

Road Force[®] Elite GSP9700 Series Wheel Balancer

Operation Instructions



1. Getting Started

1.1 Introduction

Read this manual prior to operating. Equipment owner is responsible for training. Equipment is meant to be used by trained operator and this manual assumes the technician has been trained.

 Installation of balancer should be completed only by an authorized Hunter Service Representative.

Corporate Information

- Hunter Engineering Company: 11250 Hunter Drive Bridgeton, MO 63044 U.S.A.
- Phone: 314-731-3020 / Fax: 314-731-1776
Web: www.hunter.com

1.2 For Your Safety

Hazard Definitions:

 **CAUTION:** Hazards or unsafe practices, which could result in minor personal injury or product or property damage.

 **WARNING:** Hazards or unsafe practices, which could result in severe personal injury or death.

 **DANGER:** Immediate hazards, which will result in severe personal injury or death.

These symbols identify situations that could be detrimental to your safety and/or cause equipment damage.

Important Safety Instructions - Electrical

- Do not operate equipment with a damaged cord or damaged until examined by a Hunter Service Representative.
- An extension cord must use current rating equal to or better than that of the equipment.
- Never use cord to pull plug from the outlet.
- Balancer requires a properly grounded electrical supply.
- Verify electrical supply circuit matches balancer voltage and amperage ratings.
- Do not alter electrical plug.
- Don't plug into unsuitable supply circuit as equipment damage or injury may result.
- Ensure power switch is in the off position ("O" position) before plugging equipment into electrical outlet.

Important Safety Instructions - Operation

- Do not operate equipment near open containers of flammable liquids (gasoline).

- Read and follow all caution and warning labels affixed to your equipment and tools. Misuse of this equipment can cause personal injury and shorten the life of the balancer.
- Keep all instructions permanently with the unit.
- Keep all decals, labels, and notices clean and visible.
- To prevent accidents and/or damage to the balancer, use only Hunter recommended accessories.
- Use equipment only as described in this manual.
- Never stand on the balancer.
- Wear non-slip safety footwear when operating the balancer.
- Keep hair, loose clothing, neckties, jewelry, fingers, and all parts of body away from all moving parts.
- Do not use on wet surfaces or expose to rain.
- Wear OSHA approved safety glasses.

Important Safety Instructions - Balancers

- Keep the safety hood and its safety interlock system in good working order.
- Do not place any tools, weights, or other objects on the safety hood while operating the balancer.
- Verify wheel is mounted properly and wing nut is firmly tightened before operation.
- The safety hood must be closed before touching the green "START" button, to spin the wheel.
- Hood Autostart will cause the balancer shaft to spin automatically upon hood closure.
- Raise safety hood only after wheel has come to a complete stop.
- The red "STOP" button, can be used for emergency stops.
- Never reach under the hood while wheel is in motion.

1.3 Decal Information & Placement

Right Side View.

- Decal **128-1244-2** cautions that spindle rotation may occur with foot pedal depression and to keep clear of clamping components during shaft rotation.
- Decal **128-964-2** gives the maximum wheel diameter and maximum wheel weight for balancer
- EN/IEC Class 1 Laser Product Certification is shown on Decal **128-1638-2**.
- An explanation of FDA compliance standards is shown on Decal **128-1117-2**.

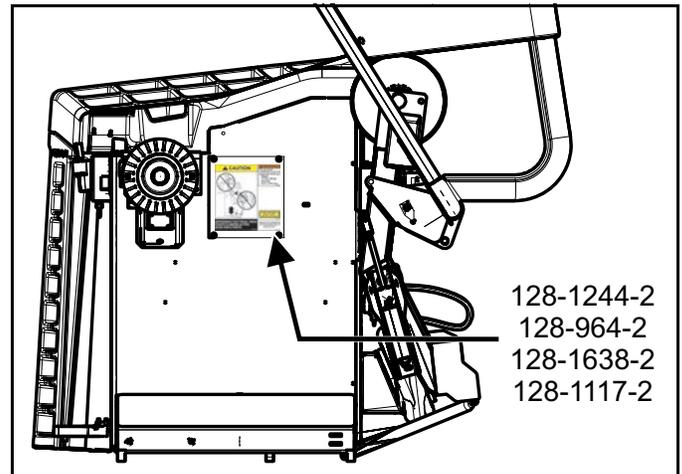


Figure 1: Right Side View



Figure 2:

Front View

FDA standards for Class 2M laser compliance are shown on Decal **128-1155-2** (for TDC Units).

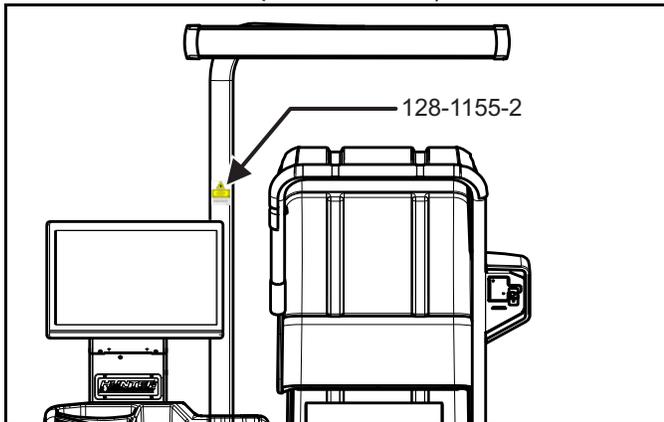


Figure 3: Front View

The Class 2M laser apertures are located at either end of the TDC header.



Figure 4: Top Dead Center Header

Left Side View

Decal **128-391-2-00** cautions that the unit may automatically start upon closing of the hood when Hood Autostart is enabled.

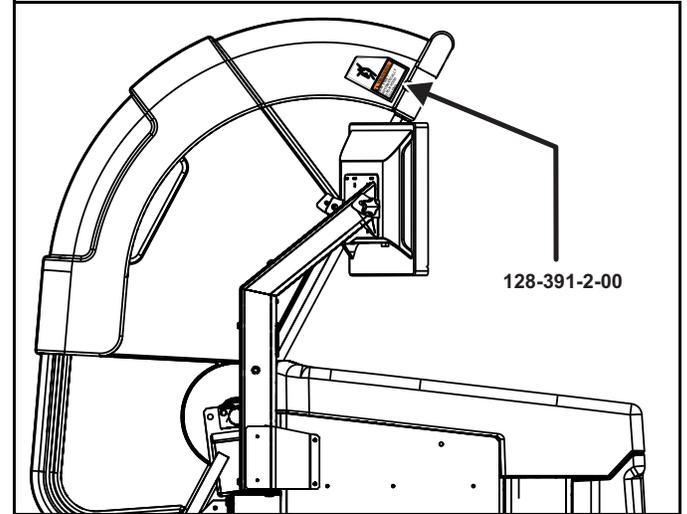


Figure 5: : Left Side View

Back View

Decal **128-381-2** warns the operator not to remove the balancer cover and not to use below garage floor level.

ETL certification standards are outlined on Decal **128-1120-2**.

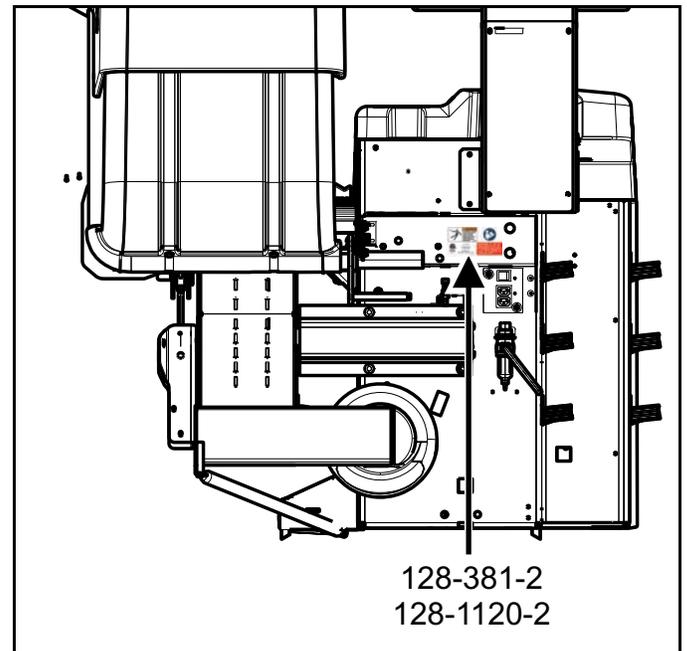


Figure 6: Back View

A manufacturer's identification label is on the rear of the balancer.



Figure 7: Manufacturer ID label

Specific Precautions/Power Source

The Road Force® Elite GSP9700 Balancer is intended to operate from a power source that will apply 230VAC +10% / -15%, 1 phase, 10 amp 50/60 Hz, power.

The power cable includes a NEMA 20 amp plug, L6-20P, between the supply conductors of the power cord and utilizes a twist lock connector.

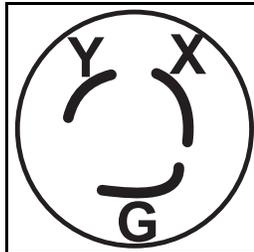
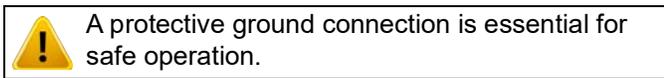


Figure 8: : NEMA L6-20P Plug



Optical Scan Laser Precaution

The Optical Scan Laser is a class 1 laser designed to measure the profile of wheel assemblies. The laser is not

a field serviceable part. No maintenance is to be performed on the laser.)



Figure 9: Class 1 Laser Warning

Wavelength: 650nm.

HammerHead® TDC Laser Precaution

The TDC (Top Dead Center) Laser Indicator is a class 2M laser designed to aid in applying clip-on weights. This is an option feature that is not a field serviceable. Laser Radiation - Do not stare into the beam or view directly with optical instruments.



Figure 10: Class 2m Laser warning

Turning Power ON/OFF

Push Button Switch.

Balance is equipped with a push button power switch located on the left side of the LCD support. Use this switch for normal shut down and restarting procedures.

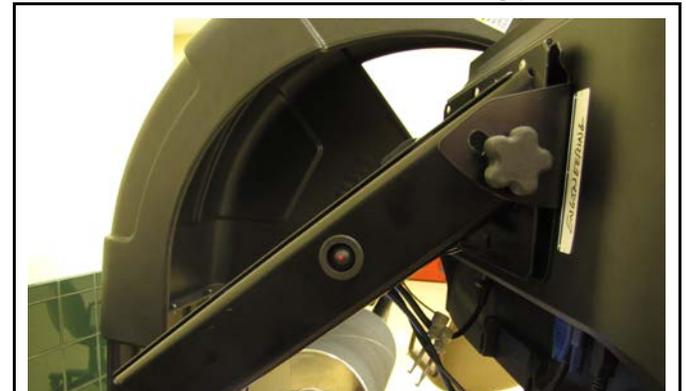
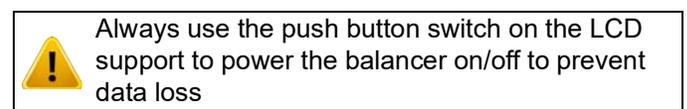


Figure 11: push button power



Main Power Switch

The main power ON/OFF switch is located on the back of the balancer cabinet.

To power the balancer “ON,” press the “I” side of the ON/OFF switch. To turn all power the balancer “OFF,” press the “O” side of the ON/OFF switch.



Figure 12: Main Power Switch

Equipment Specifications

Electrical	
Voltage:	230VAC +10% / -15%, 1 phase, 50/60 Hz, power cable includes NEMA 20 amp plug, L6-20P
Amperage:	10 amperes
Wattage:	3450 watts (peak)
Air	
Air Pressure Requirements:	100-175 PSI (6.9-12.0 bar)
Approximate Air Consumption:	4 CFM (113 Liters/Minute)
Atmospherics	
Temperature:	+32°F to +122°F (0°C to +50°C)
Relative Humidity:	Up to 95% Non-condensing
Altitude:	Up to 10000 ft. (3048 m)
Sound Pressure Level	
Equivalent continuous A-weighted sound pressure at operator's position does not exceed 70 dB (A).	

Certain Features:

Balancer may include certain features equipment:

- Road Force® uses a roller that applies a load to the tire in order to take road force measurements



Figure 13: Road Force

- SpeedClamp® pneumatically clamps the wheel onto the shaft for balancing.

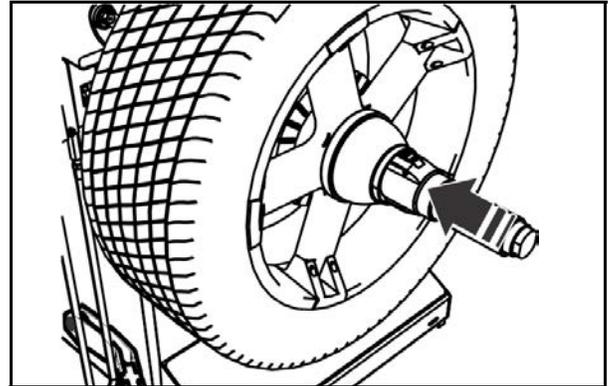


Figure 14: SpeedClamp®

- HammerHead® top-dead-center laser automatically displays a vivid line at top dead center after a wheel has been spun.

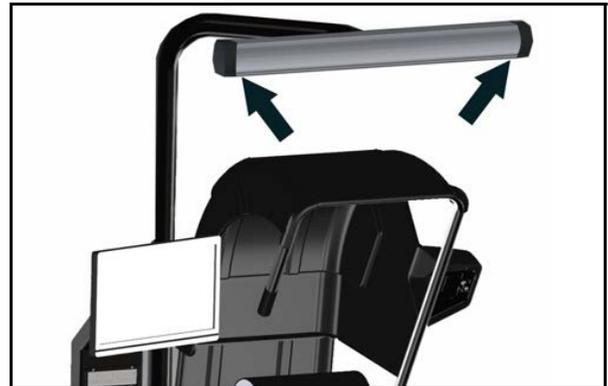


Figure 15: HammerHead®

2. Road Force Elite Main Screen

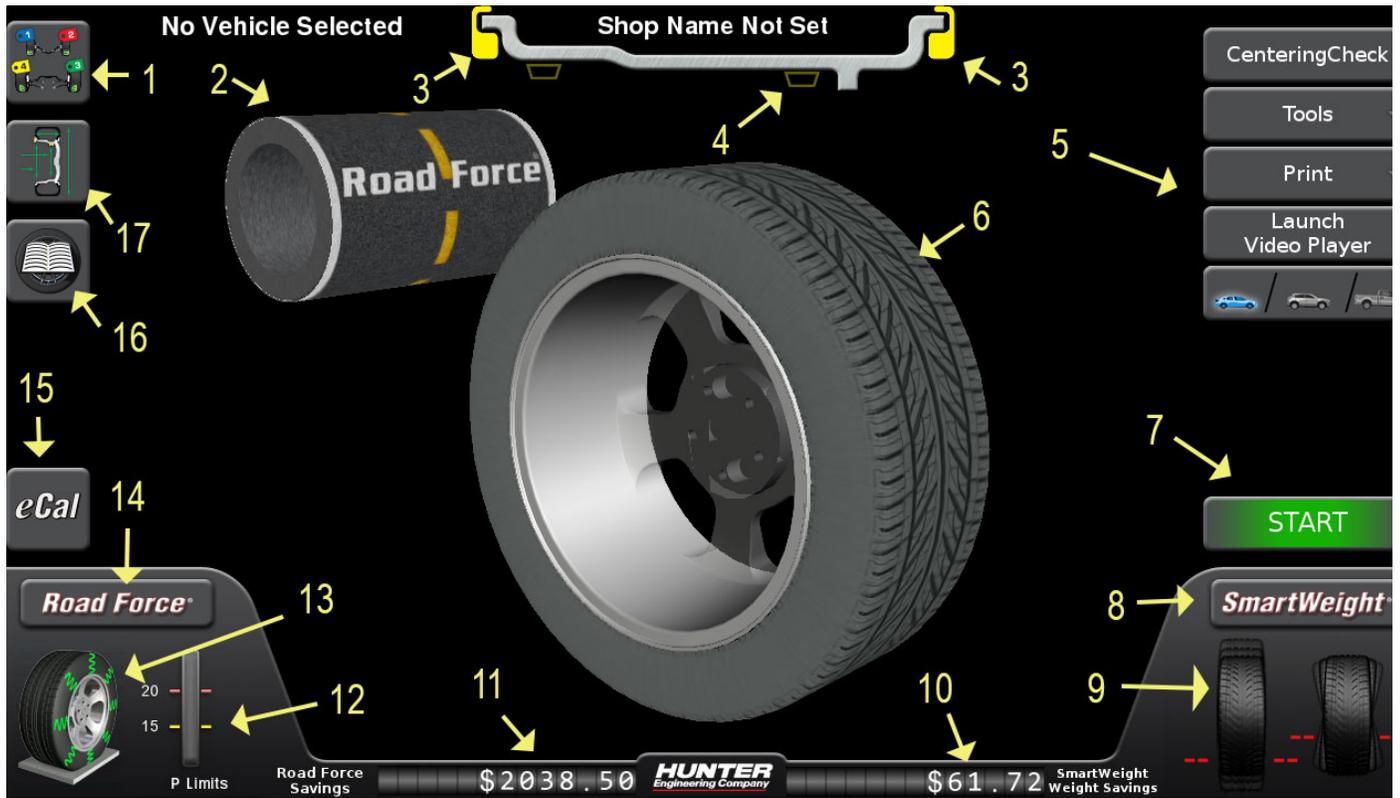


Figure 16:

2.1 Road Force® Elite GSP9700 Main Screen Components

1. Tire Stack / Vehicle Plan View Tab	9. Imbalance and Couple Force Display
2. Load Roller	10. Road Force Limits Display
3. Clip Weight Plane	11. Road Force Wheel Assembly Display
4. Tape Weight Plane	12. Road Force Menu Button
5. Context Sensitive Menu	13. Wheel Dimensions Tab
6. Wheel Assembly Display	14. SmartWeight® Savings Odometer
7. Start / Stop / Servo Button	15. Road Force Savings Odometer
8. SmartWeight® Menu Button	16. Road Force® Menu Button
17. eCal button	18. Vehicle Selection

3. Balancing Procedures

3.1 Wheel Lift Operation

Getting Wheel On Balancer

 Use two hands to maintain control of the wheel.

Slide proper collet onto spindle shaft. Position wheel lift carriage (“lift”) at the end of the lift rail.

Press the foot pedal down to lower lift. Roll wheel onto the lift. Raise foot pedal to raise wheel into position to slide it on spindle. Center wheel on collet and clamp.

Keep lift under wheel and close hood. Lift will automatically lower.

 Allowing the balancer to lower lift will speed up removal.

Removing Wheel From Balancer

Place lift under wheel and raise it to wheel. Remove wheel clamp. Slide lift with wheel on it to end of lift rail. Use pedal to lower lift.

3.2 CenteringCheck® Wheel Centering Feature

CenteringCheck® is an inspection or verification of the wheel’s mount to balance to identify possible centering errors. From main balance screen, touch the “Centering-Check” button and follow the on-screen instructions.

Print Summary

From the main balance screen, select “Print” → “Vehicle Summary”. The Vehicle Summary screen will be displayed.

3.3 Inflation Station

Inflation Station provides preset tire pressure. Lift inflation hose from cradle and setting screen will pop up. Set target air pressure arrows.



Figure 17: Inflation Station

3.4 Hunter Help Video Player

On main balancer screen, touch **Help** → **Launch Video Player** button. Select balancer topic from video menu.



Figure 18: Video Player

4. Calibration & Maintenance

4.1 Auto Calibration

The balancer utilizes an eCal™ automatic calibration procedure. Once the balancer is calibrated at installation time, no further operator input is required.

4.2 Cleaning the Monitor

To maintain a brand new appearance of the display, clean with soft cloth regularly. Do not touch screen with chemicals/solvents on fingers. Doing so will damage the screen's anti-glare protection. Remove stains with a soft cleaner. Corrosive cleaner may damage the display. ArmorAll wipes are a suitable cleaning product for the touch screen.

4.3 Maintenance Schedule



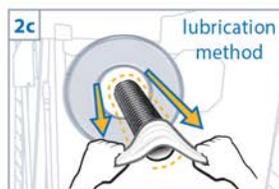
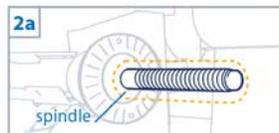
Wheel Balancer - Daily Maintenance

- 1** Clean around and under balancer. Clear all loose weights from floor.



Wheel weights under balancer may cause weight chasing.

- 2** Clean and lube spindle. Apply 3-in-1 oil to a rag. (Keep oil from skin.) Use "Clean Threads" feature to rotate.



On Hunter balancer menu:
Tools
Clean Threads

- 3** Clean hub face by hand with Scotch Brite pad. Do not lube this surface!

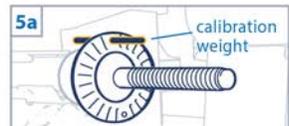


Dry scrub by hand to prevent hub damage. Do not use power tools. Do NOT use "Clean Threads" to clean hub.

- 4** Inspect wing-nut and cup. Gritty bearings, broken knobs and missing handle spacers may cause balance issues.



- 5** Perform 3 Spin Balancer Calibration.



On Hunter balancer menu:
Tools
Advanced
Calibration Procedures
3 Spin Balancer Calibration

4.4 End User License Agreement

Use of balancer and its operating software is acknowledgment of agreement to the terms of the End User Licensing Agreement ("EULA"). The entire EULA can be found by scanning the QR Code below.



Figure 19: Use QR Code to access EULA



Warranty Information

Hunter Engineering Company warrants new equipment to be free from defects in material and workmanship under normal conditions of use for a period of three (3) years from the date of installation. Exceptions to this warranty are listed below.

- Field labor is covered under this warranty for a period of six (6) months.
- ADASLink™ units carry a one (1) year warranty and remain under warranty as long as a subscription is maintained thereafter.
- DAS 3000 units, including electronic circuit boards, carry a one (1) year warranty.
- Printers carry a one (1) year warranty.
- Normal consumables and wear items are not covered. Exception is batteries, which are warranted for a period of six (6) months.
- Product that has been subject to abuse, misuse, alterations, accident, exposure to the elements, tampering, unreasonable use, or not maintained in a reasonable or necessary manner.
- Replacement parts purchased through the Hunter Service Center and no longer covered by machine warranty are warranted for a period of six (6) months.

In case of any warranty claim, it will be necessary to contact your local authorized Hunter Service Representative. To have an item considered for warranty, it must be returned to Hunter Engineering Company for inspection and evaluation. This must be done on a freight prepaid basis. If after our inspection the product proves to be defective, and is within the time frame specified, we will repair or replace the item at no additional cost.

This is Hunter Engineering Company's only warranty with respect to new equipment. Hunter Engineering Company disclaims all other warranties to the extent permitted by law. This express warranty and any implied warranties of merchantability and fitness for a particular purpose shall not extend beyond the warranty period. Hunter Engineering Company is not responsible for any incidental or consequential damages, including, but not limited to, loss of business.

We do not authorize any person to assume for us any other liabilities with our products. Any remaining warranty may be transferred to subsequent purchasers by forwarding the purchaser's name, address, phone number and equipment serial number to:

**Hunter Engineering Company
Customer Service Department
11250 Hunter Drive
Bridgeton, MO 63044
(800) 448-6848**

Hunter Training

Develop the skills and knowledge to excel



Hunter Engineering Company leads the under-vehicle service equipment industry and accepts the responsibility to train tomorrow's technicians.



Based on Hunter's know-how and industry-leading technology, Hunter Training begins with concept theory and discussion (40%) and finishes with hands-on training (60%).

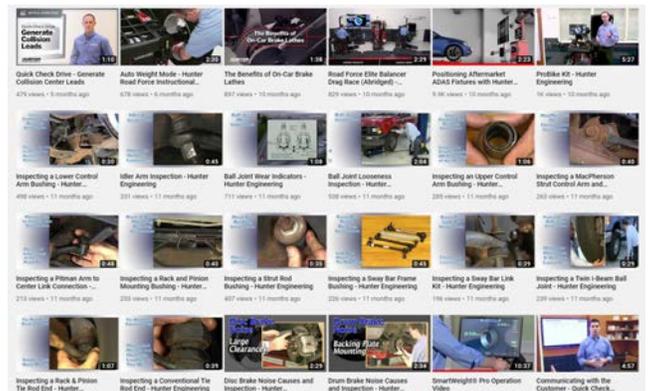


All Hunter Training classes are led by ASE-certified instructors and all training material is kept up-to-date through a rigorous curriculum review process.



Hunter has regional training facilities located across the country, each providing a variety of wheel service classes conducted by a full-time ASE-certified instructor.

Fully-equipped training service bays offer hands-on practice using the latest Hunter equipment. Heavy-duty truck alignment facilities offer alignment training on class 8 trucks and semi-trailers.



Visit hunter.com/training for more information