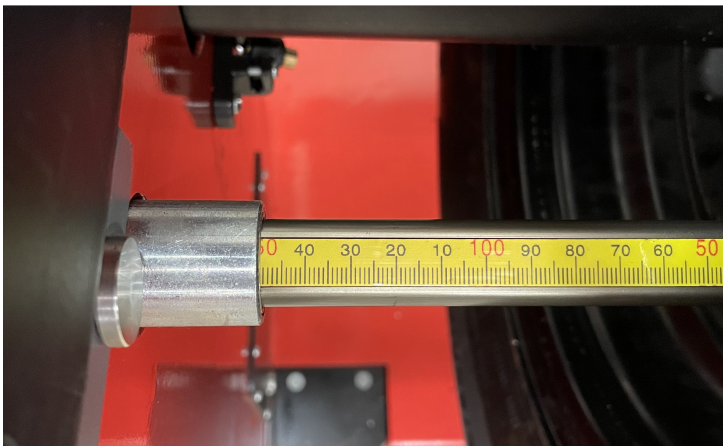# W-987 Calibration

Distance Arm Calibration

- Mount a 15" or 16" steel wheel and tire in good condition, do not use trailer wheels or spares (15" is preferred)
- Remove all wheel weights from the wheel
- Press F twice
- Press DIA +/- to input correct wheel diameter
- Pull distance arm to bead of the wheel, while holding it there press F (see image below)

- Pull arm to read 150mm, while holding it there press F (see image below)

- At the home screen, change DIA +/- and DIS +/- to numbers that are different than the wheels actual parameters

- Pull the distance arm to the bead of the wheel and verify the measurements are correct
- Distance arm calibration is complete

Automotive Calibration
- Follow these steps to calibrate the balancer for automotive wheels. If you plan to balance motorcycle wheels, you MUST calibrate with an automotive wheel first. The motorcycle calibration procedure will be performed after the automotive calibration.
- Press F
- Press DIA+
- Press F twice
- Measure the wheel with the distance arm, manually measure the width of the wheel and input the width dimension with the LAR+/-
- Lower hood to spin
- After the spin, rotate the wheel to the position shown on the display, add the 3.50 oz calibration weight on the outside of the wheel at **EXACTLY 12 o'clock** when all lights show on the display (see images below)
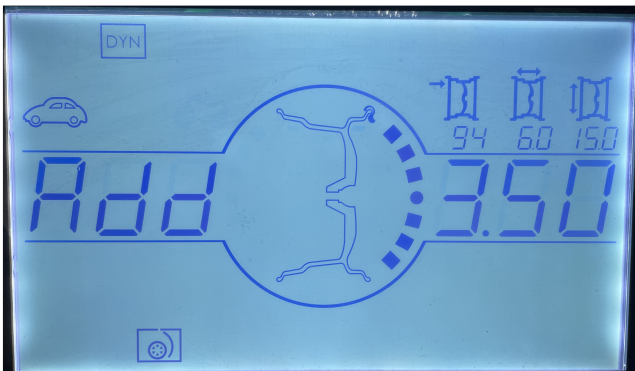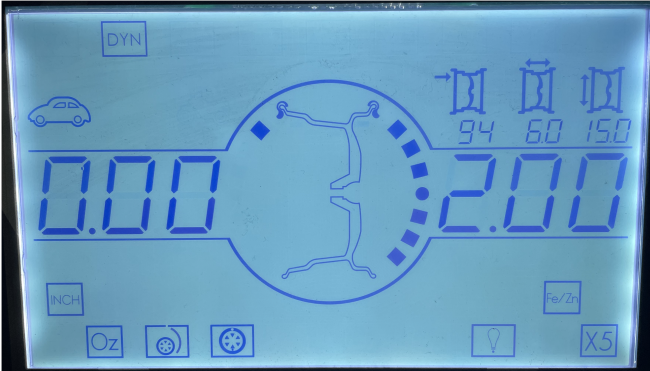

- Lower hood to spin
- After the spin, remove the calibration weight from the outside of the wheel, add the same calibration weight to the inside of the wheel at **EXACTLY 12 o'clock** when all of the lights are shown on the display (see images below)
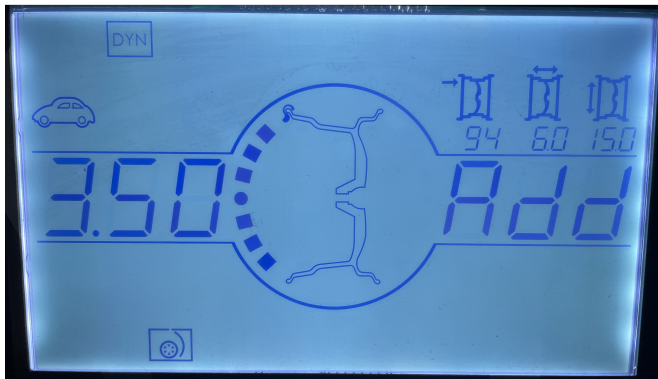
- Lower hood to spin
- After the spin, the machine will save the calibration data automatically
- Remove 3.50 oz calibration weight
- Lower hood to spin
- After the spin, balance the wheel, display will show 0.00 in the inner and outer window when the wheel is balanced
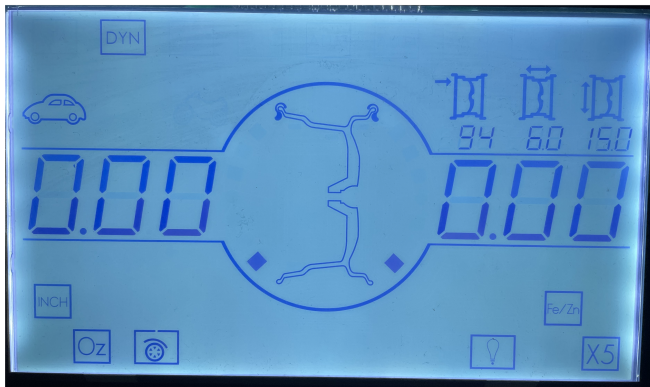
- Add a randomly placed 2.00 oz weight to the outside of the wheel
- Lower hood to spin
- After the spin, rotate the wheel until the lights show on the display, observe the location of the 2.00 oz weight you added, it should be at **EXACTLY 6 o'clock**, weight amount should be within +/- 0.25 oz of the 2.00 oz test weight (see images below)

- Remove the 2.00 oz weight from the outside of the wheel and place it randomly to the inside of the wheel
- Lower hood to spin
- After the spin, rotate the wheel until the lights show on the display, observe the location of the 2.00 oz weight you added, it should be at **EXACTLY 6 o'clock**, weight amount should be within +/- 0.25 oz of the 2.00 oz test weight (see images below)
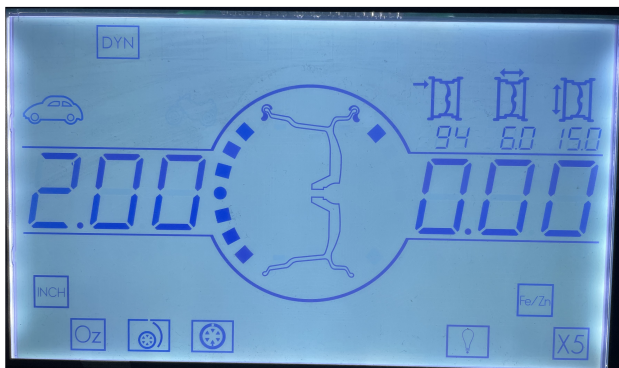

- If your wheel balancer passed these tests, the machine is successfully calibrated and ready to balance automotive wheels. If you intend to balance motorcycle wheels after this, follow the instructions below.

Motorcycle Calibration
- Please make sure you follow the instructions for automotive calibration before starting the motorcycle calibration, the balancer will not be accurate if it has not been previously calibrated with an automotive wheel. When you are switching

from automotive to motorcycle balancing, you MUST go through the motorcycle calibration procedure.

- Remove the automotive shaft and install the motorcycle adapter (we have a video demonstration that can be found on our website and YouTube channel).
- Install the distance gauge extension (see image below)
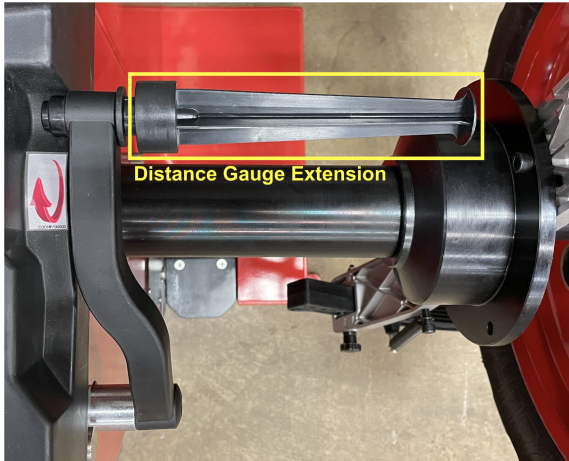
- Mount the motorcycle wheel and tire on the shaft
- Remove all wheel weights from the wheel
- Position one of the wheel clamps to line up directly with the valve stem on the wheel, we will use this as a point of reference (see image below)


- At the homescreen, press the vehicle button until the motorcycle icon shows
- Press the mode button until "STA" is shown on the display (see image below)
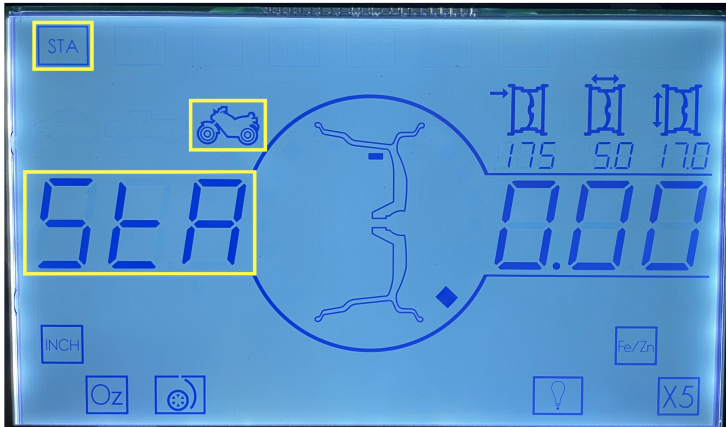
- Measure the wheels distance and diameter with the automatic distance arm (see image below)

- Make sure the wheel measurements are correct on the display
- Measure the width of the wheel with the width caliper and manually input the measurement with the LAR +/- buttons
- Press F
- Press DIA+
- Press F
- Press DIA+
- Display should say "**CAL not**" (see image below)
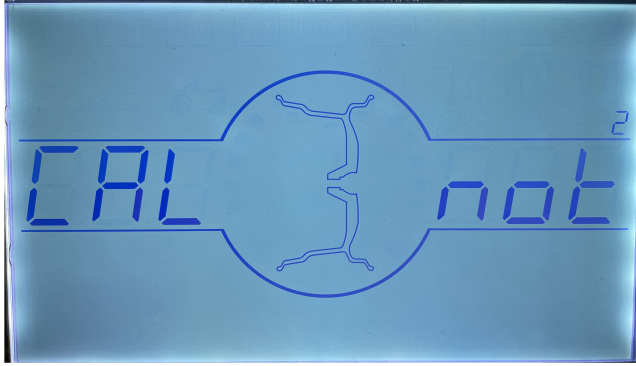
- Press F
- Lower Hood and Press Start
- After the spin, position the valve stem at 6 o'clock
- Disengage the clamps from the wheel and tire
- Without moving the clamps, rotate the wheel 180 degrees.
- Line up the valve stem with the clamp at the 12 o'clock position (this should not be the same clamp that was positioned with the valve stem earlier). It is important to be precise when lining up the valve stem and clamp.
- Clamp the wheel

- Lower hood to spin
- The wheel balancer is now calibrated and ready to balance motorcycle wheels.
- If the motorcycle calibration is performed incorrectly, please repeat the motorcycle calibration again.
- If you will be balancing an automotive wheel after this, you MUST perform the automotive calibration procedure again.