

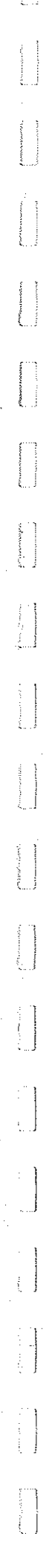


Accu Industries, Inc.®

ACCU 5400

**ELECTRIC-AIR TIRE CHANGER FOR CAR,
LIGHT TRUCK AND MOTORCYCLE WHEELS**

OPERATOR'S MANUAL



THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

RESEARCH REPORT

NO. 1000

1960

LIMITED WARRANTY

Accu Industries, Inc. ("Seller") provides a one year limited warranty on parts and labor on all goods manufactured by it, including this product. The sole and exclusive warranty which Seller makes with respect to this product and all parts and accessories thereto which are sold by Seller is a warranty limited to defects in material or workmanship for a period of one year from the date of original purchase by Buyer from Seller. For purposes of the commencement of the one-year warranty period, the term "Buyer" shall not include wholesalers, retailers or others who buy this product for resale to end user. However, in no event shall the warranty extend beyond two years from the original sale (invoice data) of this product by Seller to anyone.

This warranty applies only to this product and any parts or accessories which are attached to or shipped by the Seller to Buyer with it. This warranty does not apply to equipment parts or accessories damaged by improper and/or negligent operation or maintenance, modification, misuse, abuse, neglect, abrasion or corrosion, nor to any equipment, parts, or accessories which were not manufactured by Seller. This warranty does not apply to any "wear out" components of this product.

"Wear out" shall mean those components or parts which are consumed, used or experienced wear during the ordinary operation of this product. This warranty shall be void if the equipment, parts, or accessories are dismantled, tampered with or repairs are attempted or made by anyone other than Seller or its authorized agent.

THE EXPRESS WARRANTY SET FORTH HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH WARRANTIES ARE HEREBY DISCLAIMED AND EXCLUDED BY SELLER. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

No equipment or parts or accessories shall be shipped by Buyer to Seller without first notifying Seller and specifying the nature of the claimed defect. Any such equipment, parts, or accessories claimed to be defective must be returned, freight prepaid, to Accu Industries, Inc., 11126 Air Park Road, Ashland, Virginia 23005. If inspection by Seller shows the equipment, part, or accessory to be defective, Seller will repair or replace the same and if the Seller elects to repair or replace the same, Seller will return the same to Buyer, freight prepaid.

Buyer's sole and exclusive remedy against Seller under this Limited Warranty shall be limited to repair or replacement, at Seller's option, of defective equipment, parts, or accessories covered here under. Seller's liability shall in no event exceed that expressly set forth herein, irrespective of the basis for any other claim, including but not limited to claim for breach of contract, breach of warranty, negligence, strict liability or tort, and under no circumstance shall be liable for incidental or consequential damages.

Seller shall not be liable for any losses, damages, or expenses, whether direct or indirect, incidental or consequential, caused by or resulting from the use of defective or non conforming equipment, parts, or accessories, or from delays in delivery. Buyer and Seller agree that the venue for any claim or breach or warranty shall be exclusively in the Circuit or General District courts of Hanover County, Virginia.

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1.0 INTRODUCTION

Congratulations on purchasing the ACCU Model 5400 electric/air tire changer.

This tire changer is designed for ease of operation, safe handling of rims, reliability and speed. This combination of features means more profit and added versatility for your shop, enabling you to work with aluminum or magnesium alloy wheels without damaging customer's rims.

With a minimum of maintenance and care your ACCU Model 5400 will provide many years of trouble-free operation.

Please read this manual thoroughly before operating the unit. Instructions on use, maintenance and operational requirements of the machine are covered in this manual.

1.1 NOMENCLATURE

Before installing and using the ACCU Model 5400 it is suggested that you become familiar with the nomenclature of the machine's components.

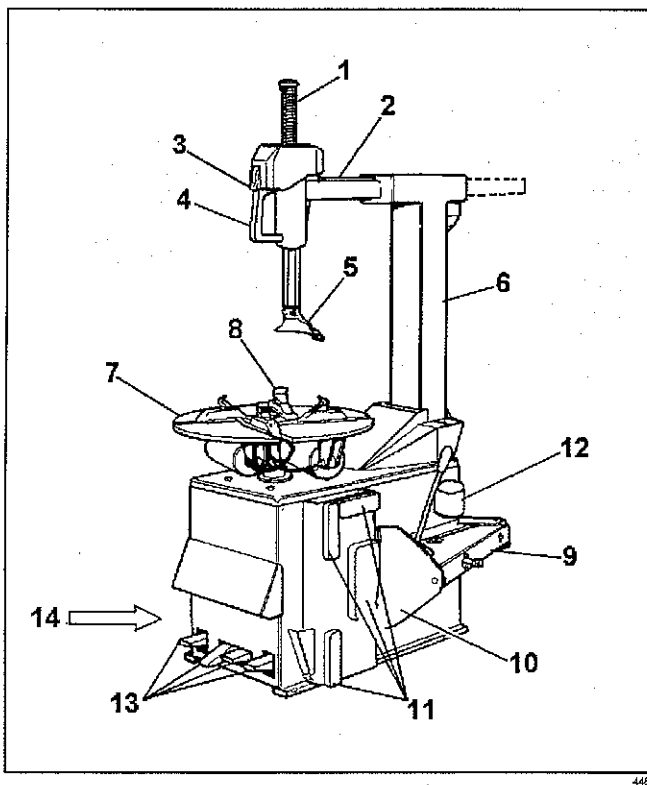


Fig. 1

1. Vertical slide
2. Horizontal slide
3. Lock button
4. Handle
5. Mount/demount fool or head
6. Tilting tower or column
7. Turntable
8. Jaw or clamp
9. Bead breaker arm
10. Bead breaker blade
11. Bead breaker pads
12. Lube pail
13. Foot pedal controls
14. Bead seater/inflator pedal

1.2 SPECIFICATIONS

Electric-air tire changer for car, light commercial vehicle and motorcycle tires designed for one-piece rims.

Weight	lbs 506 (230 kg)
Air pressure required	psi 110-170 (8-12 bar)
Bead breaker force	lbs 3300 (kN 15)
Motor 110 VAC	Hp 1 (kW 0.75)
Max. torque	ftxlb 740 (Nm 1000)
Max. wheel diameter	40" (mm 1016)
Max. wheel width	15"
Rim diam. outside locking	10"-20"
Rim diam. inside locking	12"-22"
Motorcycle wheels with adapters	15"-23"

1.3 DIMENSIONS OF THE MACHINE

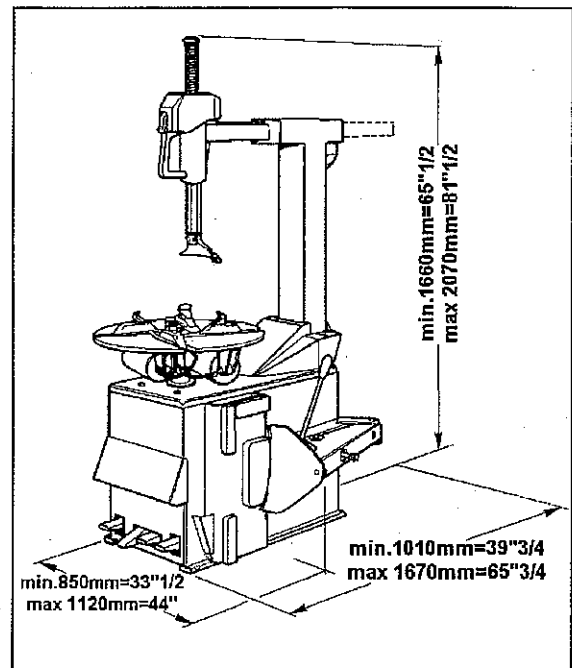


Fig. 2

1.4 STANDARD ACCESSORIES

#0001418 bead lifting tool (Fig.3)

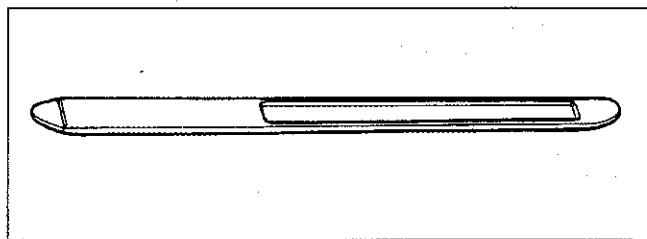


Fig.3

NOTE:
THE INFLATION GAUGE IS MOUNTED ON THE COLUMN.

1.5 OPTIONAL ACCESSORIES

#4015099 motorcycle adapter (Fig.4)

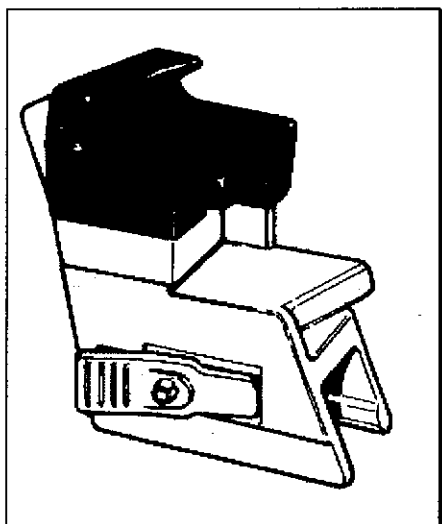


Fig.4

#4008254 8" adapter (Fig.5)

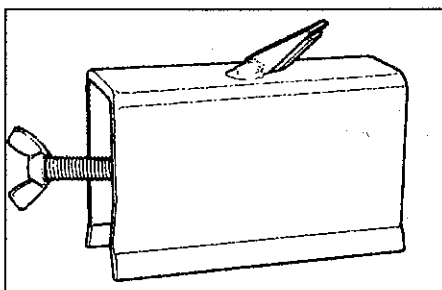


Fig.5

#4003444 bead depressor tool (Fig.6)

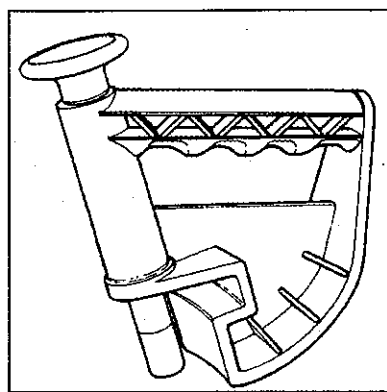


Fig.6

1.6 GENERAL PRECAUTIONS

- A. DURING THE USE AND MAINTENANCE OF THE MACHINE IT IS MANDATORY TO COMPLY WITH ALL LAWS AND REGULATIONS FOR ACCIDENT PREVENTION.
- B. THE ELECTRICAL POWER SOURCE MUST HAVE A GROUND CABLE AND THE GROUND CABLE OF THE MACHINE (YELLOW WITH GREEN) MUST BE CONNECTED TO THE GROUND CABLE OF THE POWER SOURCE.
- C. BEFORE ANY MAINTENANCE OR REPAIRS ARE ACCOMPLISHED THE MACHINE MUST BE DISCONNECTED FROM THE AIR AND ELECTRICAL SUPPLY.
- D. NEVER WEAR TIES, CHAINS OR OTHER LOOSE ARTICLES WHEN USING, MAINTAINING OR REPAIRING THE MACHINE. LONG HAIR IS ALSO DANGEROUS AND SHOULD BE KEPT UNDER A HAT. THE USER MUST WEAR PROPER SAFETY ATTIRE IE; GLOVES, SAFETY SHOES AND GLASSES.

2.0 INSTALLATION

Install the machine in a covered and dry place. Operation temperature is +41/+122 F (+5/50 C). The ACCU Model 5400 can work below 32 F, but some minor modifications are required: contact your ACCU distributor for detailed information.

A. Remove the screws that attach the machine to the pallet.

B. Remove the two lube pails.

C. Lift the column 'P' with an appropriate lifting tool (crane, fork lift) and a belt of sufficient capacity (2000N). For this operation it is required to be helped by a second person. **BE CAREFUL NOT TO DAMAGE THE AIR HOSES.** Introduce the air hoses 'T' through the hole 'C' of the cabinet.

D. Mount the column 'P' as shown in Fig.7 and connect it to the cabinet through shaft 'A', nut 'D' and the conical bushings 'B'.

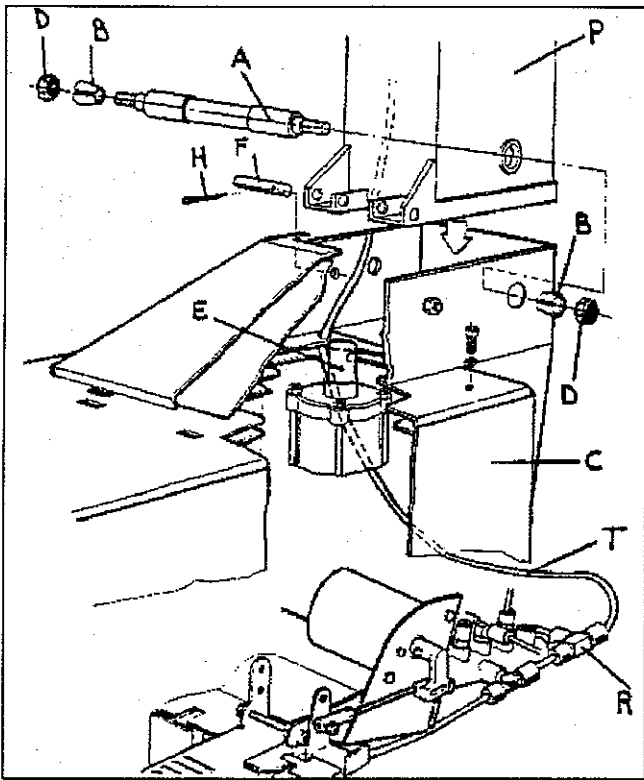


Fig.7

IMPORTANT!
THE NUTS 'D' MUST BE TIGHTENED ENOUGH TO ELIMINATE ANY SIDEWISE CLEARANCE BETWEEN THE COLUMN AND THE CABINET.

E. Tilt the column backwards. Pull the rod 'E' of the tilting cylinder and connect it to the column with in 'F'. Lock pin 'F' with cotter pin 'H'.

F. Attach air hose 'T' to the pedal assembly through air fitting 'R'.

G. Install the lube pails.

H. Attach the air hoses of the column to the foot controlled inflation valve as shown in Fig.8.

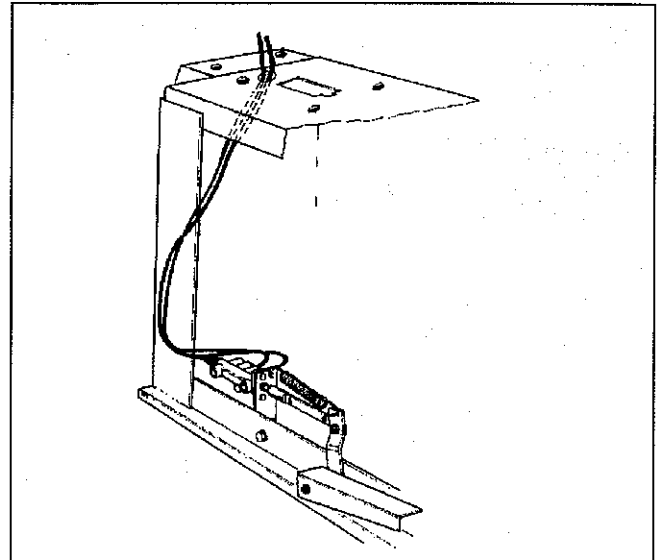


Fig.8

K. Attach the air tank to the back of the cabinet as shown in Fig.9. Attach all of the air hoses.

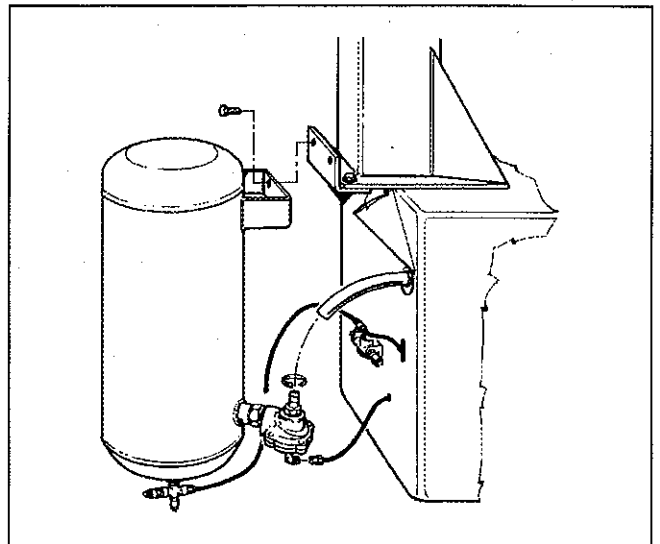


Fig.9

I. Securing the fire changer to the floor is not required but it is suggested.

2.1 ELECTRICAL INSTALLATION

WARNING!
THE ELECTRICAL INSTALLATION MUST BE MADE BY A LICENSED ELECTRICIAN.

Check that the electrical specifications of the power source are the same of the machine. The machine uses 0.75 kW.

Electric specifications are clearly marked on a label at the end of the electric cord.

If the plug is provided disregard this paragraph.

Connect the electric cord of the machine with an approved plug. The ground cable (green and yellow) must be properly connected.

WARNING!
FAILURE TO PROVIDE PROPER ELECTRICAL SUPPLY AND GROUNDING WILL CREATE A SHOCK HAZARD TO THE OPERATOR.



2.2 AIR INSTALLATION

WARNING!
THE AIR INSTALLATION MUST BE MADE ONLY BY LICENSED PERSONNEL.

WARNING!
EXCESSIVE AIR PRESSURE CAN SERIOUSLY INJURE PERSONNEL AND DAMAGE THE MACHINE.

Ensure that the line pressure is within the limits required by the machine.

If the air pressure is lower than the minimum required of 110 psi (8 bar) the clamping power of the turntable and the bead breaker power may be insufficient for certain tires.

It is suggested that the air supply be equipped with a water separator and air lubricator.

After ensuring all the above proceed as follows:

A. Connect the machine to the air supply with a rubber hose (rated for the pressure) with an internal diameter of no less than 1/4" (6mm).

WARNING!
BEFORE CONNECTING THE MACHINE TO THE AIR SUPPLY BE SURE ALL PERSONNEL ARE CLEAR OF THE MACHINE AND THAT NOTHING IS LEFT ON THE TURNTABLE AREA (TOOLS)

B. Should you install any optional accessories, please refer to the relevant instructions.

C. Should an air lubricator be installed, ensure the functional ability of the unit.
 Follow instructions of @ 7.0.J.

3.0 CONTROLS

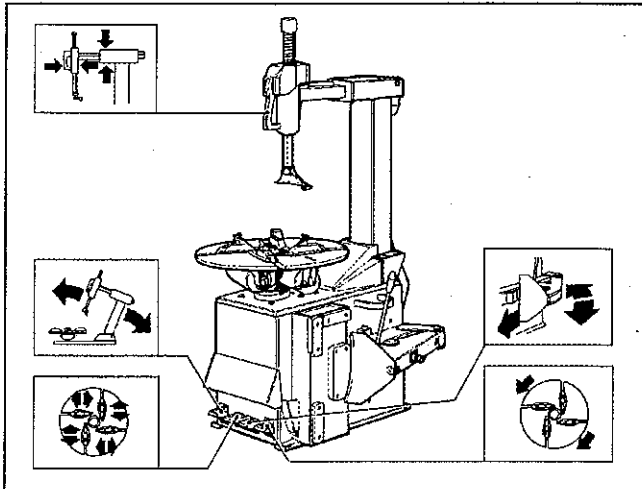


Fig.10

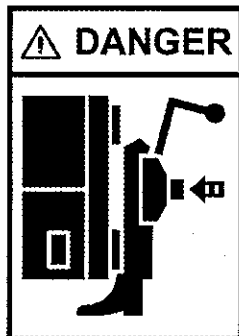
Before operating the machine, take the time to familiarize yourself with the operation and function of all the controls.

A. Press down and release, the first pedal from the left: the column tilts backwards.
Do it again: the column tilts forward.

B. Press down and release the second pedal from the left:
the jaws of the turntable will retract.
Do it again: the jaws will expand.
If you press the pedal prior to the end of the stroke and release, the jaws may be stopped in any position.

C. Open the bead breaker arm.
Press down and hold the second pedal from the right: by doing this you operate the bead breaker blade and the arm will move towards the machine.
Release the pedal: the bead breaker blade will retract.

WARNING!
WATCH YOUR FINGERS AND LEGS!



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D. Press down the first pedal from the right: the turntable turns clockwise.
Lift the pedal and the turntable turns counter-clockwise.

E. The push button on the handle allows to release the arms and position the mount/demount tool in the correct position.
Push the button to release (Fig.11). Release the button to lock (Fig.12).

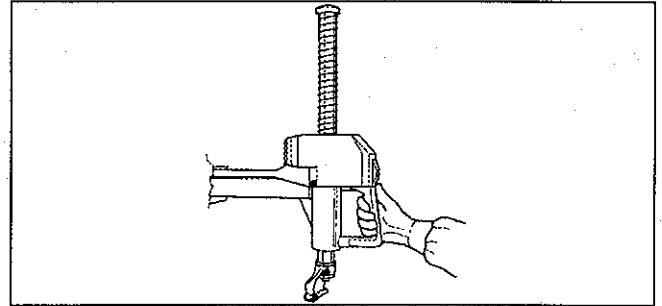


Fig.11

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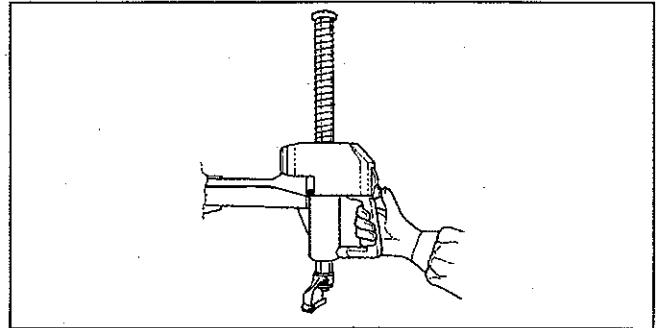


Fig.12

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F. Press bead-seater pedal on left side of the machine (#1 Fig.13) half way down: air will come out from inflation hose end.

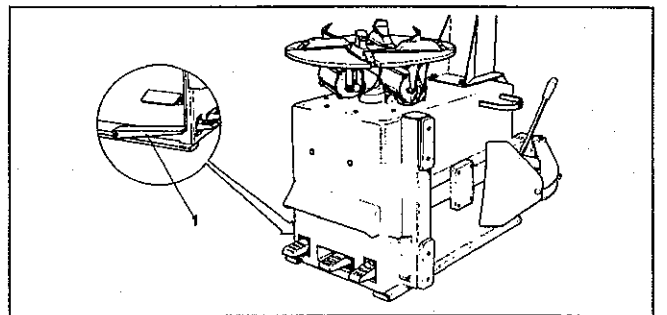


Fig.13

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G. Press bead-seater pedal down swiftly to get air blast from the inflator jets on the jaws.
Air simultaneously comes out of inflator hose.

ATTENTION!
WHEN OPERATING THE BEAD SEATER IT IS MANDATORY TO WEAR SAFETY GLASSES TO PROTECT EYES.

4.0 MOUNTING AND DEMOUNTING PRECAUTIONS

IMPORTANT!

BEFORE MOUNTING A TIRE ON A RIM, PAY ATTENTION TO THE FOLLOWING:

A. THE RIM MUST BE CLEAN AND IN GOOD CONDITION: IF NECESSARY CLEAN AND PAINT IT AFTER REMOVING ALL WHEEL-WEIGHTS TO INCLUDE 'TAPE WEIGHTS' INSIDE THE RIM.

B. THE TIRE MUST BE CLEAN AND DRY, WITHOUT ANY DAMAGE TO THE BEAD.

C. REPLACE THE RUBBER VALVE STEM WITH A NEW ONE OR REPLACE THE 'O' RING IF THE VALVE STEM IS MADE OF METAL.

D. IF THE TIRE REQUIRES A TUBE, MAKE SURE THE TUBE IS DRY AND IN GOOD CONDITION.

E. LUBRICATION IS NECESSARY TO MOUNT THE TIRE CORRECTLY AND GET A PROPER CENTERING. BE SURE YOU ARE USING APPROVED LUBRICANT ONLY.

F. MAKE SURE THE TIRE IS THE CORRECT SIZE FOR THE RIM.

4.1 DEMOUNTING TUBELESS TIRES

A. Remove all wheel-weights from the rim. Remove the valve stem or core and deflate the tire (Fig.14).

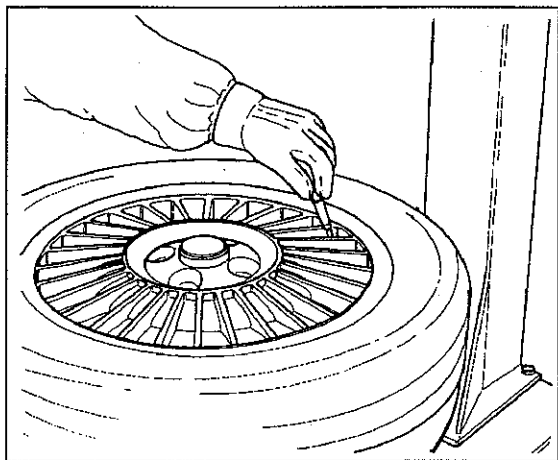


Fig.14

B. Break both beads.
 Pay extra attention during this operation as it easy to mistakenly keep your foot on the bead breaking pedal too long. This could result in immediate bead damage (Fig.15)

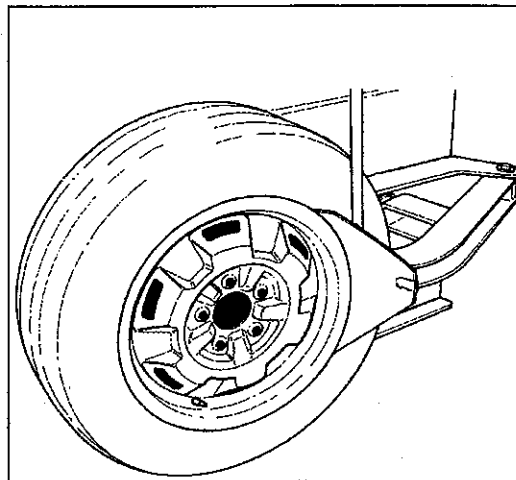


Fig.15

WARNING!
ON CHEVROLET CORVETTE WHEELS WITH THE OPTIONAL LOW PRESSURE SENSOR INSTALLED, BREAK THE BEAD AT 90 DEGREES OFFSET FROM THE VALVE STEM. DAMAGE TO THE WHEEL WILL RESULT IF THE BEAD IS BROKEN AT ANY OTHER POINT ON THE RIM.

C. Set the rim clamps to the proper position: retract clamps to clamp the wheel from the inside and expand clamps to clamp from the outside.
 When clamping samll wheels (14" or smaller) from the outside, set the clamps at a diameter nearly equal to the rim diameter, before placing the wheel on the clamps.
 This will help avoid the possibility of pinching the tire.

WARNING!
TO MINIMIZE THE RISK OF SCRATCHING ALLOY RIMS, THESE SHOULD BE CLAMPED FROM THE OUTSIDE.

D. Liberally lubricate both beads.
 Place the wheel **WITH DROP CENTER UP** (Fig.16) on the turntable, and clamp in position. Hold the tire and wheel down while clamping.

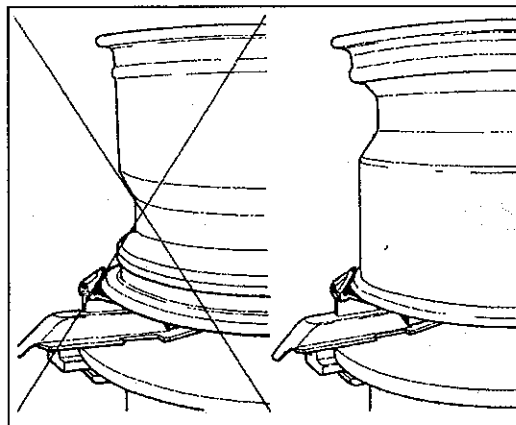


Fig.16

E. Position the mount/demount head in contact with rim edge and lock it into place: the tool automatically moves away from the rim edge vertically. Turn the adjustment knob until the mount/demount head clears from the rim flange about 1/16" (2mm); this is necessary to avoid any rim damage (Fig.17).

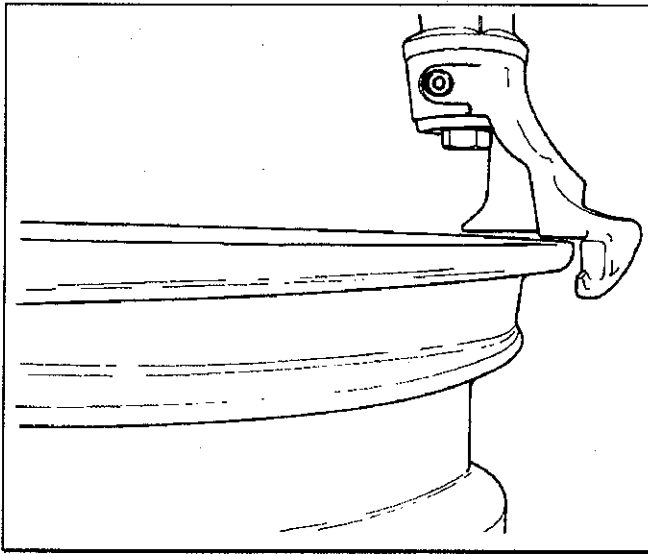


Fig.17

NOTE:

THE ROLLER INSIDE THE MOUNT/DEMOUNT TOOL MAY BE REPLACED BY A PLASTIC INSERT. REPLACEMENT IS SUGGESTED FOR OPERATORS MAINLY WORKING ON LIGHT ALLOY RIMS.

EVERY MACHINE IS EQUIPPED WITH SEVERAL PLASTIC INSERTS (INSIDE STANDARD EQUIPMENT BOX). THE PLASTIC INSERTS WILL HELP AVOID DAMAGE FROM ACCIDENT CONTACT BETWEEN THE TOOL AND THE RIM. THE PLASTIC INSERTS MUST BE PERIODICALLY REPLACED.

NOTE:

ONCE THE MOUNT/DEMOUNT HEAD IS POSITIONED PROPERLY, MATCHING WHEELS MAY BE CHANGED WITHOUT HAVING TO RESET THE HEAD.

F. Insert the bead lifting tool under the bead and over the support of the mount/demount tool. Lift the bead onto the mounting.

To make this operation easier, insure that the bead of the tire, directly across from the mount/demount head, is in the drop center of the wheel. Push the tire into the drop center with your hand or bead depressor tool if necessary.

If desired, the bead lifting tool can be removed after lifting the bead onto the finger (Fig.18).

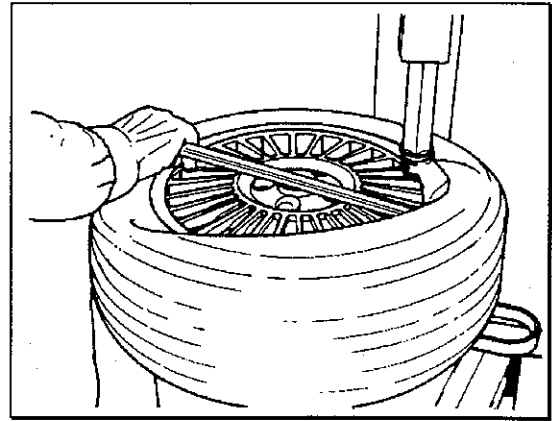


Fig.18

G. Rotate the turntable clockwise and at the same time push down on the tire sidewall to move the bead into the drop center of the rim (Fig.19).

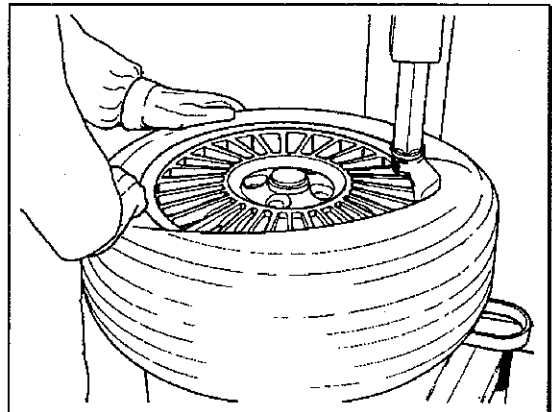


Fig.19

H. Repeat the process for removing the lower bead. This time, lift the bead opposite to the mount/demount head to keep it in the drop center (Fig.20).

Move the swing arm aside and remove the tire.

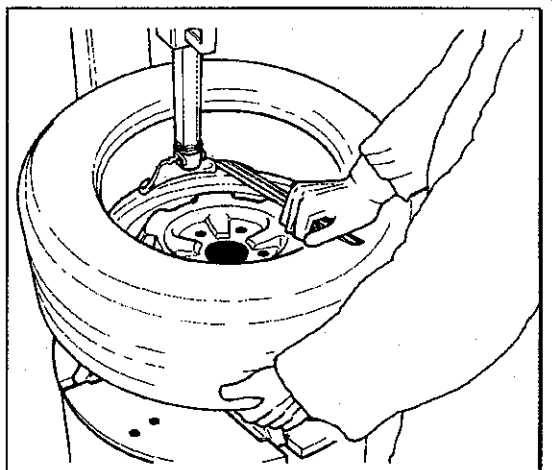


Fig.20

4.2 MOUNTING TUBELESS TIRES

A. Lubricate the entire rim surface (Fig.21).

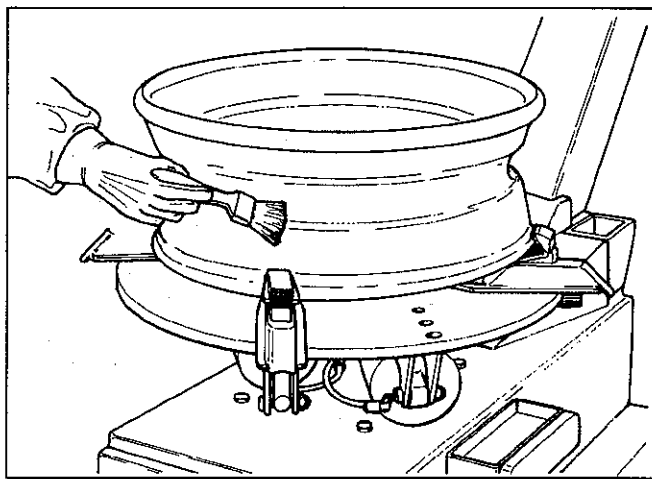


Fig.21

Liberalily lubricate both beads of the tire (Fig.22).

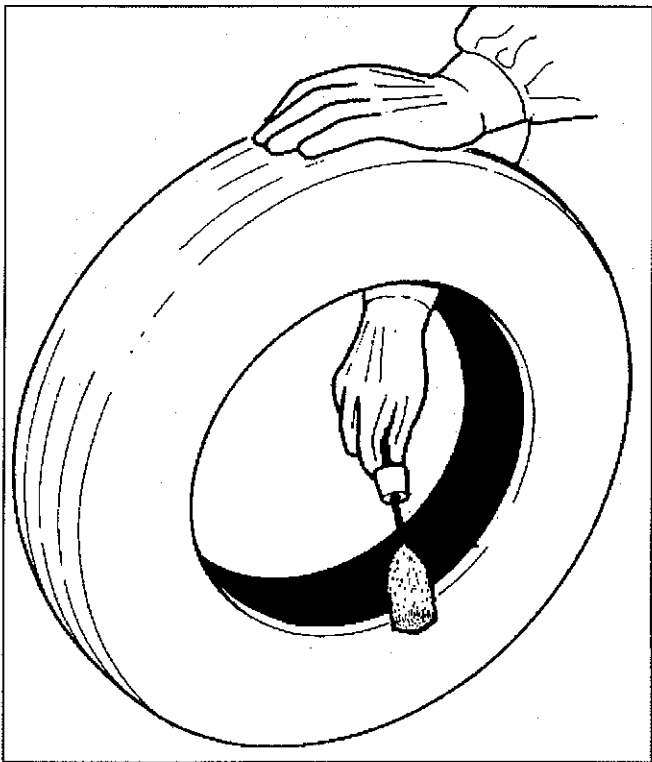


Fig.22

WARNING!
 THESE LUBRICATION OPERATIONS ARE NECESSARY TO MOUNT THE TIRE CORRECTLY AND GET A PROPER CENTERING ON THE RIM. BE SURE YOU ARE USING APPROVED LUBRICANT ONLY.

WARNING!
 SOME TIRES HAVE A COLOR DOT THAT MUST BE KEPT ON THE OUTSIDE OF THE WHEEL. IF THIS IS THE CASE BE SURE TO ATTAIN PROPER ALIGNMENT.

B. Lock the rim on the chuck and rotate it to have the valve at the 2 o'clock position. Place the tire to be mounted on the rim. Swing the mounting arm forward so that the mount/demount tool is in the working position. Engage the lower bead OVER the mounting wing and UNDER the mounting finger of the mounting tool. Turn the wheel clockwise and push the tire down into the drop center, opposite to the mount/demount head (Fig.23).

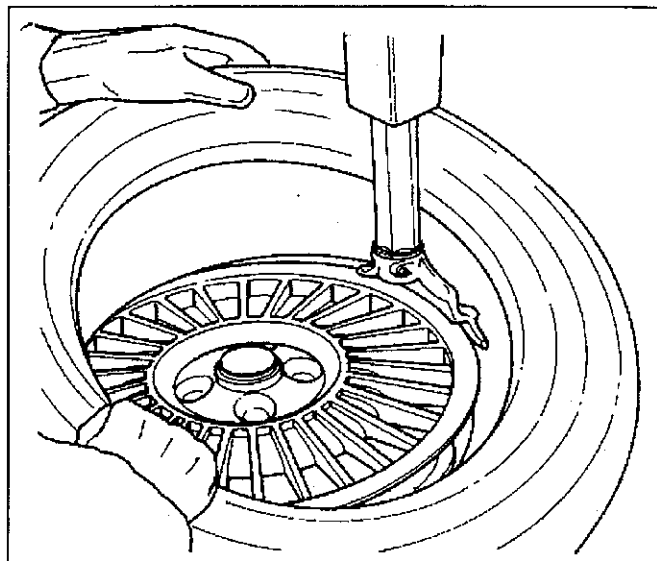


Fig.23

C. Mount the upper bead following the directions in section B. With low profile tires the bead depressor tool (option #4003444 Fig.24) can help to ease the mounting of the top bead.

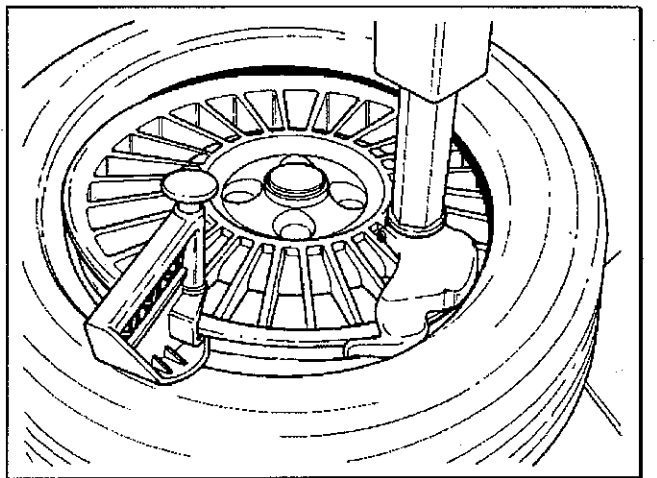


Fig.24

4.3 INFLATION OF TUBELESS TIRES.

Make sure that both beads are properly lubricated.

WARNING!
BEAD SEATING IS THE MOST DANGEROUS PART OF MOUNTING A TIRE.
 IT IS POSSIBLE TO MOUNT TIRES THAT ARE 1/2" SMALLER IN DIAMETER THAN THE RIM THAT THEY ARE MOUNTED ON. WHILE THESE BEADS WILL SEAL, IT IS IMPOSSIBLE TO GET THEM TO SEAT IN THEIR PROPER POSITION. EXPLOSION OF A TIRE MAY CAUSE SEVERE INJURY OR DEATH.

Inflate tire according to manufacturers recommendations.

WARNING!
NEVER EXCEED THE MAXIMUM PRESSURE ALLOWED BY THE TIRE MANUFACTURER.

THE RIM MUST BE UNCLAMPED WHEN INFLATING BUT ONLY AFTER THE BEADS HAVE BEEN SEATED.

THE OPERATOR MUST STAND CLEAR FROM THE WHEEL WHEN INFLATING, AND PRESSURE MUST BE MONITORED FREQUENTLY TO AVOID OVER INFLATION.

BEFORE INFLATING A TIRE, CHECK THE CONDITION OF THE TIRE AND THE RIM.

Due to unusual configurations or the stacking of tires the inflation process is sometimes difficult. To assist with this problem the ACCU Model 5400 is equipped with bead seater jets incorporated into the table top.

To utilize the bead seater proceed as follows:

- A. If possible lock the wheel from inside. Outside locking reduces efficiency.
- B. Connect the inflation hose to the valve stem.
- C. Lift the tire with both hands so that the upper bead is sealed to the rim edge (Fig.25).



Fig.25

D. Press the inflation pedal down swiftly (#14 Fig.1). The top bead is already sealed by the lifting motion. Therefore, the air from the bead seater jets will impact the top sidewall and rebound into the bottom sidewall driving it into place and creating a seal.

ATTENTION!
WHEN OPERATING THE BEAD SEATER WEAR SAFETY ATTIRE TO AVOID INJURY TO BODY OR EYES.

E. Complete inflation as described at @4.3.A.

5.0 DEMOUNTING TUBE-TYPE TIRES

A. For breaking the bead operate as described for the tubeless tires in @ 4.1.A to 4.1.F.

In this case the valve is part of the tube.

WARNING!
BE CAREFUL NOT TO DAMAGE THE TUBE DURING THE BEAD-BREAKING OPERATION.
THE VALVE SHOULD BE OPPOSITE TO THE BLADE OF THE BEAD BREAKER.

B. To demount the first bead, place the valve at 2 o'clock position.

WARNING!
DO NOT CATCH THE TUBE WITH THE BEAD LIFTING TOOL, WHEN LIFTING THE BEAD ON THE MOUNTING FINGER.

After demounting the first bead remove the tube before demounting the second bead, as described in @ 4.1.

5.1 MOUNTING TUBE-TYPE TIRES

A. Do as described in @ 4.2.A.
 Do **NOT** lubricate the tube. Talc can be used to assist with tire positioning.

B. Confirm that the tube is designed for tires(Fig.26).

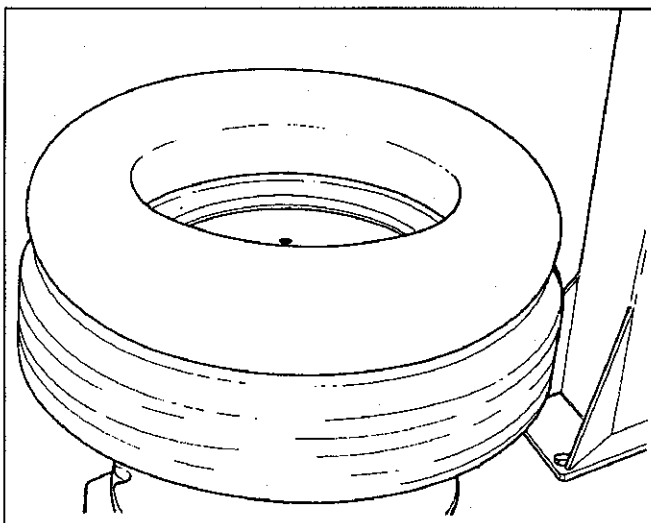


Fig.26

C. Inflate the tube slightly; if held with the index finger it should bend a little (Fig.27).

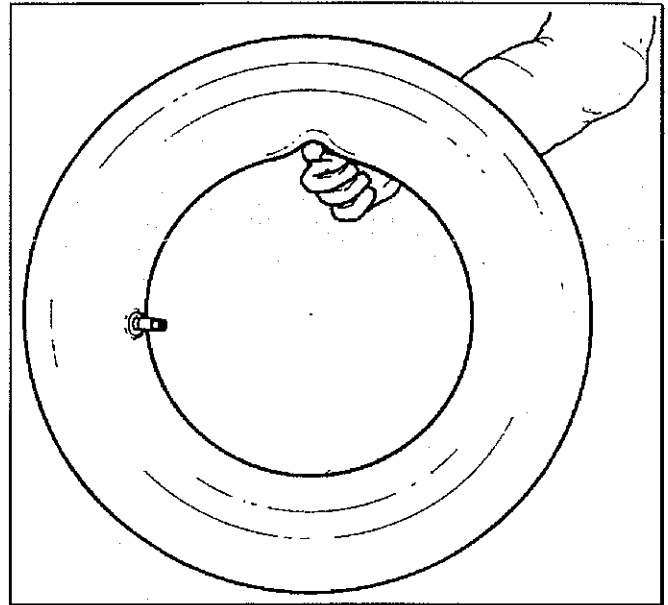


Fig.27

D. Mount the first bead as described in @ 4.2.B.
 Put the tube inside the tire and hang the valve with the clip of the inflating hose (Fig.28).
 Mount the top bead following the directions above.

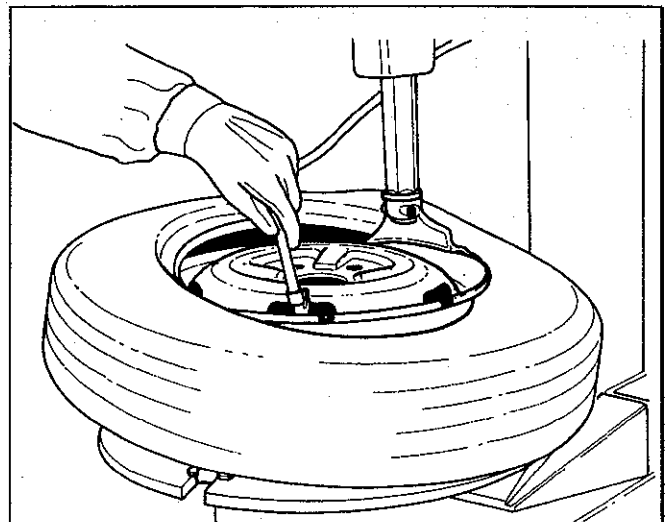


Fig.28

5.2 INFLATING TUBE-TYPE TIRES.

To inflate the tire unlock the rim and start inflating while pressing the valve towards the inside (this is necessary to avoid air pockets forming between tube and the tire) (Fig.29).

Ensure that the tire is correctly centered on the rim and complete inflation as described in @ 4.3.A.

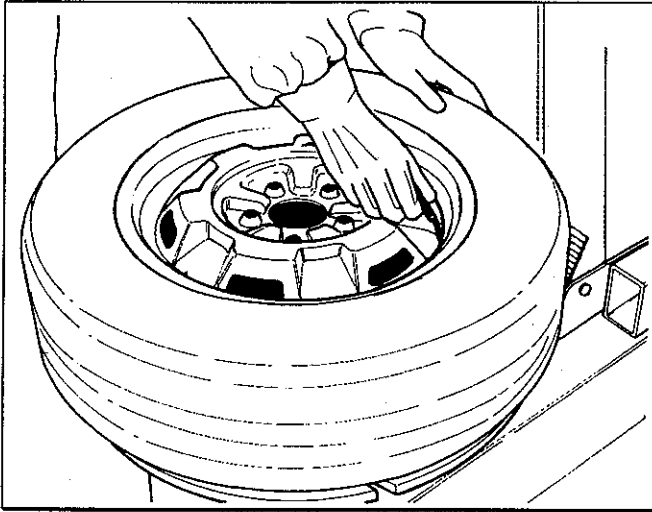


Fig.29

6.0 MOUNTING AND DEMOUNTING MOTORCYCLE TIRES

To mount and demount motorcycle tires it is necessary to utilize the optional motorcycle adaptors (4 pieces #4015099).

The bead-breaking, mounting and demounting technique is the same as per the car, tubeless or tube-type tires.

WARNING!
MOTORCYCLE RIMS MUST ALWAYS BE CLAMPED FROM THE OUTSIDE.
AIR PRESSURE MUST NOT EXCEED 110 PSI (8 BAR) WHEN CLAMPING MOTORCYCLE RIMS.

7.0 MAINTENANCE

WARNING!
BEFORE STARTING ANY MAINTENANCE OPERATION ENSURE THAT THE MACHINE IS DISCONNECTED FROM THE AIR AND ELECTRIC SUPPLY.

A. Periodically clean the vertical hexagonal rod with nonflammable liquid detergent.

After this immediately lubricate with oil (Fig.30).

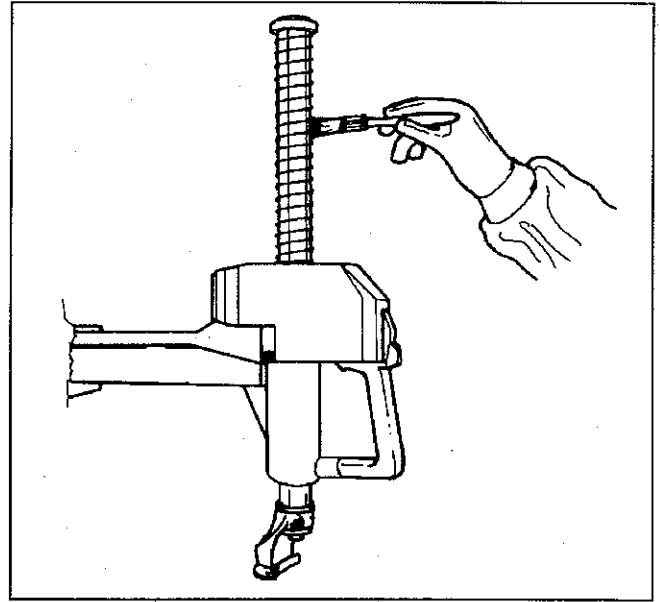


Fig.30

B. Periodically clean all moving metal parts and lubricate with oil.

C. Clean every week the teeth of the clamps with a wire brush, check the plastic rim protector and replace it if worn (Fig.31).

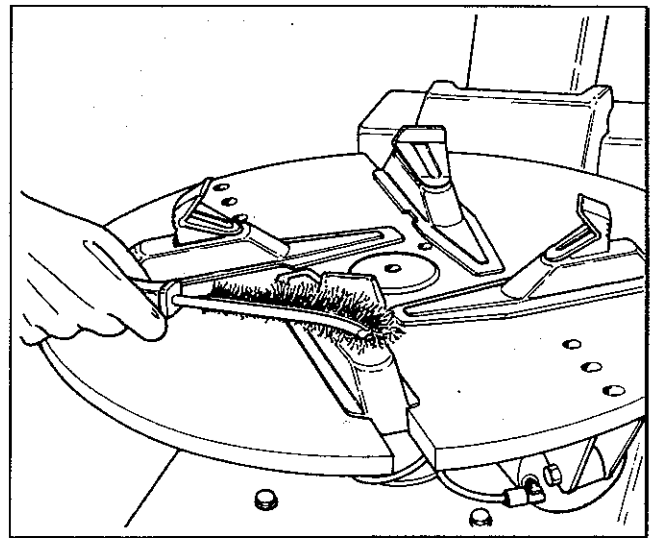


Fig.31

D. Periodically replaced the plastic insert inside mount/demount tool.

E. Lubricate rods of air cylinders with oil as needed.

F. Periodically wash all plastic parts with cold water and soap or window cleaner.

G. Check the bead breaker pads. Replace if worn.

H. If the machine is equipped with an air filter, discharge the water every day.

I. If the machine is equipped with an automatic air lubricator, check the oil level weekly. When adding oil to the lubricator, disconnect the air supply first, remove the fill screw 'A', and add oil as needed. Make sure seals are in place when replacing the cap.

Drain water daily from water separator. Do this by pulling down the fitting 'B' (Fig.32).

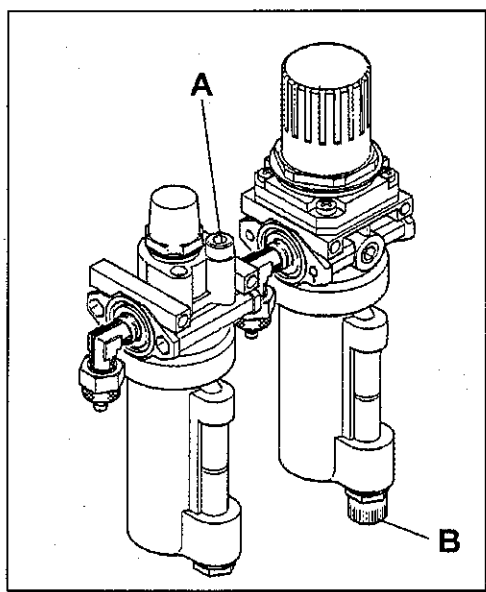


Fig.32

WARNING!
USE ONLY OILS FOR AIR DEVICES, DO NOT USE BRAKE FLUID OR OTHER NON SUGGESTED LUBRICANTS.

Suggested oils for the filter/lubricator unit:

- | | |
|---------|----------------------|
| TAMOIL: | WHITE MINERAL OIL 15 |
| SHELL: | ONDINA OIL 15 |
| BP: | ENERGOL WT 3 |
| TOTAL: | LOBELIA SB 15 |
| ESSO: | MARCOL 82 |

MH200/2

**AIR OPERATED TIRE
MOUNTING AND
DEMOUNTING HELP DEVICE**

OPERATOR'S MANUAL



1. The first step is to check the power supply.

2. The second step is to check the connections.

3. The third step is to check the settings.

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1.0 INTRODUCTION

Congratulations on purchasing the MH 200/2 tyre mounting/demounting help device.

This device, fitted on a tower-tilt type ACCU. Tyre changer, makes easier the mounting and demounting of hard tyres.

With a minimum of maintenance and care this device will provide many years of trouble-free operation.

Instructions on use, maintenance and operational requirements of the machine are covered in this manual.



STORE THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE. READ THIS MANUAL THOROUGHLY BEFORE USING THE MACHINE.

1.1 USE LIMITATIONS

The tyre mounting/demounting help model MH 200/2 is intended to be used as a help to ease the mounting and demounting of car tyres.

This device can be used only in conjunction of the following models of tyre changers, manufactured after Jan. 1, 1994:

ACCU 4402
ACCU 4502
ACCU 5400
ACCU 5402

This device shall be used in compliance to the destination for which it is specifically designed.

Any other use shall be considered as improper thus not reasonable.

In particular, the installation on machines not allowed can determine hazard conditions.

The manufacturer shall not be considered liable for possible damages caused by improper, wrong or non reasonable use.

1.2 NOTICE

This manual is a part of the product. Read carefully the warnings and instructions of this manual since they provide important information concerning safety and maintenance.

1.3 GENERAL SAFETY INSTRUCTIONS

THE USE OF THIS DEVICE IS ALLOWED ONLY TO PERSONNEL DULY TRAINED BY AN AUTHORIZED ACCU DEALER.

ANY TAMPERING OR MODIFICATION OF THIS DEVICE OR OF ITS PARTS OR COMPONENTS NOT PREVIOUSLY AUTHORIZED BY THE MANUFACTURER WAIVE THE MANUFACTURER FROM ANY DAMAGE CONSEQUENT

OR RELATED TO THE ABOVE MENTIONED TAMPERINGS.

REMOVING OR BYPASSING SAFETY DEVICES OR WARNING LABELS OF THE MACHINE IS A VIOLATION OF THE SAFETY REGULATIONS.

THE USE OF THIS DEVICE IS ALLOWED ONLY IN LOCATIONS WITH NO EXPLOSION OR FIRE HAZARD.

THIS DEVICE IS DESIGNED TO RECEIVE ORIGINAL SPARE PARTS AND ACCESSORIES ONLY.

THE INSTALLATION SHALL BE CARRIED OUT ONLY BY QUALIFIED PERSONNEL AND WITHIN THE SCOPE OF THE INSTRUCTIONS PROVIDED IN THIS MANUAL.

CHECK FOR POSSIBLE DANGEROUS CONDITIONS DURING THE OPERATION OF THE MACHINE. IN SUCH A CASE STOP IMMEDIATELY THE MACHINE.

IF CASE A DEFECTIVE FUNCTIONING CONDITION IS DETECTED, STOP USING THE MACHINE AND CALL THE AUTHORIZED ACCU DISTRIBUTOR FOR ASSISTANCE.

1.4 NOMENCLATURE

Before installing and using the mounting/demounting help, it is suggested that you become familiar with the nomenclature of the machine's components (Fig.1).

1. Rise/fall control lever
2. Roller
3. Roller release lever
4. Horizontal arm
5. Little roller
6. Lower beadholder disk
7. Movable column
8. Fix column
9. Fixing plate

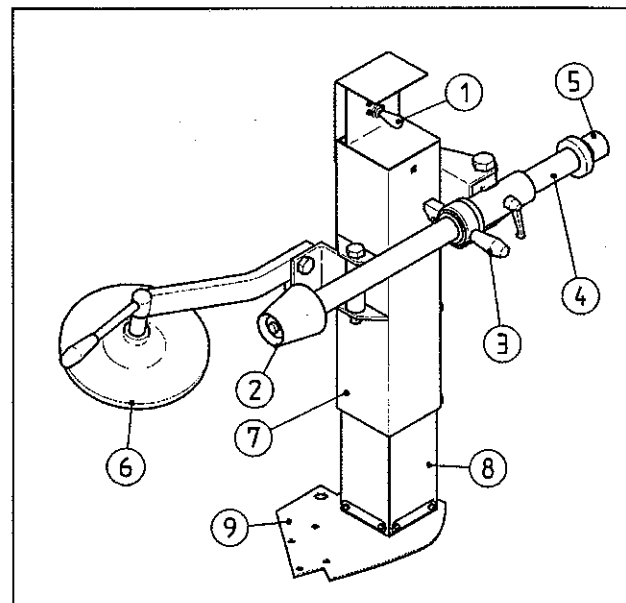


FIG.1

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1.5 SPECIFICATIONS

Weight	kg 49 (108 lbs)
Air pressure	bar 8-12 (110-170 psi)
Maximum roller force	kN 4 (880 lbs)
Raise-descent speed	m/s 0.20 (8"/s)
Acoustic pressure	<70 dBA

1.6 DIMENSIONS OF THE MACHINE

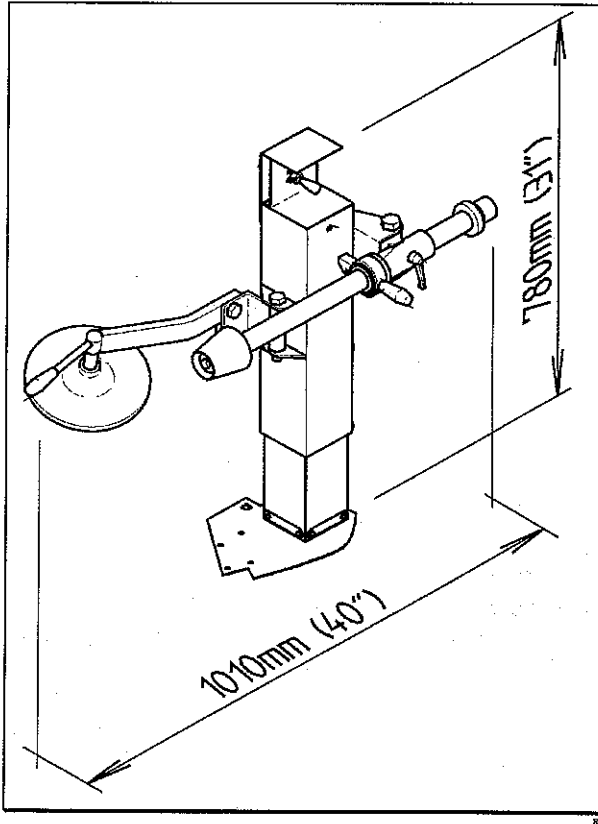


Fig.2

1.7 SAFETY PRECAUTIONS

A. DURING THE USE AND MAINTENANCE OF THE MACHINE IT IS MANDATORY TO COMPLY WITH ALL LAWS AND REGULATIONS FOR ACCIDENT PREVENTION.

B. BEFORE ANY MAINTENANCE OR REPAIRS ARE ACCOMPLISHED THE MACHINE MUST BE DISCONNECTED FROM THE ELECTRIC SUPPLY.

C. NEVER WEAR TIES, CHAINS OR OTHER LOOSE ARTICLES WHEN USING, MAINTAINING OR REPAIRING THE MACHINE. LONG HAIR IS ALSO DANGEROUS AND SHOULD BE KEPT UNDER A HAT. THE USER MUST WEAR PROPER SAFETY ATTIRE IE; GLOVES, SAFETY SHOES AND GLASSES.

1.8 SAFETY DEVICES

The raise-descent speed of the movable column is limited to 0.2 m/sec. to prevent compression hazards.

The lower disk device is free to rotate around the horizontal and vertical axis to prevent entrapping and compression hazards against the self-centering chuck of the machine on which the device is being mounted.

2.0 CARRIAGE INSTRUCTIONS

The machine is crated in a wooden box of appropriate strength.

The box is mounted in a steady way on a pallet. The carriage of the machine is its packing must be made with an appropriate lifting device (fork lift) Fig.3.

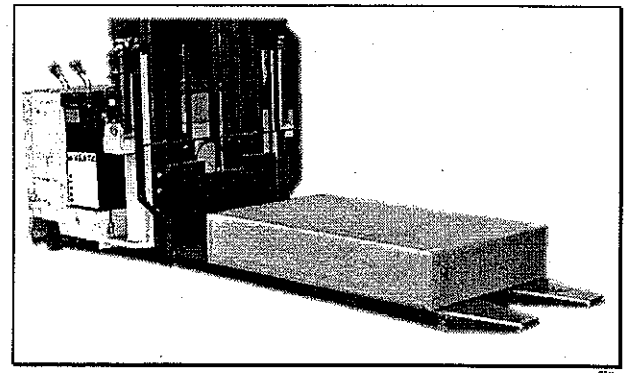


Fig.3

2.1 UNCRATING INSTRUCTIONS



ALWAYS WEAR GLOVES WHEN UNCRATING THE MACHINE TO PREVENT SCRATCHES OR ABRASIONS DUE TO THE CONTACT WITH PACKING MATERIALS.

Uncrate the machine paying attention when cutting the plastic straps or during any other operation which may be hazardous.

After removing the carton check for any visible damage to the machine and its components. In case of doubts call qualified personnel for assistance.

The packing materials (plastic bags, polystyrene, nails, screws, wood etc.) must be properly disposed of. Place the above mentioned materials into a trash container and dispose per local regulations.

2.2 INSTALLATION AREA

Check that the machine onto which this device is to be mounted is installed in an area as required by its operator's manual.

The installation of this device increases only a little the maximum sizes of the machines on which it is installed.

Insure that enough space is left around the machine to prevent compression or entrapping hazards.

Make sure that from the operating position the user can see all of the machine and the surrounding area.

The operator shall forbid, in such an area, the presence of non authorized persons and of objects which may create possible hazards.

3.0 INSTALLATION INSTRUCTIONS



BEFORE INSTALLATION THE MACHINE ONTO WHICH THE DEVICE IS TO BE FITTED MUST BE DISCONNECTED FROM THE ELECTRIC AND AIR SUPPLY.

For installation proceed as follows:

- A. Insert the arm (#1 Fig.4) in the support (#2) end push the roller inside the arm until it blocks.

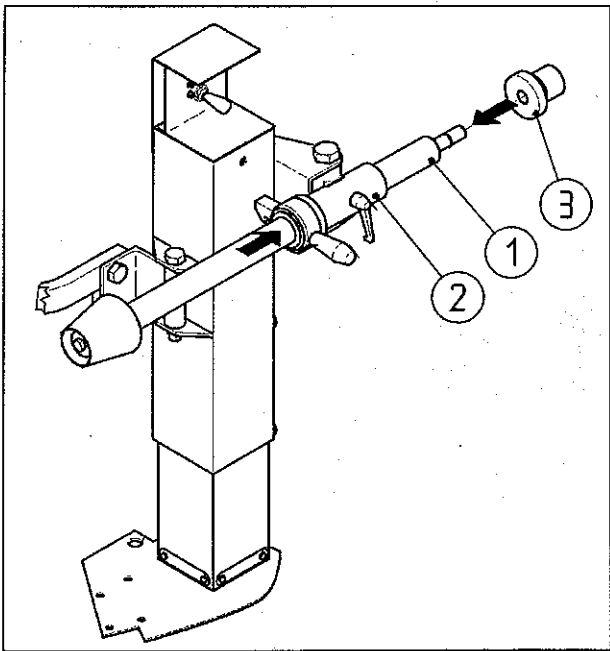


Fig.4

- B. Place the drilled plate 'A' as shown in Fig.5. The square angle must be in contact with the side wall of the cabinet and with the welded reinforcement 'B'. Lock the plate in a safe way with a clamp.

- C. Drill 4 through holes diameter 11 mm (1/2") on the bead breaker beam using the previously fitted plate as a jig.

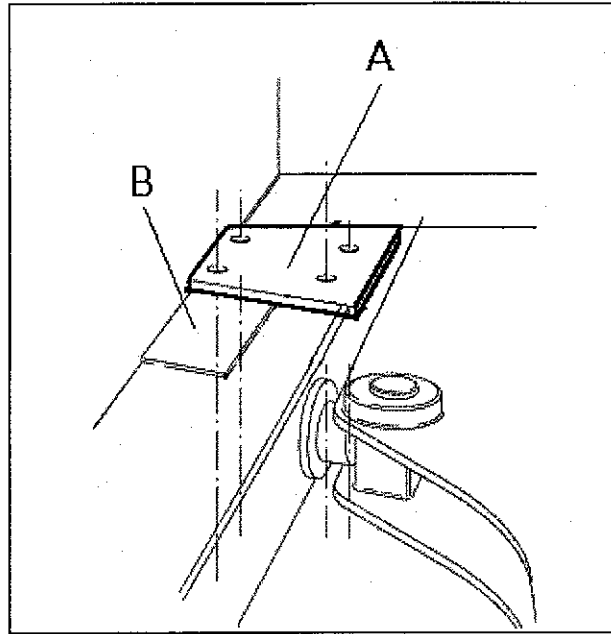


Fig.5

- D. Lift the device with an appropriate lifting tool (crane, fork lift) and a belt of sufficient capacity (100 kg - 220 lbs).

Attach the device (#1 Fig.6) to the bead breaker beam (#2) with the screws (#3), washers (#4) and nuts (#5) supplied.

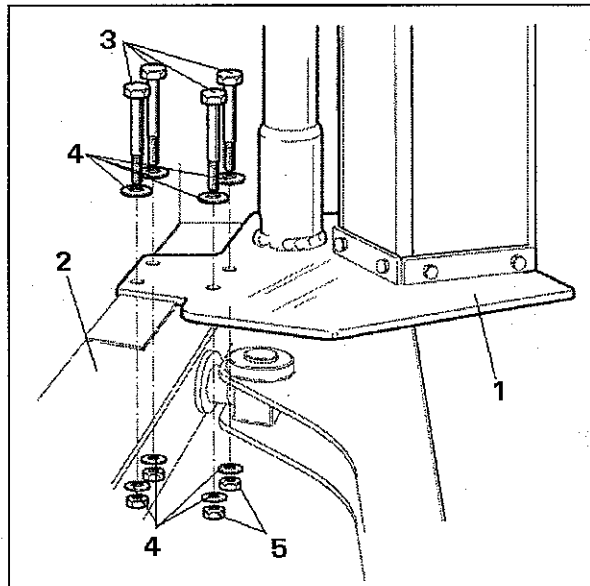


Fig.6

IMPORTANT!
THE DRILLED PLATE ('A' Fig.5) MUST BE LEFT AS A SPACER BETWEEN THE DEVICE AND THE BEAD BREAKER BEAM.

3.1 AIR INSTALLATION



THE AIR INSTALLATION MUST BE MADE ONLY BY LICENSED PERSONNEL

Ensure that the line pressure is within the limits required by the machine.

If the pressure is lower than the minimum required of 8 bar (110 psi) the force of the device may be insufficient for certain types of tires.

After checking all the above proceed as follows:

- A. Connect the air pipe on issue with the fitting on the device (#1 Fig.7)

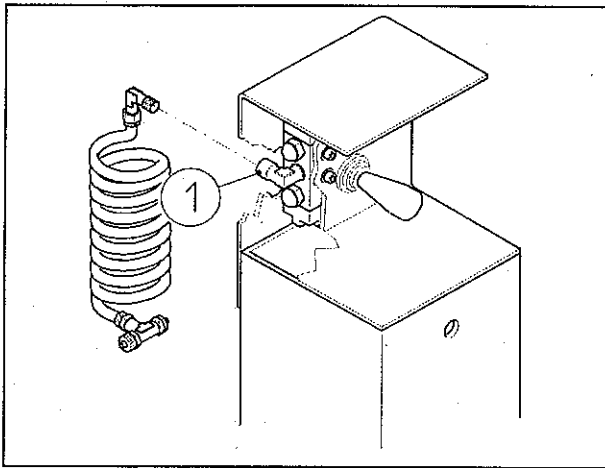


Fig.7

N.B.:
BEFORE CONNECTING THE HOSE, BIND THE SCREW THREAD WITH TEFLON TAPE.

- B. Cut the air pipe emerging from the filter (#1 Fig.8), insert the fitting (#2 Fig.8) in the cut pipe and connect the air pipe to the device #3 as shown in Fig. 8.

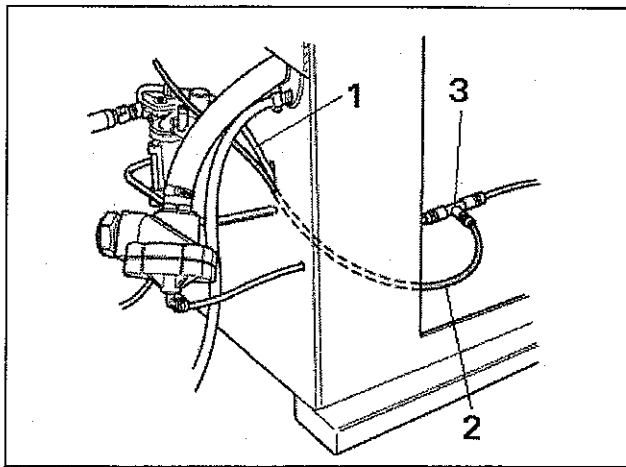


Fig.8

- C. Replace the panel of the tire changer with the appropriate screws.

4.0 CONTROLS

Before operating the machine ensure that you have well understood the operation and function of all the controls.

- A. Operate the lever upwards (#1 Fig.9) to raise the mobile column and consequently the roller and the lower disco.
- B. Operate the lever downwards (#1 Fig.9) to lower the mobile column and consequently the roller and the lower disco.

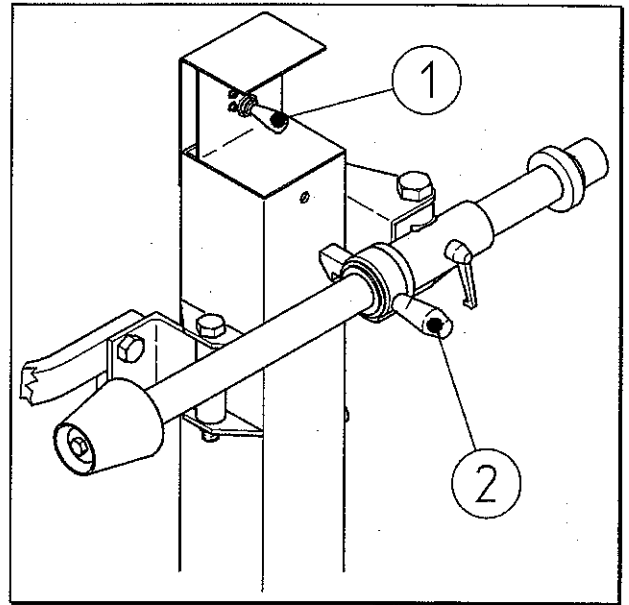


Fig.9

- C. Operate the unlock lever to release the roller arm (#2 Fig.9). Slide the horizontal arm all the way to the rear and swing the roller arm to bring the roller at rest position. Repeat the opposite operations to bring the roller into the working position.

5.0 USE AS A DEMOUNTING HELP DEVICE

- A.** Position the roller approx. 2 cm (3/4") from the rim edge.
Press down the side wall of the tire to ease the introduction of the fire bar (Fig.10).
Move the roller to rest position.
Demount the first bead as described in the tire changer operator's manual.

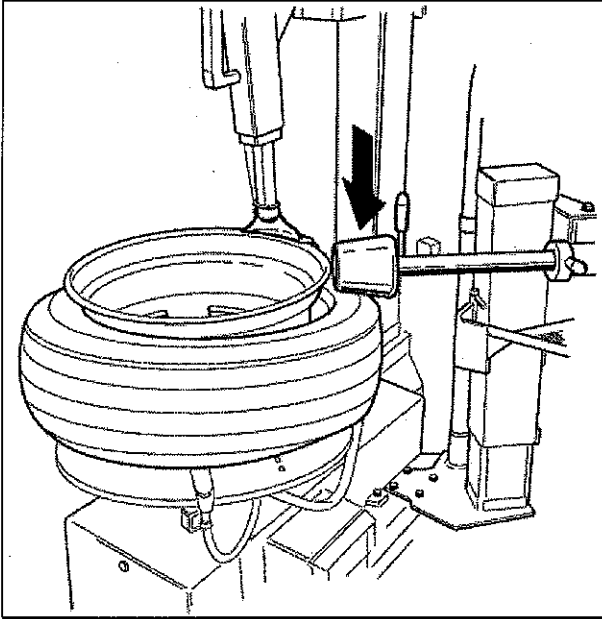


Fig.10

- B.** Position the lower disk device next to the lower rim edge.
Hold firmly the handle, press the raise button and at the same time rotate the turntable (Fig.11).
This operation allows to loosen the bead if this is stuck and helps lifting the tire.



NEVER LEAVE TOOLS OR ANY OTHER OBJECTS ON THE SURFACE OF THE LOWER DISK DEVICE.

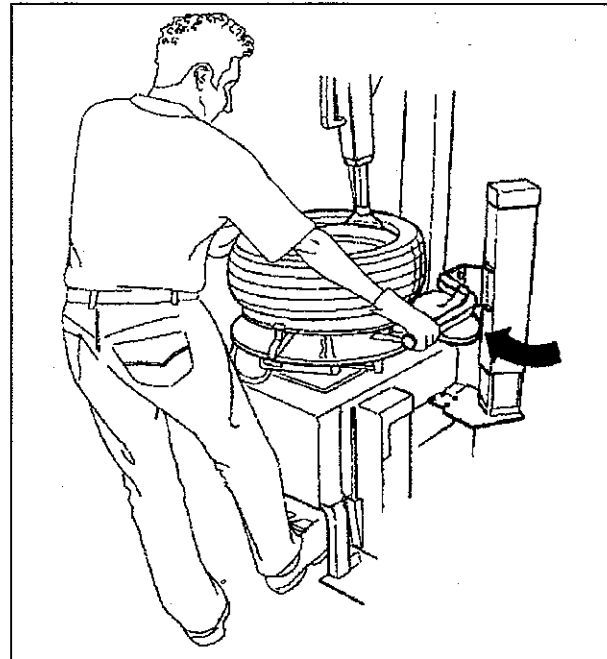


Fig.11

REMARK:

A CERTAIN EFFORT ON THE HANDLE OF THE LOWER DISK DEVICE IN RADIAL DIRECTION IS NORMAL TO COUNTER-BALANCE THE ACTION OF THE TURNTABLE THAT PUSHES THE DEVICE OFF THE CENTER WHEN ROTATING.

THE LOWER DISK DEVICE CANNOT BE LOCKED BECAUSE OF SAFETY REASONS.

5.1 USE AS A MOUNTING HELP DEVICE

- A.** Mount the first bead.
Position the roller as shown in Fig.11
During the mounting operation the roller pressure helps keeping the bead in the drop center.
Move the roller to rest position.

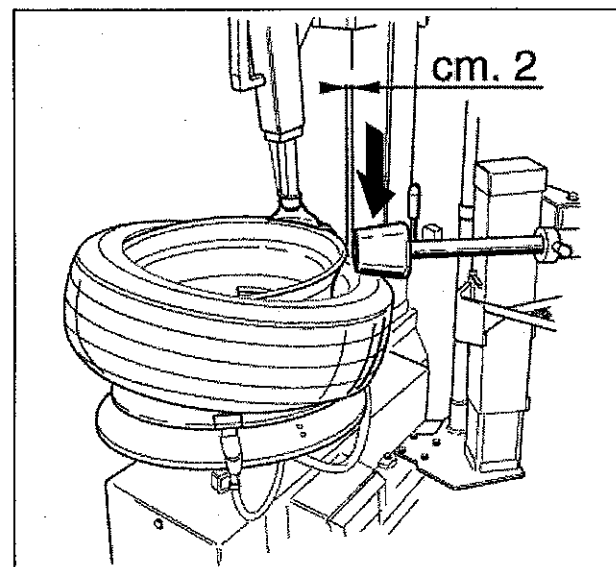


Fig.11

6.0 MAINTENANCE



BEFORE STARTING ANY MAINTENANCE OPERATION ENSURE THAT THE MACHINE ONTO WHICH THE DEVICE IS FITTED IS DISCONNECTED FROM THE AIR AND ELECTRIC SUPPLY.

- A. Periodically clean and lubricate with oil the horizontal roller arm.
- B. Grease every month the pivots of the roller swing arm, of the lower disk device and the sliding guides of the moving column.

7.0 MOVING THE MACHINE

The device can be moved only together with the machine onto which is fitted.

Follow the instructions given in the tire changer operator's manual.

8.0 PUTTING THE MACHINE OUT OF SERVICE

In case the machine is not to be used for a long period of time (6 months or more) it is necessary to disconnect all power sources and protect all parts that may be damaged. When putting the machine back in operation, check first the condition of all previously protected parts, and check for correct functioning of all devices before using the machine again.

9.0 SCRAPPING THE MACHINE

Once it is decided to no longer use this machine it is required to make it inoperating by cutting the air inlet fitting.

Consider the machine as a special waste, dismantle the machine in homogeneous parts (metal, plastic, oils etc.) and dispose following the local running regulations.

10.0 TROUBLE SHOOTING

TROUBLE	CAUSE	REMEDY
<ul style="list-style-type: none">• Operating the raise/descent lever (the device does not move).	<ul style="list-style-type: none">• Lack of air pressure.• Air hose damaged or kinking.	<ul style="list-style-type: none">• Check the machine onto which the device is installed is properly supplied with air.• Call the authorized ACCU service center.

WARNING!

FOR USE OF AUTHORIZED TECHNICAL PERSONNEL ONLY

ACCU 5400

SPARE PARTS EXPLODED DRAWINGS

- **All'ordine specificare:** tipo macchina e matricola, codice e quantità del particolare
- **En cada pedido hay que especificar:** el tipo de màquina y su nùmero de matrícula, el nùmero de còdigo de la pieza requerida y su cantidad.
- **Na encomenda especifique:** tipo da máquina e número de série, código do item e quantidade.
- **On order specify:** type of machine and serial number item code and quantity.
- **A la commande:** bien préciser le type de la machine, le n° de serie, la référence de pièce, la quantité.
- **Bei Auftragserteilung anzugeben:** Maschinentype, Serinnummer, Artikel-Code, Menge.
- **Specificeer op een order:** machine type en serienummer, artikelnummer en aantal.
- **Vid order specificisera:** Maskin typ och serie nr reservdels nr ochantal.

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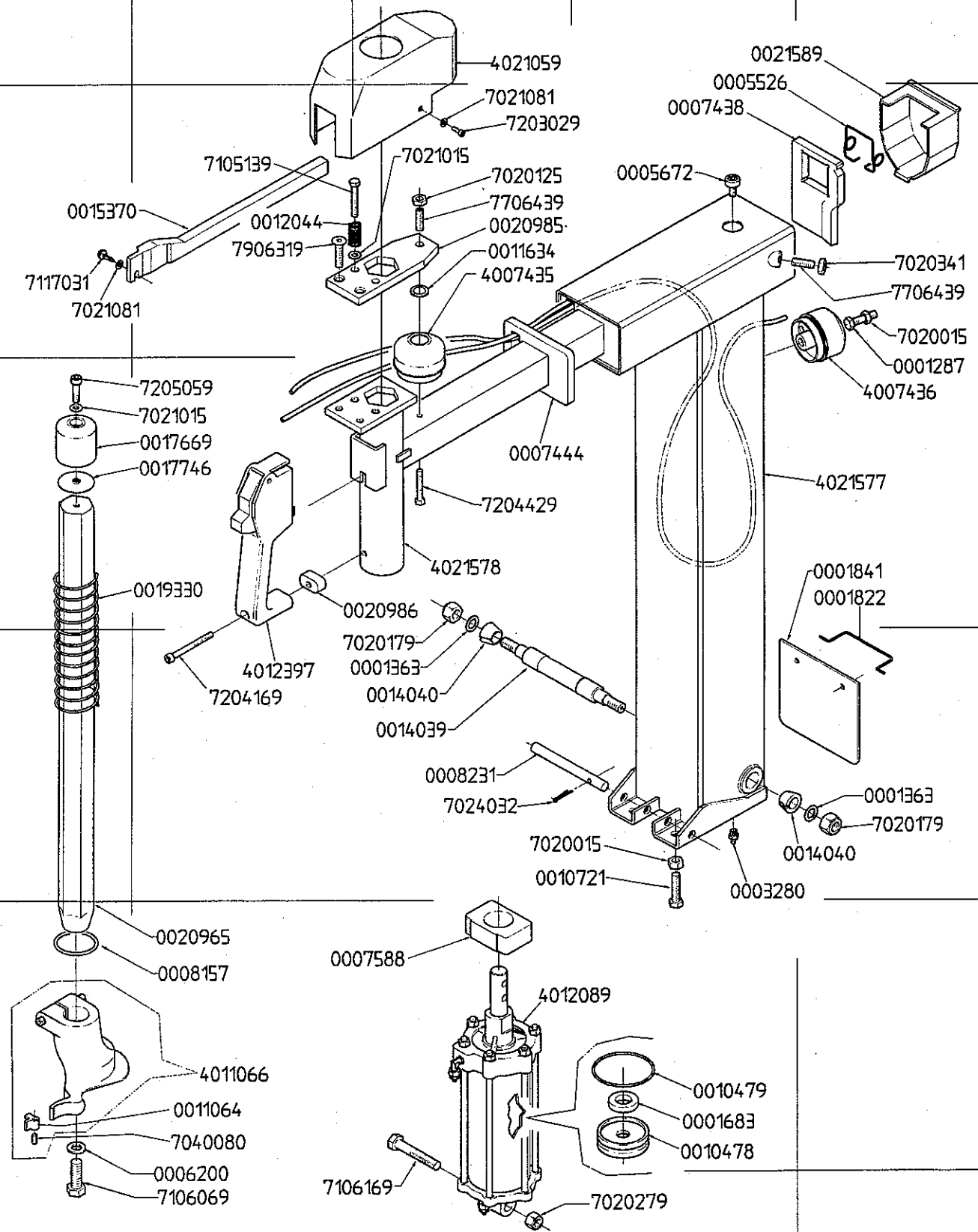
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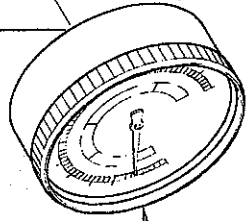
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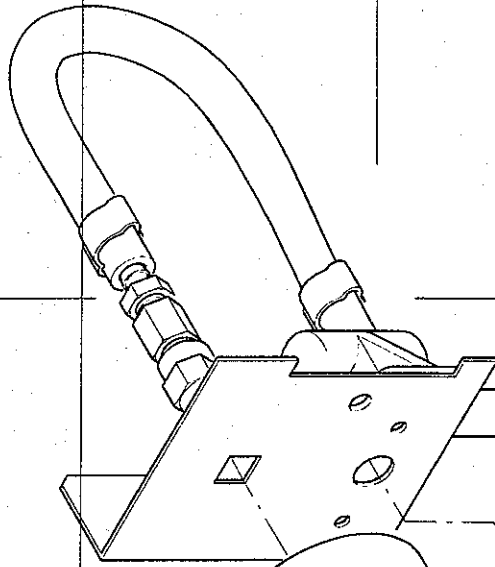
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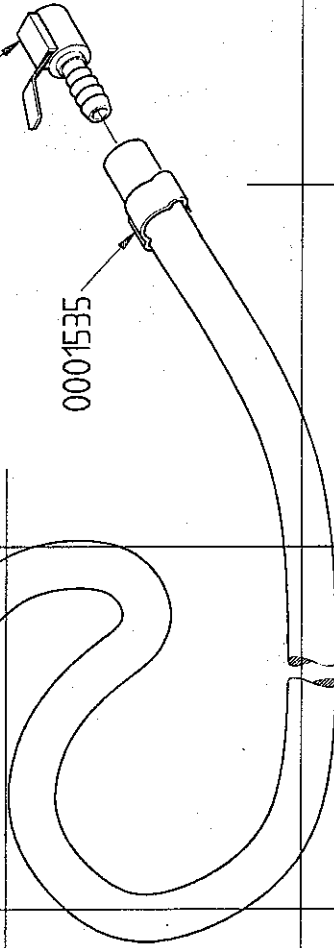


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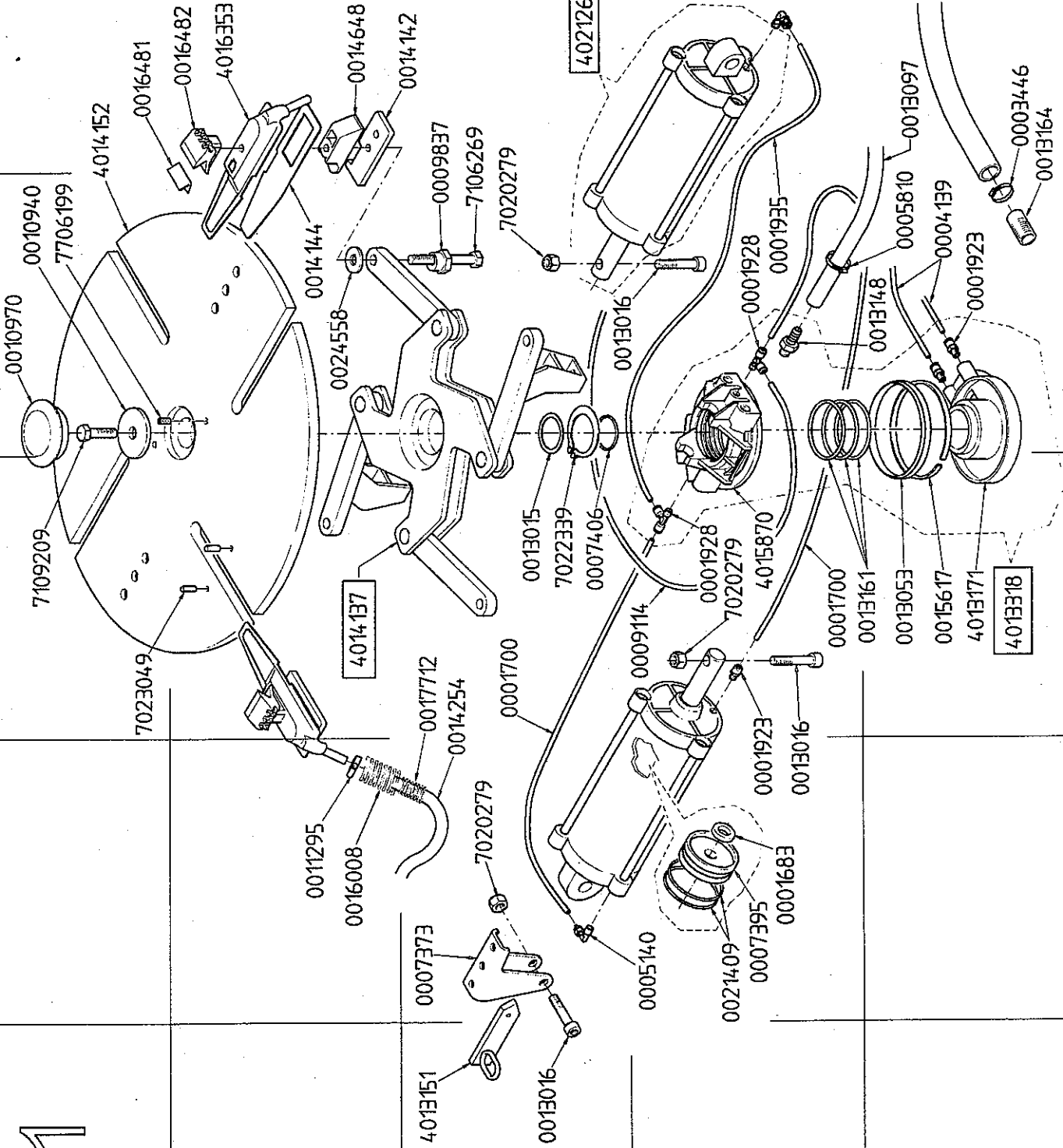
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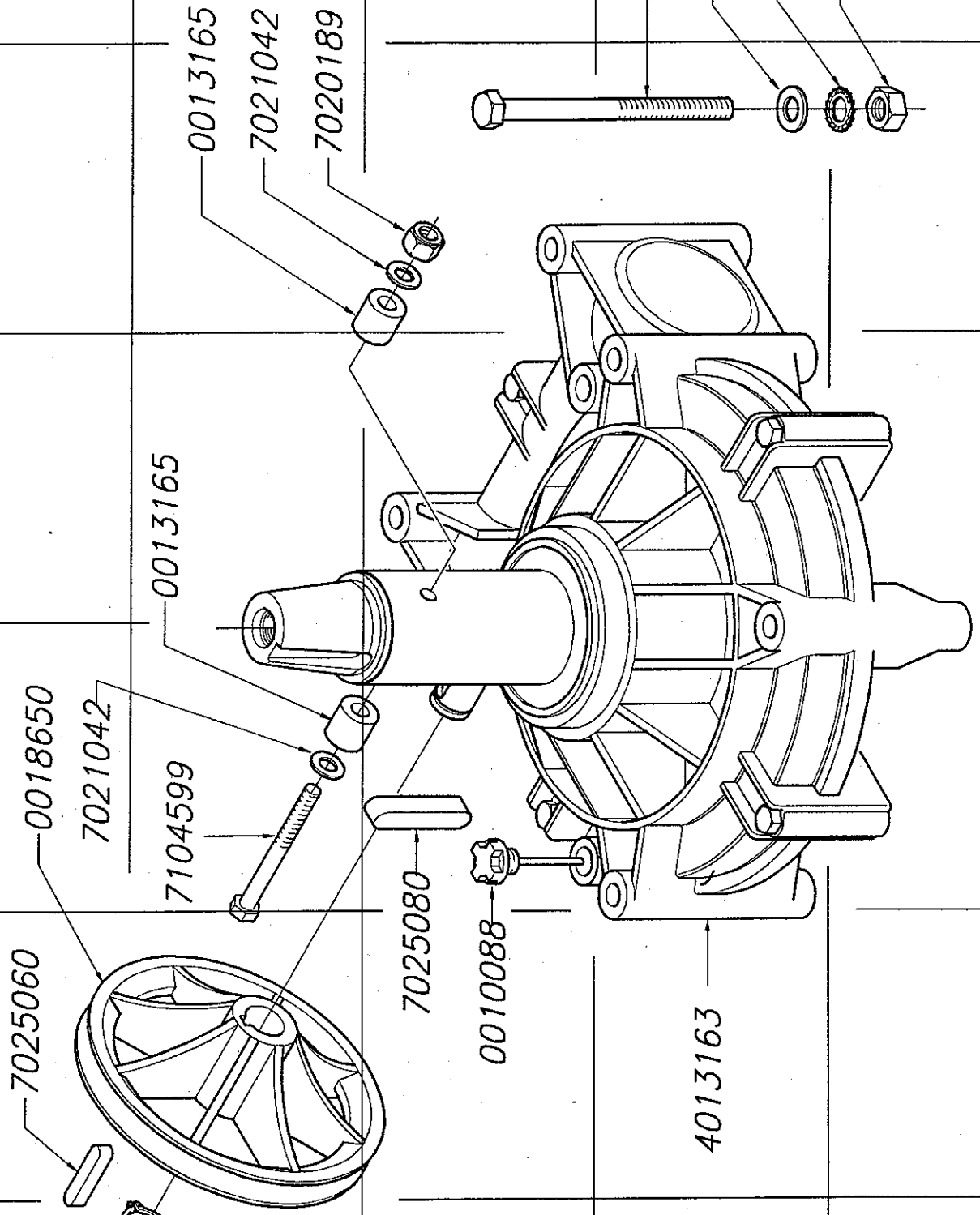
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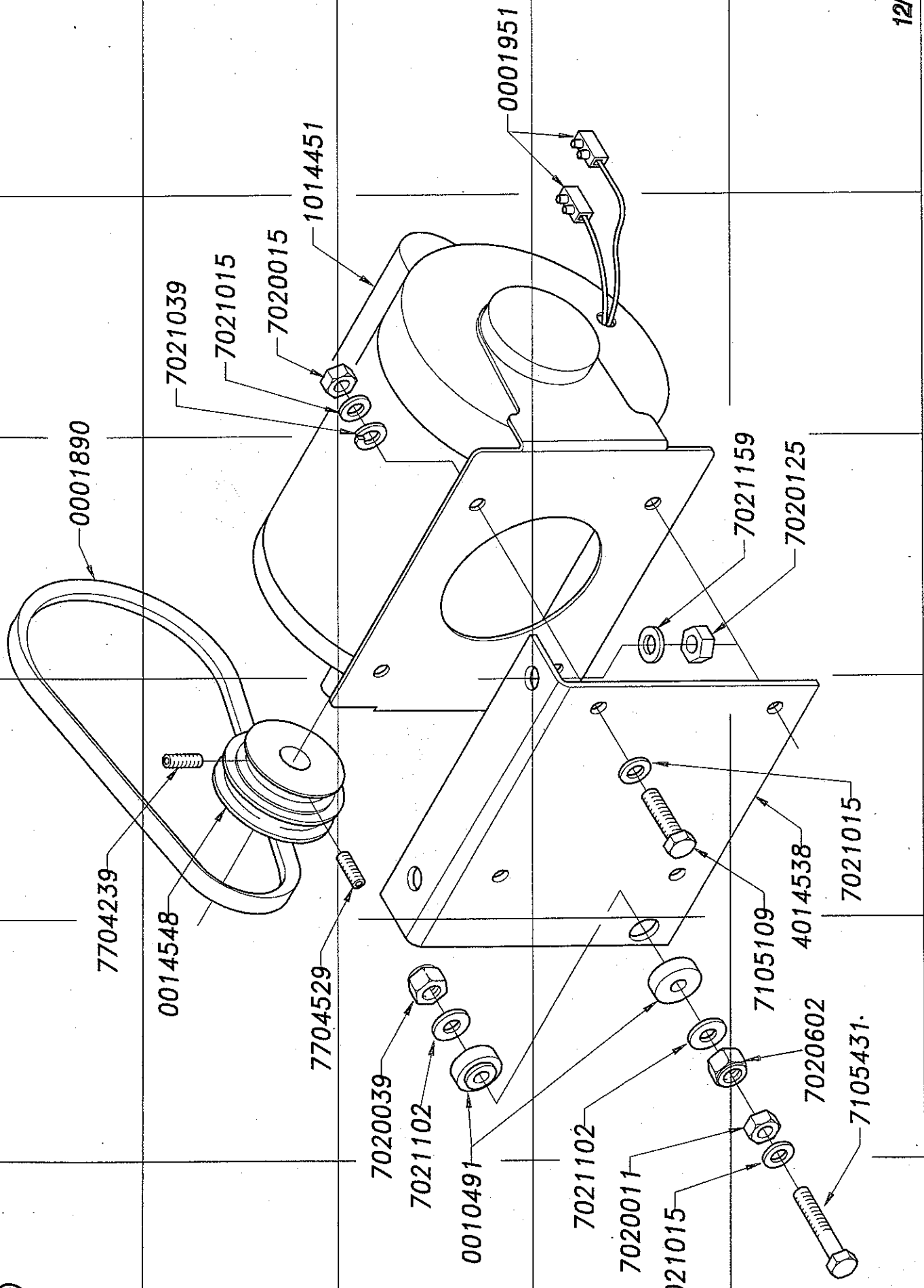
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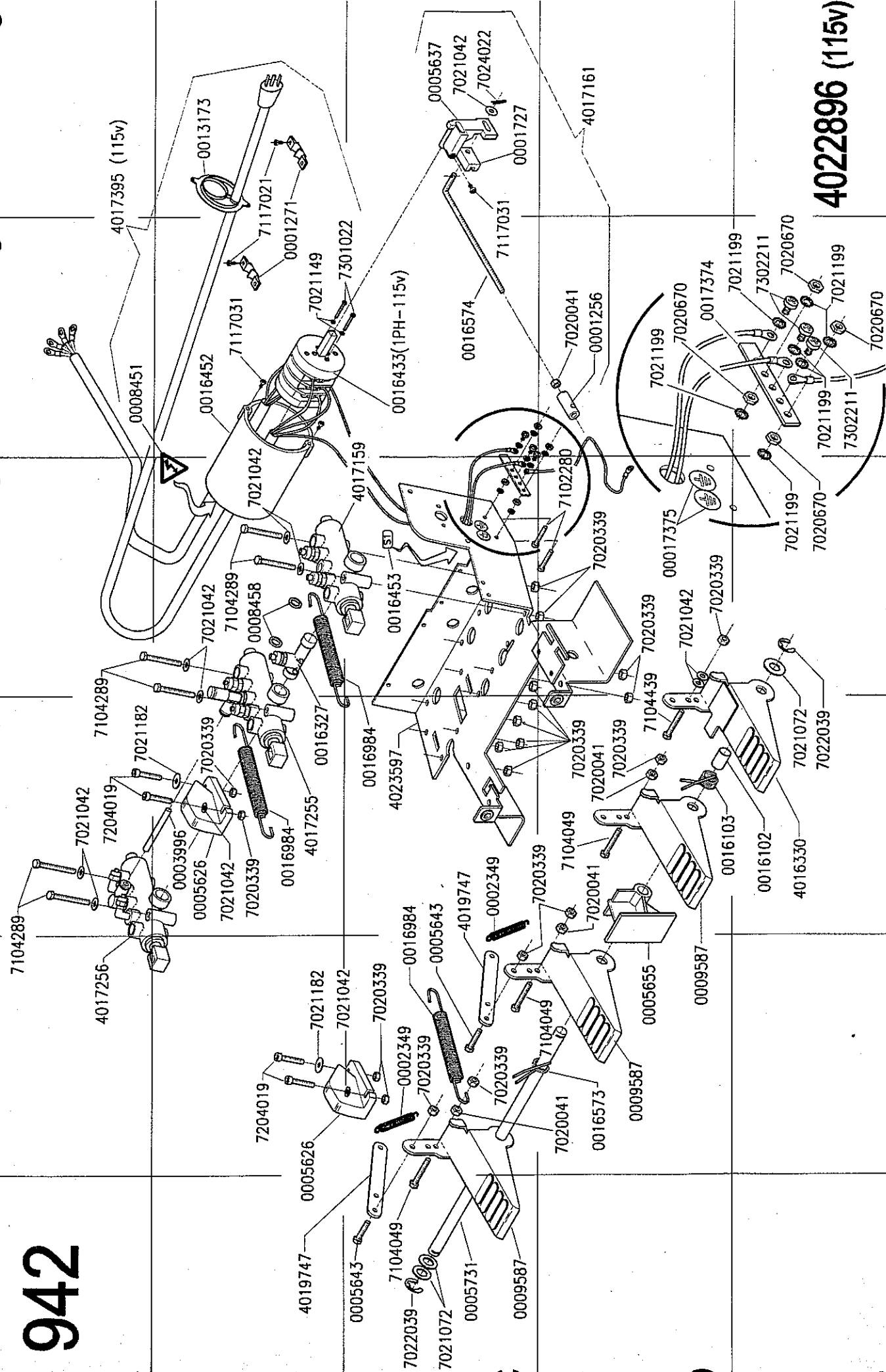
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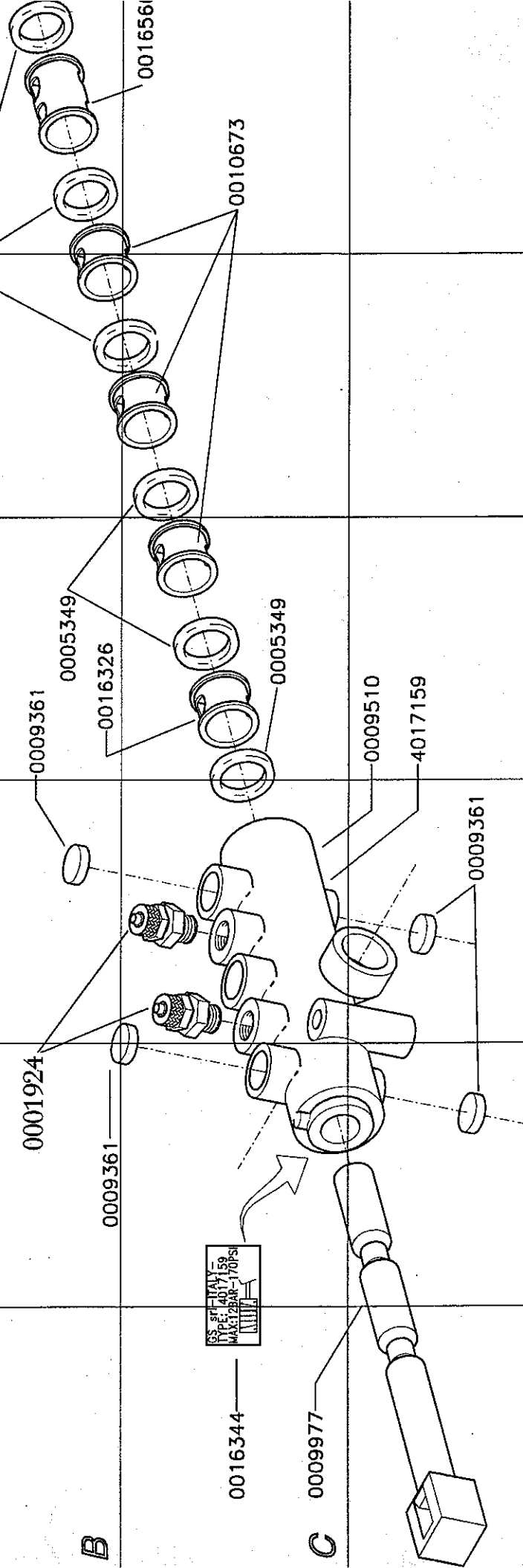
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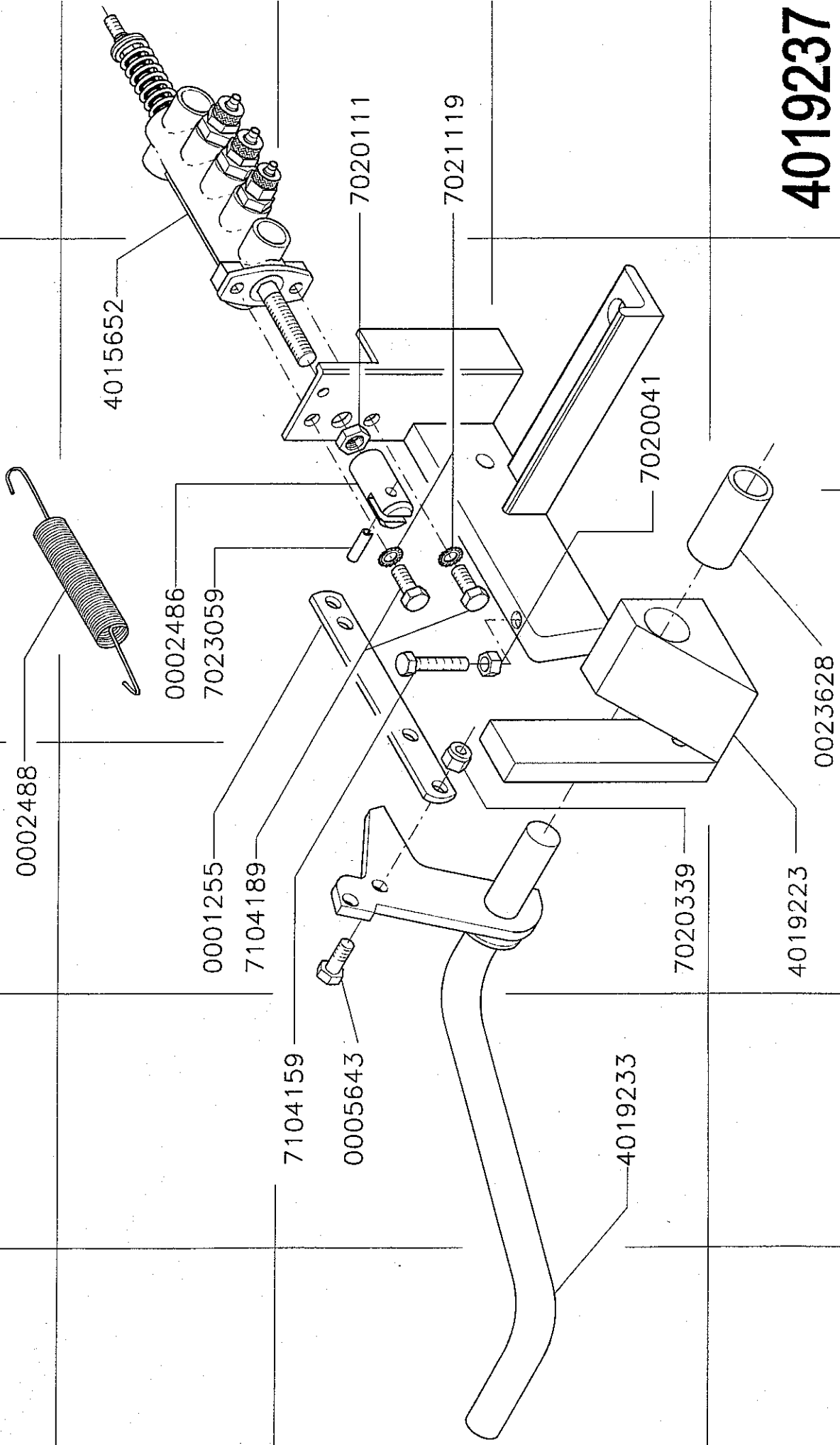
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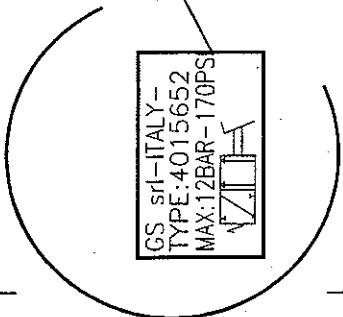
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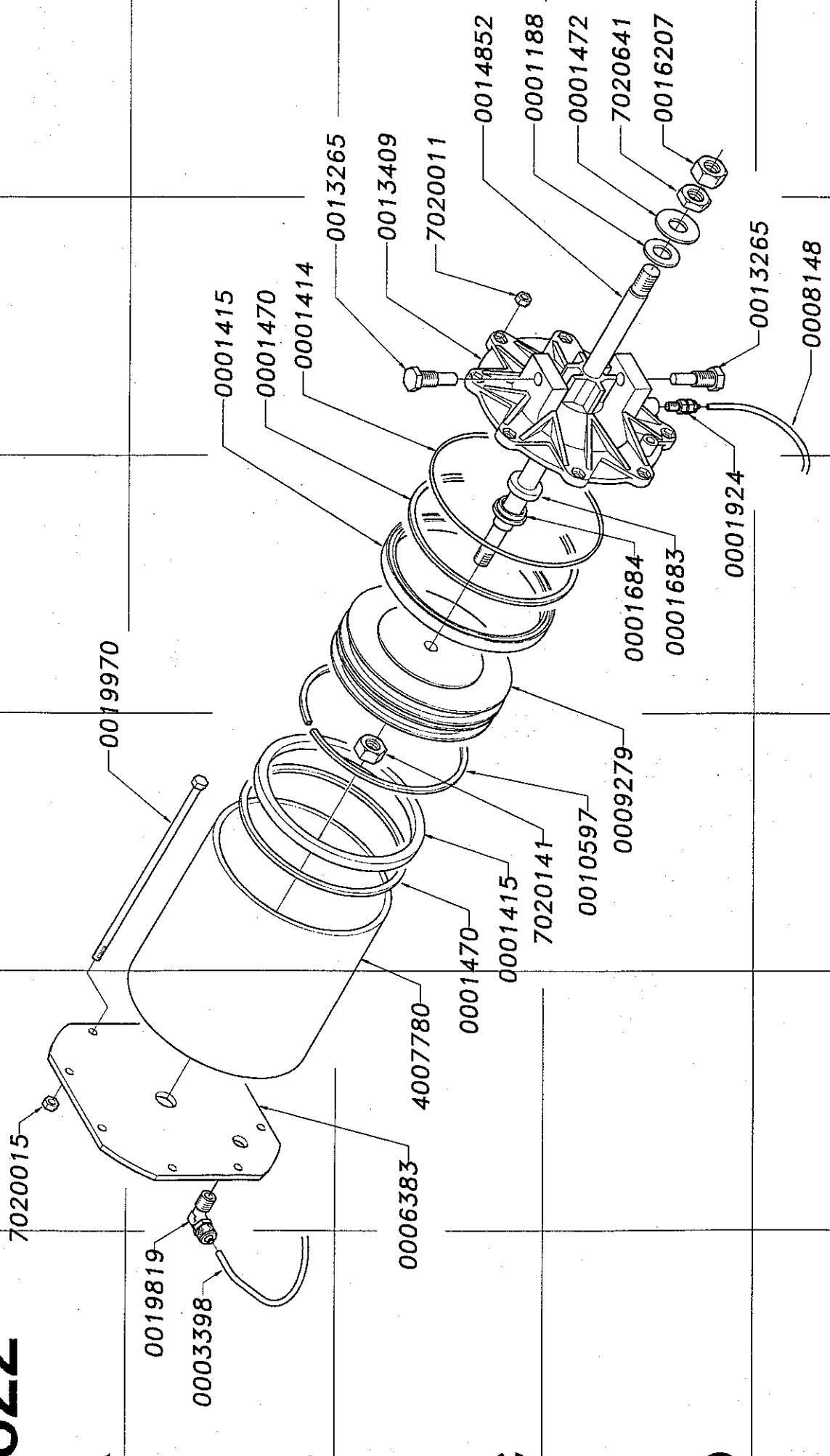
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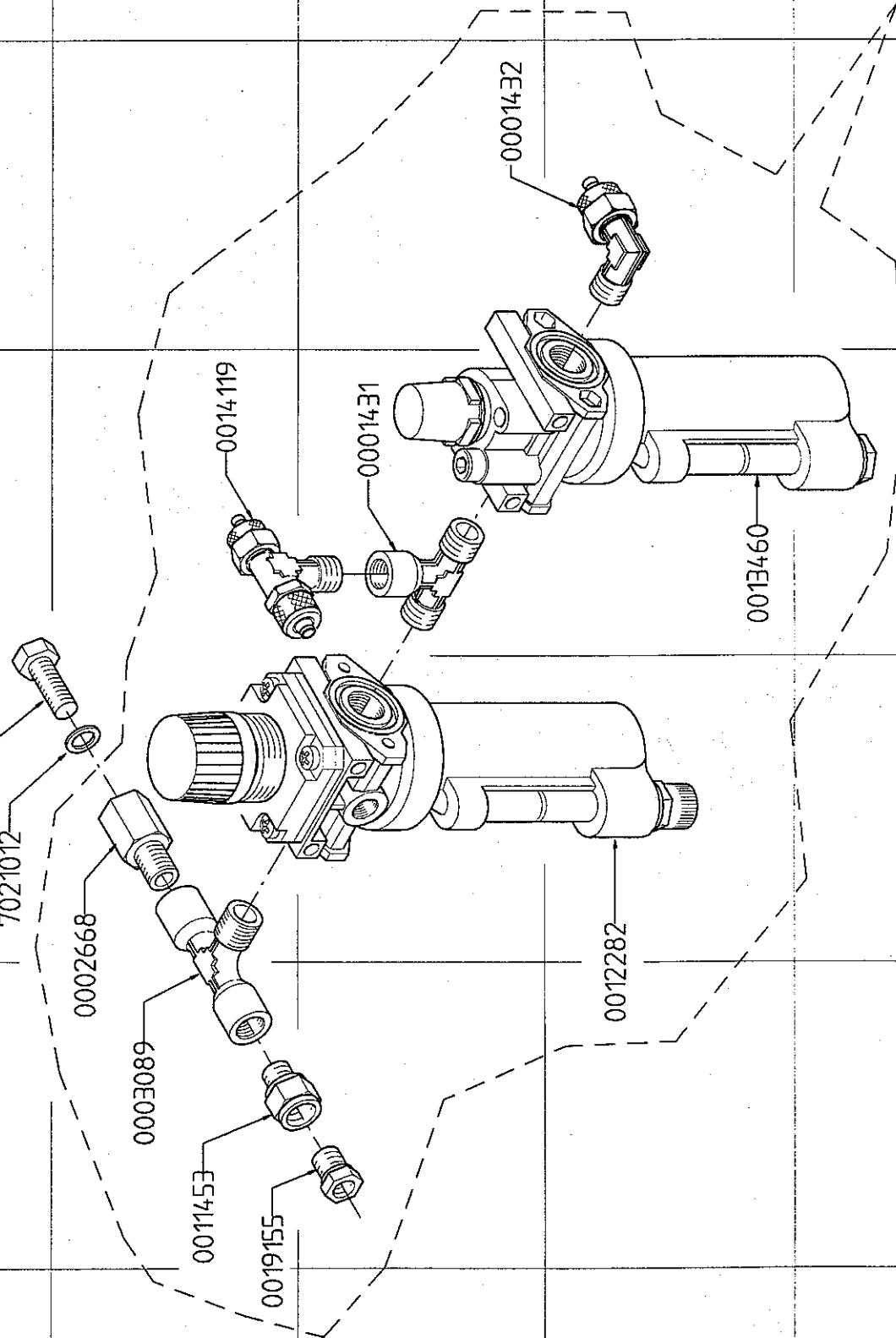
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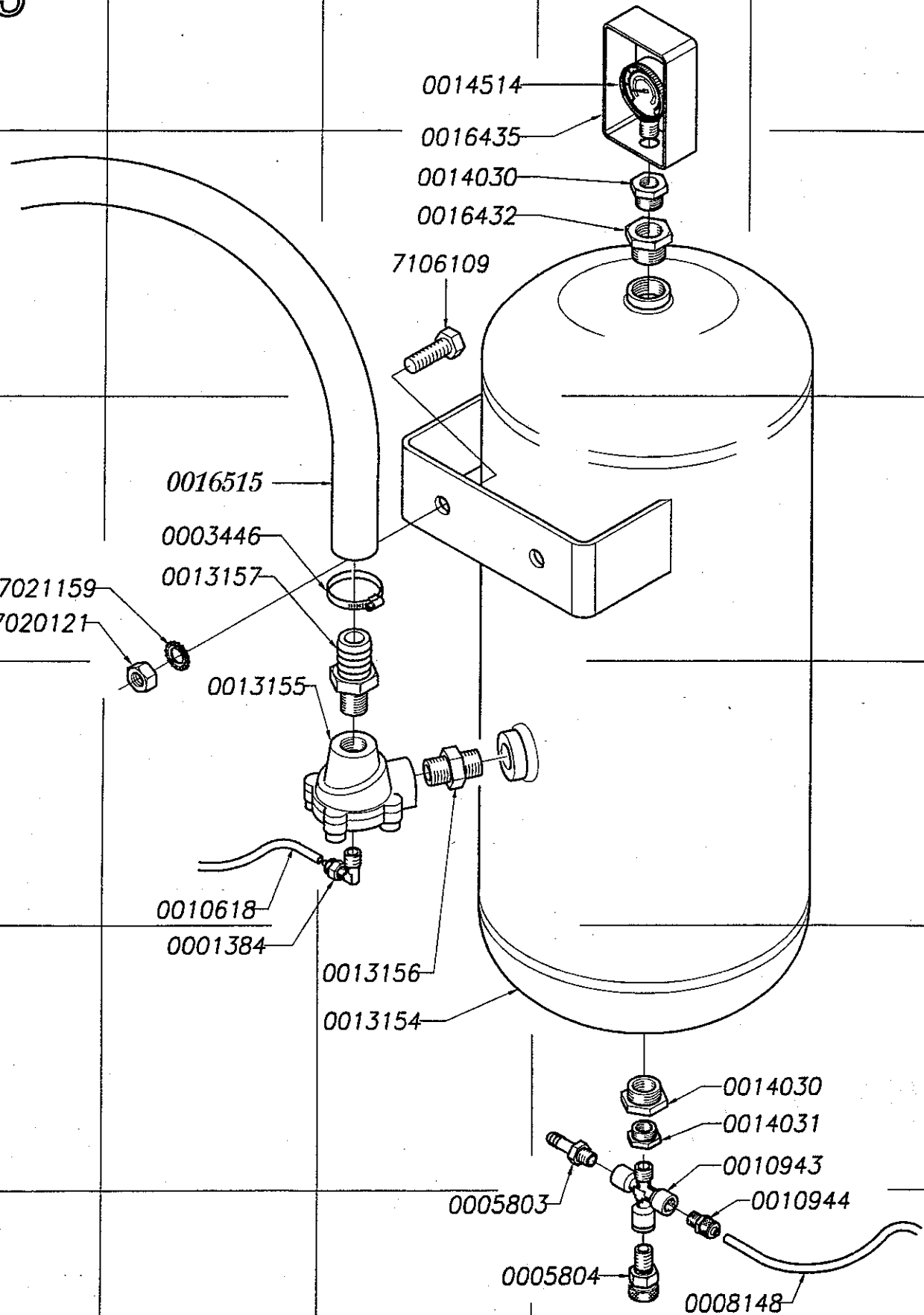
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WARNING!
FOR USE OF AUTHORIZED TECNICAL PERSONNEL ONLY

MH 200/2

SPARE PARTS EXPLODED DRAWINGS

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