



Hunter Workshop Equipment Program Recommended by Volkswagen AG



Hunter: Global Leader for Workshop Equipment and Supplier for Volkswagen AG



Wheel Alignment: Highest profit margin service! New third generation of adaptors and targets

In the field of wheel alignment, we have continuously developed and improved alignment targets in close collaboration with Volkswagen AG, ever since Hunter Germany was founded in 2002. Our alignment targets have become smaller, lighter and now, in the third generation, integrated into a universal quick lock mechanism: the QuickGrip(TM) adaptor. This technology is revolutionary and speeds up wheel alignment significantly.



1st generation targets



2nd generation targets



PATENTED

3rd generation targets

Made of break-resistant plastic, very light and mount to the wheel in seconds.



PATENTED

3rd generation high performance targets

Optimally integrated in the adaptor.



QuickGrip adaptors

The revolutionary QuickGrip® adaptors with integrated 3D targets are unique in the field of wheel alignment.

- ✓ Fast mounting
- ✓ Light and durable
- ✓ Break-resistant

PATENTED

VAS 6292 Wheel Alignment System

Revolutionary QuickGrip® Adaptors with 3D Targets

Extremely fast installation



- ✓ Spring-loaded adjust easily to wheel size
- ✓ Single lever locks the clamp – no knob twisting
- ✓ Off-center clamping has no effect on accuracy

HawkEye
Elite



Low maintenance

- ✓ Shop-tough polymer structure withstands drops
- ✓ No electronics, cables or calibration
- ✓ Only occasional cleaning required



Avoid damage to expensive rims

- ✓ Grips tire, not rim
- ✓ No metal-to-metal contact
- ✓ Only protective ring contacts rim

2.72 kg
(6 lbs.)



7.25 kg
(16 lbs.)

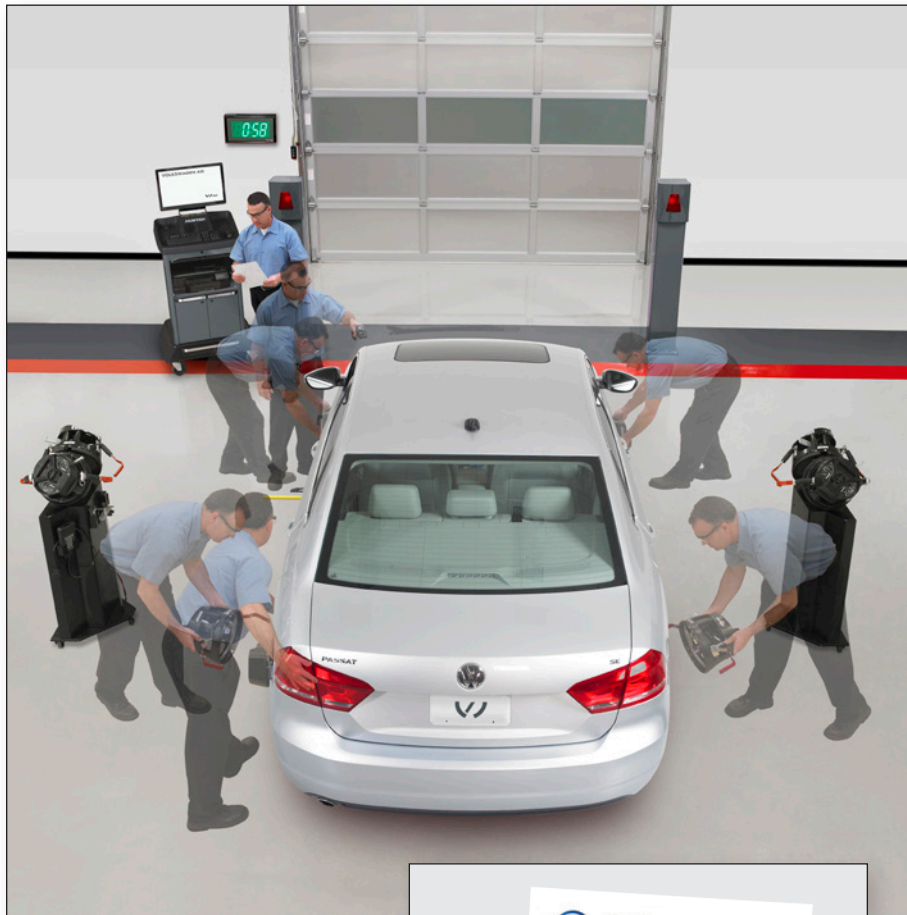
Quick Check[®] tire wear angles in less than 1 minute!



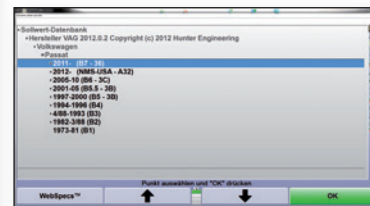
Offer a quick inspection of tire wear angles in less than 1 minute using the patented QuickGrip[®] adaptors and 3D targets.

Color-coded alignment angle results are shown on the printout:

- ✓ Front and rear total toe angles
- ✓ Camber values of all four wheels



1. Position vehicle
2. Attach QuickGrip[®] adaptors to the wheels
3. Roll the vehicle forward
4. Select vehicle



5. Remove QuickGrip adaptors
6. Get report printout
7. Drive vehicle away
8. If necessary, offer the customer an adjustment



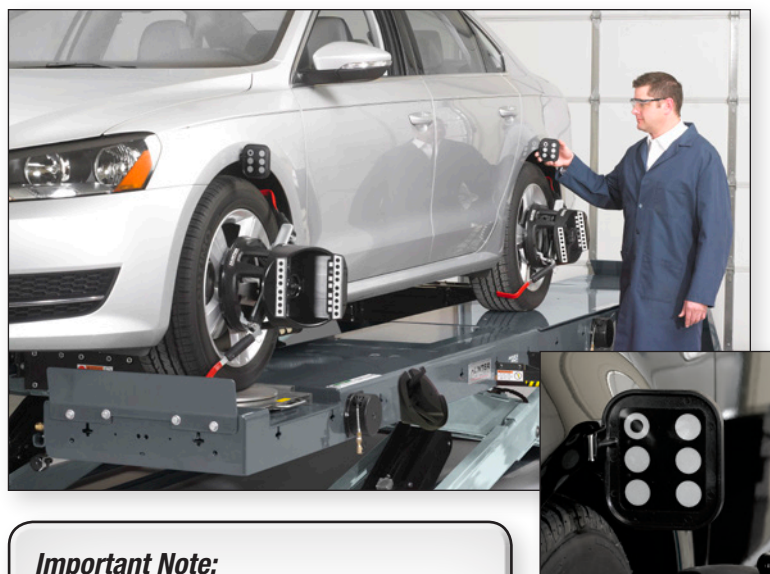
The necessary adjustment work can be communicated to the customer in a simple manner using the clear test report.



ESTIMATED 8-MINUTE SAVINGS!

Exclusive Live Ride Height feature provides exact measurements in seconds

Hunter's Live Ride Height Measurement System automates ride height measuring procedures as specified by Volkswagen and Audi. Accurate to one millimeter, Live Ride Height instantly displays measurements compared to vehicle specifications.



Color-coded bar graphs show adjustments needed to set ride height within the vehicle's specifications.

Important Note:

All new Volkswagen Group vehicle models require ride height to be measured.

ESTIMATED 7-MINUTE SAVINGS!

PATENTED

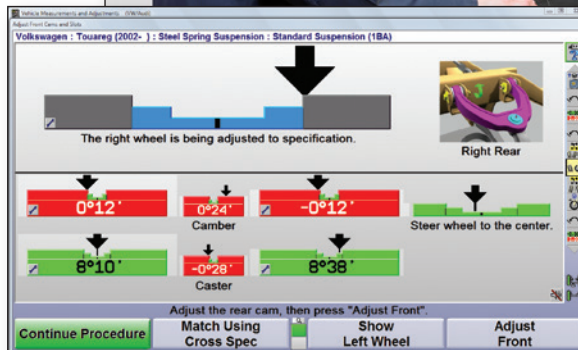
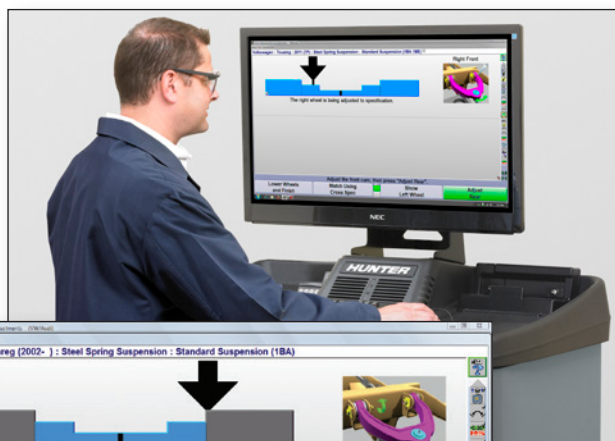
CAMM[®] takes the guesswork out of VW Touareg dual-cam camber and caster adjustment

CAMM[®] (Control Arm Movement Monitor) tracks live camber and caster measurements for precise front and rear cam adjustment.

- ✓ Computes the exact mechanical geometry of the vehicle, so correct adjustments can be made on the first try
- ✓ Easily switch between front and rear control arms to fine-tune the adjustment
- ✓ Display current camber and caster measurements for reference

Without CAMM[®], adjusting control arm camber and caster is trial and error!

CAMM[®] adjustments with camber and caster measurements displayed for reference.



ESTIMATED 5-MINUTE SAVINGS!

Easily calibrate Advanced Driver Assistance Systems (ADAS)

VAS 6430 ADR/ACC/LDW/Night Vision Fixture

VAS 6430 is available through your VAG equipment supplier.

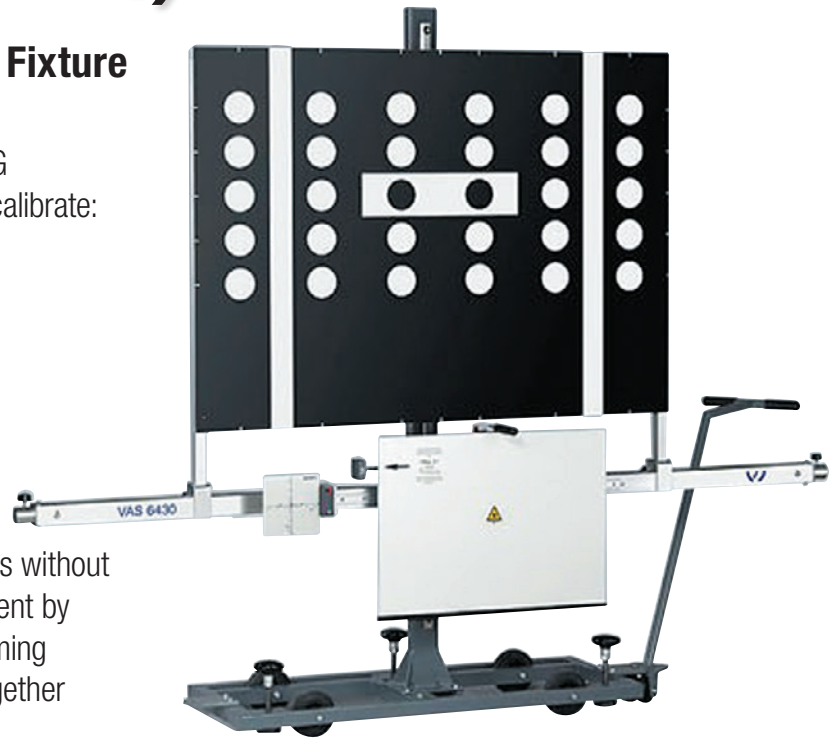
The VAS 6292 is also compatible with Volkswagen AG adjustment device VAS 6430. This device is used to calibrate:

- ✓ Adaptive Cruise Control (ACC) radar sensor
- ✓ Lane Departure Warning (LDW) image sensor
- ✓ Night Vision assistant system

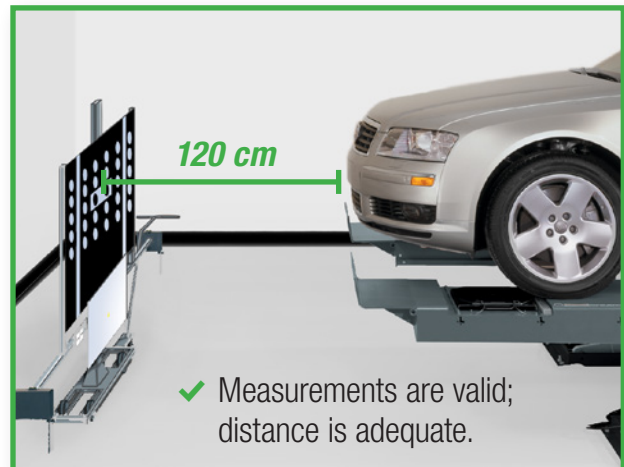
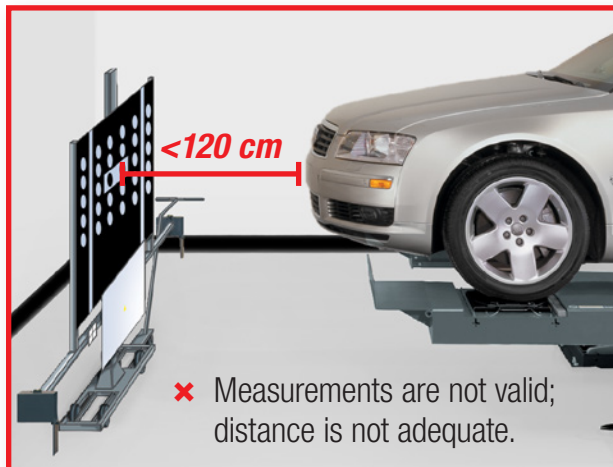


OPTIONAL

Calibrate the above systems without performing a wheel alignment by using the optional radar aiming camera kit, 20-2814-1, together with the VAS 6430.



If your alignment bay is too short to accommodate the VAS 6430 calibration fixture, Hunter's VAS 6292 Alignment System offers a solution. If the bay or lift configuration allows, the vehicle can be rolled rearward on the lift/rack until the required distance is obtained.



Adaptive Cruise Control (ACC) or Automatic Distance Regulation (ADR) measurement procedures utilizing optional HE421 radar aiming cameras (20-2814-1).

Important Note:

V.A.G requires ADR/ACC/LDW/Night Vision calibration whenever vehicle alignment is adjusted.

VAS 6292 Wheel Alignment System

Our most popular wheel aligner for quick measurements through simple operation



The **best-selling** version in the Volkswagen Group

The cabinet-mounted system provides a camera beam mounted in the center of the mobile console, and its height can be adjusted. The cameras detect the targets on the vehicle with the wheel alignment lift set at any working height.

A larger equipment console is also available that offers additional tool drawers.



Standard features

- ✓ Swiveling 24-inch widescreen display
- ✓ Handheld remote control
- ✓ Separate printer drawer for more operating convenience

VAS 6292 facts

- ✓ Work processes are simple and results are achieved quickly. For your employees, this creates confidence in the technology and in their work.
- ✓ Rolling compensation now even faster in the QuickComp® procedure. The vehicle is positioned just behind the turnplate and rolled forward. The targets are detected and compensated in seconds.
- ✓ The QuickGrip® adaptors with the integrated 3D targets are adjustment-free, break-resistant, very light and work without batteries or cables.
- ✓ Measurement results are precise because the maintenance-free camera technology guarantees long-term precision.
- ✓ After the alignment, the steering is truly straight when driving forward.
- ✓ The targets do not need to be adjusted over the entire course of the alignment, brought onto the scale.
- ✓ Driving assistance adjustment with VAS 6430 can even be performed independent of the alignment, with two optional auxiliary cameras.
- ✓ The digital camera technology is positioned outside of the immediate work area and is thus protected.
- ✓ There are no cables or disruptive electronic signals between the targets and the camera console.
- ✓ The vehicle height is automatically displayed live, in real-time, on the screen via the height targets.

Choose the right sensor package for your shop!



Wall- and ceiling-mounted configurations are perfect when space is at a premium.



Permanently installed cameras with a manually height-adjustable camera beam.



Floor-mounted overhead camera configuration is suitable if wall-mounting the camera is not possible.

Clearance height up to 2200 mm



This is the perfect combination for drive-through wheel alignments or a workshop pit.

VAS 791 001 Alignment Lift

The Fully Integrated Alignment lifting platform



Save time and trips around the vehicle

The new scissor lifting platform is the standard design for wheel alignments and guarantees the highest efficiency possible through Fully Integrated Alignment (FIA).

FIA makes possible automatic locking and unlocking of the rear slipplates and optional front turnplates during wheel alignment. This saves a substantial amount of time compared to conventional manual locking/unlocking plates.

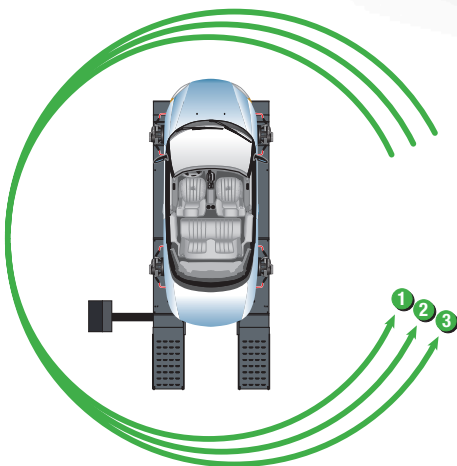
New stability with a smaller footprint

The VAS 791 001 is made in the USA and produced in the Hunter lifting platform factory. To guarantee the precision required for wheel alignment, the runways are designed for especially high stability against twisting. The integrated rear slipplates and optional front turnplates can be locked in place from the operating console with the press of a button.

Extended wheel stops come standard

Recesses included for optional turnplates.

Integrated rear slipplates (2 m length) come standard.



FIA reduces the conventional, large number of trips around the vehicle during wheel alignment to only 3 trips:

1. Mount QuickGrip® adaptors on the wheels
2. Perform wheel alignment with automatic locking and unlocking of the slipplates and turnplate
3. Demount QuickGrip® adaptors. Done.

VAS 791 001 facts

- ✓ Low height of only 220 mm, also suited to underfloor assembly at no additional cost
- ✓ Extra-wide runways make it possible to drive wide vehicles on
- ✓ Feedback sensor synchronizes the runways and ensures safety with multiple lock stops
- ✓ Durable chrome bolts and Teflon bearings
- ✓ Lifting platform can be switched off in case of hydraulic malfunction through quick-locking procedure
- ✓ 16 lockable height positions
- ✓ Complete operation of the lift via separate operating console

Specifications

Electric supply	230/380/400V, 3Ph, 50Hz or 230V, 1Ph, 50Hz
Air connection	6.2–10.3 bar (90–150 psi)
Load capacity	4536 kg (10000 lbs.)
Overall dimensions	6430 x 2250 x 225 mm (LxWxH)
Track (LxW)	4850 x 610 mm
Drive-on height	222 mm (8.75 in.)
Maximum lift height	1829 mm (72 in.)
Lifting/lowering time	55 seconds (raise), 25 seconds (descent)

Scope of delivery VAS 791 001

ASE 791 001 80 000

- ✓ Auto scissor alignment lift with operation control console
- ✓ Recessed pockets for turnplates (50 mm deep)
- ✓ Cable-covering plates
- ✓ Two adjustable tread plates
- ✓ Air supply via two quick-couplings

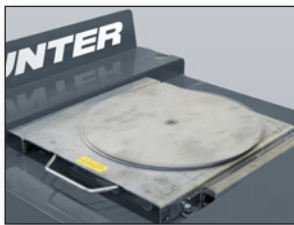


PATENTED

Operating console

- ✓ Complete operation from the console

Recommended accessories



VAS 791 001/1, turnplate

ASE 791 001 80 A00

Turnplate, controlled manually from the operating console or automatically through FIA



VAS 791 001/2, axle lift

ASE 791 001 80 B00

Scissor axle lift with 2.6 ton lifting capacity including extensions



Optional lift lighting

LED lighting system with spots in the tracks, ensures very good lighting where it is needed

The VAS 6230BE Road Force® Elite

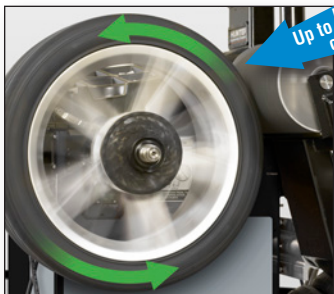
Perform a Road Force® test and balance faster than any traditional balancer!



PATENTED

Vision System

- ✓ Eliminate error opportunities
- ✓ More information in less time



PATENTED

Diagnostic Load Roller

- ✓ Solve vibration problems
- ✓ Identify vehicle pulls
- ✓ Provide "new car ride"



PATENTED

CenteringCheck®

- ✓ Ensure proper centering
- ✓ Eliminate setup errors



VAS 6230BE facts

- ✓ The new series model of the high quality balancing machine with additional Road Force Measurement® for finding the cause of a vibration in the steering wheel
- ✓ The patented Road Force Measurement® encompasses tire uniformity, flaws in the tire and rim, lateral force and bad bead seat
- ✓ Standard intuitive touchscreen display for quick operation and all information at a glance
- ✓ Automatic self-calibration before every measuring procedure
- ✓ Comes standard with ForceMatching® Technology to minimize rim faults and tire force fluctuations
- ✓ BDC adhesive weight placement aid is standard
- ✓ Inner and outer dataset sensor arms for quick and precise placement of the weights and runout measurements
- ✓ Wheel data entry and locking of the drive shaft via foot pedal
- ✓ Servo-stop comes standard, for automatic wheel positioning at the weight position
- ✓ Optional tire lift equipment to center all heavy wheels more quickly and easily
- ✓ Optional HammerHead TDC, laser light weight positioning

VAS 6533 Wheel Balancer

Exclusive technology for simple balancing



STANDARD

Touchscreen Interface

- ✓ Intuitive interface
- ✓ Quickly train new technicians



PATENTED

Enhanced SmartWeight®

- ✓ Even better balance
- ✓ Maximum efficiency
- ✓ More single weight solutions



0.0g

PATENTED

eCal Auto-Calibration

- ✓ True “self-calibration”
- ✓ No operator input required



OPTIONAL

HammerHead-TDC (12:00PM), laser light weight positioning. Also for VAS 6230 B



OPTIONAL

Pneumatic clamping device “AutoClamp”

VAS 6533B facts

- ✓ Balancing machine with graphical display via LCD display and innovative software for quick and safe operation
- ✓ All procedures are displayed in an easily comprehensible manner via the LCD display, operation via the popular Hunter Softkeys
- ✓ Comes standard with the patented ServoDrive system, a programmable DC drive system for automatic wheel positioning at the equalizing point for hammer-on or adhesive weights
- ✓ Also BDC adhesive weight placement assistance via laser
- ✓ Inner and outer dataset sensor arms for quick and precise placement of the weights and runout measurements
- ✓ Wheel data entry and locking of the drive shaft via foot pedal
- ✓ With SmartWeight® technology, reduces weight costs by up to 40% and makes control runs unnecessary
- ✓ Optional HammerHead TDC, laser light weight positioning

NEW

VAS 741 005

Fully-automatic tire changing has never been so EASY!



PATENT PENDING

WalkAway™ Operation **NEW**

- ✓ 80-second unattended bead breaking and demounting process
- ✓ When paired with wheel balancing, 25%+ time savings is possible
- ✓ 57% less time spent changing a tire using WalkAway™

PATENTED

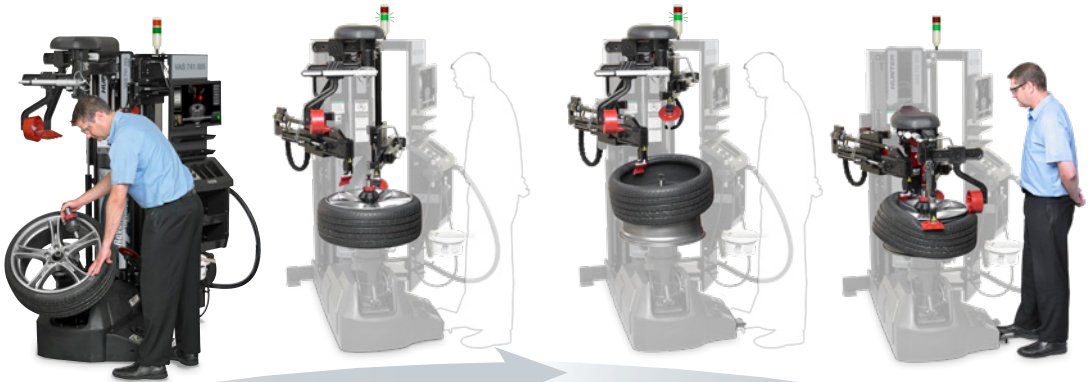
“GO” pedal controls the fully-automatic procedure



- ✓ Saves times and reduces operator errors
- ✓ The operator starts the procedure by actuating the “GO” pedal without any other movements
- ✓ Same procedure for all wheels and tires
- ✓ Mount and demount without touching the rim
- ✓ Machine stops automatically by releasing pedal



Automatic and autonomous operation saves time, effort, and mistakes



Unseat bead and demount tire 120 seconds

Mount tire in 40 seconds

After wheel data entry, no further manual movements are required during mounting and demounting

Product benefits at a glance:

- ✓ Work area: All auto tires of 12 – 30 in. rim diameter and up to 15 in. rim width
- ✓ Innovative product details make processing UHP and RFT tires simple and safe
- ✓ Touchscreen display shows the current step and monitors the work procedure
- ✓ Fully automatic procedure saves time and avoids operator errors
- ✓ Operator task is limited to tire/wheel positioning, determining tire diameter, and determining the position of the valve, thus avoiding damage to the tire pressure monitoring sensor
- ✓ Integrated tire lift automatically centers the wheel onto the central tensioner during lifting
- ✓ Strong, fully-hydraulic drive, finely-controllable via joystick steering
- ✓ Control of the machine via joystick for entry of rim data
- ✓ The operator starts the fully automatic mounting and demounting procedure by actuating the "GO" pedal without any other movements
- ✓ Integrated bead-pushing system brings the bead into the well during mounting
- ✓ The integrated pumping station automatically inflates the tires to the set pressure

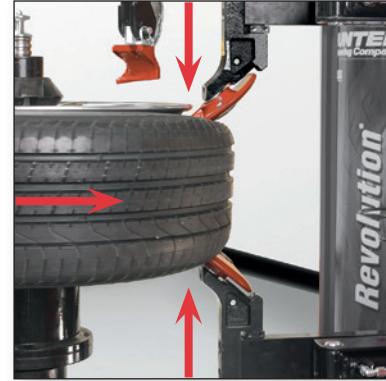
Specifications

Electric supply	Select between 380 V, 3 Ph 50/60 Hz, 16 Amp
Motor drive	variable up to 15 RPM
Air supply	8,5 bar +/- 1,5 bar
Air consumption	27 l/min
Rim diameter	12 - 30 inch (305 - 762 mm)
Maximum tire diameter	50 inch (1270 mm)
Maximum tire width	15 inch (381 mm)
Space required	1830 x 1980 mm
Weight as shipped	816 kg

Scope of delivery VAS 741 005

ASE 741 005 80 000

- ✓ Plastic protector for rim tool head (3 each)
- ✓ Valve insert assembly tool, valve inserter
- ✓ 1 bucket tire bead lubricant with brush
- ✓ Replacement demounting tool holder
- ✓ Tire lift
- ✓ 2 each tire bead pushers



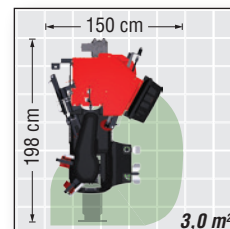
The bead breaker rolls simultaneously and gently pushes the tire from the rim from above and below without endangering the tire pressure monitoring sensor.



When the rim diameters and the valve position have been saved, damage to the tire pressure monitoring sensor is avoided.



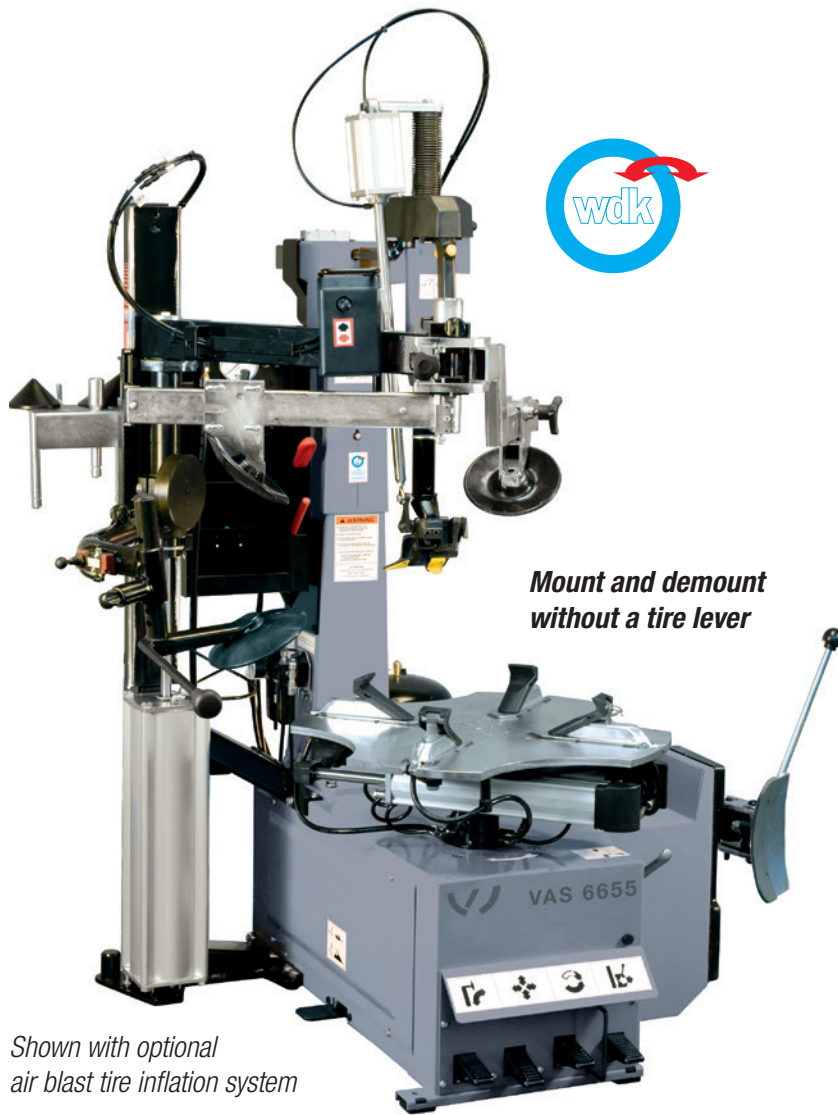
The demounting head grasps and lifts the tire bead automatically without the need for the operator to intervene. The typical tire lever is old-fashioned.



The Premium tire changer VAS 741 005 requires very little space for a machine of its class. And, moreover, it can be placed directly against the wall.

VAS 6655

For service shops with high tire throughput



*Shown with optional
air blast tire inflation system*

**Mount and demount
without a tire lever**



VAS 6560

Technical standard for everyday use

VAS 6655 facts

- ✓ Automatic tire changer for processing all tires with 11 – 24 in. outer diameter
- ✓ All procedures are performed electro-pneumatically, including the automatic, sideways pivot of the mounting post. It's practical and it saves space
- ✓ Four self-centering clamping claws are operated by a double-action pneumatic cylinder
- ✓ The claw guide and bench are nickel-coated and thereby protected from corrosion
- ✓ Plastic inserts in the mounting head and bead pad prevent damage to the rim

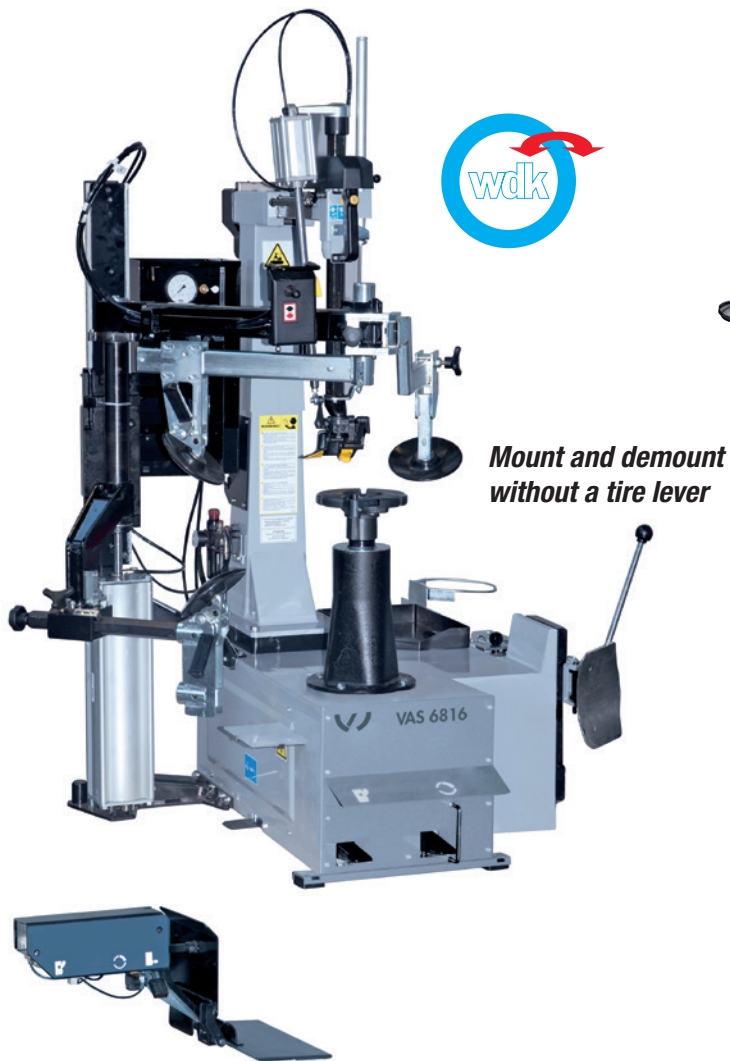
- ✓ Pneumatic locking of the mounting arm with automatic spacing guide to the rim
- ✓ Foot pedals for all important functions guarantee safe operation, and the operator's hands remain free
- ✓ WDK-tested bead-pushing system BPS30 for UHP and run-flat tires
- ✓ Tire pressure gauge operated by foot

VAS 6560 facts same as VAS 6655 except for

- ✓ 11 – 22 in. outer diameter
- ✓ Mounting column can be pivoted to the back
- ✓ Mounting head standard

VAS 6816 with Centering

For specialist shops among the tire pros



Optional tire lift for wheels up to 100 kg



VAS 6645

Tire mounting center for touchless tire changes

- ✓ The patented multifunction tool on the movable, vertical arm makes completely new mounting comfort possible.

VAS 6816 facts

- ✓ Automatic tire changer for processing all tires with 11 – 30 in. outer diameter
- ✓ All procedures are performed electro-pneumatically, including the automatic, sideways pivot of the mounting post
- ✓ Centering ensures absolutely precise stretching that is easy on the rim
- ✓ Pneumatic locking of the mounting head with automatic spacing guide to rim

VAS 6645 facts

- ✓ Automatic tire-changing station for touch-free changing of all tire diameters up to a maximum of 1250 mm
- ✓ Patented multifunction tool for unseating the bead and touch-free mounting and demounting of the tire
- ✓ Patented chuck plate with pneumatic rim clamping
- ✓ Pneumatic bead unseating discs hold the bead in the well during mounting
- ✓ Operation of the device is comfortable, precise and safe, performed from the operating console

Hunter USA

Development, production, sales, training — everything from one company



Lee Hunter founded the company in 1946, and it has remained a family business since that time.



The Hunter factory in St. Louis, Missouri, USA is the headquarters for wheel aligners, training and sales.



The Hunter factory in Raymond, Mississippi, is responsible for the development and production of all electronic parts.



The Hunter factory in Durant, Mississippi, produces lifts, wheel balancers and the VAS 741 005 tire changer.

Hunter: Market leader in the USA

The Hunter Engineering Company is a worldwide leading manufacturer of workshop equipment. Founded in 1946 by Lee Hunter in Ladue, Missouri, USA, it has remained a privately-owned, family company. In 1946, Hunter built a large company headquarters in St. Louis, Missouri, in which over 70 engineers develop the software and hardware parts for the machines and test them in laboratories. In addition to the main building, the company's own training center, with an auditorium for 400 persons was erected, and in 1992 the training center was expanded to include trucks and buses.

The production of the machines takes place in the three factories: in Bridgeston, Missouri, Raymond, and Durant, both in Mississippi. The sales organization of Hunter works internationally and is supported by over 60 agencies worldwide.



Hunter Worldwide

International distribution channels in 110 countries

Since first entering into the international market in the 1950s, Hunter has made steady progress in introducing its innovative products to all of the regions of the world. Hunter is committed to building lasting business relationships and a loyal following of end users worldwide through its international network of distributors in more than 110 countries around the world.



Hunter is recognized as a worldwide leader in the automotive aftermarket and will continue to design international-specific products for its global market.

 *International distribution*
 *Domestic distribution*

