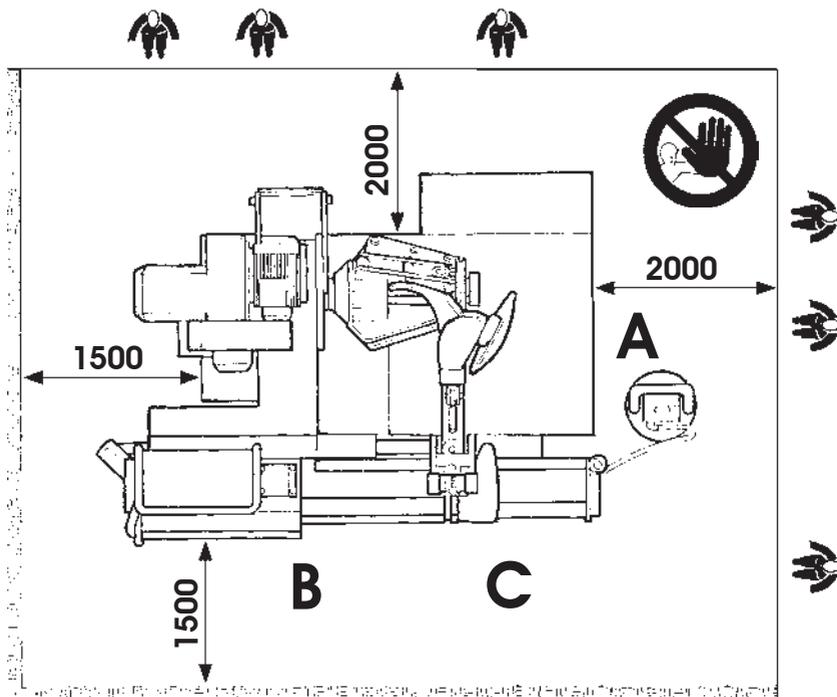
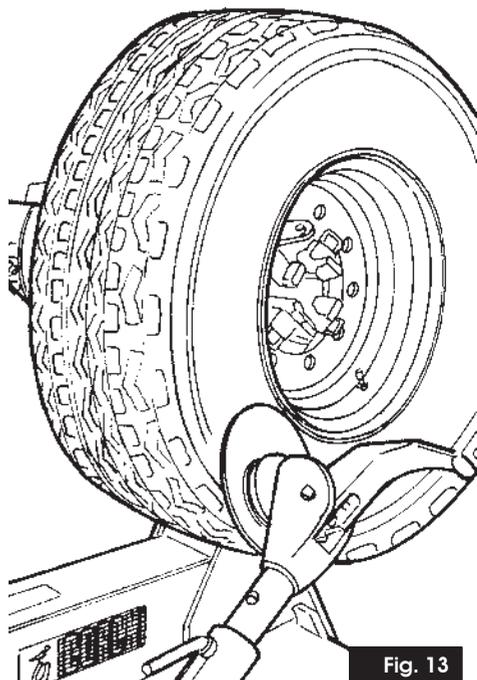
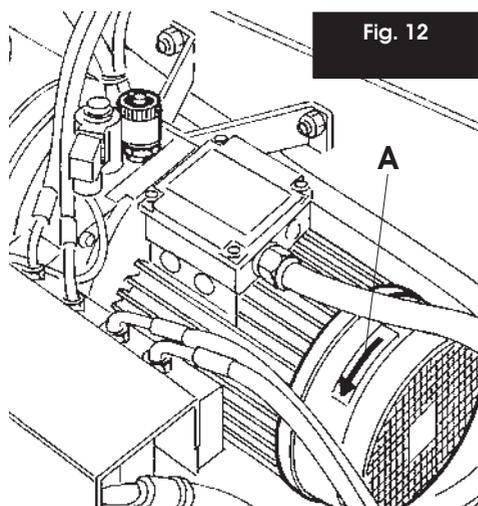
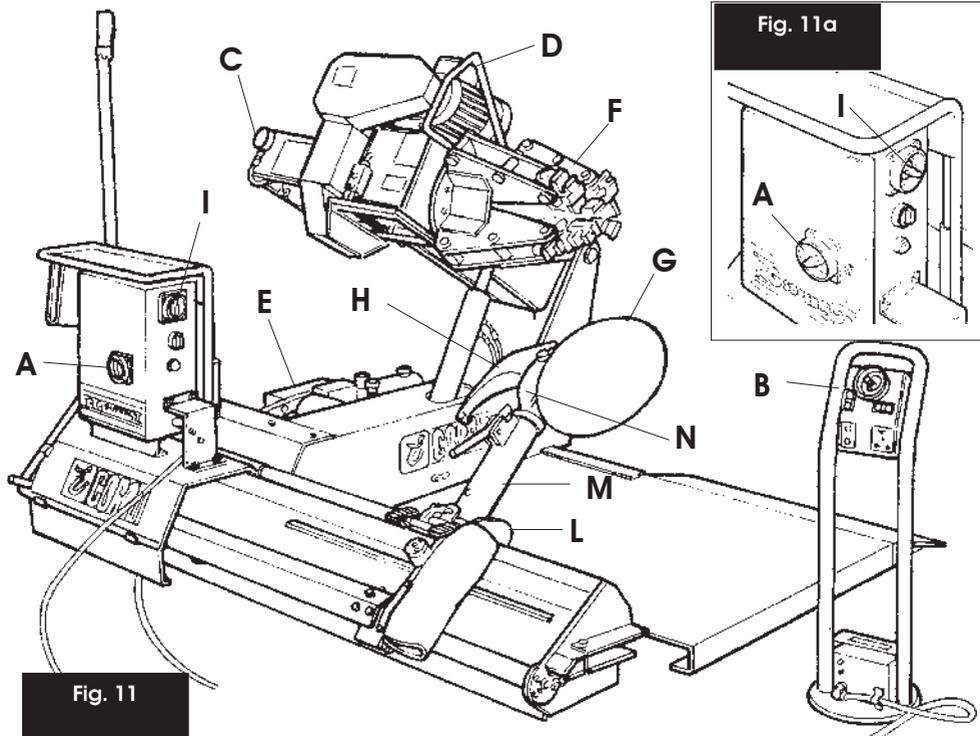
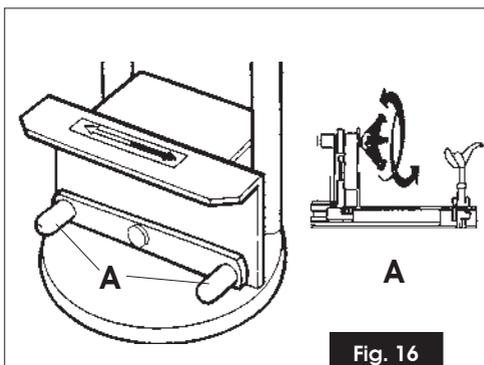
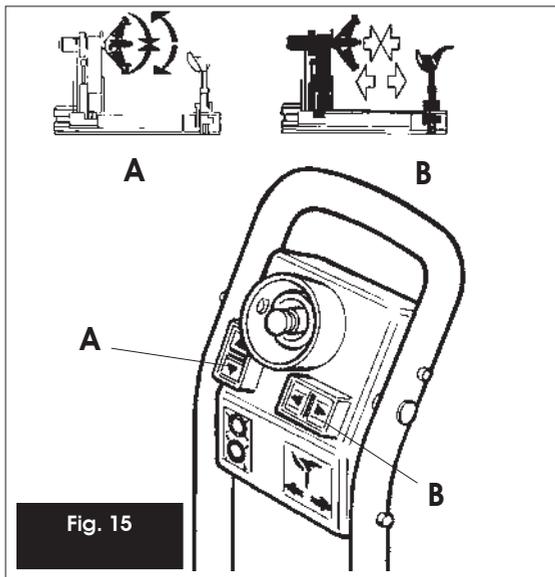
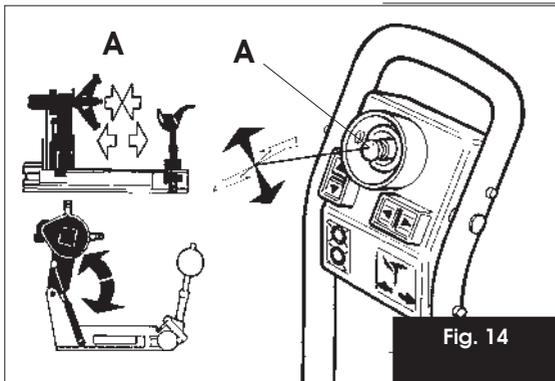


Fig. 10







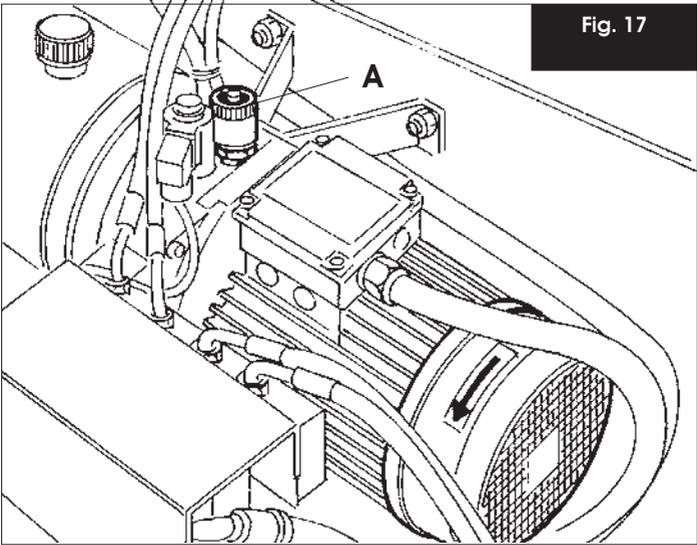


Fig. 17

Fig. 18

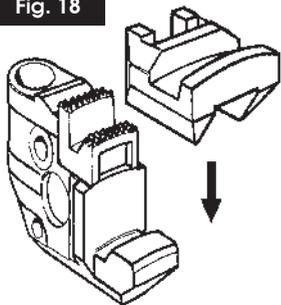


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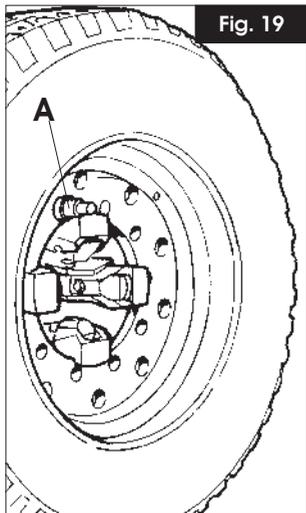


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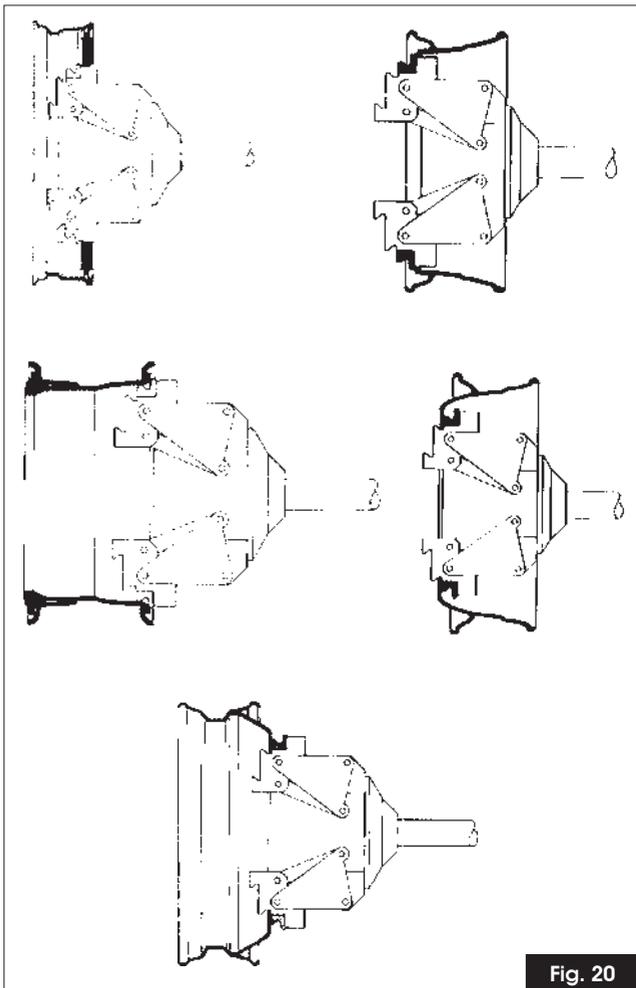
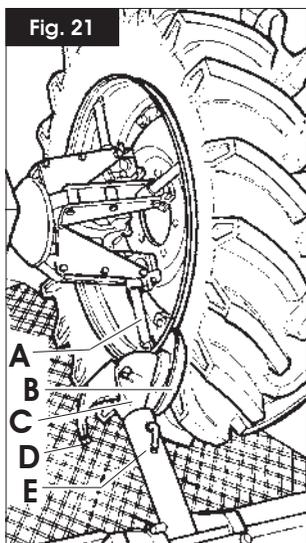


Fig. 20

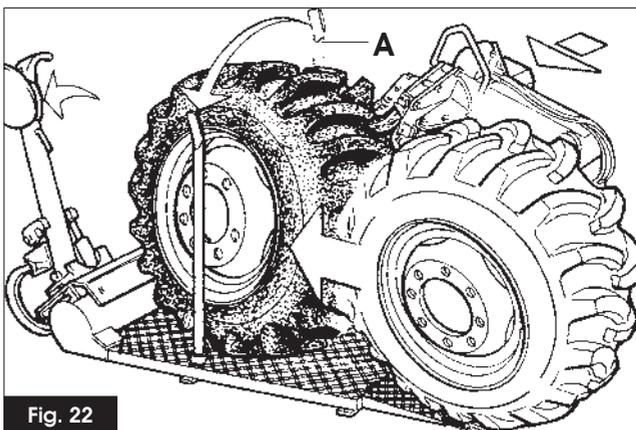
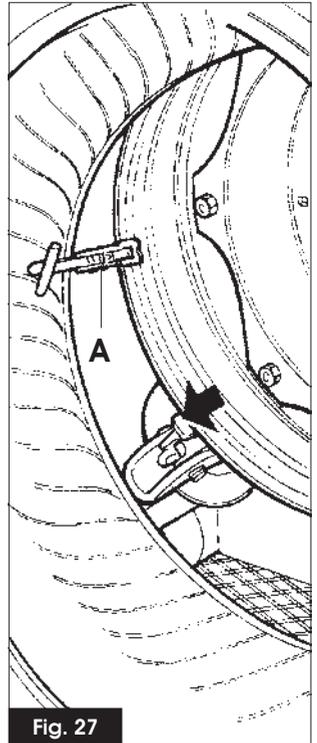
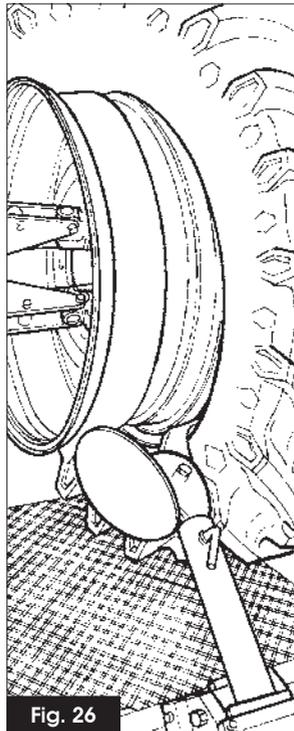
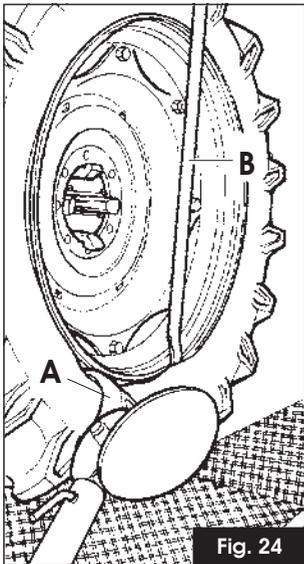
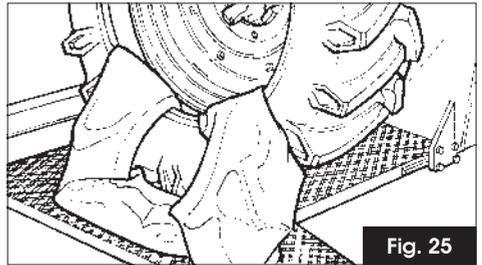
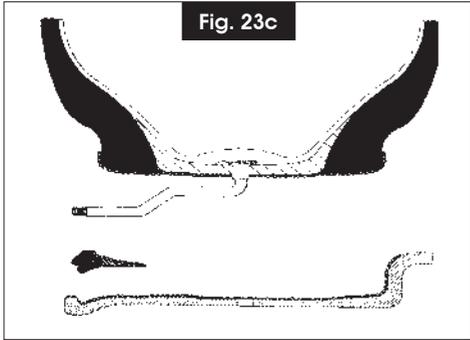
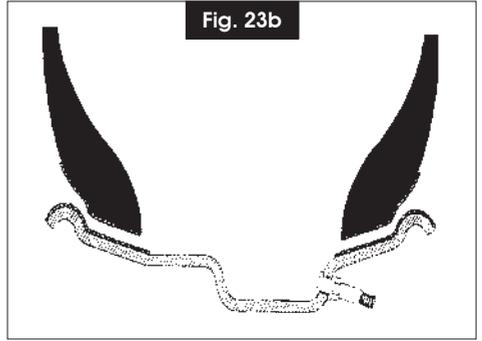
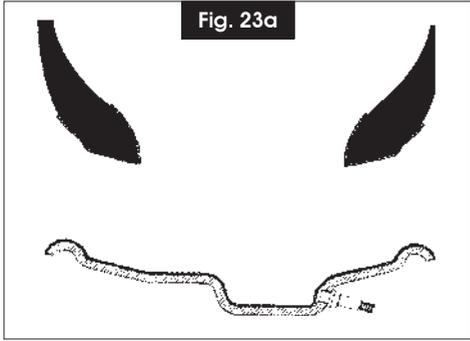


Fig. 22



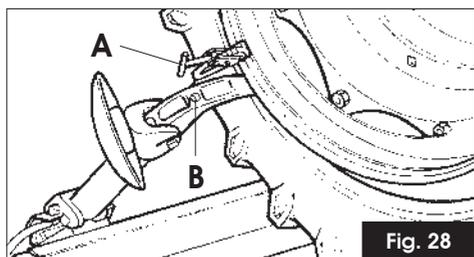


Fig. 28

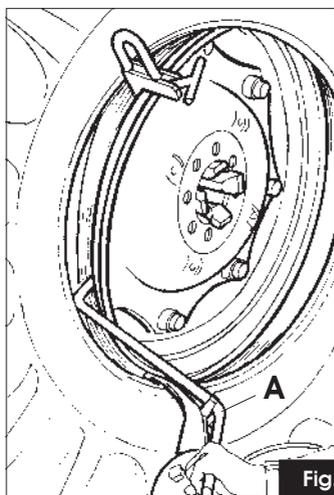


Fig. 29

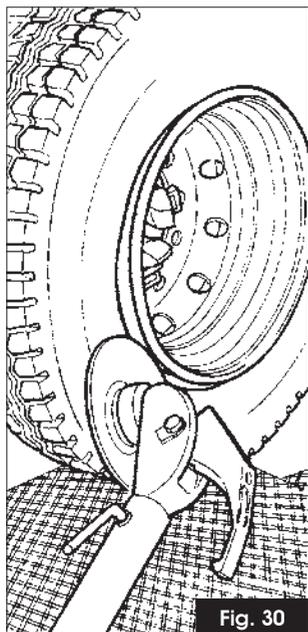
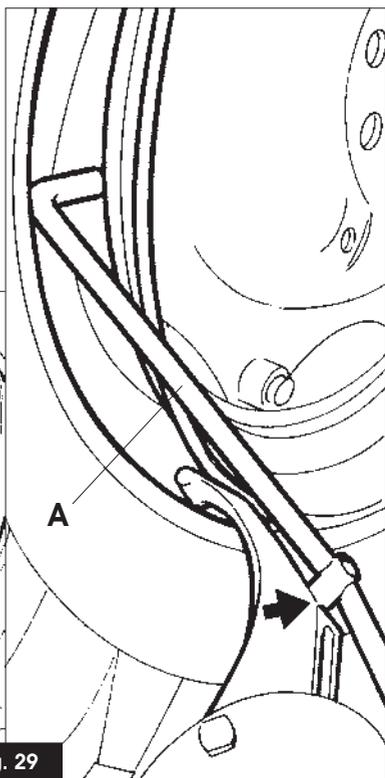


Fig. 30

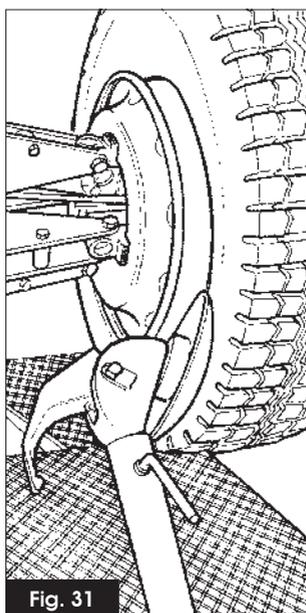


Fig. 31

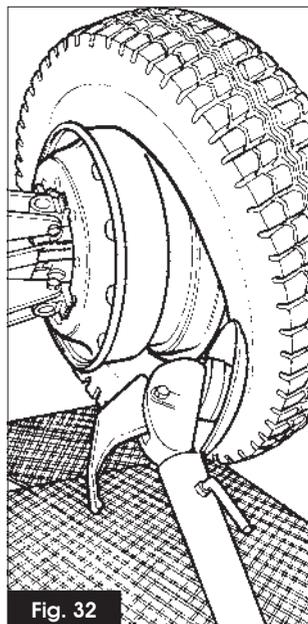


Fig. 32

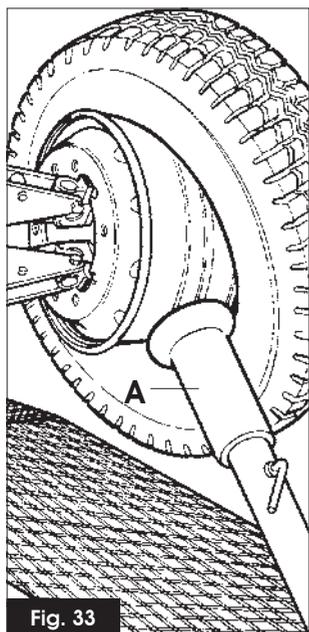


Fig. 33

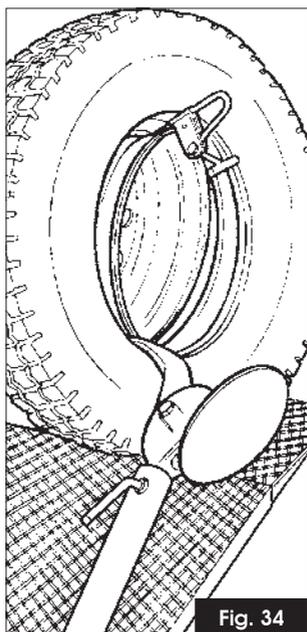


Fig. 34

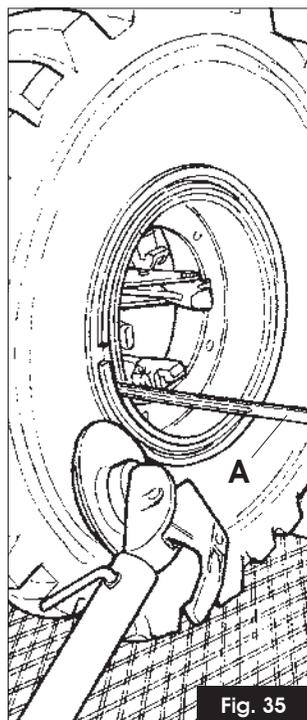


Fig. 35

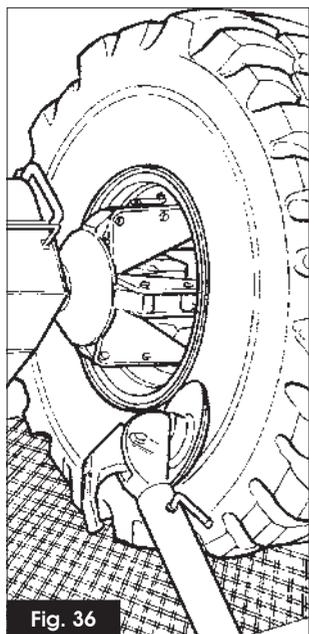


Fig. 36

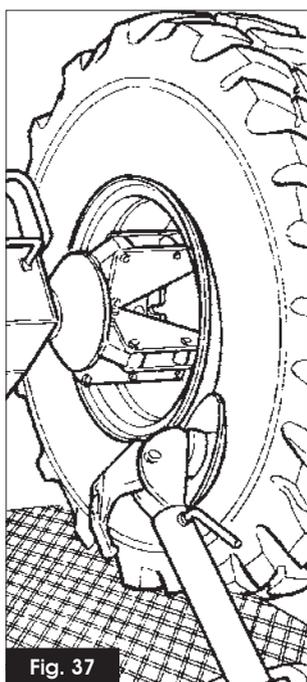


Fig. 37

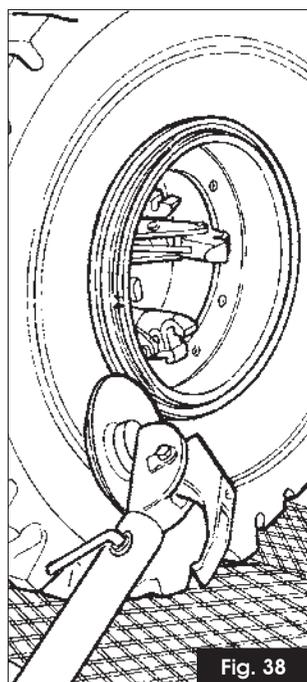


Fig. 38

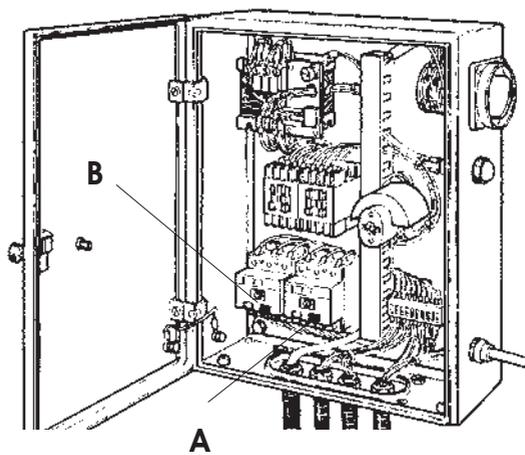


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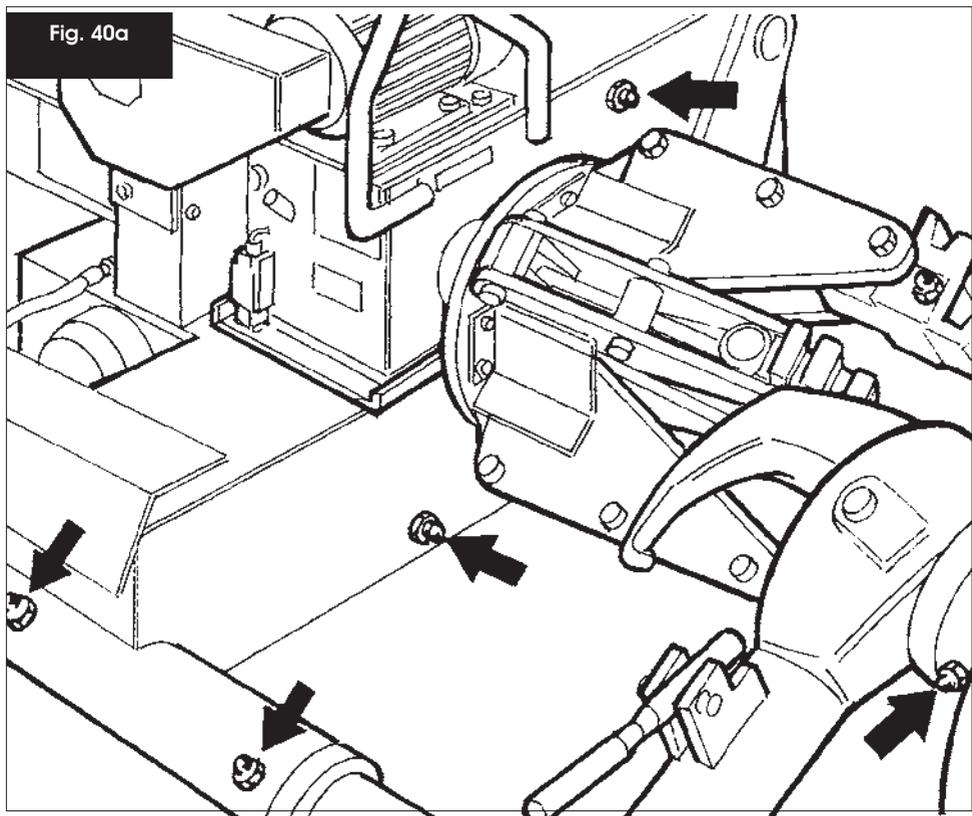
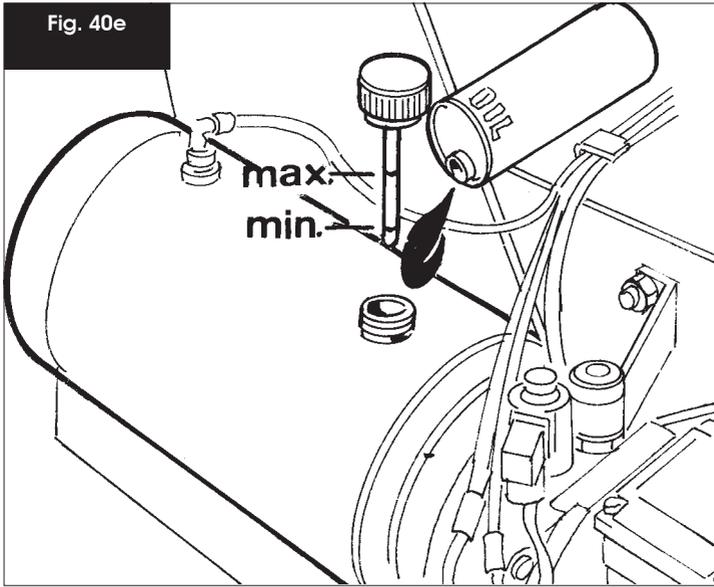
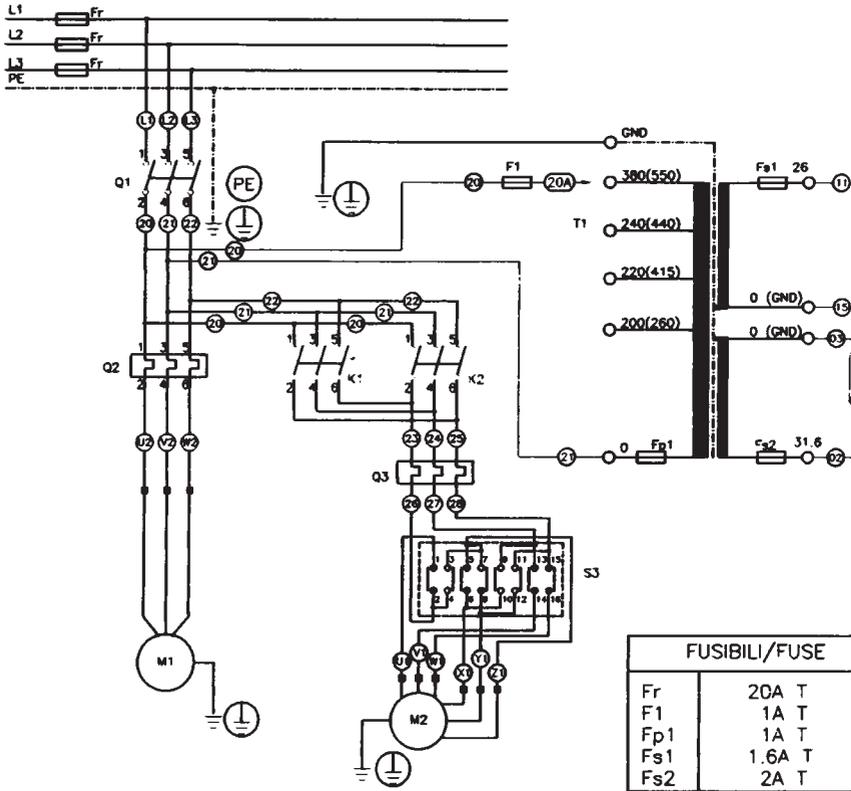
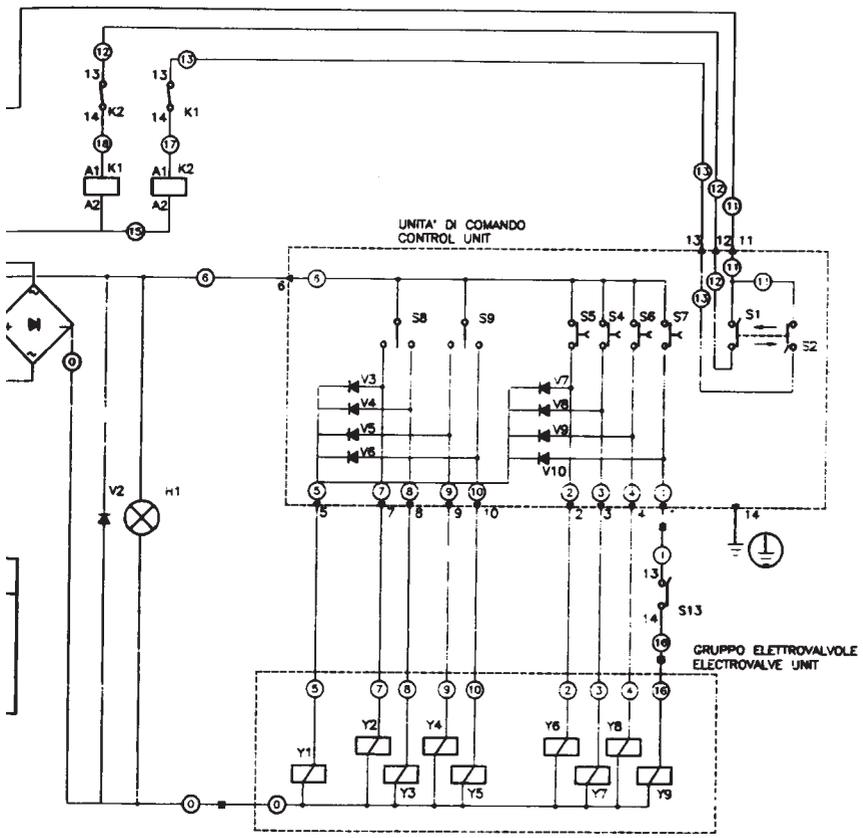


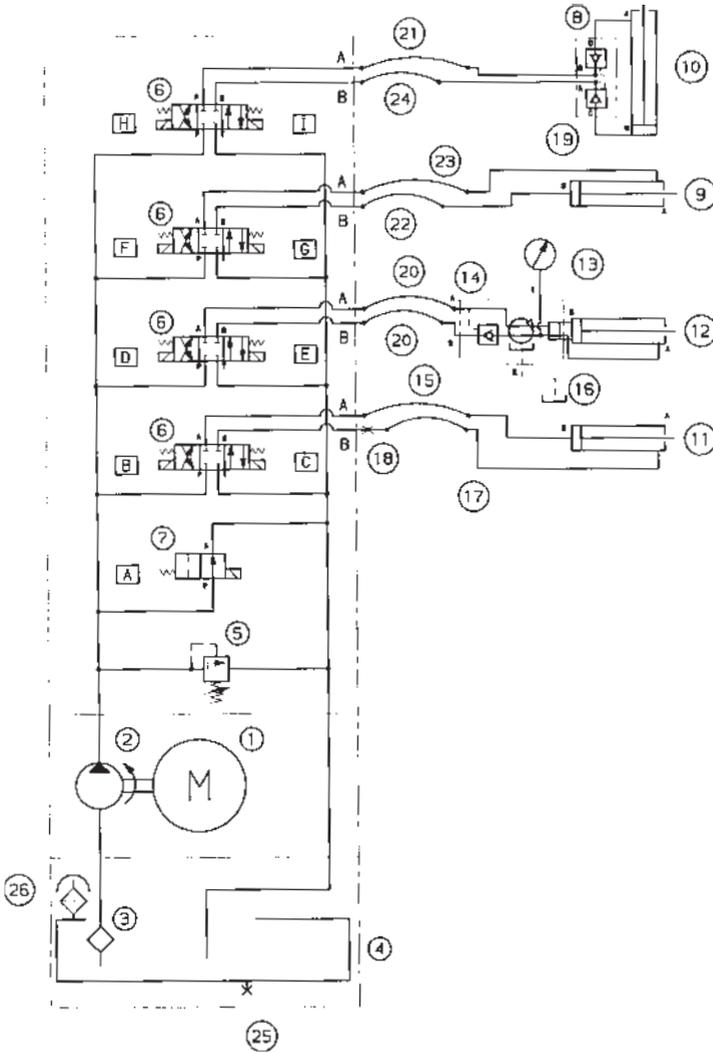
Fig. 40e







455641



CILINDRO	FORZA kg	VELOCITA' cm/sec
19	120	75
9	70	30
10	70	30
11	40	20

FORZA kg	VELOCITA' cm/sec
n.ro. 9825	1.3
n.ro. 10738	1.5
n.ro. 2963	4
n.ro. 3854	4.6
n.ro. 2983	4.2
n.ro. 3654	5.2
n.ro. 835	12.5
n.ro. 1193	15.2

* Le corse dei cilindri sono state rilevate sulle macchine.

446676

EC STATEMENT OF CONFORMITY

We, CORGHI S.p.A. Strada Statale 468 n°9, Correggio(RE), ITALY, do hereby declare, that the product

AGS/52L(2005) tyre changer

COMPLY WITH THE FOLLOWING STANDARDS:

EN292, 09/91

WITH REFERENCE TO EC DIRECTIVES:

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

Correggio, 10 / 05



CORGHI S.p.A.
G. Corghi

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 S.p.A.** Strada Statale 468 n°9, Correggio(RE), ITALY déclarons que le matériel :

Démonte-pneus **AGS/52L(2005)**

- est conforme aux normes suivantes:

EN292 du 09/91

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

- 98/37/CE
- 89/336/CEE modifié par la directive 92/31/CEE

Correggio, 10 / 05



CORGHI S.p.A.
G. Corghi

IMPORTANT: La déclaration CE de conformité est considérée comme nulle et non avenue dans le cas où l'appareil n'est pas utilisé avec des accessoires d'origine CORGHI et/ou, de toute façon, conformément aux indications contenues dans le manuel d'utilisation.

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

CE - KONFORMITÄTSERKLÄRUNG

CORGHI S.p.A. Strada Statale 468 n°9, Correggio(RE), ITALY,
erklärt hiermit, daß das Produkt :

Reifenmontiermaschine **AGS/52L(2005)**

- den Anforderungen folgender Normen entspricht:
EN292, 09/91

auf Grundlage der Vorgaben durch folgende Richtlinien:

- 98/37/CE
- 89/336/EWC mit Änderung durch die Richtlinien 92/31/EWC

Correggio 10/ 05



CORGHI S.p.A.
G. Corghi

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

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

DECLARACIÓN CE DE CONFORMIDAD

La mercantil abajo firmante, CORGHI S.p.A. Strada Statale 468 n°9,
Correggio(RE), ITALY, declara que el producto:

desmontagoma **AGS/52L(20005)**

- se conforma a las siguientes normas :
EN292 del 09/91

- en base a lo contemplado en las Directivas:

- 98/37/CE
- 89/336/CEE, modificada por la Directiva 92/31/CEE

Correggio, 10 / 05



CORGHI S.p.A.
G. Corghi

IMPORTANTE: La declaración CE de conformidad caduca en el supuesto que la máquina no sea exclusivamente utilizada con accesorios originales CORGHI y/o en cualquier caso en cumplimiento de las indicaciones contenidas en el manual de uso

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 AGS/52L(2005)

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

Correggio, 10/05



.....
CORGHI S.p.A.
G. Corghi

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.

UPT - Cod.4-327490 - 10/05



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