

## SUPER-AUTOMATIC TYRE CHANGER FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES

### LEVERLESS - CONTACTLESS



Hydraulic tyre changer  
with wheel diameter  
pre-selection

4 new versions:  
START  
VISION  
VISION A  
PLATINUM

It can work on all types  
of wheels from 13" to  
32"

# AQUILA TORNADO

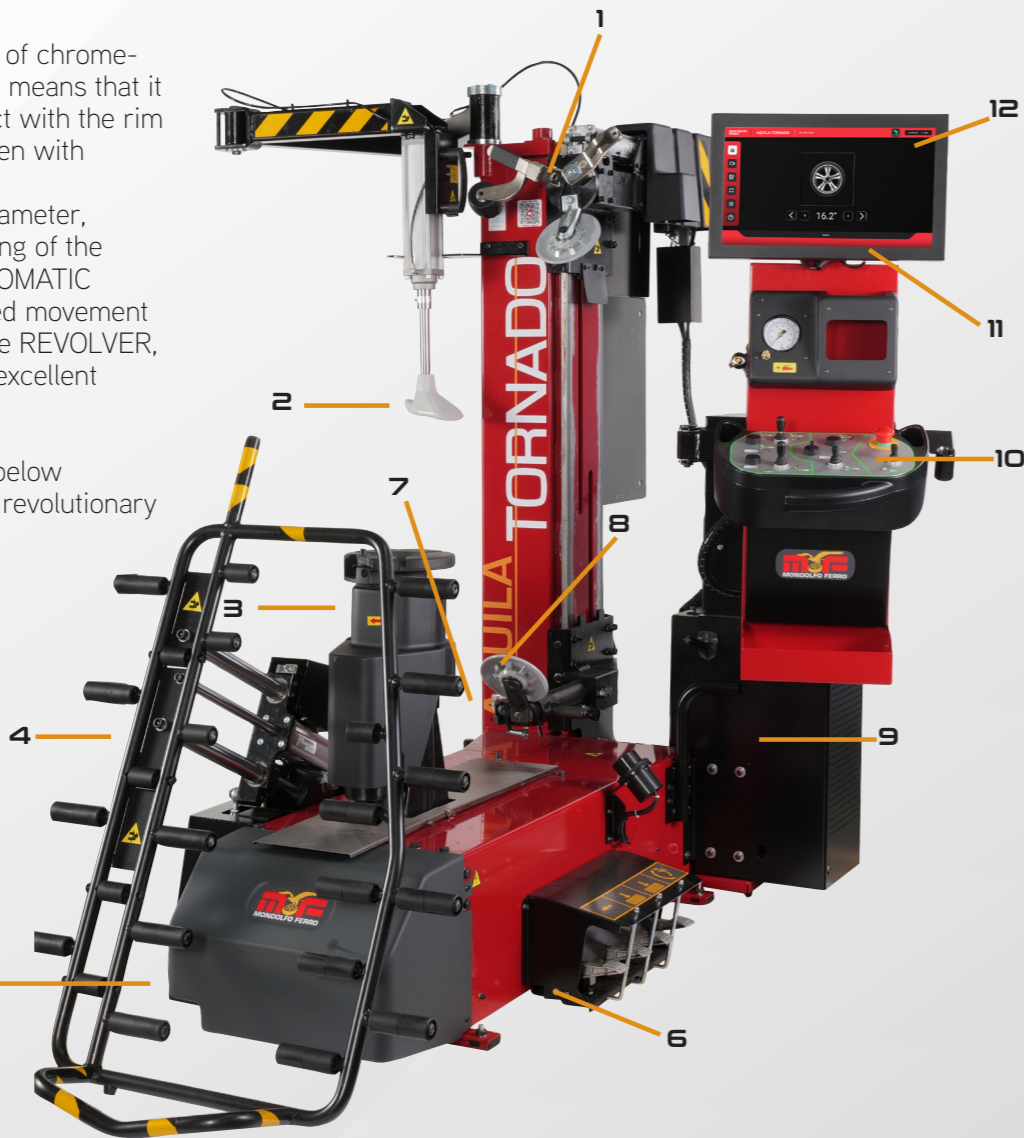
Aquila TORNADO is the innovative **CONTACTLESS** tyre changer “without lever” dedicated to the most demanding professionals. The new Aquila TORNADO is renewed and technologically enriched. The automatic wheel width recognition is now available, as well as the new control console that guarantees improved practicality and ergonomics thanks to the new 19” touch-screen monitor.

The ever-increasing popularity of chrome-plated and repainted alloy rims means that it is essential to avoid any contact with the rim during work operations, not even with plastic-coated components.

The pre-selection of the rim diameter, resulting in automatic positioning of the wheel with respect to the **AUTOMATIC REVOLVER**, and the coordinated movement between the wheel axis and the **REVOLVER**, guarantee easy operation and excellent precision.

The main features mentioned below represent the strengths of this revolutionary tyre changer capable of operating on any type of car and light duty vehicle wheel from 13” to 32”:

- Hydraulically-controlled operation.
- Synchronised wheel and tool movements.
- **REVOLVER** tool (4 tools) with 3 positions and automatic rotation.
- 3 new patented solutions for maximum operator benefit.



## FEATURES

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|--|---|
| <p>1. <b>REVOLVER</b> tool (4 tools) with 3 positions and automatic rotation.</p> <p>2. Bead pressing tool.</p> <p>3. Smart electromechanical centre post turntable with <b>HYDRAULIC</b> axial movement.</p> <p>4. <b>Premium Wheel Lift</b> full lifting and lowering movement (85 kg).</p> <p>5. New-generation <b>Motoinverter</b>.</p> <p>6. <b>Ergonomic</b> pedal controls.</p> | <p>7. Manually fold-up tool for first bead mounting.</p> <p>8. Lower bead breaker disc with <b>automatic wheel width recognition</b>.</p> <p>9. Hydraulic control unit.</p> <p>10. <b>New control console</b>.</p> <p>11. <b>Inflatron electronic inflator</b> (standard in the <b>SUPER</b> and <b>PREMIUM</b> versions).</p> <p>12. <b>New 19” touch-screen monitor</b> for optimised control</p> |
|--|---|

## OPERATIONAL STEPS

### STEP 1 - SETTING THE WHEEL SIZE

The **interactive touch-screen** allows setting the wheel size in inches and automatically positioning the wheel radially with respect to the **AUTOMATIC REVOLVER**.

AQUILA TORNADO is the first machine where the **wheel axis moves simultaneously with the tool** to guarantee precision and efficiency.

- Electronic rim diameter selection with consequent automatic radial positioning of the wheel (micro-adjustment is also possible).
- **CAMERA** always active that can be displayed on screen (standard in all versions except the **START** one).
- Selection of 2 tyre demounting programmes: Normal and Soft.



INTERACTIVE TOUCHSCREEN



UPPER BEAD DEMOUNTING

### PREMIUM WHEEL LIFT

with automatic movement of the centre post turntable for easier wheel loading



### NEW DISCS WITH SENSORS

The new discs with sensors, the **major innovation of this evolution**, allow automatic detection of the wheel width when using the automatic bead breaking cycle

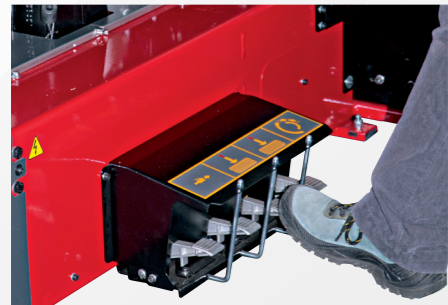


### PREMIUM WHEEL LIFT CONTROL LEVER

## STEP 2 - WHEEL CLAMPING



**PATENTED**  
INTELLIGENT  
ELECTROMECHANICAL  
SELF-CENTERING



**PATENTED WHEEL  
CLAMPING**

Fast, simple, reliable for all wheel types (complemented by special dedicated flanges and cones).

## STEP 3 - LOWER AND UPPER BEAD BREAKING

**Hydraulic upper bead breaking operation:** the disc descends and the wheel performs a specific movement to facilitate the bead breaking operation with a controlled penetration path.



**PATENTED**

**MULTIFUNCTION REVOLVER:**  
NEW DISC WITH SENSORS  
4 tools - 3 positions - Automatic Rotation

**Hydraulic lower bead breaking operation:** a second independent but specular disc rises and the wheel performs a specific movement to facilitate the bead breaking operation with a



**LOWER TOOL  
WITH MANUAL  
ENGAGEMENT**

## STEP 4 - UPPER BEAD DEMOUNTING

The DEMOUNTING of the first upper bead is facilitated by the new tool with mobile spring hook. This important feature allows any type of tyre to be easily and safely clamped, reducing tension and stress.



**PATENTED**  
NEW TOOL  
WITH MOBILE  
SPRING COUPLING

**SAFETY  
SENSOR**



During the automatic demounting cycle, the software provides a movement that guarantees the complete protection of the TPMS sensor

## STEP 4 - AUTOMATIC DEMOUNTING

In the versions with **AUTOMATIC DEMOUNTING CYCLE** the operator must only supervise the work without any effort. The wheel width detection, bead breaking and demounting procedures are automated and managed by an efficient program for each wheel. Maximum ease, maximum safety.

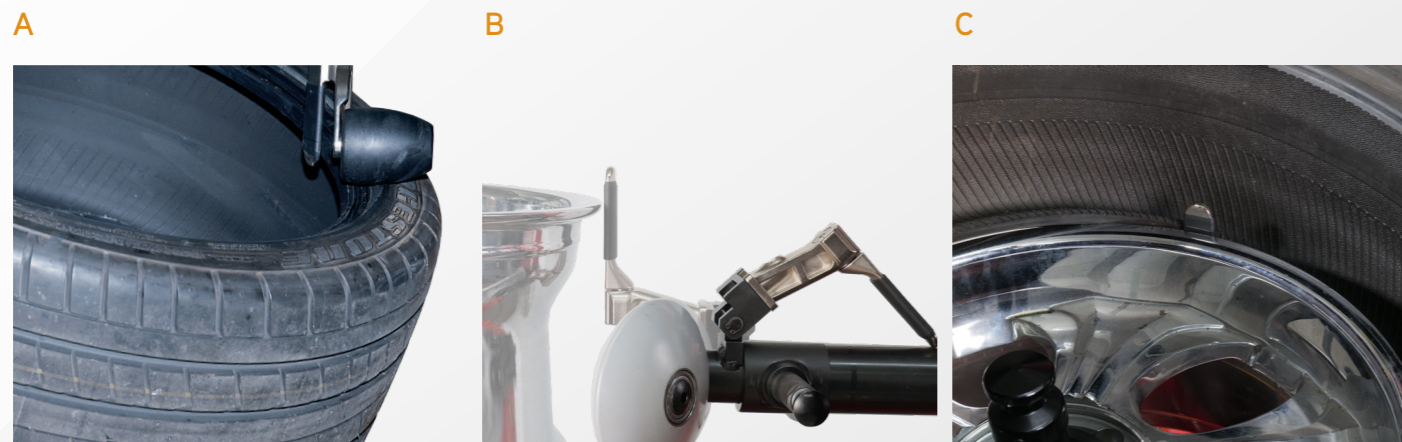
## STEP 4 - LOWER BEAD DEMOUNTING

The lower independent bead breaker disc moves upwards until the tyre is brought into the demounting position, an operation that can be facilitated by the simultaneous movement of the WHEEL UNIT.



## STEP 6 - LOWER AND UPPER BEADS MOUNTING

A. The upper BEAD BREAKER DISC and built-in plastic roller push the tyre into the rim.  
 B-C. If required, the lower arm tool will help you perform this operation on particularly soft tyres.



Complete MOUNTING operation facilitated by tool and built-in presser always in the same position.



D-E-F. By positioning the REVOLVER mounting tool head between the rim and the tyre, the REVOLVER PLASTIC ROLLER will automatically help the tyre to stay in the channel.

The rotation of the centre post turntable and the help of the standard rotating bead pressing tool will make the final mounting very easy.



## MOBILE CONTROLLE CONSOLE

All work operations are controlled via the freely positionable console. Simple, fast and intuitive controls.



User-friendly with absolute control in manual operation.

## FITTINGS

## SCOPE OF DELIVERY

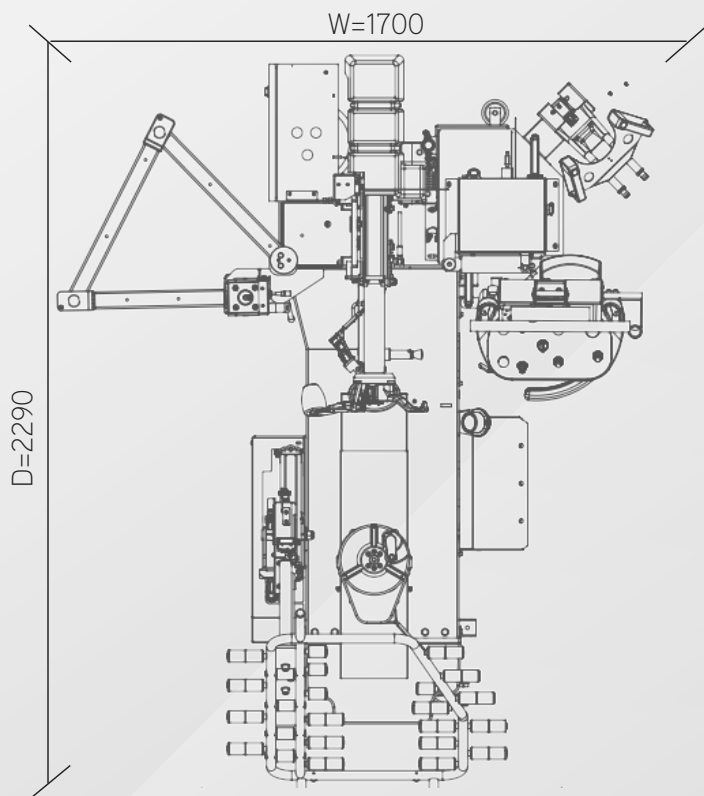
	PREMIUM WHEEL LIFT	BEAD PRESSING TOOL	AUTOMATIC MECHANISM	CAMERA	EL. INFLATOR INFLATRON
START	●	●			
VISION	●	●		●	
VISION A	●	●	●	●	
PLATINUM	●	●	●	●	●



# TECHNICAL DATA

WHEEL SIZE RANGE	
Rim diameter	from 13" to 32"
Max tyre diameter	1200 mm (47")
Maximum tyre width	400 mm (16")
Upper and lower bead breaking force	900 kg
ELECTROMECHANICAL CENTRE POST TURNTABLE	
Automatic clamping	with handle
Rotation torque	1200 Nm
Motor Rating	2-speed motoinverter
Rotation speed	7-18 rpm
Wheel lift capacity	85kg
POWER SUPPLY	
Electric 1Ph	230V-0,75 kW 50Hz/60 Hz
Electric 1Ph (alternative)	115V-0,75 kW 50Hz/60 Hz
Working pneumatics	8 bar
Hydraulic control unit motor	0.8 KW
Operating hydraulic pressure	120 bar
A weighted sound pressure level (LpA) at the workplace	< 70 dB(A)

## DIMENSIONS



## ACCESSORIES

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**A. 8-15100041**  
ALL IN ONE universal flange  
100mm + spacers 20 mm
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**B. 8-11100037**  
Van and pick-up rim  
rise kit
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**C. 8-15100003**  
Special adapter kit for high rims  
(H=28mm). E.g. Porsche rear  
wheel
- 

**D. 8-15100040**  
Spacer ring kit H=22mm  
matches with P/N 8-11100037 /  
8-11100086 / 8-15100003
- 

**E1. 8-11100404**  
T.I. inflating system kit
- E2. 8-15100038**  
T.I. ASME kit (For USA and  
Canada only)