

# BMW EQUIPMENT GUIDE

CUSTOMIZED HUNTER EQUIPMENT  
FOR BMW SHOPS



# HUNTER OVERVIEW

## SINCE 1946

### About Hunter

Since 1946 when Automotive Hall of Fame inductee Lee Hunter founded Hunter Engineering, the company has built a reputation for innovation and visionary leadership in the application of the newest technologies to automotive undercar service.

### Innovation

Hunter's award-winning research and development team of mechanical, electrical, and software engineers is responsible for hundreds of patented and exclusive features that make Hunter products the most productive undercar service equipment available.

### Designed and Built in the USA

Expert assembly goes into each alignment system tyre changer, wheel balancer, brake lathe, and other product components. All printed circuit board design and assembly is performed in-house.

### Quality

Commitment to quality encompasses all aspects of product design, development, engineering, supply chain, and manufacturing to produce products that are supported by expert field service and training with customer satisfaction as the end goal.



# DEFINING THE STANDARD WORLDWIDE

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

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.

The Hunter factories located in St. Louis, MO (headquarters), Raymond, MS, and Durant, MS are the core locations for development, production, sales and training.

Hunter Engineering is a U.S.-based technology company powered by award-winning innovation teams of electrical, mechanical, and software engineers and developers. Hunter is proud to design and print circuit boards for their products in the U.S.A. The revolutionary products that Hunter brings to market define the standard for productivity, safety, profitability, and durability in the undercar service industry.



**MADE IN USA**  
USING THE FINEST US & GLOBAL MATERIALS



## Product Research and Development | Electronics | Fabrication | Assembly | Distribution



More than 1,000 U.S. jobs in St. Louis, Missouri (HQ), and Durant, Raymond, and Madison, Mississippi.

### Laser and Plasma Cutting

Hunter uses state of the art fiber optic lasers and plasma cutters to turn sheet and plate steel into precision cut parts

### Fabrication and Welding

Hunter certified welders along with a fleet of welding robots ensure industry-leading precision and quality go into each part.

### Sophisticated Electronics

Ensuring quality and reliability, Hunter designs and prints circuit boards in-house. Hunter produces over one million boards and cable assemblies every year.

### Powder Coating

Products undergo a cleaning and phosphate process followed by high-performance powder-coating for world-class appearance, durability, and corrosion resistance.

### Precision Machining

Skilled machine operators use CNC milling machines and cutting-edge robotic systems to manufacture high-precision components.

### Assembly and Testing

Hunter assemblers and inspectors undergo extensive training and testing to become certified. Each part undergoes multiple levels of inspection prior to leaving the plant.

# HUNTER KDS II ALIGNMENT SYSTEM

WA685

**SUPPORTS THE LATEST  
BMW ALIGNMENT  
SOFTWARE STANDARDS**



## BMW 59 500 853

*(Formerly 81332444406, 81332220806,  
81332407385, 81332304173, 81332444405)*

## BMW 59 500 844

*(Formerly 81335A49B28, 81335A49B29, 81335A49B27)*



# KDS II COMPLIES WITH ALL BMW SPECIFICATIONS

Hunter's KDS II wheel alignment system complies with the strict requirements of BMW workshops to provide high-precision alignments. The customized WinAlign® alignment software is designed to guide the technician through a step-by-step alignment process for all BMW Group vehicles, including those equipped with single-joint, spring-loaded front axles and multi-link rear axles with spherical kinematics.



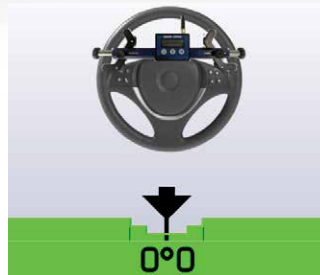
## WinAlign® alignment software

The patented, standard in alignment systems worldwide, WinAlign® provides quick and accurate measurements for maximum efficiency and profits.



## Recall BMW specifications

Vehicle specifications can now be recalled via the BMW chassis code.



## Steering Wheel Level Integration

Live electronic steering wheel level before/after measurements included on the BMW printout — acquired via step by step software-guided Technician input.



## Live Ride Height Measurement

Automate the ride height measurement procedure accurate to one millimeter.



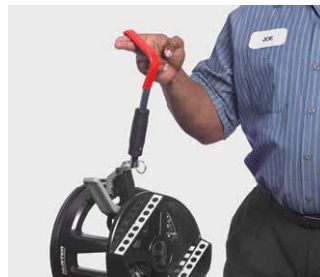
## Fully Integrated Alignment

With the Hunter lift rack connected to the aligner, features like slipplate/turnplate locking and unlocking are automatic, saving you time and trips around the vehicle.



## Easy to install

Spring-loaded adjustment conforms to wheel size. Single thumb lever locks the clamp. Off-center clamping has no effect on accuracy.



## Lightweight and low maintenance

Shop-tough polymer structure withstands drops. No electronics, cables or calibration. Minimal cleaning is required.



## No metal-to-metal contact

Clamp arms grip the tyre while the protective ring contacts the rim.

## KDS II WHEEL ALIGNMENT SYSTEM OFFERS:

### Speed & precision

- ✓ Mount targets
- ✓ Roll forward
- ✓ View measurements quickly

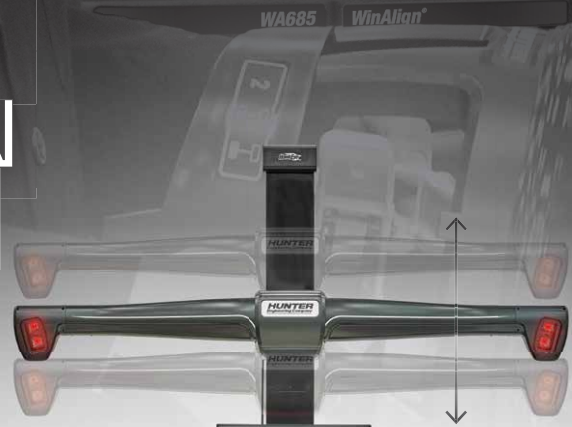
### Long-term cost of ownership

- ✓ No metal-to-metal contact
- ✓ No electronics at the wheel
- ✓ Virtually maintenance-free

### Ease-of-use

- ✓ Wide field-of-view
- ✓ Make adjustments from any height
- ✓ No cables, batteries, or wireless signal hassles

# CHOOSE YOUR CONFIGURATION



## Aligner Console

- ✓ Current WinAlign® alignment software
- ✓ Electronic software key for BMW software
- ✓ Two years of Hunter all vehicle information database updates
- ✓ Three-year subscription to WebSpecs® via HunterNet® online database
- ✓ ASANet™ compatible
- ✓ Powerful & secure PC powered by Windows®
- ✓ Keyboard, mouse and color printer
- ✓ Network module (wired and wireless)
- ✓ Handheld remote
- ✓ Steering wheel holder
- ✓ Brake pedal depressor



WA560E  
series cabinet



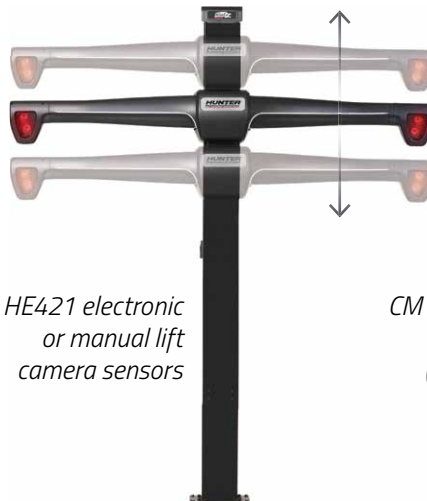
Xpandable series cabinet



WA510E  
series cabinet

## Camera Sensors

- ✓ Four high-resolution HawkEye Elite® cameras
- ✓ Full range of vertical camera movement to accommodate alignments at any height



HE421 electronic  
or manual lift  
camera sensors



CM cabinet-mounted  
camera sensors  
(only on WA560E  
series cabinets)

## Wheel Adaptors and Targets

- ✓ Three-dimensional targets
- ✓ Four Live Ride Height targets

### Choose adaptors from:

QuickGrip® adaptors or BMW pin adaptors

Storage hangars available on cabinets, HE421 sensor posts and lift rack.



QuickGrip® adaptors (left) and BMW pin adaptors (right) shown mounted on wheels.

# CUSTOMIZE YOUR KDS II ALIGNMENT SYSTEM



## BMW Quick Clamp adaptor 175-348-1

Hunter Quick Clamp adaptor approved by BMW features large tyre hooks and 120 mm pins.

HE421LZQCBMWE and HE421MLQCBMWE sensor groups each include 4 BMW Quick Clamp adaptors.



## Cordless Icon Remote Indicator 20-2882-1-E

Provides technician with complete control of the alignment system while making adjustments to the vehicle.



*... or use SplashTop remote software for complete remote control of the aligner from your Apple or Android device.*



## QuickGrip® Adaptor Adjustable Tyre Hooks 20-2521-1

Eliminates the need to exchange QuickGrip® adaptor hooks for different passenger car tyre sizes.



## Rolling Compensation Support Kit 20-1850-1

For lifts without turnplate pockets. Provides a rolling surface and turnplate bridge for one axle. Shown with optional turnplate approach ramp contained in 20-1556-1.

**HUNTER**

# GSP97 RFW BMW ROAD FORCE® WALKAWAY™ WHEEL BALANCER

**BMW 59 500 856**

(Formerly 81245A15825)



## Diagnostic load roller

Solve vibration problems and provide the "new car ride" in less time than any traditional balance.



## WalkAway™ Inflation System

Change tyres faster by inflating on the balancer while other work is done.



## Vision System

Eliminate error opportunities and provide more diagnostic information in less time.



## Automatic CenteringCheck®

Ensure proper centering and eliminate setup errors.



Weight locations identified anywhere along the wheel



Touchscreen interface allows technicians to easily adapt to processes



True self-calibration with patented eCal auto-calibration



See usage data and track trends anywhere through HunterNet® online portal



## Specifications

Power requirements	196-253V, 10 amp, 50/60 Hz, 1 ph NEMA L6-20 plug included
Air supply requirements	7-12 bar (100-175 psi)
Roller force	Variable up to 567 kg (1,250 lbs.)
Capacity	
Rim width	1.5 - 20.5 in. (38 - 521 mm)
Rim diameter	10 - 30 in. (254 - 762 mm)*
ALU	14 - 40 in. (356 - 1016 mm)*
Max. tyre diameter	40 in. (1016 mm)
Max. tyre width	20 in. (508 mm)
Max. tyre weight	79 kg (175 lbs.)
Radial runout accuracy	0.051 mm (0.002 in.)
Imbalance resolution	± 0.28 g (0.01 oz)
Placement accuracy	512 positions, ± 0.35°
Balancing speed	300 rpm
Motor	Programmable drive system and DC motor

\*Extreme wheel sizes may require manual data entry.

# ROAD FORCE® WALKAWAY™

## FIX VIBRATION ISSUES IN ONE VISIT

Match-mounting, or repositioning the tyre on the rim to equalize the high and low spots, greatly improves performance and prevents customer comebacks.

### ✗ Other Shops



#### Basic Balance

Tyre is balanced with standard non-diagnostic balancer or older generation Road Force® with the roller turned off.



#### Quality Control

Customers perform the quality check on their own vehicle leaving the chance for imbalance.



#### Disatisfaction

When tyres are not correctly balanced, customers either return unhappy or never return.



#### ✗ Additional Work

An unhappy customer returning will add over 45 minutes of work that technicians are often unequipped to handle.

### ✓ Road Force® WalkAway™ Shops



#### Road Force® Balance

Tyre is balanced in less time with Hunter's Road Force® WalkAway™ premium diagnostic balancer.



#### Quality Control

A few tyres need repositioning on the rim to guarantee a round assembly adding only a few minutes at installation.



#### Satisfaction

Because the technician tested every assembly, all customers leave happy.



#### ✓ Peace-of-Mind

Superior service differentiates Road Force® WalkAway™ shops from all other shops.

**HUNTER**

# GSP96BMW

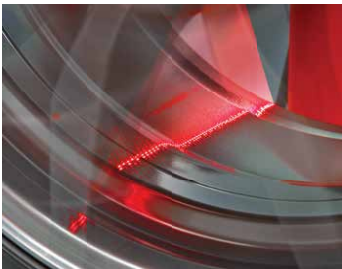
## SMARTWEIGHT® ELITE WHEEL BALANCER

BMW 59 502 520



### Enhanced SmartWeight®

Get the most efficient balance by using less weights from performing more single weight solutions.



### Vision System

Eliminate error opportunities and provide more diagnostic information in less time.



### Automatic CenteringCheck®

Ensure proper centering and eliminate setup errors.



### Touchscreen interface

Intuitive interface that new technicians can adapt to quickly.



Weight locations identified anywhere along the wheel



True self-calibration with patented eCal auto-calibration



See usage data and track trends anywhere through HunterNet® online portal



## Specifications

Power requirements	196-253V, 10 amp, 50/60 Hz, 1 ph NEMA L6-20 plug included
Air supply requirements	7-12 bar (100-175 psi)**
Capacity	
Rim width	1.5 - 20.5 in. (38 - 521 mm)*
Rim diameter	10 - 30 in. (254 - 762 mm)*
ALU	14 - 40 in. (356 - 1016 mm)*
Max. tyre diameter	44 in. (1118 mm)
Max. tyre width	20 in. (508 mm)
Max. tyre weight	79 kg (175 lbs.)
Radial & lateral runout accuracy	0.051 mm (0.002 in.)
Imbalance resolution	± 0.28 g (0.01 oz)
Placement accuracy	512 positions, ± 0.35°
Balancing speed	300 rpm
Motor	Programmable drive system and DC motor

\*Extreme wheel sizes may require manual data entry.

\*\*Only wheel lift models and SpeedClamp®

**HUNTER**

# GSP92 SWP BMW SMARTWEIGHT® PRO WHEEL BALANCER

BMW 59 502 521 (with SpeedClamp®)

BMW 59 500 855 (with Wingnut)

(Formerly 81245A15827)



## Enhanced SmartWeight®

Get the most efficient balance by using less weights from performing more single weight solutions.



## ExactPosition™ weight placement system

Easily indicate exact weight placement using laser vision system with simple dimension entry.



## CenteringCheck®

Ensure proper centering and eliminate setup errors.



## Intuitive interface

Single-knob navigation and 3D graphics simplify the experience.



Optional outer hood laser automatically measures wheel width when hood is lowered



Weight locations identified anywhere along the wheel



See usage data and track trends anywhere through HunterNet® online portal



## Specifications

Power requirements	208-240V, 3 amp, 50/60 Hz, 1 ph NEMA L6-20 plug included
Air supply requirements	7-12 bar (100-175 psi)**
Capacity	
Rim width	1.5 - 20 in. (38 - 508 mm)
Rim diameter	10 - 30 in. (254 - 762 mm)*
ALU	7.5 - 38 in. (191 - 965 mm)*
Max. tyre diameter	38 in. (965 mm)
Max. tyre width	20 in. (508 mm)
Max. tyre weight	61 kg (135 lbs.)
Imbalance resolution	± 1.0 g (0.05 oz)
Placement accuracy	512 positions, ± 0.35°
Balancing speed	150 rpm
Motor	Programmable drive system and DC motor

\*Extreme wheel sizes may require manual data entry.

\*\*Only wheel lift models and SpeedClamp®

**HUNTER**

# TCRH BMW REVOLUTION™ TYRE CHANGER BMW 59 500 854

(Formerly 81255A49A28)



## WalkAway™ Mode

The TCR1H allows the operator to “walk away” during bead breaking and demounting process on tyres 2 through 4 in a set.

- ✓ 80-second unattended bead breaking and demounting
- ✓ 25%+ time savings when paired with wheel balancing
- ✓ 2-minute average change time for all tyres.
- ✓ Top indicator lamp signals WalkAway™ status

## Fully automatic adds safety



Position Safety



Leverless Safety



Inflation Safety



Tyre & Wheel Safety



Power and Clamping Safety



Wheel Lift Safety



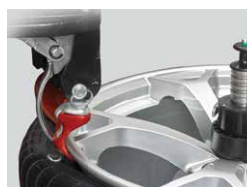
TPMS Safety



**PATENT PENDING**

### “Go” pedal operation

Press to make selection or hold to advance procedure.



**PATENTED**

### Leverless toolhead

Demount without levers while preventing wheel damage.



**PATENT PENDING**

### Automatic simplicity

The same procedure for all wheel assemblies minimizes necessary operator experience.



## Specifications

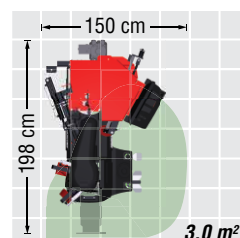
<b>Power requirements</b>	60Hz Power: 208-230V, 1 ph, 24A, NEMA L6-30P Supplied; 50Hz Power: 220-230 V*, 1 ph, 24 A, NEMA L6-30P Supplied; 50Hz Power: 230/400 V, 3 ph, 10/6 A, NEMA L22-20P Supplied
<b>Air supply requirements</b>	8.6 ± 1.7 bar (125 ± 25 psi)
<b>Mount / demount tool</b>	Polymer Self Inserting Leverless
<b>Clamping type</b>	Center w/Quick Clamp
<b>Bead loosening type</b>	Upper / Lower Roller
<b>Match mounting capable</b>	Yes
<b>Capacity</b>	
<b>Rim diameter range</b>	305 - 762 mm (12 - 30 in.)
<b>Max. tyre diameter</b>	50 in. (1270 mm)
<b>Max. wheel width</b>	15 in. (381 mm)
<b>Drive</b>	Variable up to 15 rpm CW / CCW   Torque: 875 ft-lbs (1186 Nm)

This product is listed to UL201 Garage Equipment Standard by Intertek (ETL) Testing Laboratories.

Meets national electrical code requirements for electrically powered shop equipment.



Intertek



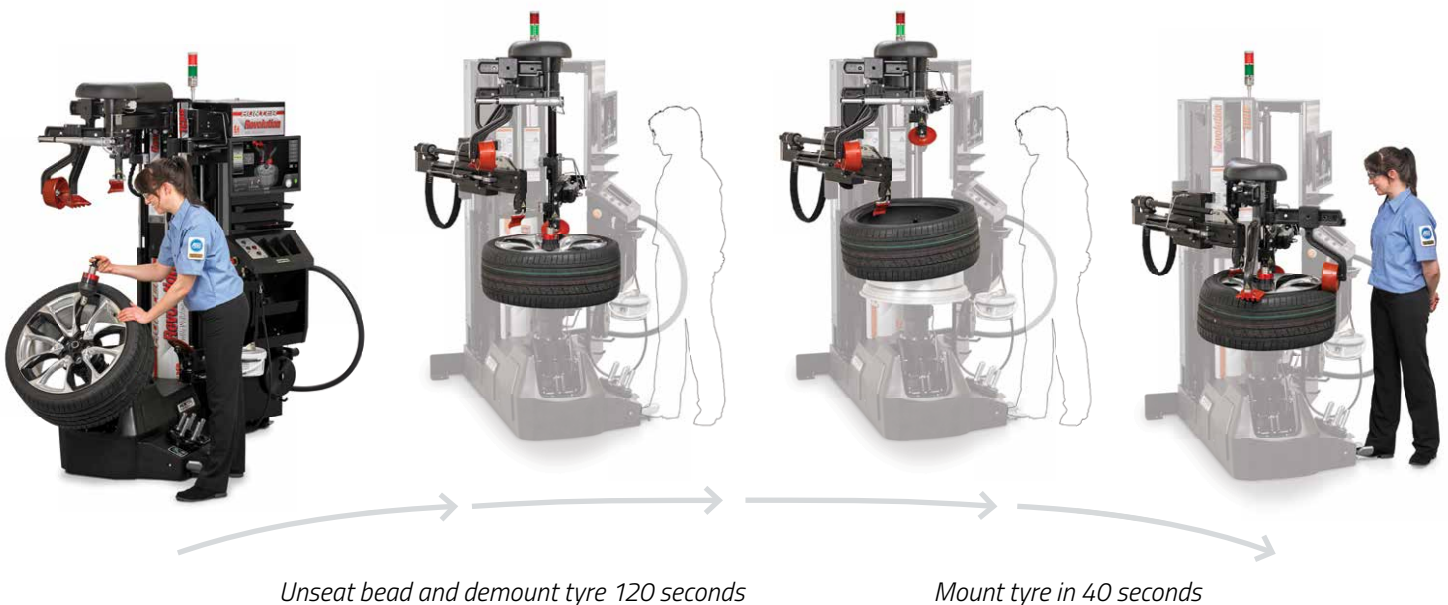
## Mindful of shop space

The TCRH tyre changer requires very little space for a machine of its class. And, moreover, it can be placed directly against the wall.

# REVOLUTION™

## AUTOMATIC AND AUTONOMOUS OPERATION SAVES TIME, EFFORT, AND MISTAKES

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



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



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



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

**HUNTER**

# TCM BMW MAVERICK® TYRE CHANGER BMW 59 502 710



## Fully-variable, hydraulic controls

Technicians have complete authority in the tyre changing process.



## SmartSet® leverless toolhead

Unique design safely deploys demounting hook to lift bead without operator risk or wheel damage.



## Intelligent safety and productivity

The Maverick monitors roller and hook positions with customizable speeds.



## InflationStation™

Inflate all tyres to their correct pressure with blast inflation to seat tough beads.



Hydraulic speed and accuracy are the best in the business



RollerLock® clamp secures the wheel quickly and safely



Match-mount tyres when combined with the Hunter Road Force® WalkAway™ wheel balancer



## Specifications

Power requirements	60Hz Power: 208-230V, 1 ph, 24A, NEMA L6-30P Supplied;
	50Hz Power: 220-230 V*, 1 ph, 24 A, NEMA L6-30P Supplied;
	50Hz Power: 230/400 V, 3 ph, 10/6 A, NEMA L22-20P Supplied
Air supply requirements	8.6 ± 1.7 bar (125 ± 25 psi)
Mount / demount tool	Polymer Leverless
Clamping type	Center w/ Quick Clamp
Bead loosening type	Upper Lower Roller
Match mounting capable	Yes
Capacity	
Rim diameter range	10 - 34 in. (254 - 863 mm)
Max. tyre diameter	50 in. (1270 mm)
Max. wheel width	19 in. (483 mm)
Drive	Variable up to 17 rpm CW / CCW Torque: 700 ft-lbs (949 Nm)



**HUNTER**

# TCX3000 BMW

BMW 59 500 842

(Formerly 81252348771)

## Easy mounting and demounting system

- ✓ Hydraulic core functions are smooth and predictable
- ✓ Hands-free mounting and demounting of the tyre
- ✓ Patented chuck plate with pneumatic rim clamping
- ✓ Pneumatic bead discs hold the bead in the well during mounting
- ✓ Operation from the console is precise and safe



### Tri-tool head

Rotates for easy access to multiple tools — demounting hook, mounting finger, or bead-loosening roller.



### Leverless & touchless demounting

Powerful demounting hook handles the toughest tyres and wheels with no rim contact.



### Dual roller system

Automatic tilt to loosen the toughest beads.



## Specifications

Power requirements	230V, 1 Ph, 50/60 Hz
Air supply requirements	8-10 bar (116-145 psi)
Air volume with optional inflation tank	18 L (4.75 gallons)
Capacity	
External clamping range	12 - 34 in. (304 - 863 mm)
Tyre diameter	49 in. (1250 mm)
Tyre width	16.5 in. (420 mm)
Table rotation speed	Clockwise: 7 rpm and 17 rpm Counter-clockwise: 7 rpm



**HUNTER**

## YOUR STRONG PARTNER IN THE BMW ORGANIZATION

To learn more about Hunter equipment, visit [Hunter.com](http://Hunter.com).

Contact your local Distributor to schedule an on-site demo  
or to get a free pricing quote.



Scan or visit  
[hunter.com/contact](http://hunter.com/contact)



**HUNTER**  
Engineering Company

Form UB08370-05, 03/26  
Supersedes Form UB08370-05, 02/25

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

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