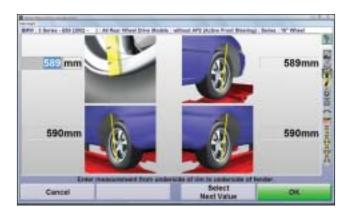
KDS Wheel Alignment Systems Customized for Aligning All BMW Group Vehicles



KDS II Wheel Alignment Systems



unter has designed the KDS II wheel alignment systems to meet the strict requirements of BMW workshops and provide high-precision alignments on all cars, SUV's, and light commercial vehicles. A customized version of Hunter's WinAlign® alignment



software* has been designed to meet the specifications of all BMW Group vehicles, including those equipped with single-joint, spring-loaded front axles and multi-link rear axles with spherical kinematics.

Customized Alignment Software

The customized WinAlign alignment software guides the BMW technician through a simple, vehicle-specific alignment process with step-by-step instructions and clear, concise graphics. The work sequence is so flexible that it is also possible to move to another part of the program at any time.

Complete BMW Model Support

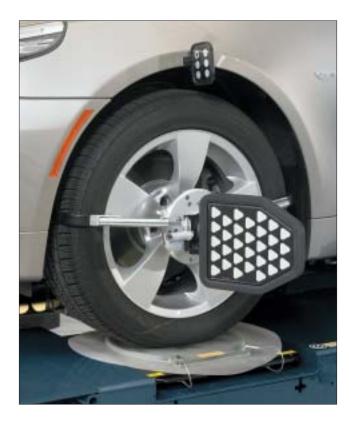
Hunter's customized WinAlign alignment software includes new alignment procedural steps necessary for proper wheel alignments on all BMW models.

HawkEye[™] **Sensors**

KDS II Wheel Alignment System Provides Picture Perfect® Alignment

Hunter digital imaging alignment sensors use **multi-dimensional** modeling to provide accurate alignment measurements. High-resolution digital cameras continuously measure wheel target position and orientation thus providing the same alignment measurements as conventional sensors.





Durability / Low Long-Term Cost of Ownership

- ✓ No electronics at the wheel, no electronic circuitry to damage if targets are dropped.
- ✓ No moving parts and virtually maintenance-free.
- No batteries.



Four digital cameras (one for each wheel) measure the position and orientation of alignment targets.



Speed

- Mount targets
- ✓ View measurements

It's that quick!

Ease of Use

- Wide field of view.
- Vehicle can be raised to a comfortable working height for adjustment.
- ✓ No cables or electronic signals between the targets and the console.
- ✓ No need to install spoiler adapters or remove or adjust targets during the alignment procedure.

Exclusive Live Ride Height Feature





Without Live Ride Height Measurement System, getting measurements is time consuming and prone to error!

If your aligner is not equipped with Live Ride Height Measurement, all ride height measurements must be taken manually and entered manually using a keyboard.

Receive Exact Measurements in Seconds

Hunter's optional Live Ride Height Measurement System reduces the amount of time it takes to measure and enter data by automating the exact procedures as specified by BMW. Accurate to one millimeter, ride height measurements are continuously displayed during the alignment process.



WinAlign® alignment software uses the ride height measured by the technician to calculate the camber and toe specifications. WinAlign® software also uses the entered ride height and the camber to determine if the traditional vehicle loading method should be used.

Approved KDS II HawkEye™ Sensor Configurations

Fixed Column



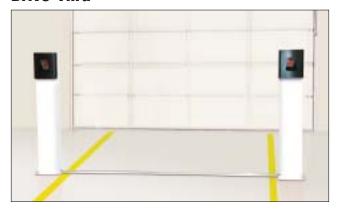
The fixed column standard configuration HS401FC5BMWE fits most service bay applications.

Wall Mount



The wall mount HS401WM5BMWE is designed for straight or herringbone approach bays. This configuration also easily adapts to mount to the ceiling.

Drive-Thru



HS401DT5BMWE is suitable for an alignment quick check lane where the quick checks are done at floor level, or for use in a pit.

Lift-Model



HS401LZ5BMWE provides a vertical camera lift to achieve additional lift height or to work with the vehicle lowered to the floor.

Cabinet Mount



HS401CM5BMWE cabinet mounted sensors, attached to a mobile alignment console, can service multiple alignment bays and provides a vertical camera lift to achieve additional lift height or to work with the vehicle lowered to the floor.

Floor Mount



HS401FM5BMWE floor mounted overhead camera configuration suitable for drive through. Patented fixed camera configuration and no moving parts.

KDS I Wheel Alignment System with DSP508-XF-E Sensors



DSP508-XF-E Cordless Sensors* provide high-speed data communication without the problems associated with cable connectivity.





The optional wireless hand-held ride height remote measures ride height and then transmits the measurements to the aligner.

Greater Speed

- Instantaneous data transfer between sensors and alignment console.
- Quick, precise measurement readings.
- ✓ Fast, simple sensor calibration.

Enhanced Reliability

- On-screen display alerts alignment technician if any sensor adjustments are required.
- Sturdy construction reduces potential damage to sensor.
- "Foolproof" locking mechanism prevents movement after mounting.

Ease of Use

- DSP508-XF-E cordless sensors remove hassle of connecting cables.
- New cordless sensor batteries provide a full day of continuous operation and are "hot-swapable", ensuring measurements are not lost in the event of a power outage or during battery replacement.

BMW Console Options







WA130BMWE



WA110BMWE



WA120BMWE

KDS II Equipment Package*

Alignment System includes:

- Mobile or stationary (wall or post mounted) cabinet
- (4) Storage Shelves for BMW wheel adaptors & HawkEye targets
- Configured computer (specification listed below)
- Color LCD monitor (17-inch minimum)
- Keyboard with protective cover
- Mouse pointing device
- HawkEye Sensor Group
- HawkEye Supercable
- (4) BMW wheel adaptors with 120 mm centering pins
- Steering wheel holder
- Brake pedal depressor
- Handheld wireless remote control
- (2) Heavy-duty mechanical turnplates with protective covers
- (2) Heavy-duty mechanical slip plates with protective covers
- Speaker and volume control for multimedia features
- HP DeskJet Color Printer
- Operation Manual

Computer Specifications:

- Intel Dual-Core Processor (1.8 Ghz minimum)
- 1GB RAM DDR2 Memory (minimum)
- 80GB Hard Disk Drive (minimum)
- DVD/CD-RW Drive
- Integrated Network Card
- Integrated Video Card
- (6) USB 2.0 Ports (2 on front, 4 on back)
- Integrated Sound Card

Language-Specific Software Package Including:

- Microsoft Windows Vista Operating System
- Latest WinAlign® BMW Software Version for all BMW vehicles
- BMW Vehicle Specification Database
- Vehicle Specification for non-BMW group vehicles**
 **(including free updates for two consecutive years)
- WebSpecs
- User-Programmable Vehicle Specification Database
- User-Programmable Factory Specification Amendments
- Vehicle Adjustment Illustrations with Instructions
- Work Management Database
- Customer Database with Archive of Vehicle Measurements
- Hard disk drive restoration software
- ASA-Network compatibility

KDS I Equipment Package

Alignment System includes:

- Mobile cabinet
- (4) Storage Shelves for BMW wheel adaptors & DSP508 sensors
- Configured computer (specification listed below)
- Color LCD monitor (17-inch minimum)
- Keyboard with protective cover
- Mouse pointing device
- (4) DSP508 Sensors (minimum) Data transmission via wireless radio frequency communications or cables.
- (4) Sensor cables
- (4) BMW wheel adaptors with 120 mm centering pins
- Steering wheel holder
- Brake pedal depressor
- Handheld wireless remote control
- (2) Heavy-duty electronic turnplates with protective covers
- (2) Turnplate cables
- (2) Heavy-duty mechanical slip plates with protective covers
- Speaker and volume control for multimedia features
- HP DeskJet Color Printer
- Operation Manual

Computer Specifications:

Same as with HawkEye Sensors

Language-Specific Software Package Including:

Same as with HawkEye Sensors

^{*} All new configurations include a 3-year warranty on PC and installed components.

(Note: Self-Centering wheel adaptors for DSP500 Sensors and HawkEye Sensors are NOT included in the KDS I and KDS II packages)

BMW Approved Options and Accessories

BMW Approved Lift Options

Hunter offers two models of high-precision BMW-approved lifts, a compact scissor lift (RXBMWE) and a high-capacity 4-post lift (4PBMW). All Hunter BMW lifts are level within 0.5 mm and include ultra-low-friction slipplates. All lifts include Front Wheel Stops, two Wheel Chocks, Air Line Kit, Louvered Ramps with built-in Wheel Stops, and two Movable Work Steps.



- 6.05 meter (19 ft. 10 in.) length fits in BMW's favored bay 7 meters (23 ft.).
- 4,500 kg (9,900 lbs.) capacity
- 3.15 meters (124 in.) max wheelbase capacity
- Includes two 2,041 kg (4,500 lbs.) capacity swing jacks



4PBMW

- 6.81 meter overall length
- 7,258 kg (16,000 lbs.) capacity
- 4.37 meters (172 in.) max wheelbase capacity
- Includes two 3,629 kg (8,000 lbs.) capacity swing jacks

RXBMWE and 4PBMW lifts are equipped to operate at one of the following power configurations. Please specify the desired power supply configuration when placing your order:

(230 V, 1 Ph, 60 Hz / 230 V, 1 Ph, 50 Hz / 400 V, 3 Ph, 50 Hz)



30-418-1-X-XF Remote Indicator

Display provides graphic indication of live measurements. View measurements with touch of a key.

WinAlign alignment software upgrades may require additional and/or upgraded hardware. Because of continuing technological advancements, specifications, models and options are subject to change without notice.

BMW Wheel Adaptors offer exclusive, easy to use features and provide greater versatility and extra durability

Specialized BMW wheel adaptors have new longer tire hooks that easily reach around the tread blocks of BMW vehicles equipped with mud tires or performance tires. The long hooks are also useful on models that have tight gaps between the tire and wheel opening. The lower profile of the long hooks enable them to stay close to the tire.



175-348-1 BMW Wheel Adaptor

Optional adapters mount quickly and easily to BMW tire/wheel assemblies to speed setup and reduce overall alignment time. (4 required)



175-325-1 HawkEye-Series Adaptor

Patented HawkEye Alignment Targets remain centered while the technician clamps the adaptor to non-BMW rims. 10 - 24.5 inch clamping range. (4 required)



175-321-1 HawkEye-Series Adaptor

Hunter's conventional DSP500 Alignment Sensors remain centered while the technician clamps the adaptor to non-BMW rims.10 - 24.5 inch clamping range. (4 required)

Visit our website: www.hunter.com

HUNTER

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