MC680 Motorcycle / ATV Tire Changer

(K&L# 37-9998)

INSTRUCTION MANUAL

READ THIS ENTIRE MANUAL
BEFORE OPERATION BEGINS

Safety Instructions
Operating Instructions
Installation Instructions
Maintenance Instructions

READ these instructions before placing unit in service. KEEP these and other materials delivered with the unit in a binder near the machine for ease of reference by supervisors and operators.

RECORD THE FOLLOWING INFORMATION WHICH IS LOCATED ON THE SERIAL NUMBER DATA PLATE.

Serial Number: _____ **Model :** _____

K&L Supply Co.

VERSION: B

Operators Protective Gear and Equipment

Personal protective equipment helps make tire changing safer. However, equipment does not take the place of safe operating practices. Always wear durable work clothing during tire service activity. Shop aprons or shop coats may also be worn, however loose fitting clothing should be avoided. Tight fitting leather gloves are recommended to protect operator's hands when handling worn tires and wheels. Sturdy leather work shoes with steel toes and oil resistant soles should be used by tire service personnel to help prevent injury in typical shop activities. Eye protection is essential during tire service activity. Safety glasses with side shields, goggles, or face shields are acceptable. Back belts provide support during lifting activities and are also helpful in providing operator protection. Consideration should also be given to the use of hearing protection if tire service activity is performed in an enclosed area, or if noise levels are high.

WARNING

Failure to follow danger, warning, and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property. Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual.

For additional tire, wheel, and/or inflation information contact the following:

K&L Supply Co., Inc. 1040 Richard Ave. Santa Clara, Ca. 95050 800-727-6767 www.klsupply.com

Owner's Responsibility

To maintain machine and user safety, the responsibility of the owner is to read and follow these instructions:

- Follow all installation instructions.
- Make sure installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations; such as State and Federal OSHARegulations and Electrical Codes.
- Carefully check the unit for correct initial function.
- Read and follow the safety instructions. Keep them readilyavailable for machine operators.
- Make certain all operators are properly trained, know how to safely and correctly operate the unit, and are properly supervised.
- Allow unit operation only with all parts in place and operating safely.
- Carefully inspect the unit on a regular basis and perform all maintenance as required.
- Service and maintain the unit onlywith authorized or approved replacement parts.

Keep all instructions permanently with the unit and all decals on the unit clean and visible.

This tire changer comes with a very detailed and easy to understand instruction manual. This manual assumes that the customer has used a wheel clamp style tire changer previously, or has operators that have operated a wheel clamp style tire changer. If this is your first tire changer purchase and you have not operated a wheel clamp style tire changer, it is strongly recommended to have a person/trainer who is familiar with this style of tire changer train you in the operation. This tire changer is very similar to many other tire changers on the market. The distributor that sold this unit will be glad to give you a demonstration session at their location or guide you to someone who can provide a service call to your location for training (a service charge would apply). The distributor also offers telephone technical support and trouble-shooting suggestions as needed. This does not take away from the responsibility you have to read and understand this complete manual. This responsibility is no different than when you purchase a motorcycle/automobile. The motorcycle/automobile dealer assumes you know how to operate and drive a motor vehicle. Safe operation is your responsibility and the dealer assumes you know how. Seek training as needed.

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DANGER

EXPLOSION HAZARD – NEVER EXCEED 40 PSI WHILE SEATING BEADS

Explosion Hazard Never inflate tire above manufacturer's recommended pressure after bead is seated.

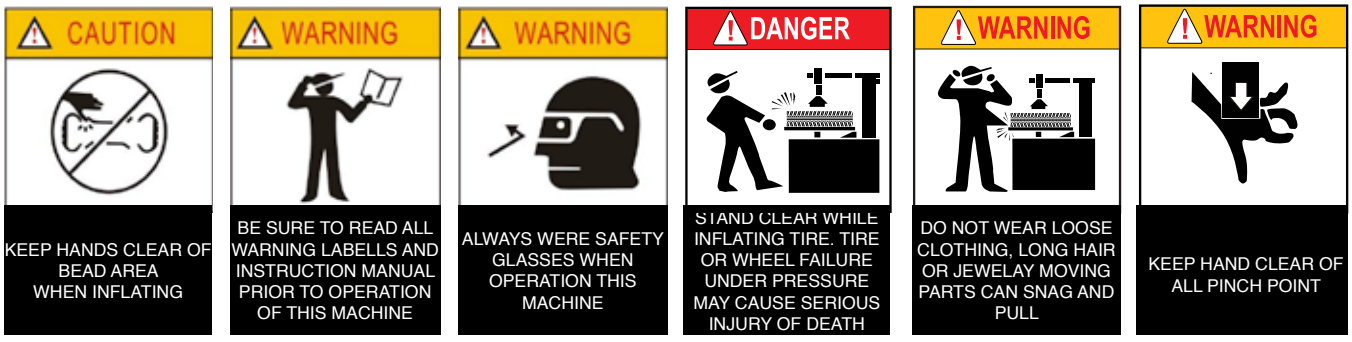
WARNING

This machine is only applied to mount, demount and inflate the tire in the specified scope and not for any other purpose.
The manufacturer will not be responsible for the damage or injury caused for the operation not properly and out of the range.

NOTE

This machine should be operated by the special trained qualified personnel. When operating, the unauthorized personnel will be kept far away from the machine.
Please note the safety label stuck on the machine.
Operators should wear safety protective facilities such as working suit, protective glasses, and ear plug and safety shoes. Keep your hands and body from the movable parts as possible as you can. Necklace, bracelet and loosen clothing may cause dangerous to the operators.
Tire changer should be installed and fixed on the flat and solid floor. The more than 0.5m of distance from the rear and lateral side of the machine to the wall can guarantee the perfect air flow and enough operation space.
Do not place the machine in the site of high temperature, high humidity, and dust and with flammable and corrosion gas.
Without the permission from the manufacturer, any change on the machine parts will cause injury/damage to the machine/operator.
Pay attention that the tire changer should be operated under the specified voltage and air pressure.
If you want to move the tire changer, you should under the guidance of the professional service personnel.
Notice: During operation, one operator is required for working on the wheel weighing below 25kg, two operators required for the 25-50kg wheel, and wheel lifting equipment for wheels heavier than 50kg.

SAFETY LABEL INSTRUCTIONS




Electrical shock!


Wear the goggle


Read the user manual


Wear the gloves


Do not reach any part of your body under the de-mount tool


When breaking bead, the bead Breaking blade will quickly move leftwards


Note: when press the tire, the opened clamp cylinder may injury the hand of the operator. Remember, do not touch the sid


When clamping the rim, do not Reach your hand or other parts Of the body in between the clamp & the rim.

Contents

CHAPTER I BRIEF INTRODUCTION

1.1 BRIEF INTRODUCTION

This series of equipment is the tire changer with fixed column and rocker arm tire changer. It is suitable to mount, demount and inflate all types of motorcycle tires with tube & tubeless. The operation is easy, convenient, safe and reliable. The model is MC680.

1.2 EQUIPMENT OVERALL DIMENSION

Model	Height (mm)	Length (mm)	Width (mm)	Net Weight (kg)
MC680	1,750	860	750	175

1.3 TECHNICAL PARAMETER

Operational Pressure: 8-10bar
Motor: 50Hz ±1% 400V±1% 0.75kW
Turntable Rotation Speed: 6rpm
Noise: <75dB
Note: An over-voltage protection device is needed for the connection with power supply

1.4 APPLICATION SCOPE

Model	max. wheel diameter	max. wheel width	rim diameter (external clamping)
MC680	960mm(37″)	254mm(10″)	6″~ 24″

1.5 ENVIRONMENT REQUIREMENT

mbient temperature 5°C~45°C
relative humidity 50%@40°C -90%@20°C
sea level max.1000m
without dust and flammable and explosive gas
The operation space around the machine wills not smaller then the indicated in FIG1. If the machine is installed outdoors, it must have the protective shed to avoid being exploded to the rain and sunlight.

⚠ It is forbidden to use in the site with the flammable gas!

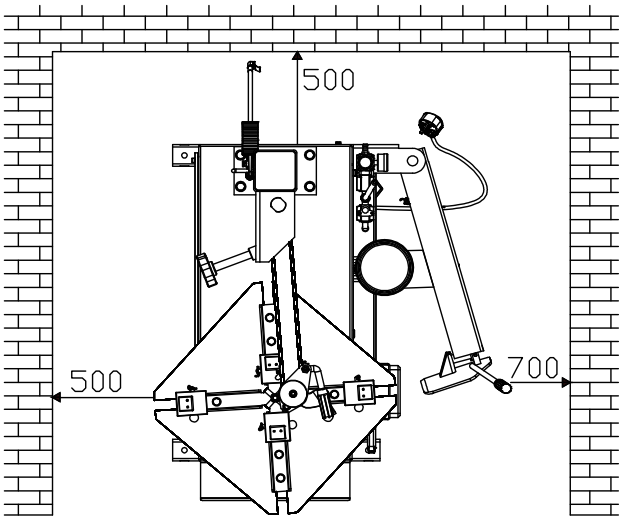


FIG 1

CHAPTER II CONFIGERATION AND OPERATION

Know Your Unit - Compare this illustration with the unit before placing it into service. Maximum performance and safety will be obtained only when all persons using the unit are fully trained in its parts and operation. Each user should learn the function and location of all controls. Prevent accidents and injuries by ensuring the unit is properly installed, operated, and maintained.

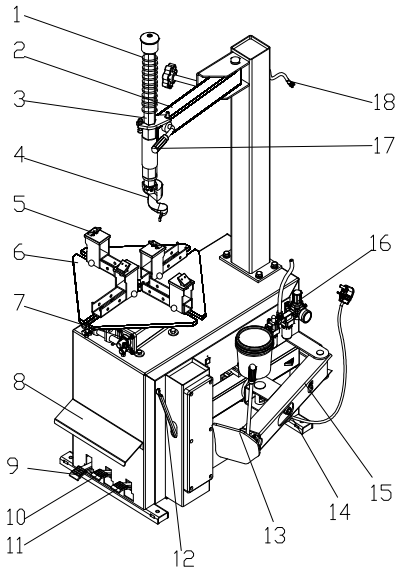


FIG 2

1-vertical shaft spring	2- rocker arm
3- hexangular shaft	4- demount tool
5- claw	6- turntable
7- turntable cylinder	8- operation panel
9- clamp pedal	10- press tire pedal
11- turntable pedal	12- crowbar
13- blade	14-bead breaking cylinder
15- bead breaking arm	16- air source
17- lock handle	18 - column

CHAPTER III INSTALLATION AND CALIBRATION

Before installation, carefully read this manual. The unauthorized change on the parts and spare parts of the machine will cause damage on the machine. Installation personnel should have the specific electrical knowledge.

Operators must be trained and authorized.
Before installation, carefully read the equipment list. If any question, please contact with the dealers or our company. To ensure the success of the installation, please prepare the following common tools:

Two wrenches (10″) , one socket wrenches, one hexangular wrench, one tung, one screw driver, one hammer and one millimeter
The tire changer must be fixed on cement ground by anchor bolts fastened through its 4 base frame holes.
The tire-changer must be fixed to the ground by means of suitable anchoring bolts.

3.1 DEPACKAGE

3.1.1 According to the de-package instruction on the package box, to detach the box and remove the package material to check if the machine damage or not and if the spare parts completed.

3.1.2 Keep the package material far away from the working site and deal with it properly.

3.2 INSTALLATION

3.2.1 After un-package the package carton, take out accessory boxes(FIG 4-1),bead breaking arm(FIG 4-3)and column assembly(FIG 4-2). And position and fix according to the FIG5. Remove the bolt, elastic washer and plate washer on the body (FIG 4-4).

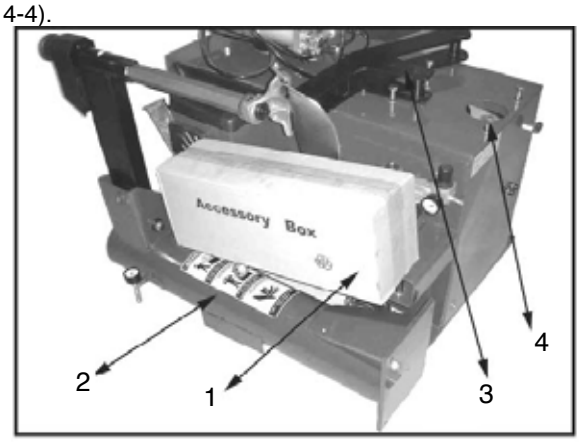


FIG 4

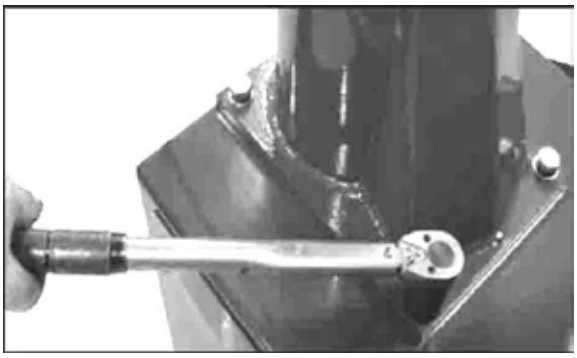


FIG 5

3.2.2 Place the column on the body. The direction of the warning label is forwards. Make the holes on the column base plate align to thread holes on the body. Once again assemble the removed the bolt, elastic washer and late washer and plate washer removed in 3.2.1The torque is 70 N·M(FIG5) Use torsion wrench to tight

3.2.3 Use the wrench to remove the screw(FIG 6-3) hexangular shaft (FIG6-1) and take off the vertical shaft cap (FIG 6-2), When remove the screw on the vertical shaft ca p, you need use the lock handle to lock the hexangular shaft to avoid sliding off to damage the machine or injury personnel! Install the vertical shaft spring (FIG7-1) on the vertical
shaft. Mount the vertical shaft cap and mount the removed screw and assemble the hand wheel into the nut bushing of the rocker arm (FIG 7-2).

3.2.4Remove the lock nut at the front end of the bead breaking cylinder piston rod (FIG 8-1) and use the wrench to remove the nut on the bead breaking arm bolt (FIG8-4) Remove the bolt (FIG8-3) and hang the spring (FIG8-2)

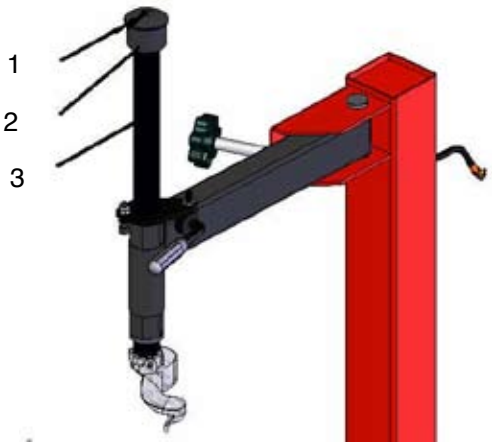


FIG 6

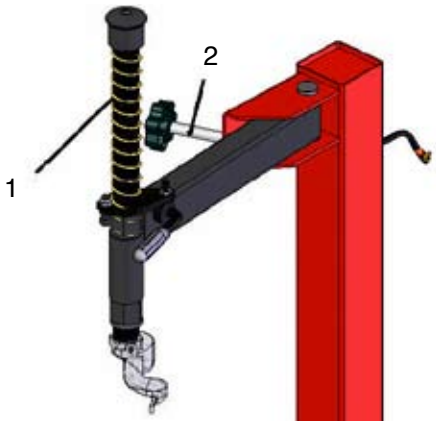


FIG 7

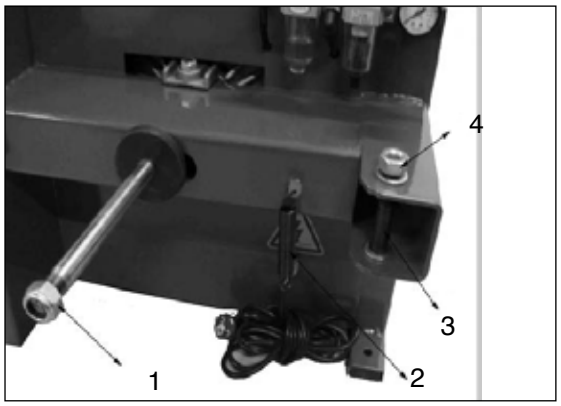


FIG 8

3.2.5Position the bead breaking arm shaft bushing into the bead breaking support plate on the body (FIG 9-1) to align the hole and install the bead bre3aking bolt (FIG9-2) and assemble the nut to lock (FIG 8-4). Insert the piston rod (FIG10-2) through the hole of the bead breaking slide bushing(FIG10-1). The surface of the slide bushing should be outwards (FIG 10).
Assemble the removed nut (FIG 8-1) into the front end of the piston rod. The nut will be assembled.
The distance from the edge of the bead breaking blade to the bead breaking rubber is 30~40mm (FIG11). Hang the spring.(FIG9-3).

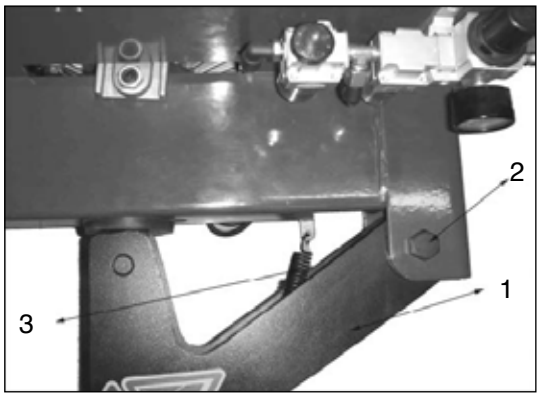


FIG 9

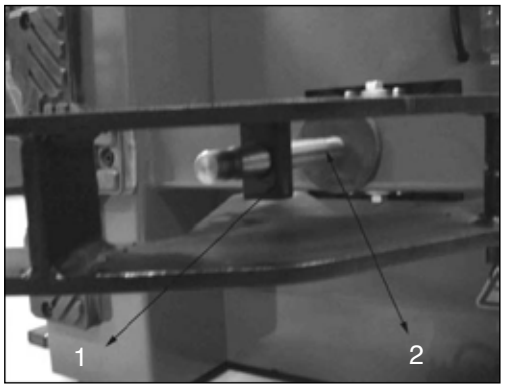


FIG 10

3.3 AIR SOURCE INSTALLATION:

Air source has been adjusted before ex-factory. If it needs hange, adjust again

3.3.1 Take out the air source and 2 screws from the accessory boxes and remove the oil and dust. Fix the screw on the right side of the body (FIG12)

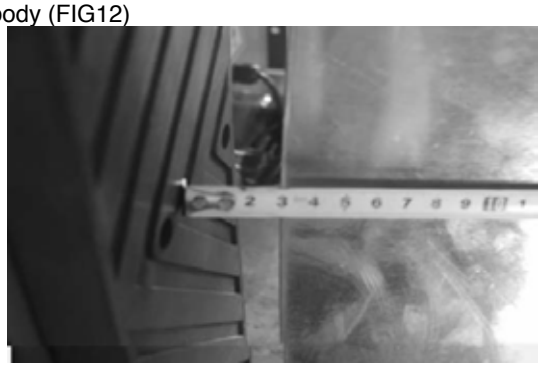


FIG 11

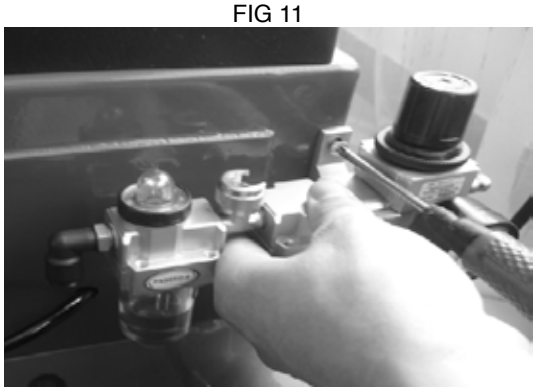


FIG12

3.3.2 Connect air hose: Remove the connect of on the ø8 PU hose on the lateral side of the body. This connect is equipped for avoid the air hose from sliding into the body. And plug into the elbow. See (FIG14).

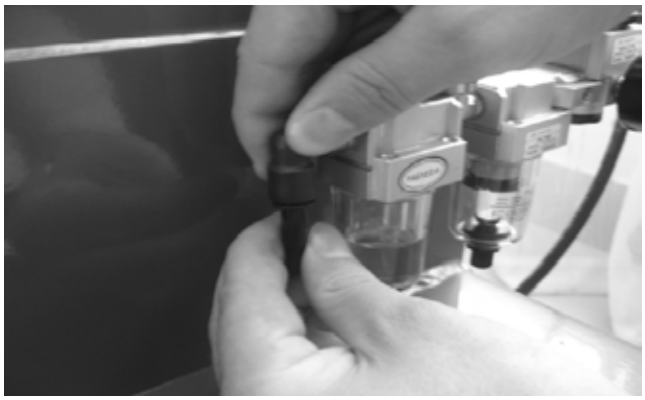


FIG 13

3.3.3 Connect the inflation gun: Plug the inflation gun connect into the slot of the open nut (FIG15) and tight the open nut and then connect air supply.

3.3.4 Air source has been adjusted before ex-factory. If it needs change, adjust again:
Pressure: Lift up the pressure adjustable button (FIG16-1) and twist clockwise and the air pressure will increase. Meanwhile, if counterclockwise, the air pressure will decrease. Oil Feed Use screw driver to twist the screw (FIG16-2). If clockwise, the oil dropping speed will slow. If counterclockwise, it will become fast.

FIG 15

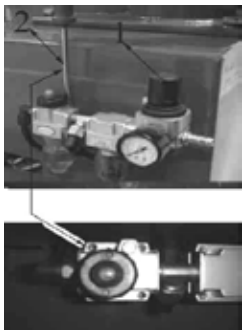


FIG 16

CHAPTER IV DEMOUNT AND MOUNT TIRE OPERATING INSTRUCTIONS

The unit must be properly operated and properly maintained to help avoid accidents that could damage the unit and injure the operatoror by standers. This section of the Operating Instructions manual reviews the 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.

4.1 DEMOUNT TIRE

4.1.1 CAUTION - **This machine may operate differently from machines you have previously operated. Practice with a regular steel wheel and tire combination to get familiar with the machine's operation and function.**
Deflate the air in the tire completely by removing the valve core. Use the special tool to detach the wheel weights on the rim. (FIG17).

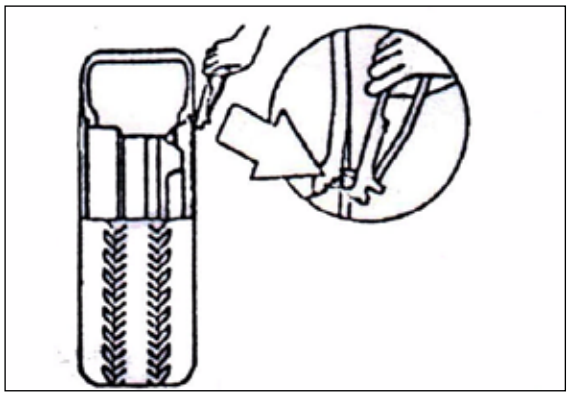


FIG 17

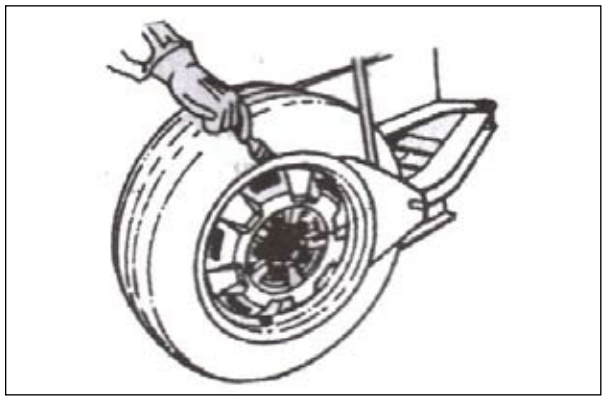
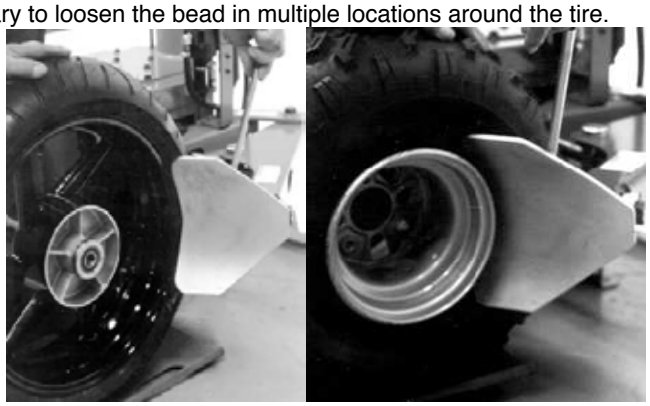


FIG 18

NOTE: Loosening the beads on a fully inflated tire is unsafe and causes excessive wear on machine parts. Deflate the tire completely to prolong the life of your machine.
ATV NOTE: It may be necessary on some ATV wheels to leave 5-10 PSI in some of these wheels to facilitate bead loosening.
NOTE: Always loosen the bead on the narrow side of the wheel's drop center first (motorcycle wheels may not have a narrow or long side, and some ATV wheels may bolt together).
NOTE: Use extra care in positioning the bead loosener shoe on larger wheels/tires, and on alloy wheels. Make sure the shoe rests next to but not on the rim, and not on the tire sidewall. The riser underneath the bead loosener will help properly position ATV wheels.

4.1.2 (FIG 18). Pull the bead loosener shoe away from the machine and roll wheel into position. The valve stem should be in the 3 o'clock position. Position the bead loosener shoe against the tire next to, but not on, the rim. Depress the bead loosener foot pedal to actuate the shoe and loosen the bead. It may be necessary to loosen the bead in multiple locations around the tire.

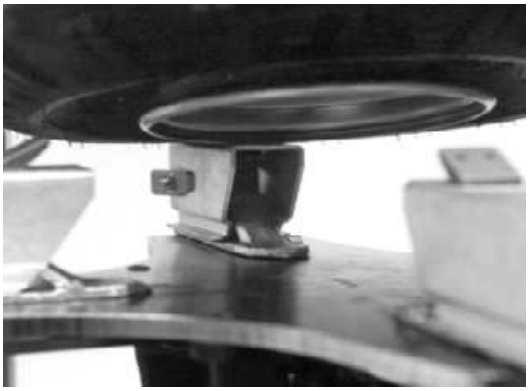


Turn wheel around and repeat loosening procedure on the other side of the wheel. This should be the long side of the drop center.

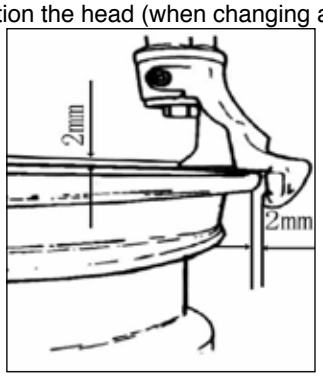
Apply tire manufacturer's approved rubber lubricant liberally to entire circumference of both tire beads after loosening. (Fig 18)

TIP: It will be easier to clamp the wheel to the table top if the lower bead is loosened last.

Place tire/wheel assembly on table top with mounting side up. Use the clamp control pedal to move the clamps inwards (push pedal down) or outwards (toggle pedal up (FIG 2-10). Clamp motorcycle and ATV wheels from the outside (clamps push inwards against the outside rim edge). Place rim flange into rear clamp and slowly move the other clamps inward until they contact the rim. Observe closely to prevent tire/wheel damage.



4.1.3 Move the swing arm into position (FIG 2-3). 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 to lock the slide into place (FIG 2-17). As the slide is locked, the mount/demount head will move upward approximately 1/8 inch from the rim edge (FIG19). The mount/demount head roller should be in contact with the rim edge. Turn the swing arm adjusting knob to move the head away from the rim 1/8 to 1/4 inch. The operator may swing the arm out of the way and back into place again without needing to reposition the head (when changing a set of the same wheels).



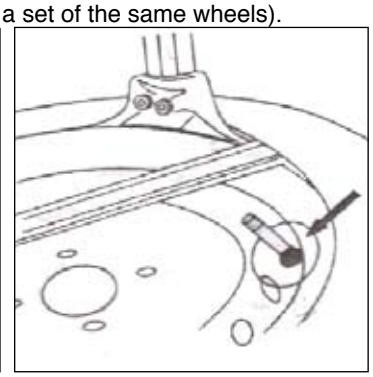


FIG 19 **FIG 20 .**

4.1.4 Insert the smooth curved end of the bead lifting tool over the forward end of the demount head and below the top bead of the tire (Fig 20). Use your free hand to press down on the tire opposite the head to help with tool insertion. Push the bead lifting tool down towards the wheel to lift the tire bead up and over the knob portion of the demount head. The tool may be removed if desired. Depress the table top pedal to rotate the wheel clockwise. The demount head will guide the upper bead up and over the edge of the wheel.
NOTE: Push down on the tire across from the demount head during table top rotation to utilize the drop center area of the wheel. This reduces the tensional force on the bead during demount. 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. Insert the smooth curved end of the bead lifting tool 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.
Depress the table top pedal to rotate the wheel. The demount head will guide the bead up and over the edge of the wheel. Continue rotation until lower bead is demounted.
NOTE: With tube-type tires, demount the upper bead and remove the tube before demounting the lower bead.
NOTE: Table top rotation can be stopped at any time by removing your foot from the pedal.
NOTE: Normal table top rotation for demounting is clockwise. Depress the table top pedal to rotate this direction. To rotate the table top counterclockwise, lift the pedal up with your toe.
CAUTION - At times during the mounting and demounting procedure, the bead lifting tool may encounter resistance or come under load. Keep one hand firmly on the tool to avoid possible tool disconnect. Use the reversing feature to back out or jam ups.

4.1.5 When handling the tube tire, Take out the tube and then move the lower lip upwards to the upper edge of the rim and then repeat the above steps to detach the other lip .In the process of demounting tire, you should keep your hands and the other parts of your body from the movable parts. Necklace, bracelet and the loose clothing can injury personnel.

4.2 MOUNT TIRE:

This information must be read and followed carefully to prevent accidents and injuries during mounting.
CAUTION - Check tire and wheel carefully before mounting. Make sure the tire bead diameter and wheel diameter match exactly. Consult the Rubber Manufacturer's Association for approved rim widths for tire sizes. Mis-matched tires and wheels explode.
WARNING - Never Mount a tire and wheel handed to you by anyone without checking both tire and wheel for damage and compatibility. Be extra cautious of persons without knowledge of tire service. Keep by-standers out of service area.
CAUTION - Never mount a damaged tire. Never mount a tire on a rusty or damaged wheel. Damaged tires and/or wheels may explode. If you damage the tire bead during mounting,
STOP!, remove the tire and mark it as damaged. Do not mount a damaged tire.

4.2.1 Inspect the wheel closely for damage. Clean the wheel and remove any light corrosion or rubber residue.
Do not attempt to service heavily corroded wheels. Inspect tire for damage, paying close attention to the beads. Verify size match between tire and wheel.

4.2.2 Spread the lubrication liquid or soap liquid around the lip. Place tire over wheel and move swing arm into position. Position the tire so that the lower bead is above the rear extension of the mount/demount head and below the front knob (FIG 21). Depress table top pedal and rotate the wheel to mount the lower bead. Use the drop center of the wheel to reduce the tensional force on the bead by pressing down on the tire directly across from the mount head. Rotate table top until lower bead is fully mounted.

FIG 21

4.2.3 For top bead, rotate the table top until the valve stem is directly across from the mount head. Lift the upper bead up and over the rear of the mount head. With your left hand, press down on the tire between the mount head and the valve stem to hold the tire in the drop center. Depress the table top pedal and rotate the tire until the bead is mounted. Continue to press down on the tire during the remaining mounting process. (FIG22). In the process of clamping the rim, do not reach your hands in between the rim and the claw to avoid possible injury.
WARNING - Do not force the tire onto the rim. Bead damage could result making the tire unsafe and/or creating the risk of injury.
NOTE: If table top rotation stalls, reverse the table top momentarily until the tire bead is again loose on the wheel. Reposition the mount head, make sure the bead is correctly positioned in the drop center of the wheel, then attempt mounting again.
NOTE: For low profile or stiff sidewall tires, it may be advantageous to use the bead lifting tool to initially hold the upper bead down in the drop center, or use drop center tools.
NOTE: For tube type tires, mount the lower bead first, move swing arm out, install the tube, and then mount the upper bead.

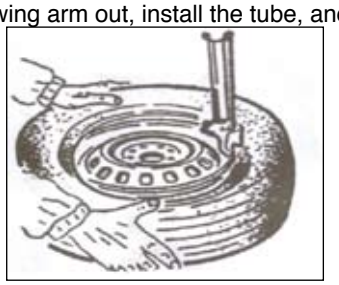


FIG 22

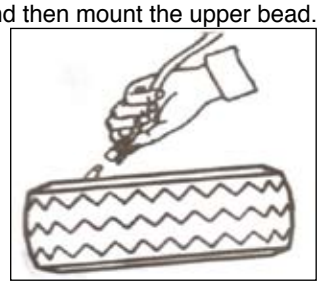


FIG 23

4.3 INFLATION:Tire inflation is performed in two steps:
Bead Seat and Inflation.
When inflating the tire, please be careful and obey the operation process. Check the air route to see if the air connection is OK. This machine is equipped with an inflation gauge for monitoring the inflation of the tire and the inflation pressure (FIG2-23).

WARNING - Check for proper inflation gauge operation. Accurate pressure readings are important to safe tire inflation. Refer to the Operating Maintenance section of this manual for instructions. If the rim has been clamped from the outside for tire mounting, release the clamps, lift the tire, and move the clamps to the center of the table top. Tire failure under pressure is hazardous. This tire changer is not intended to be a safety device to contain exploding tires, tubes, wheels, or bead sealing equipment. Inspect tire and wheel carefully for match, wear, or defects before mounting. Always use approved tire bead lubricant during mounting and inflation.
The inflation pedal, located at the rear of the left side of the machine, controls the flow of air through the inflation hose.
NOTE: The clip-on chuck on the end of the hose should always be an open style with all parts in proper working order.

Position 1 - At Rest – With the inflation hose attached to the tire valve and the pedal in this position, the air gauge will register the air pressure in the tire. Whenever your foot is removed from the pedal, it will return to this position.
Position 2 - Tire Inflation – This is the first activated position. With the inflation hose attached to the tire valve and the pedal in this position, line pressure is allowed to flow through the valve and into the tire for inflation. Tire pressure is not indicated on the gauge in this position.

Bead Seating - Operator should keep hands, arms, and entire body away from the tire during the remaining bead seat and inflation procedures. Do not stand over tire, as personal injury could result. NEVER exceed 40 PSI air pressure when attempting Bead Seat. If operator is unable to obtain Bead Seat, something is wrong. Deflate tire completely, inspect both the tire and wheel, correct any problems found, relubricate both tire beads and reattempt Bead Seal and Bead Seat procedures. Follow all safety instructions in this manual and on machine.

1. Once tire pressure is indicated on the air gauge (inflation pedal in position 1; foot removed from pedal), continue to inject air into the tire in short intervals. Check the pressure frequently. Stand back during bead seat. Keep hands, arms, and entire body away from tire during this procedure. Tire beads should move outward and "pop" into their bead seat position as pressure inside the tire increases. If this does not happen, a problem exists. Investigate carefully.

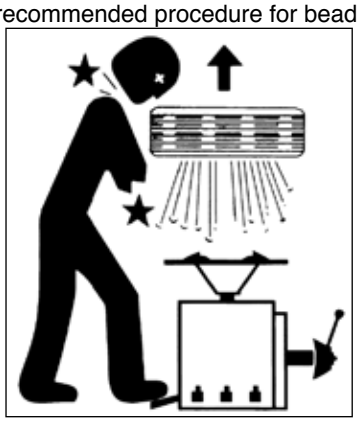
WARNING - Check tire pressure frequently. Never exceed 40 PSI while seating beads. Once seated, never exceed tire manufacturer's recommended air pressure. Tires can explode, especially if they are inflated beyond their limits. At all pressure levels when inflating through the valve stem, keep hands, arms, and entire body away from inflating tire. An exploding tire, wheel, or bead sealing equipment may propel upward and outward with sufficient force to cause serious injury or death to operator or bystander.
Inflation
NEVER exceed tire manufacturer's recommended air pressure. Tires can explode, especially if inflated beyond these limits. Keep hands, arms, and entire body back from inflating tire. Avoid distraction during inflation. Check tire pressure frequently to avoid over inflation. Excessive pressure can cause tires to explode, causing serious injury or death to operator or bystander.

1. Make sure both beads are seated. When both beads are seated, the tire is ready for inflation.
2. Replace the valve core if it was removed.
3. Depress the inflation pedal to position 2 to inflate the tire. Check tire pressure frequently by removing foot from pedal and checking the gauge on the tower. Avoid over inflation.
NOTE: Release air pressure from the tire by pressing the manual release valve button (inflation hose must be attached to the valve stem).

When inflating the tire, please be careful. Keep your hands and body away from the tire. **Explosion Hazard Never exceed 40 PSI while seating beads.**
Explosion Hazard - Never inflate tire above manufacturer's recommended pressure after bead is seated.

STAGES OF INFLATION
Bead Sealing (machines equipped with Air Blast)
A 140 PSI air blast from the table top jets creates an air curtain to aid in bead sealing. Never exceed 10 PSI in the tire during bead sealing. The tire will contain about 1/2 to 2 PSI when bead seal is obtained.

Bead Seating
Bead seating usually occurs on the long tapered side of the wheel first and the shorter side last. Bead seating will usually require at least 7 PSI in the tire. 40 PSI is the maximum safe pressure at this stage regardless of operating pressure. Most European import cars and many aftermarket alloy wheels are very tight and can be difficult to bead seat. Also note that asymmetrical hump and run-flat tires are extremely difficult to bead seat. Follow tire manufacturer's recommended procedure for bead seating.



Inflation
After the beads are seated, the tire is inflated. Do not inflate the tire above the manufacturer's recommended pressure as stamped on the tire sidewall. The typical inflation pressure for automobile tires is between 24 and 45 PSI. Light truck inflation pressure typically covers a wider range.

MIS-MATCHED TIRES AND WHEELS
Never attempt to mount and inflate mis-matched tires and wheels. **Mis-matched tire and wheel combinations explode, causing personal injury or death to operator and bystanders.**
For safety, do not attempt to mount and inflate Mis-matched tires and wheels.

CHAPTER V MAINTANENCE & REPAIR

NOTE: Only qualified professional personnel can execute the maintenance. Before any maintenance, Cut off the power. And ensure the maintenance personnel can take charge of the power plug. Meanwhile, cut off the air supply and pull off the quick adaptor of supply and completely deflate the residual air in the machine.

To correctly use the tire changer and prolong its working life, it is necessary to periodically maintain and repair according to the instruction manual. Or the running and reliability of the machine will be affected and the personnel near the machine or the operator will be injured.

The following position should be monthly maintenance:

Keep the machine and working area clean. Use the diesel oil to clean the hexangular shaft (FIG24) and use the machine oil to lubricate. Use the diesel oil to clean the turntable claw and guide rail and use the lithium base grease to lubricate. (FIG25)
Periodically check the lubrication oil level in the oil fog device. If the oil level lower than the oil scale, please feed in the SAE30 lubrication oil in time (FIG 26)

Drain out the water and impurity in the oil water separator one time every day.
Periodically check and adjust the tension of the driven belt. Properly adjust the adjust nut in A and B to realize the proper tension (FIG27). Check all the connected parts and tighten the loose bolt.

FIG 24

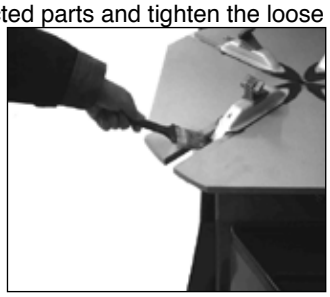


FIG 25 .

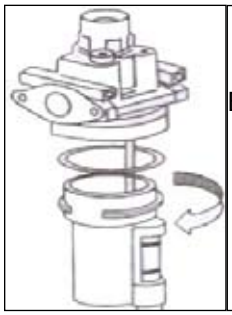


FIG 26

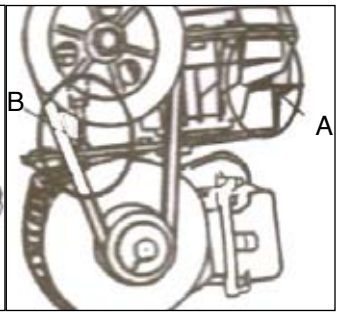


FIG 27 .

HEXANGULAR SHAFT & LOCK PLATE LOCK GAP ADJUSTMENT

When press downward the hexangular lock handle, the hexangular shaft will vertically slide under the effect of the weight of the hexangular shaft and return spring. When the lock handle rotate clockwise for about 100 degree, the cam connected to the handle will push up the lock plate to lock the hexangular shaft. If you can not realize this situation, you can reach the target to lock the hexangular shaft through adjusting the position of the screws and nuts. (FIG 28)

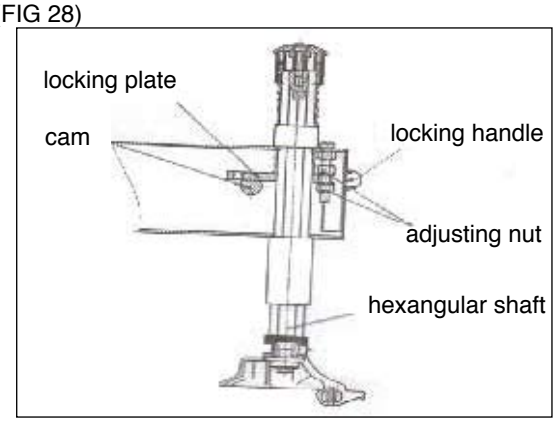


FIG 28

CHAPTER VI TRANSPORTATION

The machine must apply the original package to the transportation and position according to the indication on the package. The transportation of the machine must use the corresponding forklift (FIG 29) and the stack should not exceed 3 layers.

STORE AND TRANSPORTATION

On the vertical surface, there are corresponding identification to show the basic requirement on the store and transportation.

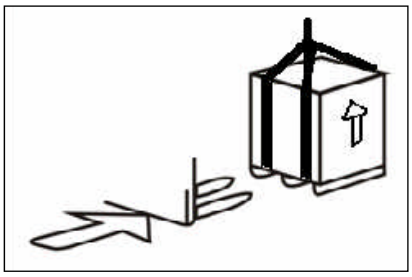
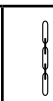


FIG 29

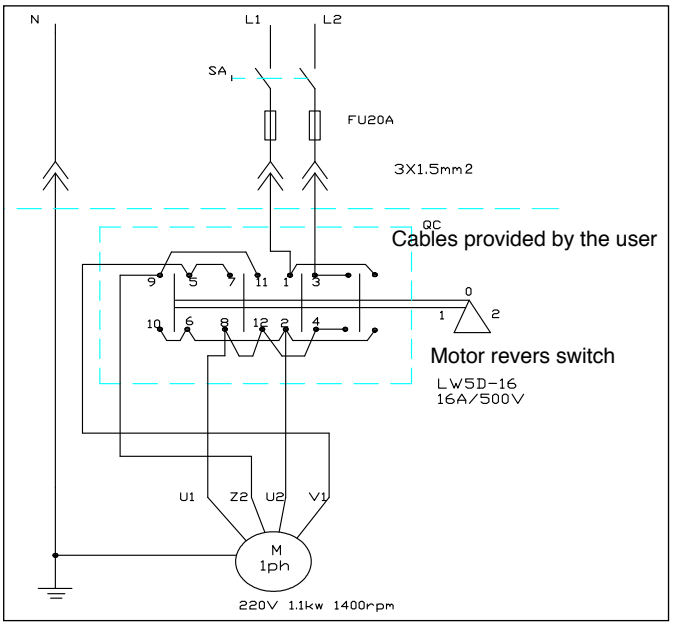
STORE IDENTIFICATION

figure						
instruction	light	up	moist-proof	two layer	gravity center	hoist from here

a. temperature: -5~+55°C
b. humidity: ≤ 90%
c. Without cor rossive gas and keep away from falmable and explosive objects and have methods to protect rain and snow.
d. In the process of transportation, meet the basic require ment of the identification.

CHAPTER VII ELECTCTRICAL AND PENUMATIC DRAWING

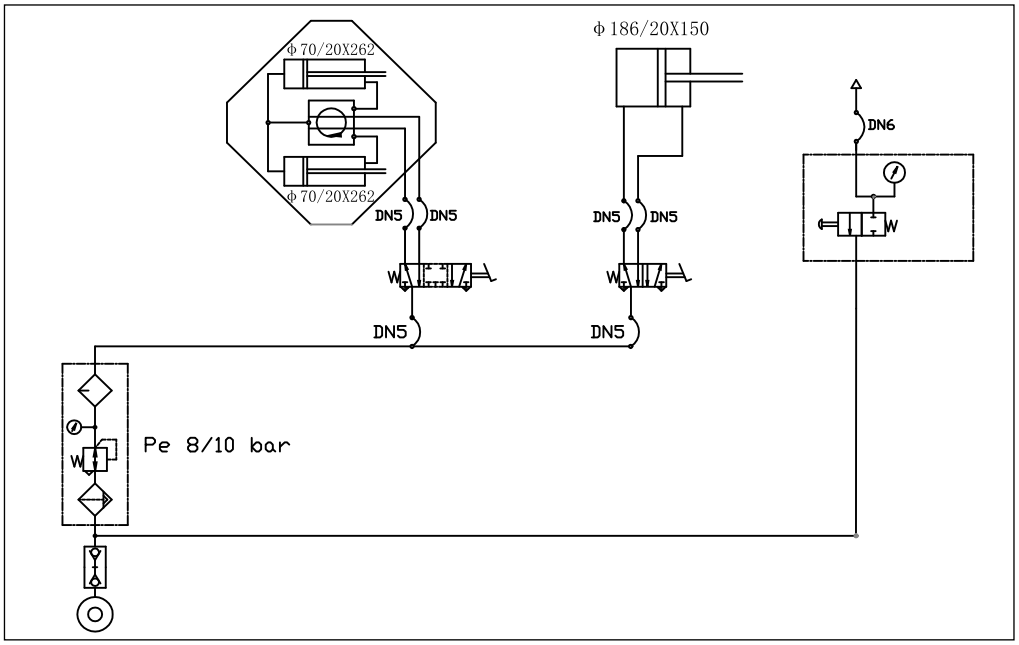
7.1. 220V ELECTRICAL PRINCIPLE DRAWING



ELECTRICAL ELEMENT LIST

Item No	Description	Model	Quantity
1	Motor	YC90S2-4/0.75KW/ 50HZ/400V	1
2	Power Cable	4 x 1.5mm^2	1
3	Change-over Switch	TCS4S340-33345	1
4	Circuit breaker	5SJ16D 20A/400V	1
5	plug	TYPE 014	1

7.2. PNEUMATIC PRINCIPLE DRAWING



CHAPTER VIII TROUBLESHOOTING ANALYZE AND SOLUTION

Item No	Description	Model	Quantity	Remark
1	Tri-link	AF-2000	1	
2	Three Digital Valve		1	Manufacture in the factory
3	Two Digital Valve		1	Manufacture in the factory
4	Inflation Gun		1	

TROUBLESHOOTING	REASON	SOLUTION
Turntable rotates in one direction.	Universal switch contact burned	Change Universal switch
Turntable does not rotate.	Belt damage Belt too loose Motor or power source have problems Universal switch contact damage	Change belt Adjust the tension of the belt Check motor, power source and power source cable Change motor Change Universal switch
Turntable can not clamp the rim as normal	Claw worn Clamp cylinder air leakage	Change claws Change the air leakage sealing parts
Hexangular shaft cannot lock	Lock plate not in position	See Chapter V
Chassis pedal not return.	Pedal return spring damage	Chang torsion spring
Motor not rotate or the output torque not enough	Drive system jam Capacitor broken down Voltage not enough Short-circuit	Remove the jam Change capacitor Wait for the restore of the voltage Remove
Cylinder output force not enough	Air leakage Mechanic fault Air pressure not enough	Change sealing parts Remove the fault Adjust the air pressure to meet the requirement
Air leakage	Air pipe damage Pipe connect damage Sealing end damage Sealing glue missing	Change damaged parts Add sealing glue

CHAPTER IX PACKAGE LIST AND OPTIONAL ACCESSORY

Item No	Description	Quantity	Complete package	non-complete package	Remark
1	Body	1			
2	Column Assembly	1			
3	Bead Breaking Arm Assembly	1			
Accessory Box		1			
1)	Crowbar	1			
2)	Vertical Shaft Spring	1			
3)	Grease Container	1			
4)	Grease Container Bracket	1			
5)	Claw Protective Cover	4			
6)	Demount Tool Protective Cover	2			
8)	Hand Wheel	1			
9)	Inflation Gun Assembly	1			
11)	Air Source Connect	1			
14)	Oil Water Separator	1set			
16)	Operation Manual				
17)	Quality Guarantee				
18)	Product Certificate				
Optional Accessory					
19)	Brush	1			
20)	Blade protective cover	1			
21)	Crowbar protective cover	1			
22)	Plastic Demount Tool (5#)	1			

Note:
1. To the packaged objects, please tick "√" in the corresponding ".".
2. The accessory need to be marked the specification, please fill in the corresponding remark.

APPENDIX

MC680 TIRE CHANGER SPARE PARTS

35-2779 Bead Head
35-2780 Spring
35-2781 Nylon Protector (Jaws)
35-2782 Cylinder (Turn Table)
35-2783 Filler Nozzle
35-2784 Bead Head Plastic Protector #1
35-2786 Bead Head Plastic Protector #2
35-2788 Air Filler Hose
35-2789 M/C, ATV, Jaw Sold Each
35-2790 Belt
35-2791 Regulators
35-2815 Turn Table Switch
35-2817 Motor
35-2835 Bead Breaker Shoe Plastic Protector


35-2779


35-2786


35-2815


35-2783


35-2784


35-2781


35-2789


35-2817


35-2791


35-2790


35-2782


35-2780


35-2835

WEARABLE PARTS LIST

Item No	Description	Specification	Quantity	Remark
1	Claw Cover		4	
2	Demount Tool Cover		1	
3	Blade Protective Cover		1	
4	Y-ring	30X20X7	2	for turntable cylinder

806 OIL SAFETY DATA SHEET

MOBIL XHP 222

ITEM	QUALITY STANDARD
Penetration Rate25°C Mm/10	280
Dropping Point °C	280
Anticorrosion	passed
Basic Oil Viscosity	220
Oxidize Stability 100h Pressure-drop Kpa	35
Water Lose Percentage79%	5
Copper Corrosion	1A

SAE30# LUBRICATION OIL

ITEM	QUALITY STANDARD
Density 15°C	0.893
Flash Point	224
Pour Point °C	-18
Viscosity 40°C	100
Viscosity 100°C	11.2
Viscosity Index	97

2# LITHIUM BASE GREASE

ITEM	QUALITY STANDARD
Penetration Rate Mm/10	278
Dropping Point	187
Copper Corrosion 100 °C 24h	No change
Oxidize Stability (99 °C 100h)	0.2
Anticorrosion (52 °C 48h)	1 level
Similarity Viscosity (-15°C, $10s^{-1}$) / (P A·s)	800
Water Lose (35 °C 1h) %	8

CKC460 INDUSTRIAL GEAR OIL

ITEM	QUALITY STANDARD
Viscosity 40°C	461
Viscosity Index	92
Flash Point °C	212
Freezing Point °C	-26
Copper Corrosion 100 °C 3h	1A
Mechanical Impurity	0.007
Pour Point	-10