

# AUTOMATIC TYRE CHANGER



## AUTOMATION AND CONTROL

Accuracy, Control and Power for Optimum Results

**QUADRIGA 1000** Automatic  
tyre changer

**JohnBean**<sup>TM</sup>

# ACCURACY, CONTROL AND POWER

## 5 INDIVIDUAL PROGRAMS

1

### **Automatic standard mode**

The machine mounts and demounts tyres automatically.

2

### **Automatic sports mode**

Special program to handle UHP and run-flat tyres.

3

### **Automatic soft mode**

Special program to handle tyres with soft sidewalls.

4

### **Expert mode**

Work processes can be carried out manually, or automatically, at user's choice.

5

### **Manual mode**

All operations can be carried out manually if desired by the user.

The requirements in tyre service have become more and more challenging in recent years. Not only do popular UHP and run-flat tyres require new mounting and demounting technologies, but mounting and demounting procedures in general have become more and more complex and moreover wheels are much heavier than before.

### **ACCURATE**

The automatic tyre changer Quadriga 1000 was developed to relieve the operator and to minimise error sources thanks to its substantially automatic procedures. The controlled power and accuracy of this machine allows to carry out all operations - especially bead breaking - efficiently and gently at the same time.

### **VERSATILE**

This tyre changer is capable of handling all conventional wheels presently in the market as well as UHP and run-flat tyres of up to 30" rim diameter and 47" wheel diameter.

### **ERGONOMIC**

Owing to its intelligent and ergonomic design, the time-saving procedures and its universal application the Quadriga 1000 is also suited for shops with a high tyre service volume.

### **FULLY AUTOMATIC**

This nearly fully automatic tyre changer offers several programs to customise mounting and demounting procedures to the individual requirements at site.

### **CONTROLLED**

Despite of automatic operation the user is always in control of all work processes. As long as he actuates the joystick, operations are carried out automatically.

Once he releases the joystick, the automatic procedure is interrupted - which is possible at any time, for example in order to lubricate the tyre.

If necessary it is also possible to repeat program steps.

## THAT'S HOW EASY IT IS TO DEMOUNT AND MOUNT TYRES AUTOMATICALLY WITH QUADRIGA 1000

### CLAMPING

The tyre is placed on the ergonomic lift of Quadriga 1000 where the potentiometer detects the diameter of the tyre/wheel assembly. The data is used to position the clamping flange automatically and exactly relative to the wheel. Then the lift loads the wheel onto the clamping flange where the wheel is clamped hydraulically.

### BEAD BREAKING

Now the rim diameter is detected manually and all other relevant data is scanned automatically by means of the laser - so all necessary data is available in the machine. Simply pre-select and start the demounting program on the conspicuous control console and Bead breaking at once the two bead breaker discs move to the ideal bead breaking position.

### DEMOUNTING

Next comes the integrated demounting lever. It is readjusted automatically to an optimum position between rim and tyre. The operator only has to press the bead into the drop centre of the rim so that the machine can start the automatic demounting procedure. The integrated demounting lever levers the upper tyre bead over the rim flange - absolutely preserving to both tyre and rim. Finally the lower bead is demounted automatically by means of the demounting tool.

### MOUNTING

As long as the rim is clamped, the machine retains the data saved during the demounting procedure. Next simply pre-select the mounting program, place the tyre on the clamped rim where the mounting tool is already in proper position and the lower bead is mounted by Quadriga 1000. Now start automatic mounting of the upper bead and the demounting tool automatically turns into a mounting tool. This mounting tool guides the tyre during the mounting procedure, and assisted by the bead pusher the upper bead breaker disc presses the tyre most gently into the drop centre of the rim. As soon as all tools have returned to their home position, the tyre is inflated, the wheel is unclamped and delivered to bottom position by the lift.



# TECHNICAL DATA AND **OPTIONAL ACCESSORIES**

## TECHNICAL DATA

	QUADRIGA 1000
Rim diameter	12 - 30"
Max. wheel diameter	47"
Max. rim width	17"
Max. wheel weight	70 kg
Dimension (W x D x H)	1290 min. / 1350 max. x 2240 x 1850 mm
Weight	820 kg
Pneumatic operating pressure	8-12 bar
Power supply	200 - 240 V 1ph 50/60 Hz

## OPTIONAL ACCESSORIES



Light truck wheel kit:  
**4031033**



Closed-centre rim kit:  
**4030036**



Infrared thermometer  
for measurement of tyre  
temperature:  
**4-00680A**



Reverse mounting kit:  
**4031040**



Adhesive weight removing tool:  
**4025573**

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