

# INSTALLATION, OPERATION, AND MAINTANENCE MANUAL



## BEAR POWER ARMS

Model 70-1024

Model 70-1025

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# BEAR<sup>®</sup>

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## Preface

This guide is an important document for the machine, for ensuring correct and safe operation, and also granting a long working life and the best efficiency to the machine, please read this manual carefully before the installation and operation.

**Carefully keep this manual for use at any time.**

### Brief Introduction

#### 1.Scope of Application

The Bear Power Arm device on each side of the main body, is designed and made specially for changing the tires of cars, vans, light trucks and motorcycle with the principle of best quality and highest working efficiency, especially suitable for the stiff and low profile tyres.

Max wheel diameter : 1200mm (47")

Max wheel width: 381mm (15")

**Note: This machine can only be used for the purpose designed by  
the manufacturer. Do not use it for any other purpose.**

Any damage caused by incorrect using or beyond the scope of application will not be covered under warranty.

#### 2.Note:

Unauthorized people should not stand close to the place with warning stickers and never take off the stickers.

Never touch the moving parts during the operation.

The damage, due to the accident, misusing, unauthorized changing and repairing of the machine caused by the operators or the third person, is not in charged by the manufacturer.

### 3.Transport

Make sure transport the machine with its original package, and place it according to the marks on the package. The packed machine should be moved by means of a fork lift truck of suitable capacity, insert the forks at the points shown in (Fig.1).

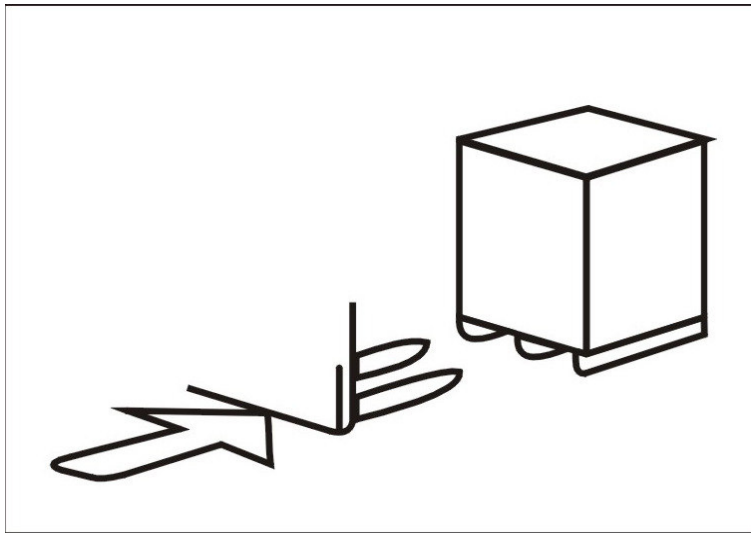


fig 1

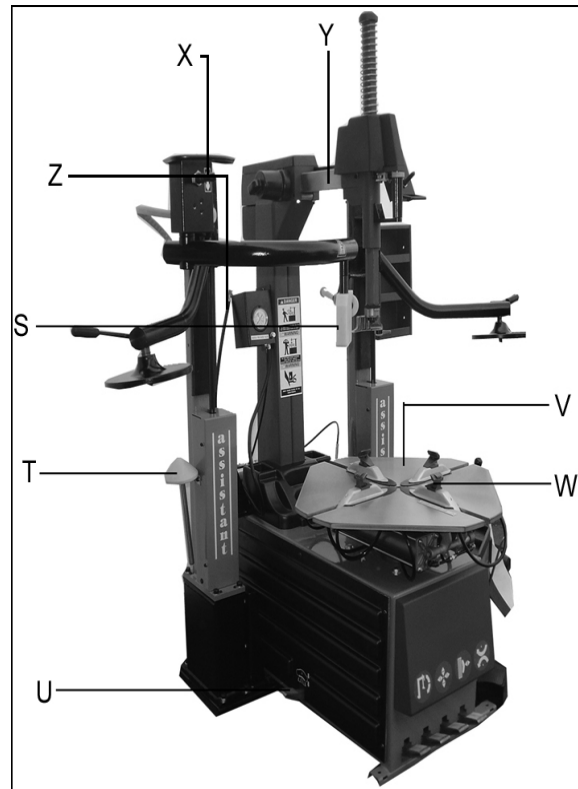
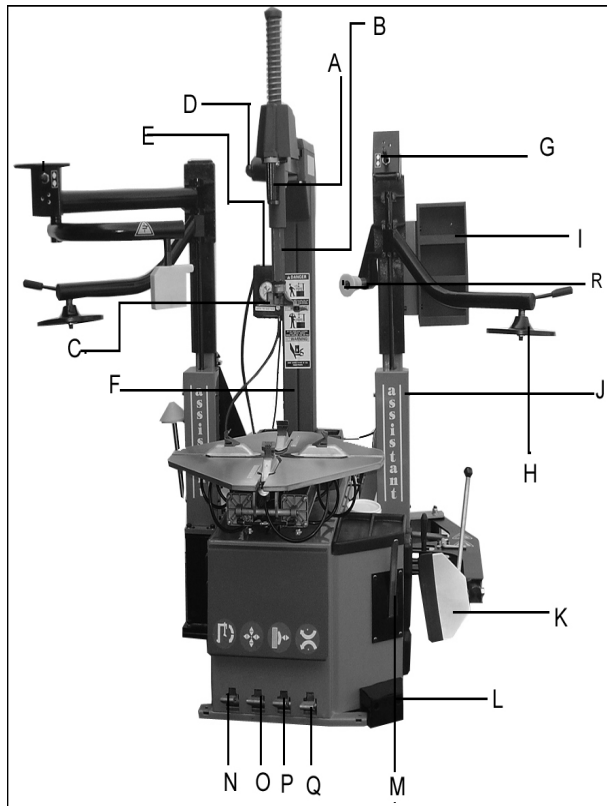


fig2

## Construction: Fig. 2

- A: Pneumatic locking handle
- B: Vertical axis
- C: Mount/Demount head
- D: Air-driver side lock
- E: Inflation gauge
- F: Post
- G: Manual operate valve
- H: Bead break disk
- I: Tool box
- J: Right assistant

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K: Bead breaker blade  
L: Feet support  
M: Lever  
N: Tilting pole control pedal  
O: Clamp control pedal  
P: Tire control pedal  
Q: Turntable control pedal (clockwise and counter clockwise)  
R: Plastic roller  
S: Plastic block  
T: Plastic cone  
U: Quick inflation system control pedal  
V: Turntable  
W: Clamp  
X: Manual operate valve  
Y: Horizontal arm  
Z: Inflation hose

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## Installation and testing the machine

### Installation place

Choose the installation site according to the rules on safety at work. Moreover, the installation space must allow the operator to use the machine and all its components without any restriction. In case of the installation is in the open area, it is necessary to protect the machine by means of a protective shed. Never use the machine in the place with flammable gas, and never place the machine in the extreme temperature or humidity environment, the surface of the machine should against lots of dust, ammonia and diluents etc.

### Unpacking

After unpack the package, checking the visible damage on the machine and the component due to the shipment, if there is some problems please contact with the dealer. The packing material such as plastic, nail, screw, wood and carton should be put into the waste box or be handled according to the local regulations.

**Note: The operator should wear the gloves, so as to avoid the injury**

**when unpack the machine.**

## Power and air connection

\*Any electrical connection should be done by the specialized technician. Check if the power and air sources are in accordance with the specification on the nameplate before operation. The electrical net, with which the machine connects, should have a fuse to protect the machine.

\*If the voltage is not stable, a voltage stabilizer should be connected between the power source and the machine.

\*The machine should be well earthed .An automatic air-switch should be adopted with the main power supply.

\*The power leakage current should be less than 30mA.

**Note: If there is no power plug on the machine, the user should mount on one, which suitable for the electric current over 16A or connect the power supply directly according to the above demand.**

\*For the machine with the motor of 3PH, step the pedal (Q) after the connection of the power supply and the turntable (V) should turn in a clockwise direction. If the turntable turn in the counterclockwise position, reverse any two of the wires in the three-phase plug, the damage caused by the ignorance of the above instruction, will not be covered by the manufacturer.

Connect the air compressor with the tie-in of the separator.

The operating pressure of this machine should be 8-10bar (110-140Psi), the machine can work well within such operating pressure, if it is lower than 8bar(110Psi),the strength for the grip and bead break for turntable will be not enough for some kind of tires and even it can not operate the tires.

Check if the reading on the pressure gauge that locates on the separator meet the demand of pressure setting reading, if not so, check if there is some problems on the pipe or air-compressor.

### Warning logo and instruction of the machine



Never place leg between the bead breaker blade and bead breaker rubber, so as to avoid stepping the wrong pedal and injury the operator.



Never place hand on the tyre when the demount head is on the working position, so as to avoid the injury of the operator.



Never place your hand between the tyre and gripping device when operate the rim, so as to avoid the injury of the operator.



The jaws should be in closed position when do the bead break, so as to avoid the injury of the operator.



The operator should wear the protection glasses when inflate the tyres with the machine with GT system, so as to avoid something blow into the eyes.



Never put the hand between the rim and tyre when inflate the tyre, so as to avoid the injury of the operator.

There should be nobody behind the tilting post, when the machine is on the working position.



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## Operating Test

Check the four pedals are in their original position□connect the air source, the operation can begin when the pressure up to 8--10bar

Note: After the connection with the air source the clamp(W) on the turntable(V) should automatic open, which is setted before delivery.

\*Pressing the pedal (Q) , the turntable (V) will turn in the clockwise direction.

\*Raising the pedal (Q) the turntable (V) will turn in the counterclockwise direction.

\*Pressing the pedal (P) the bead breaker blade (K) will begin to move.

When the pedal is released the bead breaker blade returns to its original position.

In the meantime please check towards the body to see if the separator works well. Normally it will drop one drop of oil after the pedal is pressed for 5-6 times, if it drops too quick or too slow, please adjust the index on the separator by a screwdriver.

\*Pressing the pedal (O) the clamps (W) on the turntable (V)close when lightly step the pedal the machine can show the step moving function. when the pedal is pressed again, the clamps (W) open.

\*Rotate the pneumatic locking handle (A) to lock the horizontal arm (Y) and vertical arm (B).

\*Pressing the pedal (N) the post (F) will tilt back slowly, when the pedal is pressed again, the post (F) will return to its original position.

\*Press the pedal (U) this pedal has two position strokes, in the first position stroke, the inflation pipe (Z) exhaust, in the second position stroke, the wenthole on the turntable (V) exhaust.

\*Shift the manual control valve (G/X) to see if the plastic made block (S) and bead breaking disk (H) work well.

### Notes:

- \*The machine must be fixed well to avoid the reel during the operation.
- \*The machine must place on the ground completely.
- \*Cut off the air and electric power sources before any maintenance.
- \*Check the screws on every parts of the machine is loose enough.
- \*Keep the human body and hands away from the moving parts of the machine during the operation. The necklace, bracelet, loose clothes and long hair is dangerous for the operators. The operator should wear safe clothes such as gloves and glasses.
- \*Keep the working area tidy and clean, or it may cause sudden accident
- \*The working area should be well lighted.

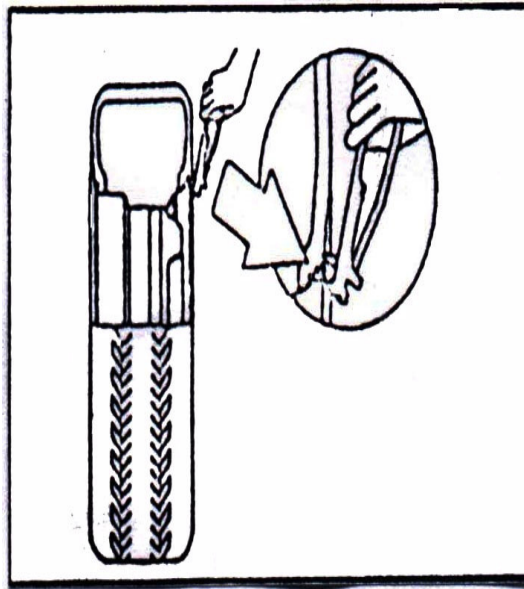


fig3

### Operation

Never use the machine before read this instruction and warning carefully.

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## Demounting the tyres:

Release all the air inside the tyre.

Remove the weight on the rim (Fig.3)



fig4

## Demounting the tyres:

Place the tyre between the bead breaker blade (K) and rubber pad, and place the blade on the bead 2 cm from the rim, step on the pedal (P) to separate the bead from the rim. (Fig. 4) The vent hole on the tyre should not near to the bead breaker blade during the operation.

**Note: This machine is designed particularly for the low profile, stiff and wide tyres, so there is a adjusting handle on the bead breaker. When mount or demount the particular wide tyres, the operator can adjust the handle position and do the operation on the wide tyres.(Fig. 5)**



**fig5**

1. Turn round the tyre and repeat the above steps on the other parts of the tyre to get it separate thoroughly from the rim.
2. The positioning scale on the turntable show the position of the rim directly (Fig. 6). Place the tyre on the turntable after choosing the locking method.(Normally when working for aluminum alloy rim , one should choose suitable locking) Fig.

