

# SAJAM

## Operation Manual

### MT201 Tire Changer



\*Read these instructions before placing unit in service.

\*\*Keep these and other materials with the unit in a binder near the machine for easy reference by supervisors and operators.

\*\*\*You will need the manual for the information of the machine, such as safety warning and precautions, assembly, operating, maintenance and parts list / assembly diagrams.

\*\*\*\*Keep your invoice with this manual for future reference. Manufacturer shall not be liable for any injury to persons on damage to thins caused by failure to comply with these regulations and can cancel warranty coverage.

## Installation, Operation, Maintenance

## 1. Technical Data

Model	
Electric Requirement	See the manufacturer's serial plate
Max. Wheel Diameter	38"
Max. Wheel Width	12"
Outside Clamping—Rim sizes	5.5" - 23"
Inside Clamping—Rim sizes	7" ~ 25"
Overall Dimensions (L x W x H)	98 x 77 x 113 cm
Shipping Weight	152kg
Ambient Temperature	5~40°C
Operation Humidity	30~95%
Installation altitude NOT exceed	1000m
Transport / Storage temperature	-25~55°C

## 2. Assembly instruction

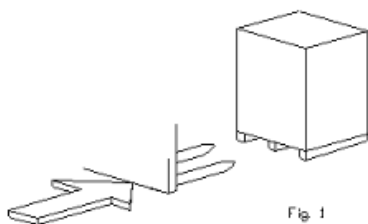


Fig.1

### 2-1 Transport

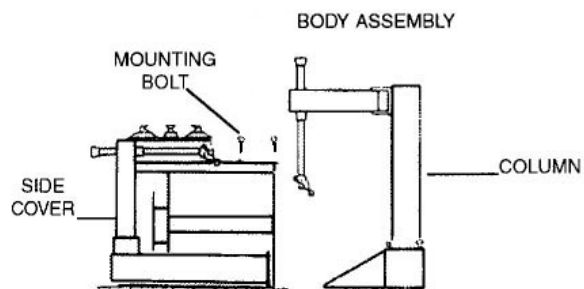
When transporting the machine, it must be handle with a forklift truck with the forks. Positioned as show as in the Fig.1.

### 2-2 Unpacking

When unpacking, check to make sure all parts shown on the spare parts List/Assembly. Diagrams are included. If any parts are missing or broken, please call the manufacturer or the dealer as soon as possible.

## 3 Workplace Requirement

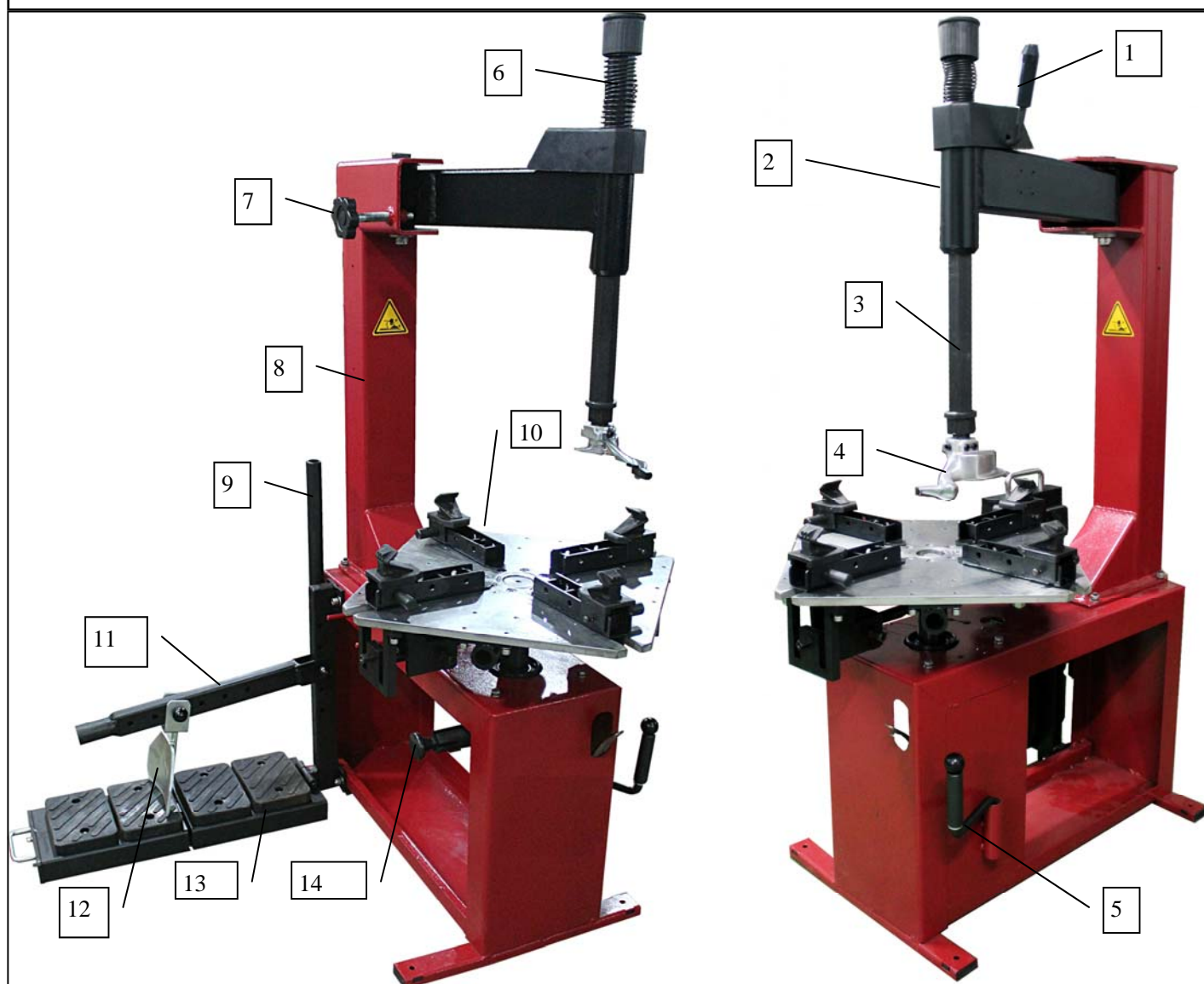
1. The machine's workplace requires 1000(width)×1500(depth) with at least 500 mm of clear space from each wall. Place the tire changer on a firm, smooth and unbroken floor.



### Assembly Procedure

1. Temporarily remove the four mounting bolts, washers, and Nuts located at the top / rear of the body assembly.
2. With assistance, set the column on the body assembly, and align the four mounting holes in which the bolts, washers, and nuts were moved.
3. Firmly wrench tightens the column with the four mounting bolt, washers, and nuts mentioned in step 1 above.

## 4. Product description























1	Locking handle	2	Swing arm	3	Hexagonal shaft	4	Mounting head
5	Clamping wrench	6	Spring	7	Adjustment knob	8	Column
9	Pole	10	Adjustable clamping jaw	11	Bead breaker pole	12	shovel
13	Rubber wheel support	14	Turntable pin switch				

### 4.1 Standard Accessories

STL	NHMC	MHPP

## (5) Optional upgrade accessories

NOTICE: Some upgrade accessories maybe not suitable to your machine. For more detail, please contact your reseller.

	<b>ATV</b> All Terrain Vehicle Adapter Set
	<b>MC</b> Motorcycle Adapter Set
	<b>LRA</b> Large Rim Adapter Set
	<b>MAAS</b> Motorcycle Deluxe and ATV Adapter Set
	<b>UMAS</b> Motorcycle Deluxe Adapter Set
	<b>SPJP</b> Short Plastic Jaw Protector
	<b>LPJP</b> Long Plastic Jaw Protector
	<b>TLPP</b> Tire Lever Plastic Protector
	<b>MHPP</b> Mounting Head Plastic Protector
	<b>SFRL</b> Standard Filter + Regulator + Lubricator Installed on all Coseng tire changers except on model C288S Factory set at 8 bar / 116 PSI
	<b>STL</b> Standard Tire Lever (400 mm)
	<b>ETL</b> Extended Tire Lever (600 mm)
	<b>HDTL</b> Heavy Duty Tire Lever
	<b>IG</b> Complete Inflation Gun
	Professional "4 in 1" inflation gauge 1. Draw air 2. Pressure testing 3. Deflate 4. Inflate
	<b>PMH</b> Plastic Mounting Head For swing arm tire changer
	<b>MPMH</b> Motorcycle Plastic Mounting Head
	<b>BBSPP</b> Bead Breaker Shovel Plastic Protector
	<b>NHMC</b> No Hands Mounting Clamp
	<b>REPP</b> Rim Edge Plastic Protector



## (6) Operating Instruction

This unit must be properly operated and properly maintained to help avoid accidents that could damage the unit and injure the operator or bystanders. This section of the Operating Instructions manual review basic operations and use of controls. These instructions should be reviewed with all employees before they are allowed to work with the machine. Keep these instructions near the machine for easy reference.

## (7) Bead breaker and demounting



**This machine may operate differently from machines you have previously operated. Practice with a regular steel wheel and tire combination to familiarize yourself with the machine's operation and function.**

\*\* Remember to remove all weights from both sides of the wheel. Weights left on backside of wheel may cause the wheel to be clamped unlevel. This may result in the combination mount/demount head contacting the rim causing scratches. On alloy wheels, always rotate the wheel one turn after setting the mounting head to insure proper wheel chucking.

\*\* Always review with the owner any nicks and scratches on expensive wheel and tire combinations prior to servicing.

\*\* Review the custom and special wheel section of this manual prior to servicing custom or special tire/wheel combinations.



**breaking the beads on a partially or fully inflated tire is unsafe and causes excess movement and friction against the bumper pads and excessive wear on pivots. Deflate the tire completely to prolong the life of your machine.**

1. Deflate the tire completely by removing the valve core from the valve stem (figure 1). Be cautious and do not smoke as a *flammable gas could have been introduced into the tire at some time.*

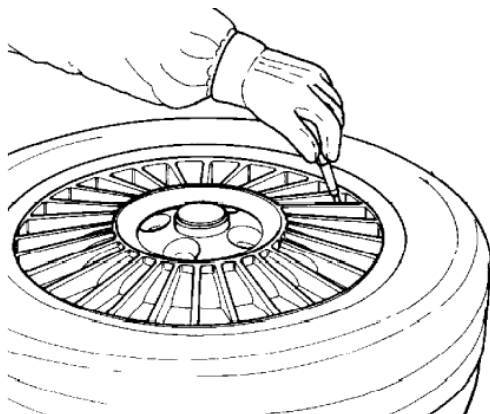


Figure 1 - Remove Valve Core to Deflate Tire



**Tires are always installed and removed from the rim's narrow side.**

\*\* Always loosen the bead on the narrow side of the wheel's drop center first (tire removed in figure 2 for clarity).

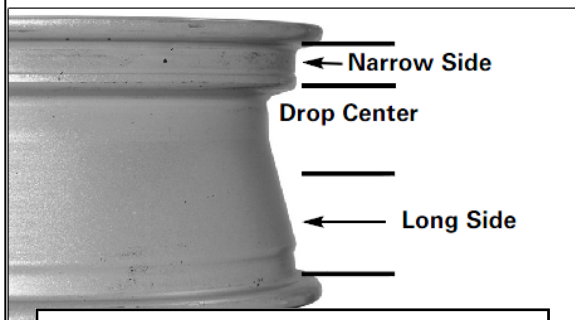
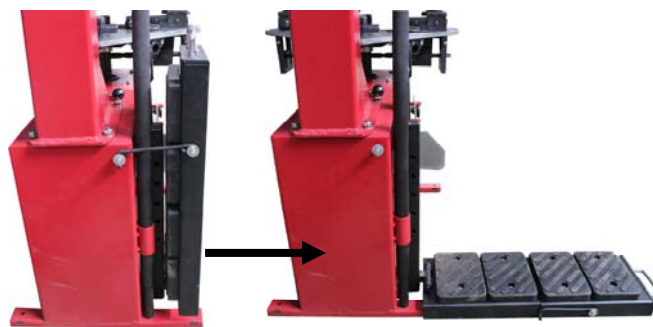


Figure 2 - Determine Narrow Side of Wheel

\*\* pull down the bead breaker on the ground.



\*\* Use extra care in positioning the bead breaker shovel on larger wheels/tires, and on alloy wheels.

2. Pull the bead breaker shovel away from the machine and roll wheel into position. The valve stem should be in the 2 o'clock position to accommodate a possible asymmetric safety hump type rim.



Figure 3 - Position Tire and Bead breaker shovel



Position the bead breaker shovel against the tire next to, but not on, the rim. Press the pole down to press bead breaker shovel to loosen the bead. It may be necessary to loosen the bead in multiple locations around the tire (figure 3).

3. Turn the wheel around and repeat loosening procedure on the other side of the wheel. This should be the long side of the drop center (figure 2).

\*\* It will be easier to outside clamp the wheel to the table top if the long side of the rim is loosened last.

4. Apply tire manufacturer's approved rubber lubricant liberally to entire circumference of both tire beads after loosening (figure 5).



Figure 5 - Apply Rubber Lubricant to Tire Beads

5. Determine the mounting side of the wheel. The mounting side is the narrow side of the drop center. See figure 2 for more information on the drop center.

6. lock up the turntable pin switch. It is easy for clamping wheel on the clamping claws.



7. also change the claws clamping location. It will reduce the time of clamping.



8. use the clamping wrench to control clamping claws to clamp the wheel.



9. Check the four clamping claws clamping on the rim, then retighten clamping claws by wrench.



10. Move the swing arm into position. Pull the locking handle forward to release the slide. Push down on the top of the vertical slide to move the demount head into contact with the rim edge. Push the locking handle back and lock the slide into place (figure 7).



Figure 7 - Position Mount/Demount Tool

11. The mount/demount head should be in contact with the rim edge. Turn the swing arm adjusting knob to move the mount demount head away from the rim 1/8 to 1/4 inch (figure 8).

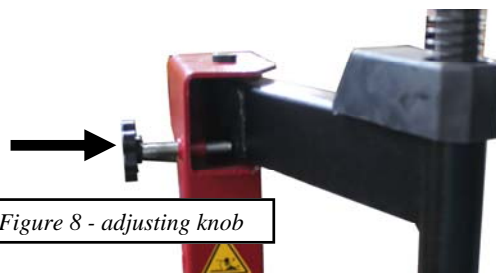


Figure 8 - adjusting knob

12. Check mounting head positioning. Mounting head should be positioned with 3/16 to 1/8 inch clearance between the top of the rim edge and the bottom of the head, and 1/8 to 1/4 inch clearance between the rim edge and the head roller. This clearance will be maintained as long as the locking handle and adjustment knob are not changed. The operator may swing the arm out of the way and back into place again without needing to reposition the head (when changing a like set of wheels) (figure 9).

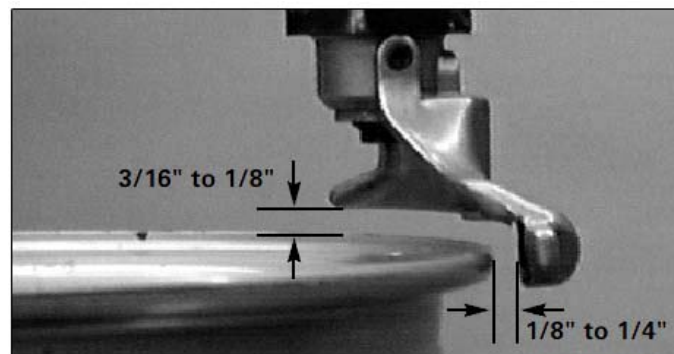


Figure 9 - Proper (Metal) Mount/Demount Head Position



## **CAUTION**

At time during the mounting and demounting procedure, the STL may encounter resistance and can be thrown. Keep one hand firmly on the tool to avoid possible tool disconnect. Use the reversing feature to back out of jam-ups. A thrown tool can cause injury.

13. make sure the turntable pin switch is closed.



14. prepare the STL (standard accessories).



15. Insert the smooth curved end of the STL over the forward end of the demount head and below the top bead of the tire. Lift the bead up and over the knob on the Mounting head (figure 10). Also, note the valve stem position to the Mounting head. Use your free hand to press down on the tire opposite the Mounting head to allow the bead to utilize the drop center area of the rim, this position reduces stresses in the bead and allows an easier bead lift.

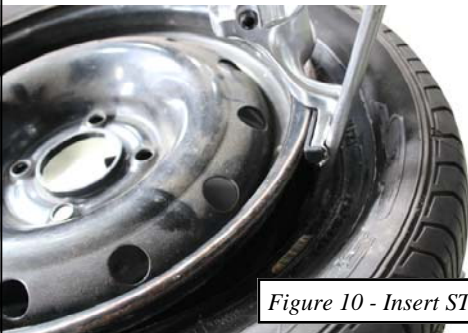


Figure 10 - Insert STL

16. Push the bead lifting tool down towards the wheel to lift the tire bead up and over the knob portion of the demount head. Hold the STL and bead in this position (figure 11).



Figure 11 - Lift Bead Over Demount Head

## 17. Optional upgrade accessories

TLPP is a optional upgrade tool to protect expensive rim during demounting. Simply the STL insert into TLPP. Call your local reseller for more detail.



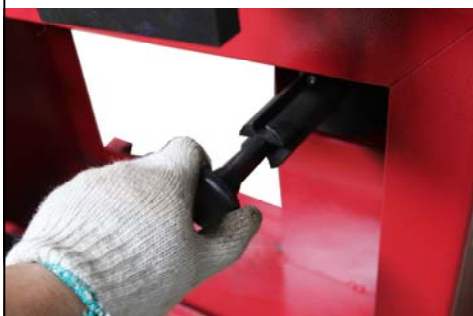
18. prepare the pole.



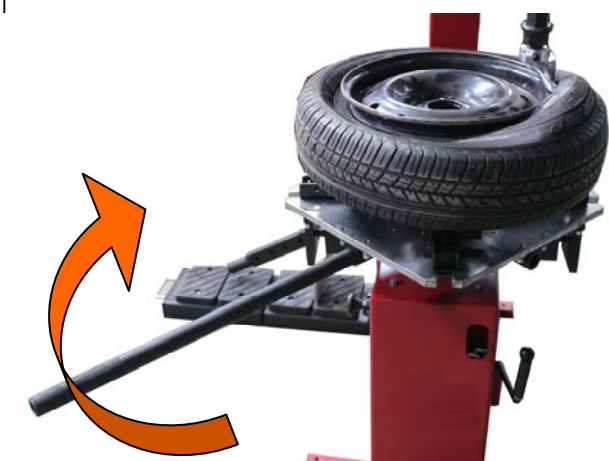
19. let's the pole insert into sleeve tube under turntable.



20. pull the turntable pin switch (open position)



21. Rotate clockwise. The bead will be pulled up by mounting head. If it is hard to rotate, apply more lubrication on tire bead. The Mounting head will guide the tire bead up and over the edge of the wheel. Continue rotation until the upper bead is demounted.



22. Lift and hold the tire at an angle so that the lower bead is resting in the drop center directly across from the demount head, and is loose below the demount head (figure 12). Insert the smooth curved end of the STL down over the forward end of the mount/demount tool and below the lower bead. Lift the bead up and over the knob on the demount head (figure 13).



Figure 12 - Demounting Lower Bead



Figure 13 - Guide Lower Bead Over STL and Over the mounting head

23. Rotate the turntable by pole from 3 o'clock to 9 o'clock. The demount head will guide the bead up and over the edge of the wheel. Continue rotation until lower bead is demounted.

\*\* With tube-type tires, demount the upper bead and remove the tube before demounting the lower bead.



24. Rotate clockwise. The bead will be pulled up by mounting head. If it is hard to rotate, apply more lubrication on tire bead. The Mounting head will guide the tire bead up and over the edge of the wheel. Continue rotation until the lower bead is demounted.





## (8) Mounting

This information must be read and followed carefully to prevent accidents and injuries during mounting.



Attempts to force a bead seat on mismatched tires and wheels can cause the tire to violently explode, causing serious personal injury or death to operator and/or bystanders.



Check tire and wheel carefully before mounting. Make sure the tire bead diameter and wheel diameter match exactly. Consult the Tire Guide and/or Rubber Manufacturer's Association for approved rim widths for tire sizes.



Never mount a damaged tire. Never mount a tire on a rusty or damaged wheel. Damaged tires and/or wheels may explode.



When in doubt do not mount



Never mount a tire and wheel handed to you by anyone without checking both tire and wheel for damage and to be certain the sizes match. Do not let untrained persons operate tire changer and keep bystanders out of service area.



Forcing the tire onto the rim can cause bead damage. If you damage the tire bead during mounting, STOP!, remove tire and mark it as damaged. Do not mount a damaged tire.

1. Before any mounting, inspect tire for damage and verify size match between tire and wheel (fig. 14).



Figure 14 - Verify Size Match Between Tire and Wheel

2. Inspect wheel closely for damage. Clean the wheel and remove any light corrosion or rubber residue (figure 15). Do not attempt to service a heavily corroded wheel, damaged wheel, or bent wheel.



Figure 15 - Inspect and Clean the Wheel

3. Inspect valve stem and replace if necessary. Next lubricate tire beads liberally with tire manufacturer's approved rubber lubricant (figure 16).



Figure 16 - Lubricate Tire Beads Liberally

4. Place tire over wheel and move swing arm into position making sure the valve stem is at the 9 o'clock position in front of bead lock. Position tire so that lower bead is above the rear extension of the mount/demount tool and below the front knob (figure 17).



Figure 17 - Position Tire Against (Mount/Demount Tool)

5. rotate wheel by pole to mount lower bead. Use drop center of wheel by forcing down on tire just ahead of the mounting tool, and follow as tire rotates. Rotate turntable until lower bead is mounted.



6. while the rotating, lower bead maybe hard mounted. Apply lubrication on lower bead, then rotates clockwise .



7. For top bead installation, unlike other tire changer, because it is a manual tire changer, this machine needs extra help "NHMC" to press down on the tire between the mount head and rotate tire until bead is mounted.

8. prepare the NHMC (standard accessories)



9. NHMC clamps and press down bead near by the mounting head.



10. clockwise the turntable by pole rotation.



11. while the rotating, lower bead maybe hard mounted. Apply lubrication on top bead, then rotate clockwise .





## 12. Optional upgrade accessories

NHMC (ST) is a optional upgrade tool to clamp and press down uncommon special rim. Call you local reseller for more detail.



NHMC (ST)



## 13. Optional upgrade accessories

Bead retainer is a optional upgrade tool to press down run flat or low profile tire and rim. Call you local reseller for more detail.



Bead Retainer





