



*The Hunter Workshop Equipment Program  
Recommended by Volkswagen AG*

**New  
Innovations**



**HUNTER**  
Engineering Company

***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™ adaptor. This technology is revolutionary and speeds up wheel alignment significantly.



1st generation targets.



2nd generation targets.



3rd generation targets: Made of break-resistant plastic, very light and mount to the wheel in seconds.



3rd generation high performance targets: Optimally integrated in the adaptor.



The revolutionary QuickGrip™ adaptors with integrated 3D targets are unique in the field of wheel alignment: Mounted at lightning speed, light and absolutely durable, break-resistant.

# VAS 6292 Wheel Aligner: *Revolutionary QuickGrip™ Adaptors with 3D Targets*

## Fast mounting



- With the patented QuickGrip™ adaptors, mounting takes place in seconds rather than minutes
- Spring-loaded arms grip the tire (total wheel span width 950 mm)
- A rocker locks the adaptor in place
- Eccentric stretching does not influence measuring accuracy

## No damage to rims



- The adaptor stretches over the tire, not the rim
- A rubber ring prevents damage to the rim
- Hubcaps do not have to be removed

## Requires little space, maintenance-free



- For unobstructed, work around the wheel.
- Significant space savings compared to conventional measuring targets

## Low-weight, break-resistant



- About 50% lighter than any conventional wheel adapter
- Adaptor weight only 2 kg
- Extremely break-resistant plastic

**HawkEye**  
*Elite*

**PATENTED**



## Use the VAS 6292 Wheel Alignment System in Customer Reception for a Quick Check of Tire Wear Angles

With the new QuickGrip™ adaptors and 3D targets, you are able to offer an additional service: a quick inspection of tire wear angles in less than 1 minute. Results are displayed on a color-coded printout containing the relevant alignment angles data:

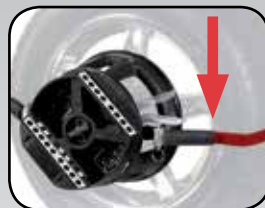
- Front and rear total toe angles
- Camber values of all four wheels



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



1. Position vehicle



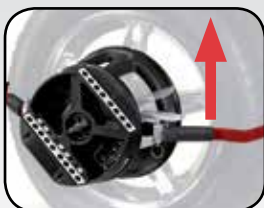
2. Attach QuickGrip adaptors to the wheels



3. Roll the vehicle forward



4. Select vehicle



5. Remove QuickGrip adaptors



6. Get report printout



7. Drive vehicle away

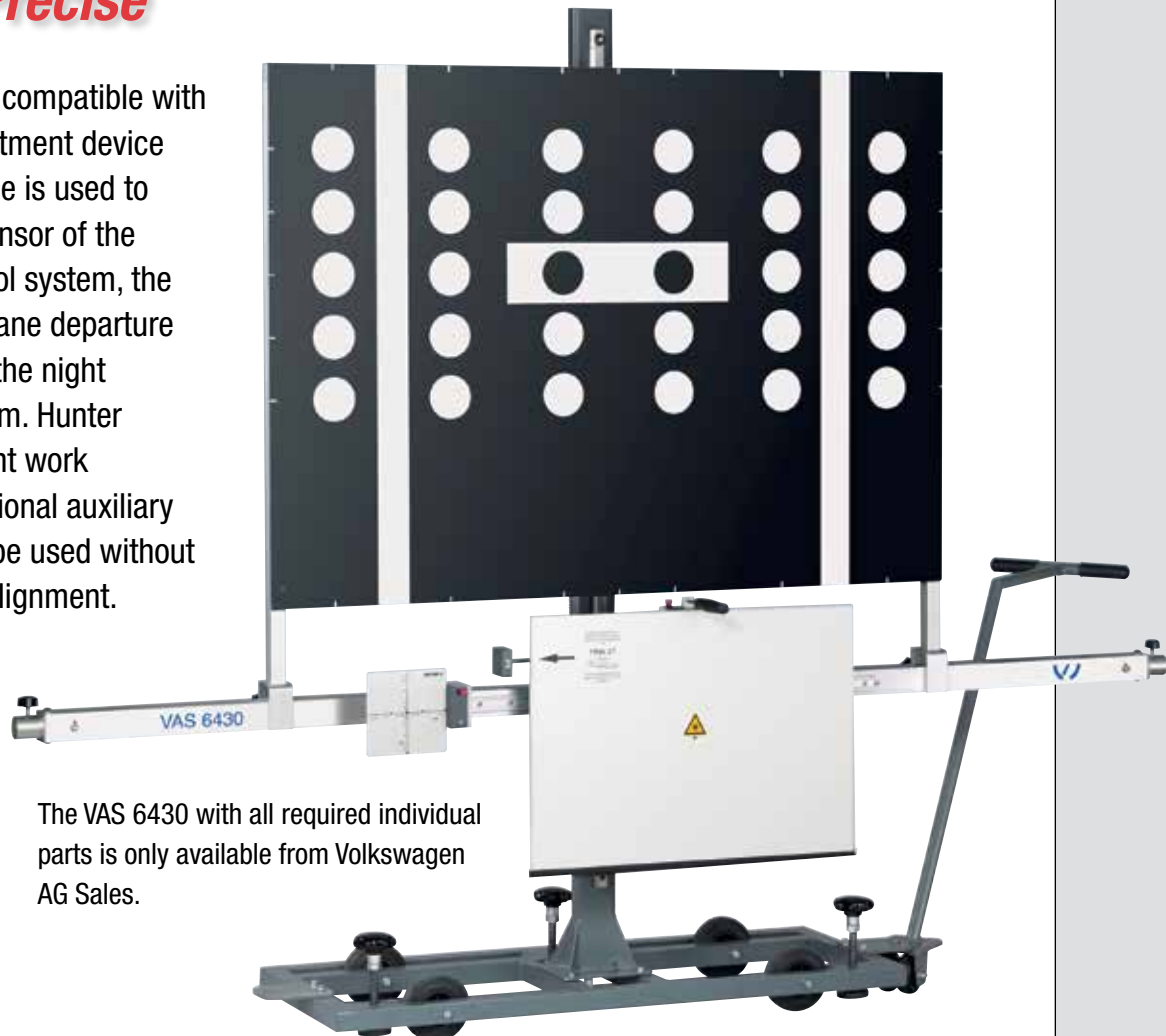


8. If necessary, offer the customer an adjustment

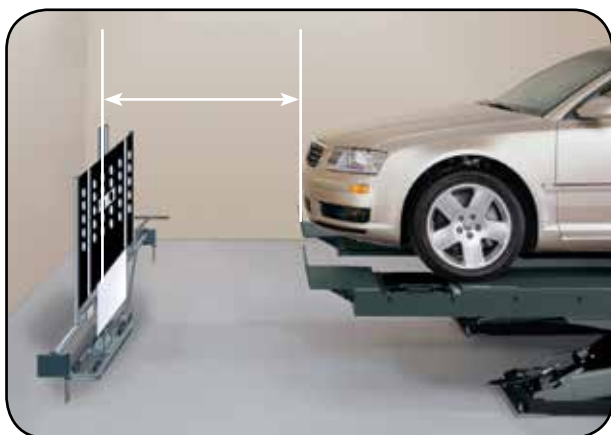
## VAS 6292:

### *Driver Assistance Systems Settings are Quick and Precise*

The VAS 6292 is also compatible with Volkswagen AG adjustment device VAS 6430. This device is used to calibrate the radar sensor of the adaptive cruise control system, the image sensor of the lane departure warning system and the night vision assistant system. Hunter makes this adjustment work possible with two optional auxiliary cameras, which can be used without performing a wheel alignment.



The VAS 6430 with all required individual parts is only available from Volkswagen AG Sales.



For the placement of the VAS 6430, refer to the manufacturer's instructions. If there are constraints on space, the vehicle can be moved backward on the wheel alignment lift to the correct distance.



Optional: Hunter auxiliary cameras are used for calibration together with the VAS 6430.

## VAS 6292:

### *Automatic Height Measurement with Real-Time Display for Exact Measurement Results*



#### **Important information:**

All new vehicle models by the Volkswagen Group require a vehicle height measurement prior to wheel alignment in order to avoid incorrect measurement results.

The vehicle height is automatically displayed live on-screen of the VAS 6292 by using the optional live ride height targets. Specific to vehicle model, accurate to the millimeter. Manual entry of the required height is not necessary – this speeds up the wheel alignment service.



You see the height data on-screen in a bar graph: The red bar signals out-of-tolerance.

## ***The New VAS 6292 Mobile: Our Most Popular Wheel Aligner for Quick Measurements Through Simple Operation***



- The cabinet mount 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 swiveling 24 inch widescreen display is standard.
- A handheld remote control that provides operation/reception without a direct connection to the console is included.
- The separate printer drawer provides more operating convenience
- The mobile VAS 6292 can also be delivered with a larger equipment console. The larger console also has various tool drawers.

The mobile VAS 6292 with cabinet mounted cameras is the best-selling version in the Volkswagen Group.



## 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 camera technology guarantees long-term precision (maintenance-free)
- 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

## ***The Movable VAS 6292 Equipment Console is Available with Four Other Camera Versions: Many Configurations to Suit Shop Needs!***



1 The wall-/ceiling-mounted configuration requires the least space.



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



3 The floor mount configuration can be used if wall-mounting of the camera is not possible. Clearance height up to 2,200 mm.



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

# VAS 791 001 Goes Perfectly with Alignment: The Fully Integrated Alignment Lifting Platform



**Intelligent interface between wheel aligner and wheel alignment lifting platform saves time and space.**

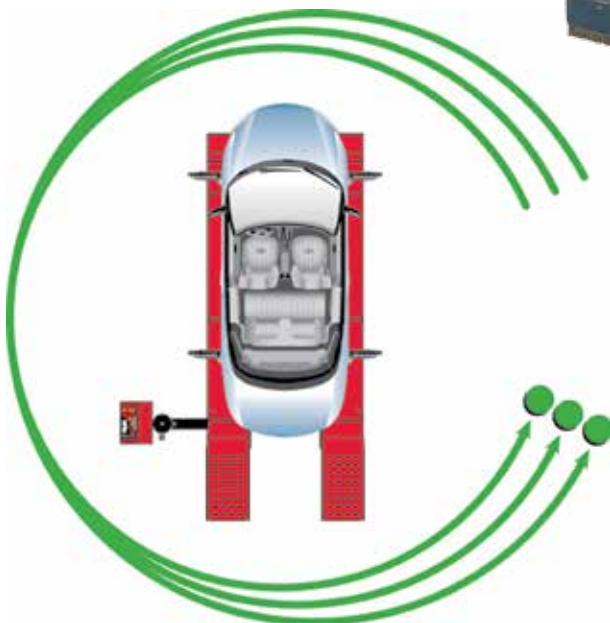
- The new scissor lifting platform is the standard design for wheel alignments and guarantees the highest efficiency possible through Fully Integrated Alignment (FIA)
- FIA makes possible automatic locking and unlocking of the rear slipplates and optional front turnplates during wheel alignment. This 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.

Recesses on-site for the optional turnplate.

Comes standard with integrated rear slipplates (2 m length).



**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

- Especially 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

### Technical Data:

Electric supply:	400 V, 3 Ph., 50 Hz
Air connection:	8 - 10 bar
Load capacity:	4.500 kg
Overall dimensions: (LxWxH)	6.430 x 2.250 x 225 mm
Track: (LxW)	4.850 x 610 mm
Drive-on height:	220 mm
Max. lift height	1,85 m
Lifting/lowering time:	55 s

- 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

### 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



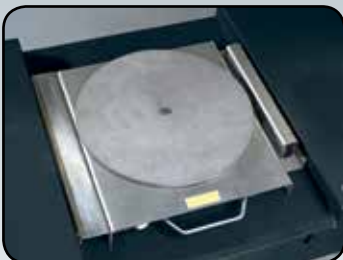
**PATENTED**

### 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 via 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 6230B Vibration Control System: Balance Wheels with Road Force® Measurement without Losing Time

Awarded the Automechanika Innovation Award in 2012.



Road force measurement for all specialist shops and analysis centers.



Road force variation in the wheel assembly is determined with the pressure roller and optimized as needed via the standard ForceMatching Program: deepest point in the rim, matched to the hardest point in the tire.



## VAS 6230B 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 machine 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

### Touchscreen display



- Enables very quick operation
- Keyboard-based entry no longer necessary

### Simultaneous operation



- The software makes simultaneous processing of different sets of tires by different operators possible
- Automatic saving of all wheel data, retrievable in a simple manner via touchscreen

### Balancing and measuring road force



- In a measurement run, determines imbalance-caused vibration problems even before the wheels are installed
- Ensures higher driving comfort

## Wheel Balancing Machine VAS 6533: With Touchscreen – Exclusive Technology for Simple Balancing



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



The optional pneumatic clamping device "AutoClamp".

### VAS 6533A 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

## **The VAS 6655:** **For Service Shops with High Tire Throughput**



Illustration with optional air blast  
tire inflation system



Mounting and  
Demounting  
without a Tire Lever

## **VAS 6560:** **Best Technical Standard for Everyday Use**



### **VAS 6655 Facts**

- Automatic tire changer for processing all tires with 11" - 24" 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
- Facts on VAS 6560** same as VAS 6655 except for
- 11" - 22" outer diameter
  - Mounting column can be pivoted to the back
  - Mounting head standard

## **The VAS 6816 with Centering:** **For Specialist Shops Among the Tire Pros**



Mounting and  
Demounting  
without a Tire Lever

Optional tire lift for wheels up to 100 kg.

### **VAS 6816 Facts**

- Automatic tire changer for processing all tires with 11" - 30" 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:** **Tire Mounting Center for** **Touchless\* Tire Changes**



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

### **VAS 6645 Facts**

- Automatic tire-changing station for touch-free changing of all tire diameters up to max. 1,250 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

# The VAS 741 005: Fully Automatic Tire Mounting Has Never Been So EASY!

**NEW**



“GO” pedal controls the procedure



**PAT. PENDING**

- Fully automatic procedure saves times and reduces operator errors
- The operator starts the fully automatic mounting and demounting procedure by actuating the “GO” pedal without any other movements
- The same procedure is used for all wheels and tires, thereby ensuring efficiency
- Mounting and demounting without touching the rim
- Machine stops automatically by letting go of the “GO” pedal



## Fully Automatic Procedure Saves Time and Avoids Errors.



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" rim diameter and up to 15" rim width
- Innovative product details make processing UHP and RFT tires very simple and safe
- The touchscreen display shows the current step and monitors the work procedure
- Fully automatic procedure saves time and avoids operator errors
- The task of the operator 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
- The 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

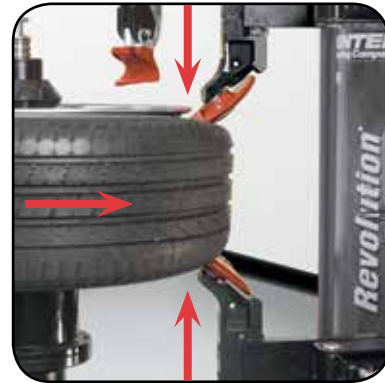
## Technical Data:

Electric supply:	Select between 400 V, 3 Ph or 230 V, 1 Ph; 50/60 Hz, 32 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)
Max. tire diameter:	50 inch (1.270 mm)
Max. tire width:	15 inch (381 mm)
Space required:	1.830 x 1.980 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.

## **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 Duran, 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.***

