EEWH307B

Motorcycle Tire Changer

Operation Instructions

Snap-on®

ATTENTION: DANGER!

Tire or wheel failure under pressure may cause serious injury by explosion.

EXPLOSION HAZARD!

NEVER EXCEED 40 PSI **WHILE SEATING BEADS.**

NEVER EXCEED TIRE MANUFACTURERS RECOMMENDED PRESSURE AFTER SEATING BEADS.

NEVER LEAN OR REACH OVER TIRE OR RIM DURING INFLATION

An exploding tire and rim may be propelled upward and outward with enough force to cause serious injury or death. This tire changer is not a safety device and will not restrain exploding tires and rims.

THE TIRE MAY EXPLODE WHEN:

1) The rim diameter does not match the tire diameter.
2) The rim or tire are defective.
3) The beads are seated exceeding recommended pressure
4) The tire is inflated beyond the tire manufacturers instructions.
5) The operator does not follow proper safety rules.

IMPORTANT SAFETY RULES

A) Only trained operators should use this machine.
B) Remove all air from tire before loosening beads. Remove valve core.
C) Remove all wheel weights from rim before mounting or demounting.
D) Always use a proper bead lubricant before mounting,demounting and seating beads.
E) Always verify that the tire and the rim are exactly the same bead diameter. Tire size is molded into the side wall. Rim size is stamped into the rim. Never mount a tire on a rim if the bead diameter cannot be identified.
F) Inspect the tire and rim carefully for defects. Do not mount the tire if any defects are found.
G) Seat beads and inflate the tire with short bursts of air while continuously checking the air pressure.
H) Stand away from the tire and wheel when inflating. Never lean or reach over the tire during inflation. Keep area clear of bystanders.
I) Never exceed the tire manufacturer's recommended maximum air pressure. Tires can burst when inflated beyond specified limits.

DANGER!

Do not mount any tire unless the tire size (molded into the sidewall) matches the rim size (stamped into the rim) exactly!

NEVER ATTEMPT TO MOUNT:

16"	tires	on	16.5"	rims
15.5"	tires	on	16"	rims
15"	tires	on	15.5"	rims
15"	tires	on	390mm	rims
14"	tires	on	365mm	rims

3014077

READ THIS LABEL!

This label is also located on the tire changer tower for operator reference.

Follow all precautions.

Follow the important safety rules.

1 GENERAL INFORMATION

The **EEWH307B** motorcycle tire changer has been specifically designed to demount and mount motorcycle tires with rims from 8" to 23" and a maximum 39" diameter.
Any other use is improper and therefore not authorized. Before beginning any kind of work on or with this machine, carefully read and understand the contents of these operating instructions.
Snap-on shall not liable for any injury to persons or damage to things caused by improper use of this machine.

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

WARNING!

TO PREVENT ACCIDENTS AND INJURIES READ INSTRUCTIONS BEFORE OPERATING

SAFETY INFORMATIONS

- Failure to read and observe all warnings and instructions could cause injury or death.
- Before using this machine read and understand all warnings and the Instruction Manual provided with this tire changer.
- Follow all warnings and instructions during use.
- Do not cover warnings and/or instructions.
- Unreadable and missing warning labels must be replaced immediately. Don't use the tire changer if one or more labels are unreadable or missing.

3014031

2 TECHNICAL DATA

1-phase electric motor 115V - 50/60Hz	0.75 kW
Handles wheel from	8"-23"
Max wheel diameter	39"
Bead breaker opening (from-to)	.8"-13"
Tire width on table (from-to)	2-13.5"
Bead breaker cylinder force (at 145 psi)	11.8 kN
Suggested working air pressure	116 - 145 Psi
Weight (standard version)	286.6 lb
Acoustic pressure level (at work)	LpA < 70 dB (A)

3 GENERAL SAFETY

Operators who work with this machine must be qualified and authorized.
To be considered qualified, an operator must understand the written instructions given by the manufacturer, be trained and be familiar with the regulations governing labor safety.

Operators must not make use of drugs or alcohol which could alter their faculties. It is, however, essential to:

- Know how to read and understand the descriptions.

- Know the performance and characteristics of this machine.

- Keep unauthorized persons away from the operating zone.

- Make sure that the installation has been made in compliance with all the pertinent regulations and standards in force.

- Make sure that all the operators have been sufficiently trained, that they know how to use the equipment in a correct and safe way and that there is adequate supervision.

- Never touch the electrical equipment or power lines unless the power has been turned off.

- Carefully read this manual and learn how to correctly and safely use the machine.

- Be sure power has been turned off before servicing equipment.

- Always keep this manual in an easily accessible place and consult it when necessary.

WARNING!
Unauthorized variations or modifications to the machine shall relieve the manufacturer from all liability for any deriving damages or accidents. In particular, removal or tampering with the safety devices represents a violation of Safety regulations.

4 SAFETY DEVICES

EEWH307B tire changer is equipped with a pneumatic built-in safety valve.
This valve prevents pressure coming from inflating gauges, or other inflating devices connected to the tire changer, to exceed 50.75 Psi.

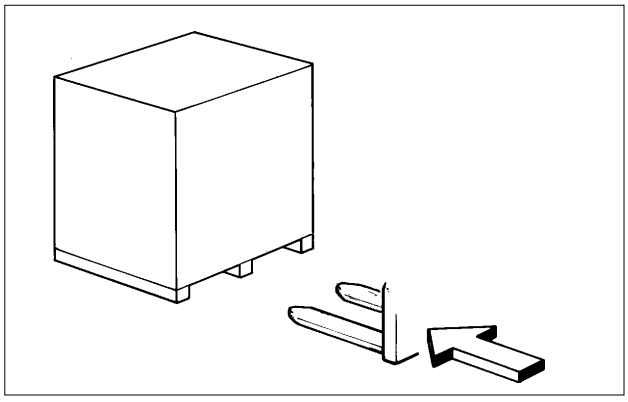
CAUTION: Removing or tampering with the safety devices installed on this machine is in violation of US Safety Regulations and relieve **Snap-on** from all liability.

5 TRANSPORT

The machine is delivered in a cardboard box with pallet.

The packing must be handled with a fork-lift truck with the forks positioned as shown in the **figure A**.

Shipping weight for the machine is **330.7 lb**.



6 INSTALLATION

6.1 INSTALLATION PLACE

Position the tire changer, in the chosen installation site.

Remember that:
1 - The area required to install the machine measures 28" in width and **46"** in depth. Keep at least **20**" away from walls.

2 - The floor must be solid, level and able to bear the weight of the machine without yielding.

3 - The installation site should be equipped with an electrical system with an efficient grounding circuit and automatic ground fault circuit-breaker with 30 mA setting.

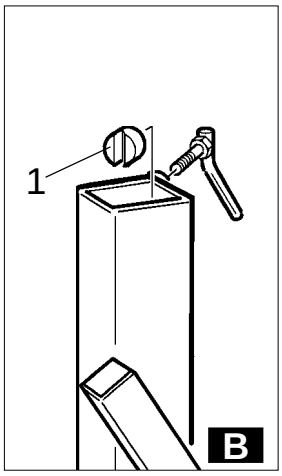
4 - The installation site must be equipped with a connection to a compressed air network with an operating pressure of at least 116 Psi.

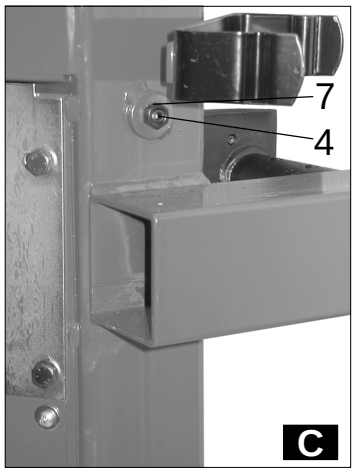
6.2 UNPACKING

1 - Remove the tire changer from the packing and check to make sure that the machine is in a good condition. Make sure that there are no visibly damaged parts.

2 - Remove all the screws that attache the machine to the pallet, using a 13mm wrench.
Slide the tire changer sideways from the pallet with care.

N.B.: Keep the packing material out of the reach of children as it can be a source of danger.





6.3 VERTICAL POST ASSEMBLY

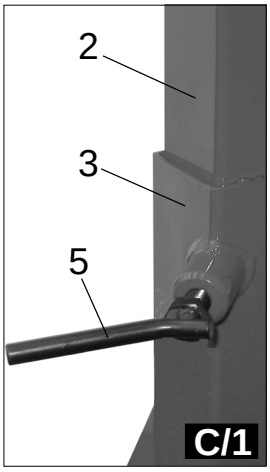
1 - Place the "locking pad" (**1, Fig. B**) into its housing on the casing.

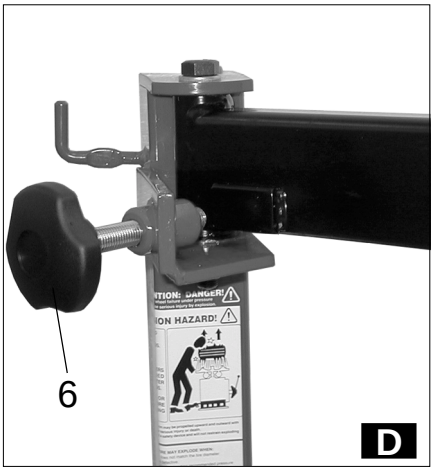
2 - Insert the vertical post (**2, Fig. C/1**) into the casing (**3, Fig. C/1**) until the slot on the post is on a level with the bolt (**4, Fig. C**).
Tighten the bolt (**4, Fig. C**) so that it acts as a stop by fitting into the slot. Tighten the check nut (**7, Fig. C**).

3 - Place the tire bead lube container on its support.

4 - Tighten the lever (**5, Fig. C/1**), adjusting the post to the required height.

5 - Tighten the knob (**6, Fig. D**) on to the vertical post.





6.4 FIXING TO THE GROUND

1 - *Set the tire changer in the desired work position.*

2- *Prepare the following tools:*

1 - Hex spanner 13 mm
1 - Electric drill
1 - Concrete drill bit diam. 13 long
4 - Metal expansion screw anchors 13x50
4 - M 8 x 50 anchor screws.

3 - *Bore to a depth of 3.15" on a level with the holes at the sides of the casing. Use a .5" wall boring bit.*

4- *Insert the expansion plugs and tighten with the .5" spanner.*

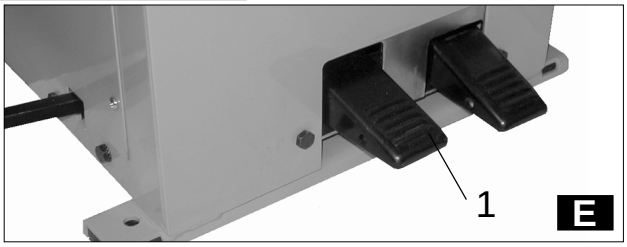
6.5 PNEUMATIC HOOK UP

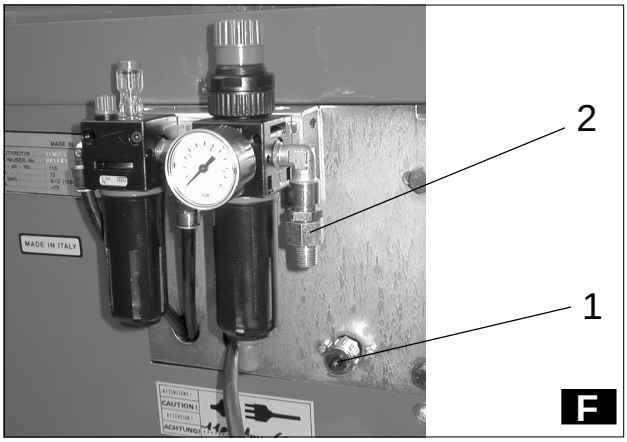
Follow these steps to make the pneumatic hook up:

1- Push pedal (**1, Fig. E**) all the way down to ensure that the grippers do not open unexpectedly.

2- Connect the inflation hose, if it is to be installed, to its connector (**1, Fig. F**).

3- Connect the tire changer to a compressed air network (suggested working pressure **from 116-145 Psi**) using the **connector** (**2, Fig. F**). Use a **compressed air hose** with an inside diameter of **0.275-0.315".**





PRESSURE IN THE COMPRESS AIR SYSTEM MUST NEVER EXCEED 232 PSI.

WARNING!
Use the union (1, Fig. F) only for the outlet of air (to connect inflating device).
Do not connect the compressed air network to this union: you could break the pneumatic equipment and the safety devices.

6.6 ELECTRIC HOOK UP

1- Before making any electric hook up, check to be certain that the supply voltage corresponds to what is stamped on the voltage tag (attached on the feeding cable of the tire changer).

2- It is absolutely essential that the system is equipped with a good grounding circuit.

3- The machine must be connected to a power supply line ground fault interruption circuit breaker set for 30mA.

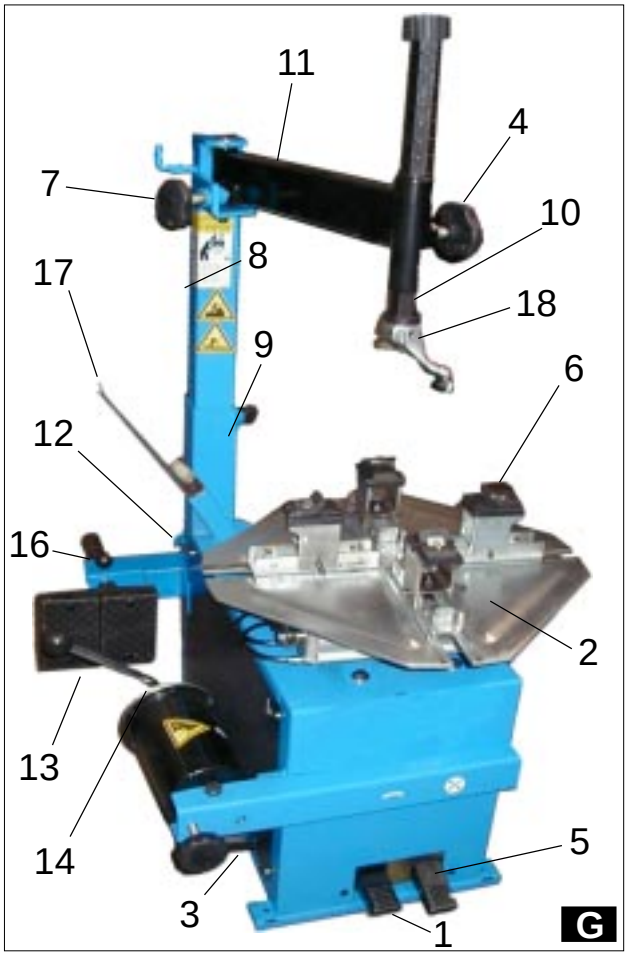
4- Note the required power draw as highlighted on the tag-plate fixed on the tire changer. Check to make sure the shop electric wiring circuit is sufficient to carry this.

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

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

7 PARTS IDENTIFICATION (Fig. G)

1 - Table top rotate pedal
2 - Table top
3 - Bead breaker (loosener) pedal
4 - Handle for vertical slide locking
5 - Table top clamp opening/closing pedal
6 - Wheel clamps
7 - Handle for horizontal arm adjustment
8 - Vertical post
9 - Lever for vertical arm adjustment
10 - Vertical slide
11 - Horizontal arm
12 - Filter and lubricator
13 - Rubber tire rest
14 - Bead breaker (loosener) shoe
16 - Knob for bead breaker adjustment
17 - Tire lever
18 - Mounting/demounting head



8 CORRECT OPERATION CHECKS

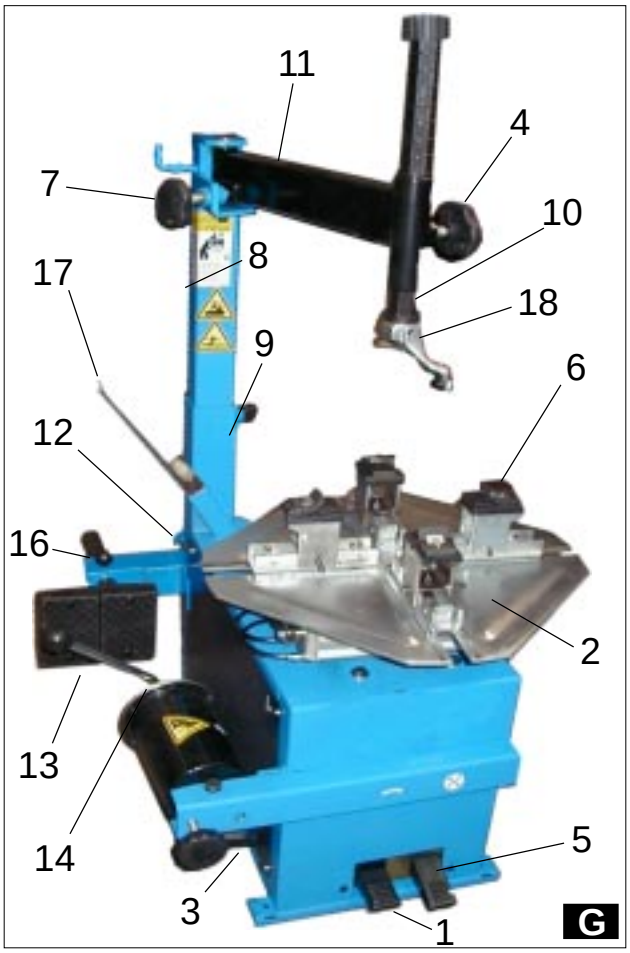
Check to make sure the tire changer works properly by carrying out the following procedures:

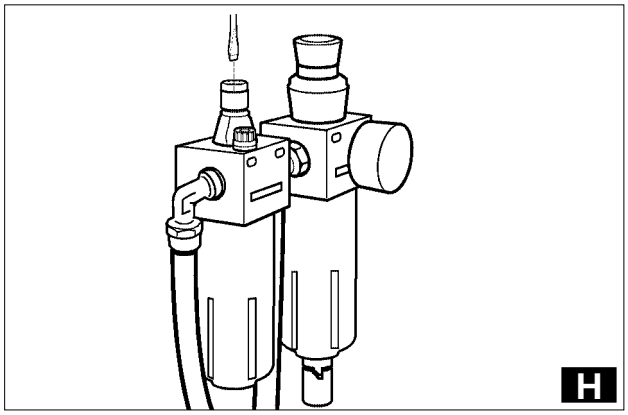
1) Depress pedal (**1, Fig. G**) down: the table top (**2, Fig. G**) should turn clockwise.
Pull the pedal (**1, Fig. G**) up and the table top (**2, Fig. G**) should turn counterclockwise.
Note: if the turning direction is the opposite of what is described here, switch two wires in the three-wire plug (this should be down by a qualified electrician).

2) Press the bead loosener pedal (**3, Fig. G**): the bead loosener shoe (**14, Fig. G**) will start operating.
Release the bead loosener pedal (**3, Fig. G**): the bead loosener shoe (**14, Fig. G**) will return to its initial position.

3) Depress the pedal all the way down (**5, Fig. G**): the four clamps (**6, Fig. G**) on the table top will open. When the pedal is depressed again, the clamps should close.

4) Check that a drop of oil drops into the lubricator glass cup (**12, Fig. G**) after every two or three movements of the footpedals (**3 or 5, Fig. G**).
Oil feed may be adjustd by means of the Lubricator adjusting screw (**see Fig. H**).





9 OPERATION

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

9.1 BEAD BREAKING

WARNING!
Bead breaking must be done with the utmost care and attention. When the bead breaker pedal is operated the bead breaker arm moves quickly and powerfully. Anything within its range of action can be in danger of being crushed.

Caution!
Remember to remove all weights from both sides of the rim before operating the machine.

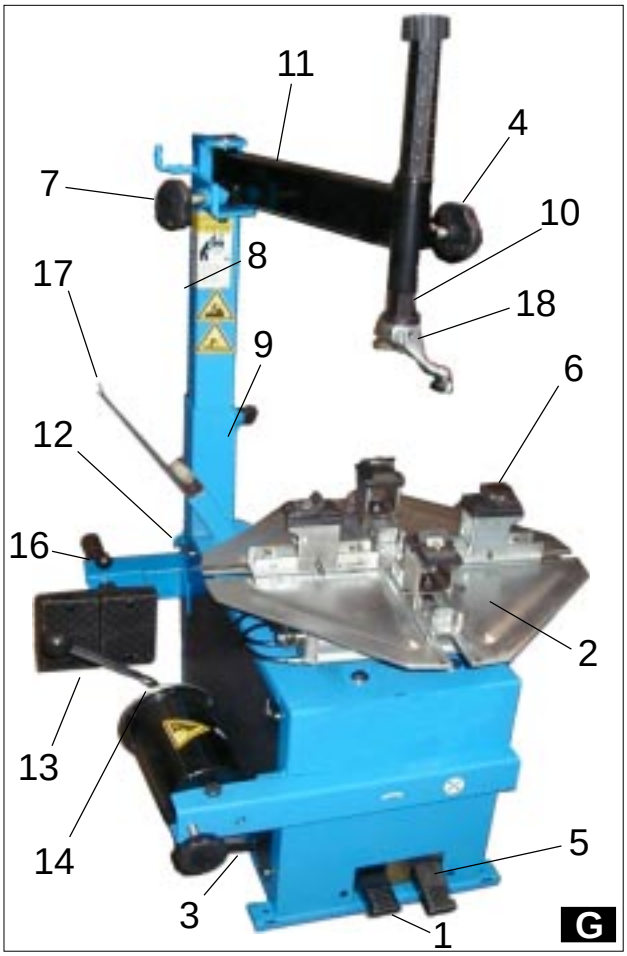
1) Deflate the tire completely and remove the valve core.

2) If necessary, remove the knob (**16, Fig. G**) and adjust the **distance** from the rubber support (**13, Fig. G**) to the shoe (**14, Fig. G**), depending on the width of the wheel.
6 different positions are available, with **0.825"** differences between each.
Depending on the type of wheel, the rubber support can be turned **90° at a time** to obtain the best bearing surface.

3) Place the wheel against the rubber support. **(13, Fig. G)**
Position the shoe (**14, Fig. G**) by hand so that it fits between the rim and tire (**see Fig. L**).

NOTE: Position the blade as to operate the side of the tire and not of the rim.

4) Push the blade (**14, Fig. G**) into the tire by depressing pedal (**3, Fig. G**). Repeat this process at different points around the tire and on both sides until the beads are completely loosened.



9.2 WHEEL CLAMPING

WARNING!
When clamping a tire, NEVER have your hands under the tire. To clamp the tire correctly, position the wheel exactly at the center of the table top (2, Fig. G). Check that the wheel is correctly clamped by all four clamps.

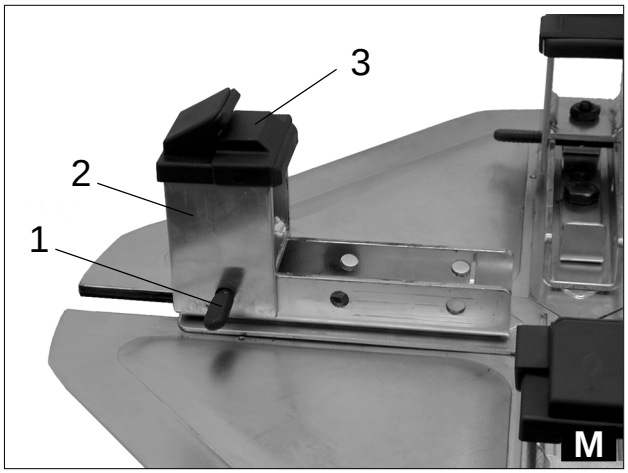
1) Check to make sure there are no weights on the rim.

2) Apply tire lubricant on the bead.

3) Fully depress the table top pedal (**5, Fig. G**) so that the 4 wheel clamps fully open (**6, Fig. G**).

4) If necessary, remove the pin (**1, Fig. M**) and adjust the position of the clamp support (**2, Fig. M**) according to the diameter of the rim.
3 different positions are available:
1 - for **5"** to **13"** diameter rims
2 - for **12"** to **18"** diameter rims
3 - for **15"** to **23"** diameter rims
as also indicated by the table top reference marks.
NOTE: If wheels less than **8"** in diameter must be clamped, mount the relative adapter (**3, Fig. M**) on to the clamp support.

5) Insert the pin again (**1, Fig. M**).
NOTE: Push it fully in place and make sure that it is correctly positioned.



CAUTION:
Before locking the wheel on the table top, ALWAYS make sure that the 4 wheel clamps are on the same reference mark.

6) Move the wheel on to the table top, then adjust the extent to which the wheel clamps open using the pedal (**5, Fig. G**). The tire must rest on them, as indicated in **Fig. N**.

7) Keeping the rim pressed downwards, fully depress the pedal (**5, Fig. G**) to clamp the wheel.

9.3 DEMOUNTING

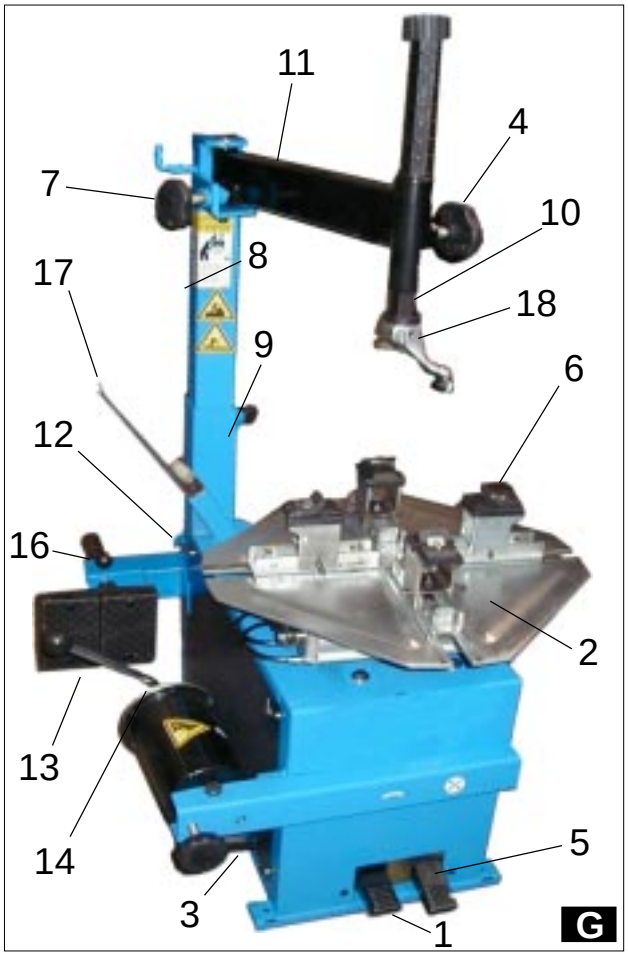
1) Using the adjuster handwheels (**4 and 7, Fig. G**), position the toolhead (**18, Fig. G**) both horizontally and vertically against the rim edge.

2) Lock the vertical slide (**10, Fig. G**) by means of the handle (**4, Fig. G**).

3) Using the handwheel (**7, Fig. G**), oppose the action of the horizontal slide (**11, Fig. G**) until the toolhead (**18, Fig. G**) moves horizontally away from the rim edge by about **0.10"**.

4) With the help of the bead lifting tool (**17, Fig. G**) inserted over the forward end of the mount/demount tool (**18, Fig. G**) and below the top bead, lift the upper bead over the knob portion of the mount/demount head (**see Fig. P**).
NOTE: To prevent pinching the inner tube, do this operation with the valve about **4"** to the right of the mount/demount tool.

5) Hold the bead lifting tool in this position and hold the pedal (**1, Fig. G**) depressed to turn the table top (**2, Fig. G**) **clockwise** until the tire comes completely off the rim.

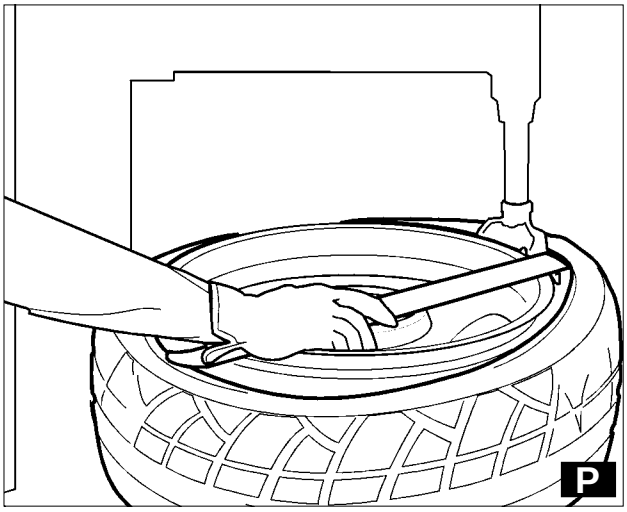


WARNING!
To prevent industrial accidents, keep hands and other parts of the body as far from the tool arm as possible when the table top is turning.

Note: If the bead rubber is particularly hard and stiff, it will tend to slip off the mount/demount tool. To prevent this, before turning the table top clockwise, rotate it counterclockwise nearly an inch while holding the bead lifting tool (17, Fig. G) as shown in Fig. P).

6) Remove the inner tube if the tire has one.

7) Repeat the procedure described in **point 5** to demount the lower bead.



9.4 MOUNTING

CHECKING TIRE AND RIM

WARNING: This checking of tire and rim is of the utmost importance to prevent the tire from bursting during bead seating and inflating operations!
Before beginning mounting operations make sure that:

- the tire is not damaged and the cord fabric is not damaged. If you note defects do not mount the tire.

- the rim is without dents and is not warped.
Caution: particularly with alloy rims, dents can cause internal micro-cracks not visible to the naked eye. This can compromise the rim and can also be a source of danger especially during inflation.

- the diameter of the rim and tire are EXACTLY the same.
Caution: the diameter of the rim is stamped on the rim. The diameter of the tire is stamped on the tire wall. NEVER try to mount a tire on a rim if you cannot identify the diameters of both.

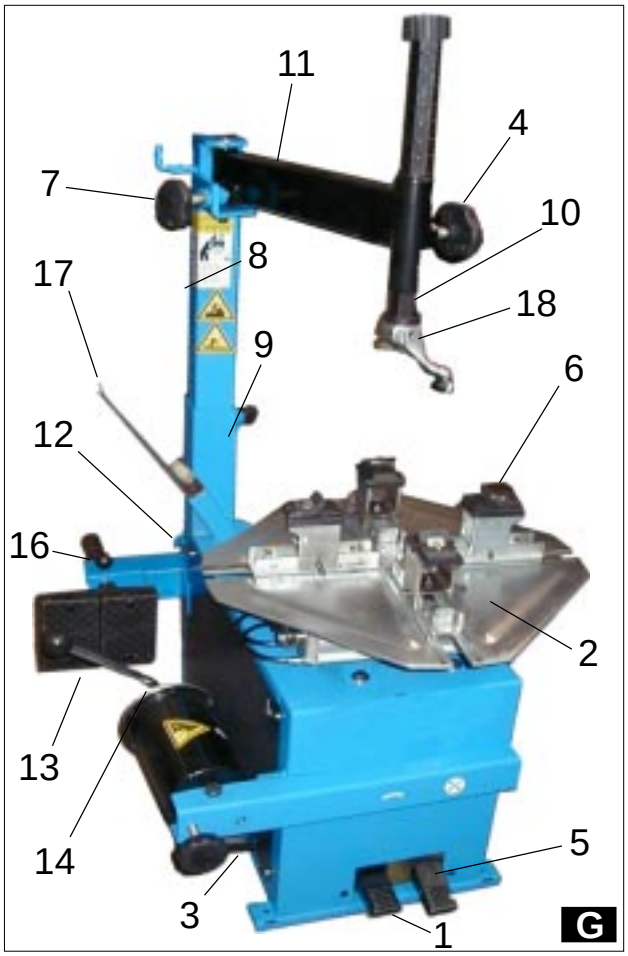
MOUNTING

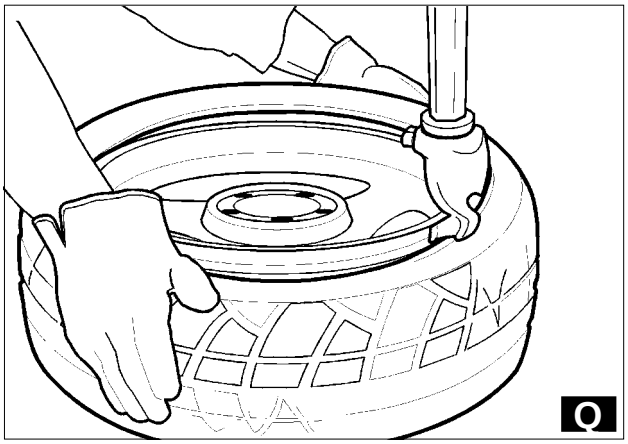
1) Apply a liberal amount of manufacturer recommended rubber lubricant to tire beads and rim well.

2) If the rim has been removed from the table top, clamp it back on the table as previously described in the section on “CLAMPING THE WHEEL”.

3) Position the mount/demount tool (**18, Fig. G**) by hand against the edge of the rim as described under 1,2,3, of the demounting procedure.
IMPORTANT: it will only be necessary to re-set the position of the mounting head if there has been a change in wheel diameter from the previous mounting or demounting operation.

4) Guide the tire so that the lower bead is above the forward portion of the mount/demount head (**18, Fig. G : See Fig. Q**).
IMPORTANT!
If the tire is tubeless, mount it with the valve at 180° from the tool arm.
Now depress the pedal (**1, Fig. G**) to begin clockwise rotation. Utilize the wheel’s drop-center area by pushing down on the sidewall nearly opposite the head to reduce tensional force on the bead as the wheel rotates.





WARNING!!
To prevent industrial accidents, keep hands and other parts of the body as far from the tool arm as possible when the table top is turning.

5) Insert the inner tube if the tire has one.

6) Once the lower bead is completely mounted, repeat the previous procedures for the upper bead.
NOTE: Proceed in the following way if the top bead is particularly difficult to mount:

- Insert the lever (**17, Fig. G**) about 4" to the left of the toolhead (**18, Fig. G**) as shown in **Fig. R**.
- Turn the table top clockwise until the lever has been brought against the toolhead (**see Fig. S**).
- Re-position the lever 4" towards the left of the toolhead and repeat the operation described in points 1 and 2 until the bead has fully inserted.

7) Depress pedal (**5, Fig. G**) to release the wheel from the table top.

NOTE: Demounting and mounting are always done with the table top rotating clockwise.
Counterclockwise rotation is used only to correct operator errors or if the table top stalls.

9.5 INFLATION

DANGER!!
Tire inflation is dangerous. Follow carefully all the cautions and instructions given.

1) Remove the valve stem.

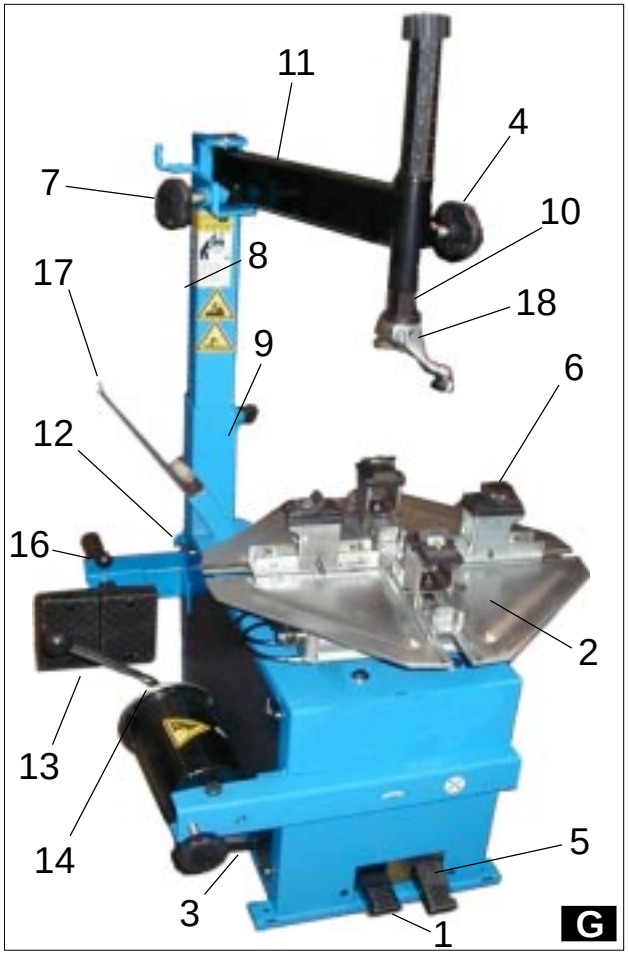
2) Clip the valve onto the inflator chuck making sure it is properly connected.

3) Make a last check to be certain that tire and rim diameter correspond and that the wheel is released from clamps.

4) Check to be certain that rim and beads are sufficiently lubricated. If necessary lubricate some more.

5) Seat the beads with short bursts of air. Between bursts, check the air pressure on the inflator gauge.
Check to see if the beads have seated and, if not, repeat the process.

6) Continue to inflate the tire with short bursts of air and constantly checking the pressure between bursts until the required pressure has been reached.

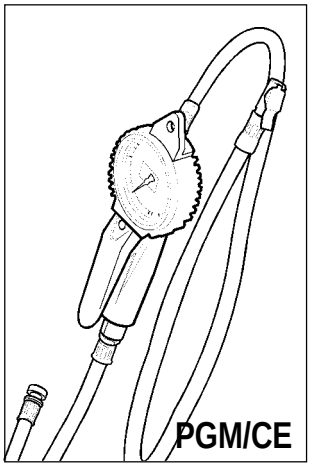


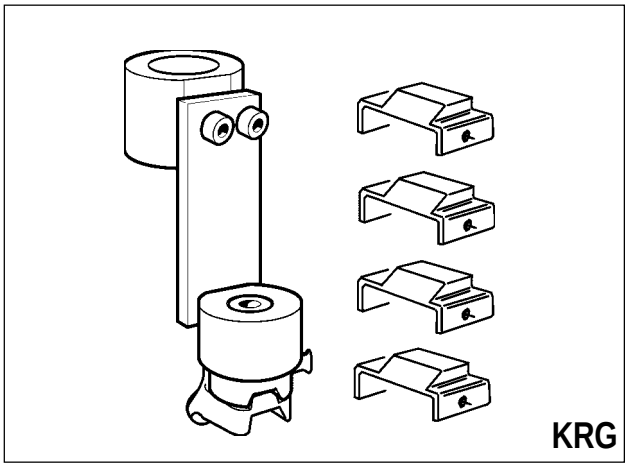
10 ACCESSORIES

IMPORTANT! All accessories are always supplied complete with installation and operating instructions.

Standard tire inflating hose -& gauge

KRG Kit for Go-Kart wheels (ideal for clamping and changing go-kart wheels)(Optional).





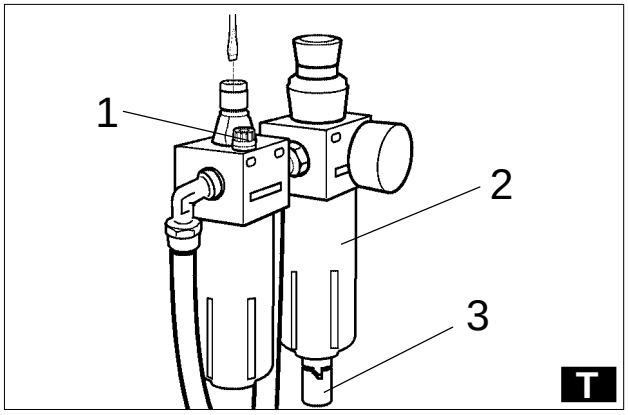
11 ROUTINE MAINTENANCE

WARNING!
Before making any inspection, adjustment or repair be certain power source is disconnected:
1) disconnect the machine from the power outlet.
2) disconnect the machine from the compressed air circuit by detaching the compressed air line from the quick couple.

Perform the following routine maintenance operations:

1) From time to time (about every 15 days) check the oil level in the lubricator. The suction pipe should never be completely uncovered. Top up as needed as follows:
- Unscrew the cap (**1, fig. T**)
- Top up with ISO **VG 32** viscosity ISO **HG** class oil for compressed air circuit (such as **ESSO Febis K32; Mobil Vacouline Oil 1405; KLUBER Airpress 32**).

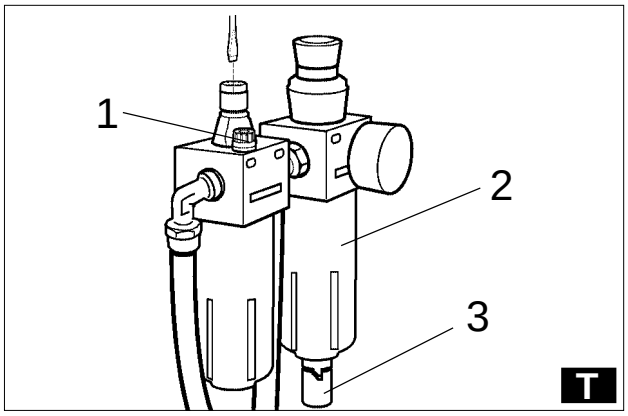
2) Every 2 or 3 days check if after every 2 or 3 pedal movements (**3 or 5, Fig. G**) a drop of oil falls into the lubricator glass cup.
If it does not, adjust the lubricator regulating screw using a screwdriver (**see Fig. T**).



3) Clean the machine daily to remove any dirt or tire debris from the wheel clamp jaw slides.

Lubricate these slides using ISO **VG 68** viscosity ISO **HG** class grease (such as, for example **ESSO Febis K68; Mobil Vactra 2; Shell Tonna Oil 68**).

4) To ensure correct operation of the pneumatic built-in safety valve (Refer to the section on “SAFETY DEVICES”, p. 5 of this manual, it is essential to carry out the following routine checks:
- check the water level in the water trap to the air supply (**2, Fig. T**). The condensation level must never rise above the transparent part of the trap.
When necessary, drain the water by turning the locking ring (**3, Fig. T**) clockwise.
- Every 30-40 days disconnect the machine from the compressed air circuit and dismantle the glass (**2, Fig. T**) to remove any solids collected inside it.



12 MOVING THE MACHINE

Follow the procedures outlined below when moving the machine:

1) Close the turntable grippers all the way towards the center.

2) Turn the table so to position the slots on the turntable plate as shown in **Fig. U.**

3) Disconnect all power sources.

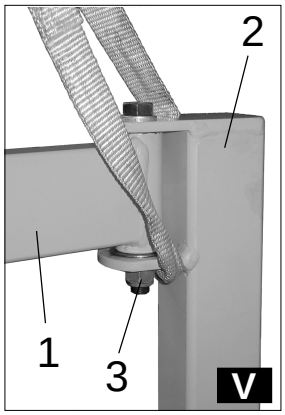
4) Sling the machine with lifting straps at least 2.4” wide.

5) Pass the first strap under the horizontal arm (**1, Fig. V**) as to insert it between the post (**2, Fig. V**) and the nut (**3, Fig. V**) which locks the arm pin.

6) Pass the second strap between the two front slots on the turntable plate.

7) Pass the straps through a lifting hook above the machine as shown in **Fig. Z**.

8) Hoist and move the machine with a sufficiently strong lift truck.



13 STORING

If the machine has to be stored for a long time, disconnect it from all power sources.
Grease all the parts that could be damaged if they dry out:
- slides
- their slots on the turntable

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

14 DATA ON SERIAL PLATE

The manufacturer's Serial plate is fixed on the back of the machine. If gives the following information:

1- Model

2- Serial number

3- Phases

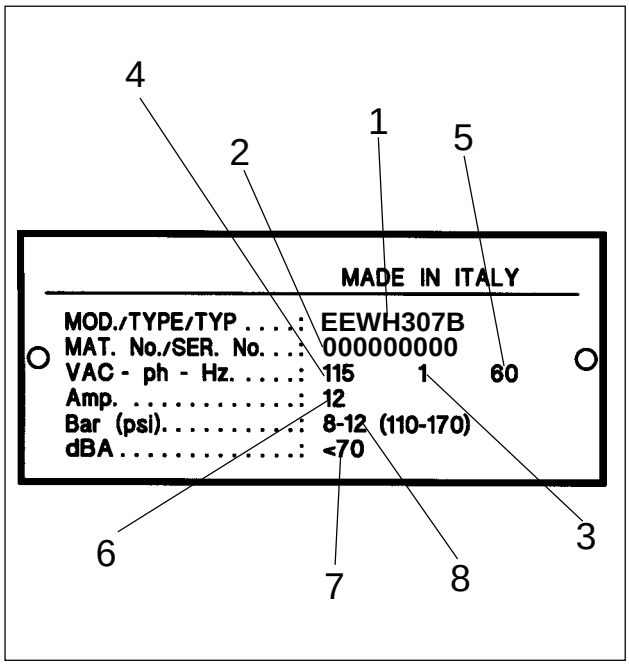
4- Voltage requirements

5- Frequency

6- Rated draw

7- Acoustic pressure level (at work)

8- Working pressure



15 TROUBLE SHOOTING

PROBLEM

When the pedal (1, Fig. G) is pressed the table top does not turn.

CAUSES

1) The power plug is not inserted.
2) No power from the electrical supply.

REMEDIES

1) Insert the plug correctly in its socket.
2) Reset the electrical supply.

PROBLEM

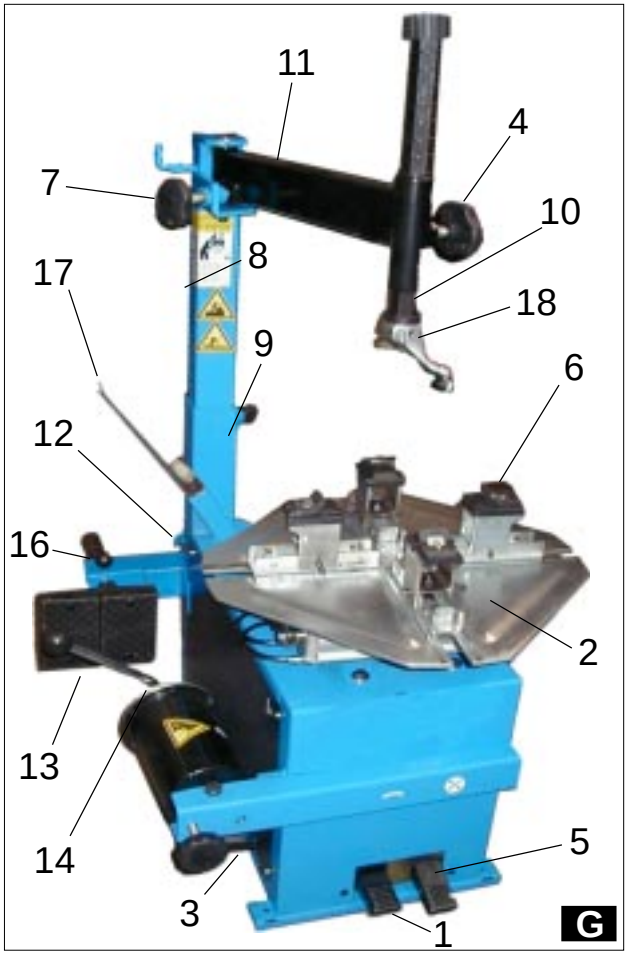
When the table top (5, Fig. G) or the bead breaker (3, Fig. G) pedal is pressed, nothing happens.

CAUSES

1) No compressed air supply to the system.
2) Compressed air hose is crimped or crushed.

REMEDIES

1) Check and correct the compressed air supply source.
2) Check and correct any hose defects. Replace hose if damaged.



NOTE:
If, inspite of the above mentioned indications the tire changer doesn't work properly, do not use it and call for technical assistance.

:

Snap-on Diagnostics
309 Exchange Avenue
Conway, Arkansas - USA

Form 5845...pn ZEEWB305A....02/21/2002..wdc... Printed in the USA