## GSP97BMW Road Force Touch®

NEW!





HUNTER
Engineering Company

## GSP97BMW at a glance





traditional balancer!



- ✓ Intuitive interface
- ✓ Quickly train new technicians



- ✓ True "self-calibration"
- ✓ No operator input required



Shown with HammerHead®, printer and storage shelf options













#### **Diagnostic Load Roller**



- ✓ Solves vibration problems
- ✓ Identifies vehicle pulls
- ✓ Provides "new car ride"

## PATENTED

#### **SmartWeight®**



- ✓ Improve balance
- ✓ Minimizes weight usage
- ✓ Maximizes productivity

## OPTIONAL HammerHead® Option



- ✓ Speeds clip-weight placement
- ✓ Improves balance

## EXELUSIVE On-Demand Videos



- ✓ Simplify training
- ✓ Improve results

## PATENTED CenteringCheck®



- ✓ Ensures proper centering
- ✓ Eliminates setup errors

## OPTIONAL

#### BullsEye™ Centering System



- ✓ Optimize centering
- ✓ Prevent wheel damage



## Road Force® test and balance <u>FASTER</u> than a tradition

Measure Road Force on every customer wheel WITHOUT A TIME PENALTY

#### **Road Force Touch® Balance Cycle**



Road Force Touch® balance starts when hood is lowered



Load roller measures Road Force while technician prepares correction weights



#### **Traditional Balance Cycle**



Balance starts when hood is lowered



Technician prepares correction weights

### nal balancer



Technician installs weights and performs check-spin

#### **Road Force Test and Balance**



- ✓ Wheel is balanced
- ✓ Wheel is also verified to roll smooth

## Optional Road Force printout verifies results



#### Balance



Technician installs weights and performs check-spin



✓ Wheel is balanced



## Intuitive touchscreen simplifies balance experience



Touching weight value servos wheel to weight location



Rim cutaway displays selected weight mode



Simple buttons launch less frequently used functions

#### Balancing interface at a glance





One touch to display rim dimensions



TruWeight™ provides live navigation through selection and placement of wheel weights



SmartWeight® panel displays wheel balance condition



Low spot on rim is identified



Simple graphics illustrate how to optimize assembly



See predicted improvement in one glance and how to do it

#### Road Force Measurement® interface at a glance





Road Force panel displays assembly value and limits

Helpful animation explains conditions



Live rim and tire conditions shown on-screen



Color-coding allows operator to visualize Road Force variations

### Road Force Measurement® solves common vibration

#### Your customer complains about a vibration...

#### A simulated road test pinpoints the problem



Vibration problems are common and service bulletins recommend the Road Force Touch to solve them.



The Road Force Touch balancer identifies the tire and rim contributions to radial-force vibration problems

#### An unknown force vibrates the spindle

Vibration is transferred from the wheel, through the spindle to the customer

#### **Specialized sensors detect the vibration**



The Road Force Touch balancer detects radial forces with sensitive instruments

**How It Works** 

**Problem / Solution** 

### problems

#### Hold the tire and rotate the rim



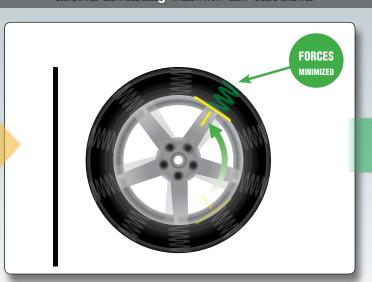
Match-mounting the stiffest point on a tire to the low spot on a rim makes the assembly roll as round as possible

Your customer leaves with a "new car ride"!



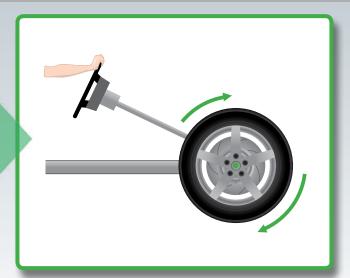
✓ Your customer experiences a smooth ride on the same tires and wheels

#### **Match-mounting cancels the vibration**



The Road Force Touch balancer duplicates tire and rim matching methods used by original equipment manufacturers

#### Your customer leaves with a "new car ride"!



✓ Radial force variation is minimized, ensuring your customer a smooth ride

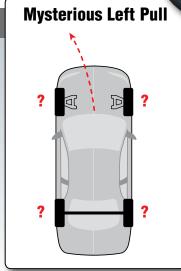


## StraightTrak® corrects tire pull

**NEW!**Now perform
individual tire pull
measurements\*

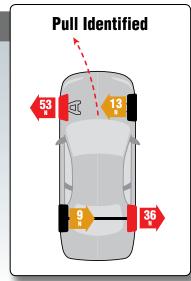
#### **Tires Just Rotated?**





#### **Measure Lateral Force to Identify Pull**

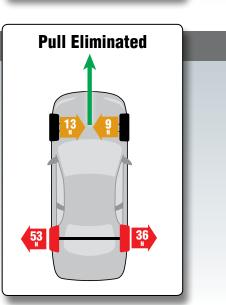
Tire conicity can ONLY be measured accurately when the tire is under load.



#### StraightTrak Delivers the Ultimate in Customer Satisfaction



Hunter suggests optimal wheel placement just like original equipment manufacturers.



<sup>\*</sup> Patent pending

## Revolutionary SmartWeight® by the numbers

- Modern vehicles are 4 times more sensitive to static vibration forces than couple or dynamic forces.
- 25 SmartWeight saves 25 labor hours per year with efficient weight applications.\*
- 30 SmartWeight can save 30% or more in correction weights.
- Avoid an average of 66 comebacks per year by using SmartWeight.\*\*
- **202** An average shop saves 202 kilograms per year with SmartWeight.\*\*\*

## SmartWeight® Balancing Technology





#### Watch Your Investment Grow!

See weight and labor savings based on your shop's numbers

- Time-savings are calculated from comparing single- and no-weight applications when using SmartWeight versus the typical two-weight application of standard balancers.
- \*\* Comeback avoidance is calculated based on residual static imbalance left by standard balancers versus SmartWeight balancers.
- \*\*\* Calculations based on 10 vehicles per day in a standard working year. Performance differences are those of a SmartWeight-equipped balancer vs. a traditional wheel balancer.

# On-screen instruction makes everyone an expert!

High-definition videos instruct on a variety of balancing and tire changing topics.

- Covers basic techniques to more advanced procedures
- ✓ Instant access, easy navigation
- ✓ On-site training for your technicians



Technicians are guided with helpful tips and timesaving procedures.

### Additional features make balancing faster and easier



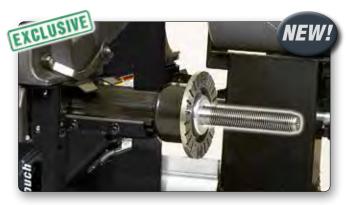
#### **Live 3D Graphics**

Interactive display intuitively guides technicians through balancing procedures.



#### **Bottom-Dead-Center Laser**

Automatically locates bottom-dead-center for adhesive weight application.



#### Most durable shaft in the industry

Consists of a superior alloy to resist wear and sustain long-lasting service.



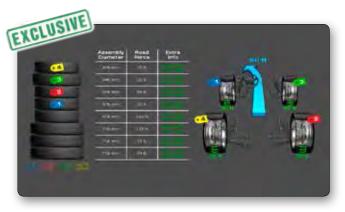
#### **Integrated Inflation Station**

Provide proper inflation pressure with convenient automatic controls.



#### Servo Stop drive control

Automatically rotates and holds wheel at top-dead-center or bottom-dead-center weight locations.



#### TranzSaver™\*

Compares tire circumferences as specified by original equipment manufacturers to prevent damage to All Wheel Drive (AWD) vehicles.



#### **CenteringCheck®**

Balancer will tell you if the wheel is properly centered before you proceed with the work.



#### **Automatic Mode Detection**

Eliminate the need to select the balance mode and reduce service time and possible mode entry errors.



#### Split Spoke® / Split Weight® Modes

- ✓ Locates best "out of sight" adhesive weight position
- Offers multiple weight placement choices to avoid obstructions



#### **Quick Cal-Check**

Quickly verify balancer calibration in seconds without the use of a reference wheel.



#### **SmartSpoke®**

Locates optimal adhesive weight location behind one wheel spoke instead of multiple weights and spokes.



#### **Foot Pedal Data Entry**

Multi-function pedal activates data entry, locks spindle during tightening or loosening of wing nut

### Popular options for BMW dealerships



#### HammerHead® top-dead-center laser option

- ✓ Greater weight placement accuracy to avoid mistakes
- ✓ More single-spin balances improve productivity
- ✓ Overhead fluorescent light illuminates work area



Incorrect



Correct

#### Printer kit with storage shelf option

- Print Road Force Measurement® test results
- ✓ Win more approvals with clear and informative printouts





On-screen entry of customer and vehicle information included in printout summary.

### Standard features for BMW dealerships



#### **Integrated wheel lift**

- ✓ Safely service heavy, oversized wheels
- Precisely center all wheels
- ✓ Integrated construction saves space, reduces added time and expense associated with stand-alone lift units



#### **Pneumatic AutoClamp**

- ✓ Clamp wheels automatically
- ✓ Save time and effort
- ✓ Eliminate wing nut

#### Standard accessories



**A** 106-82-2 Scratch guard sleeve

**B** 175-353-1 Polymer cup

**C** 46-653-2 Performance wheel and light truck spacer

**D** 221-658-2 Nylon hammer heads (4)

**E** 46-320-2 Spacer

F 221-589-2 Weight hammer/pliers

**G** 223-68-1 Pressure ring

**H** 20-1650-1 Rim tags

J 221-659-2 Adhesive weight scraper Calibration weight

#### Standard precision centering accessories



A 221-672-1 Balancer Arm Calibration Tool

**B** 251e208 400 Flange Plate 5x112 / 5x120

**C** 211e201 400 Flange Plate 4x100 / 5x120

**D** 46-511-2 Small Wheel Spacer

**E** 160-400-072 Centering Cone Ø 66.5 mm

**F** 160 400 069 Two Step Cone Ø 56, 72.5 & 74 mm

**G** 271 994 208 Studs 100mm (5 pieces) (Fits both flange plates)

### **Specifications**



RFT30BMWE shown with HammerHead," printer and storage shelf options

Power Requirements196-253V, 10 amp, 50/60 Hz, 1 phAir Supply Requirements7-12 bar (100-175 psi)Roller ForceVariable up to 567 kg (1,250 lbs)Capacity8 mm to 521 mm (1.5 in to 20.5 in)Rim Width38 mm to 521 mm (1.5 in to 20.5 in)Rim Diameter254 mm to 762 mm (10 in to 30 in)*ALU356 mm to 1118 mm (14 in to 44 in)*Max. Tire Diameter1016 mm (40 in)Max. Tire Width508 mm (20 in)Max. Tire Weight79 kg (175 lbs)Radial and Lateral Runout Accuracy0.05 mm (0.002 in)Imbalance Resolution± 0.28 g (0.01 oz)Placement Accuracy512 positions (0.7°)Balancing Speed300 rpmMotorProgrammable drive system and DC motor				
Roller Force         Variable up to 567 kg (1,250 lbs)           Capacity         8 mm to 521 mm (1.5 in to 20.5 in)           Rim Width         38 mm to 521 mm (1.5 in to 20.5 in)           Rim Diameter         254 mm to 762 mm (10 in to 30 in)*           ALU         356 mm to 1118 mm (14 in to 44 in)*           Max. Tire Diameter         1016 mm (40 in)           Max. Tire Width         508 mm (20 in)           Max. Tire Weight         79 kg (175 lbs)           Radial and Lateral Runout Accuracy         0.05 mm (0.002 in)           Imbalance Resolution         ± 0.28 g (0.01 oz)           Placement Accuracy         512 positions (0.7°)           Balancing Speed         300 rpm	Power Requirements	196-253V, 10 amp, 50/60 Hz, 1 ph		
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Balancing Speed 300 rpm	Imbalance Resolution	± 0.28 g (0.01 oz)		
	Placement Accuracy	512 positions (0.7°)		
Motor Programmable drive system and DC motor	Balancing Speed	300 rpm		
	Motor	Programmable drive system and DC motor		

<sup>\*</sup> Extreme wheel sizes may require manual data entry.

### RFT30BMWE

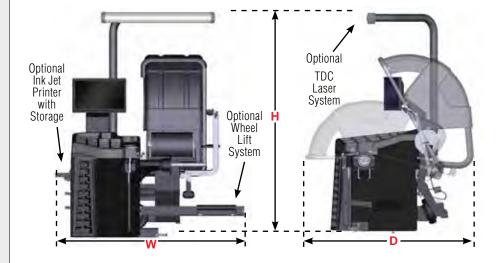
Roadforce Touch Balancer with AutoClamp Spindle and Wheel Lift				
Width (W)	Height (H)	Depth (D)	Weight	
1435 mm 56.5 in	1854 mm 73 in	1575 mm 62 in	288 kg 636 lbs	

Because of continuing technological advancements, specifications, models and options are subject to change without notice.



Hunter offers hundreds of accessories to customize your balancer to your service needs.

See Form 3203-T for more information.





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