

SmartWeight® Pro Operations Manual

7641-T 09-21



1. Getting Started

This manual provides operation instructions and information required to operate the SmartWeight® Pro.

Read and become familiar with the contents of this manual prior to operating the equipment. The owner of this equipment is solely responsible for arranging technical training.

The SmartWeight® Pro is to be operated only by qualified trained technicians. Maintaining records of personnel trained is solely the responsibility of the owner and management. This manual assumes the

technician has already been trained in basic balancing procedures.

1.1. Corporate Information

Hunter Engineering Company

11250 Hunter Drive

Bridgeton, MO 63044 USA

Phone: 314-731-3020

web: www.Hunter.com

2. For Your Safety

2.1. Hazard Definitions

Watch for these symbols:



CAUTION

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



WARNING

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



DANGER

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.

2.2. Important Safety Instructions - Electrical

Do not operate equipment with a damaged cord or equipment that has been dropped or damaged until examined by a Hunter Service Representative.

If an extension cord is necessary, it must have a current rating equal to or more than that of the equipment. Cords rated for less may overheat. Arrange the cord so that it will not be tripped over or pulled.

Never use the cord to pull the plug from the outlet

Verify that the electrical supply circuit and the receptacle are properly grounded.

To reduce the risk of electrical shock, do not use on wet surfaces or expose to rain.

Verify the appropriate electrical supply circuit is the same voltage and amperage ratings as marked on the equipment before operating.

**WARNING**

DO NOT ALTER THE ELECTRICAL PLUG. Plugging the electrical plug into an unsuitable supply circuit will damage the equipment and may result in personal injury.

When servicing the SmartWeight® Pro, power must be disconnected by removing the power cord from the electrical outlet.

Ensure that the SmartWeight® Pro power switch is in the off position ("O" position) before plugging the power cord into the electrical power outlet.

2.3. Important Safety Instructions - Operation

To reduce the risk of fire, 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 equipment.

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 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.

ALWAYS WEAR OSHA APPROVED SAFETY GLASSES. Eyeglasses that have only impact resistant lenses are NOT safety glasses.

2.4. Important Safety Instruction - 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 that the wheel is mounted properly and that the wing nut is firmly tightened before spinning the wheel.

The safety hood must be closed before touching the green **"START"** button, to spin the wheel.

Raise safety hood only after wheel has come to a complete stop. If safety hood is raised before the spin is completed, the weight values will not be displayed.

The red **"STOP"** button, can be used for emergency stops.

2.5. Decal Information & Placement - Balancers

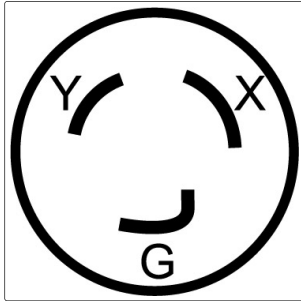
- Decal 128-1244-2 cautions the operator that spindle rotation may occur with foot pedal depression and to keep clear of clamping components during shaft rotation.
- Decal 128-964-2 gives the maximum wheel diameter and maximum wheel weight for the SmartWeight® Pro.
- EN/IEC Class 1 Laser Product Certification is shown on Decal 128-1638-2. This label shows the EN/IEC standards for a Class 1 Laser Product.
- An explanation of FDA compliance standards is shown on Decal 128-1117-2. FDA performance standards compliance is shown on the decal.
- For units with TDC Laser, FDA standards for Class 2M laser compliance are shown on Decal 128-1155-2.
- Decal 128-381-2 warns the operator not to remove the cover of the SmartWeight® Pro because of the risk of the electrical shock and not to use below garage floor level.
- ETL certification standards are outlined on Decal 128-1120-2. Users are cautioned not to use the balancer below garage level.
- A manufacturer's identification is also on the rear of the balancer.

2.6. Balancer Power Source Precaution

The SmartWeight® Pro 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 NEMA 20 amp plug, L6-20P, between the supply conductors of the power cord.

The power cord supplied utilizes a twist lock connector.



NEMA L6-20P Plug



CAUTION

A protective ground connection, through the grounding conductor is the power cord, is essential for safe operation. Use only a power cord that is in good condition.



NOTE

For information on converting from single phase NEMA L6-20P plug to a three phase NEMA L15-20P plug refer to Form 5350-T

2.7. 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.

Wavelength: 650nm.



2.8. HammerHead TDC Laser Precaution (optional equipment)

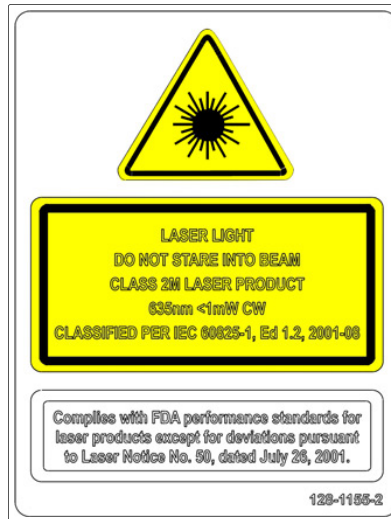
The TDC (Top Dead Center) Laser Indicator is a class 2M laser designed to aid in applying clip-on weights.

The laser is not a field serviceable or adjustable part.

Use caution in regard to reflective materials around the laser and never look into the laser beam.

LASER RADIATION - DO NOT STARE INTO THE BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

Viewing the laser output with magnifiers or related optical instruments within a distance of 100mm from the laser aperture may pose an eye hazard.

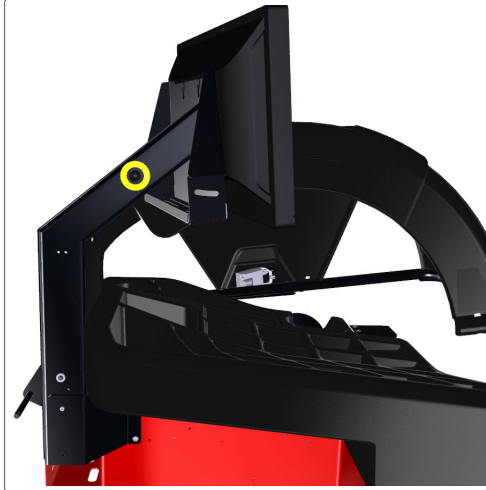


2.9. Turning Power ON / OFF

2.9.1. Push Button Switch

The balancer 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.



CAUTION

Always use the power button on the LCD support turn on/off in order to prevent data loss.

2.9.2. 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.



2.10. Equipment Specification

Table 1. Electrical

Voltage:	208-240V, 3 amp, 50/60 Hz, 1 ph (NEMA 20 amp plug, L6-20P)
Amperage:	
Wattage:	

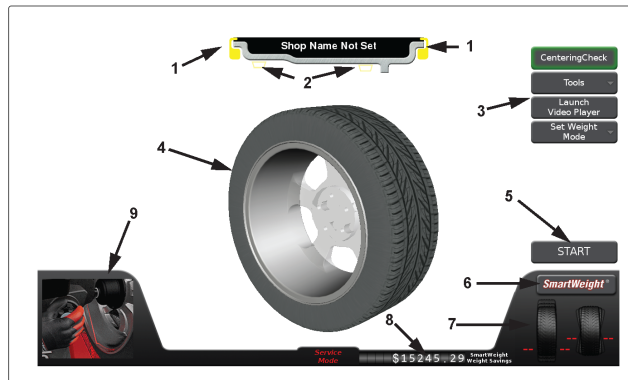
Table 2. Air

Air Pressure Requirements:	100-175 psi (7-12 bar)
Approximate Air Consumption:	4 CFM (110 Liters/Minute)

Table 3. Atmospherics

Temperature:	+32°F to +122°F (0°C to +50°C)
Relative Humidity	Up to 95% Non-condensing
Altitude	Up to 10,000 ft. (3048 m)

3. SmartWeight® Pro Main Screen



1. Clip Weight Plane	6. SmartWeight® Menu Button
2. Tape Weight Plane	7. Imbalance & Couple Force Display
3. Context Sensitive Menu	8. SmartWeight Savings Total
4. Wheel Assembly Display	9. Animated Instruction Display
5. Start / Stop Button	

4. Operation

4.1. Getting Wheel On Balancer



CAUTION

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.



TIP

Allowing the balancer to lower lift will speed up removal.

4.2. Remove 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.

4.3. Centering Check

CenteringCheck® is an inspection or verification of the wheel's mount to balance to identify possible centering errors, thus recognizing improper measurements. From the main balance screen, touch the "**CenteringCheck**" button.

4.4. Print Summary

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

4.5. Hunter Help Video Player

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



5. Maintenance and Calibration

5.1. Auto Calibration

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

5.2. Cleaning the Console

To maintain a brand new appearance of the display, clean with soft cloth regularly.

Please remove stubborn stains with soft cleaner rather than strong cleaners such as diluting agent, benzene or corrosive cleaner as they may damage the display.

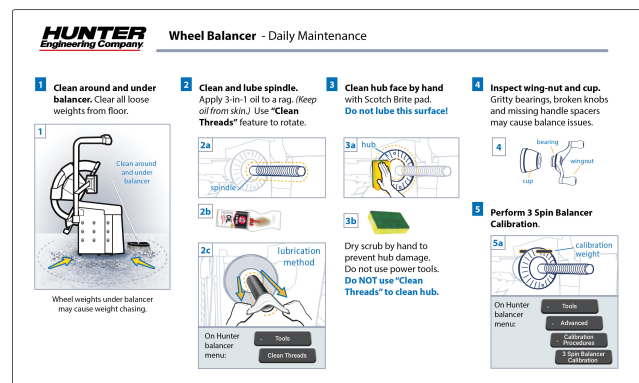
ArmorAll wipes are a suitable cleaning product for the touch screen.



CAUTION

Do not touch the screen with chemicals or solvents on fingers, i.e. brake cleaner. Doing so will damage the anti-glare protector on the screen.

5.3. Maintenance Schedule



5.4. End User License Agreement

Use of equipment 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.



5.5. Parts Warranty Summary

Hunter Engineering Company warrants new equipment to be free from defects in material and

workmanship under normal conditions of use for a period of one (1) year from the date of installation. Exceptions to this warranty are listed below.

- All circuit boards are warranted for a period of three (3) years.
- PC's and options installed inside the PC are warranted for a period of three (3) years.
- LCD's are warranted for a period of three (3) years.
- Power supplies are warranted for a period of three (3) years.
- Transducers are warranted for a period of three (3) years.
- Wheel Balancer motors are warranted for a period of three (3) years.
- Wheel Balancer shafts are warranted for a period of three (3) years.
- Tire Changers are fully warranted for a period of three (3) years with the exception of consumable parts and TCR1 power units.
- All lift and Hunter TCR1 power units are warranted for a period of two (2) years.
- Normal wear items are not covered with the exception of batteries, which are covered for a period of six (6) months.
- Replacement parts purchased through the Hunter Service Center and no longer covered by machine warranty are warranted for a period of six (6) months.

Warranted parts may be replaced with new or refurbished parts at the discretion of Hunter Engineering Company.

This warranty does **not** include normal wear items and does not apply to any product which has been subject to abuse, misuse, alterations, accident, exposure to the elements, tampering, unreasonable use, or failure to provide reasonable and necessary maintenance.

All warranty claims must be made to your local Hunter Service representation. Labor warranties can vary and additional policies and restrictions may apply.

This is Hunter Engineering Companies' only warranty with respect to new equipment

See our document library at www.Hunter.com for additional details.