

Tips and Troubleshooting

1. **Verify the wheel balancer has been properly calibrated, all components.**
2. **Verify the wheel balancer is set up for "stick-on" or "tape-on" weights.**
3. **Confirm measurements needed to perform an accurate balance when using a "stick-on" weight (wheel diameter, wheel width, distance from the balancer to the placement of the weight).** Refer to the wheel balancer operation manual for obtaining this information.
4. **Has the wheel been properly mounted to the balancer?** Before mounting the wheel, make sure that the contact surfaces of the basic adapter and rim are free from dirt and grease. Accurate balancing depends on accurate mounting of the wheel and correct seating of the cone in the pilot hole to insure that the wheel is centered on the shaft. Many alloy wheels today are lug-centric wheels and require the use of a flange/pin-plate system. The use of a flange/pin-plate system will ensure accurate and consistent balancing.
5. **Examine the wheels to verify that the XACTBalance product that was applied is still on the wheel.** If not, note the following:
 - **Was the XACTBalance product applied to a location with adequate clearance from the brake caliper?** If not, the brake caliper knocked the XACTBalance weight off the wheel surface. Select a location laterally (inner or outer) away from the brake caliper.
 - **Was the wheel surface adequately prepared before the XACTBalance weight was applied to it?** If the surface was not thoroughly clean and dry, the adhesive will not work properly and any adhesive weight will fall off. See Step 3 on p. 2.

A road test should precede any service to provide additional information. Once service corrections are made, a road test should follow to verify performance. The following questions will help the diagnostic procedure:

- When was the problem first noticed?
- When does the problem occur?
- How is the problem noticed?
- Does the problem appear suddenly or gradually?
- Were any repairs done to the vehicle prior to the problem appearing?
- Has the vehicle been involved in any minor or major accident(s)?

Get specific information. Factors such as temperature, road surfaces, vehicle speed and different loads can play major roles in vehicle handling.

Use the instructions below when either of the following conditions occur: (a) balancing a wheel with an extreme negative offset in dual-plane mode; or (b) the distance is less than 4 inches between the weight on the left plane and the weight on the right plane. NOTE: When the wheel assembly is being balanced in dual-plane mode, follow the instructions below for the right plane before balancing the left plane.

If the amount of weight needed in one location is between 3 - 4.75 oz. (85 - 135 g):

- Attach a **2.5 oz. (70 g.)** XACTBalance weight as indicated by the balancer.
- Spin the wheel assembly again to determine the amount of additional weight needed and location. Attach the second XACTBalance weight gently next to and parallel with the first weight applied.
- Spin the wheel assembly again to confirm it is balanced. If needed, the XACTBalance weight can be repositioned to achieve balance.
- After the balance has been confirmed, press firmly on the XACTBalance weight to attach it permanently.

If the amount of weight needed in one location is 5 oz. / 140 g., or more:

- Attach a **3 oz. (85 g.)** XACTBalance weight as indicated by the balancer.
- Spin the wheel assembly again to determine the amount of additional weight needed and location. Attach the second XACTBalance weight gently next to and parallel with the first weight applied.
- Spin the wheel assembly again to confirm it is balanced. If needed, the XACTBalance weight can be repositioned to achieve balance.
- After the balance has been confirmed, press firmly on the XACTBalance weight to attach it permanently.

Symptom / Possible Causes

Vibration - a repetitive movement back and forth or up or down. Rotating components will vibrate if there is too much imbalance or runout:

- Wheel imbalance
- Excessive wheel or tire runout. On average, the maximum allowable lateral runout of the assembly is .050".
- Drum or rotor imbalance
- Worn "U" joints or "CV" joints
- Wheel cover imbalance
- Worn wheel bearings
- Improper tire inflation
- Worn shocks or damaged shock mountings
- Worn or loose motor mounts
- Drive train misalignment
- Drive shaft imbalance

Shimmy - a side-to-side motion:

- Wheel imbalance
- Loose or worn components
- Excessive wheel or tire runout
- Under inflated tires
- Worn tires
- Loose wheel bearings
- Improperly torqued lug nuts
- Excessive steering gear play
- Extremely high positive caster
- Defective steering dampener
- Tire construction problems



Service Guide

XACTBalance is protected under U.S. Patent #: 6,979,060. Other U.S. and international patents pending. XACTBalance is a product of International Marketing, Inc. (IMI), a privately-owned company that has developed award-winning tire and wheel performance products since 1973.



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Installation Instructions

1 Check caliper clearance before removing wheels.

! CAUTION: To plan for tire rotation, position XACTBalance where it will clear BOTH front and rear brake calipers. If the brake calipers do not allow proper clearance, the XACTBalance weight can be placed in a lateral position on the inner or outer area of the wheel just inside the flange area.



2 Use a properly calibrated wheel balancer to determine the location and amount of weight (if more than 3 oz./ 85 g. is called for in one location, see page 4 for more details).



3 Spray XACTCleaner directly on the wheel surface and use clean paper towels to prepare the weight location.



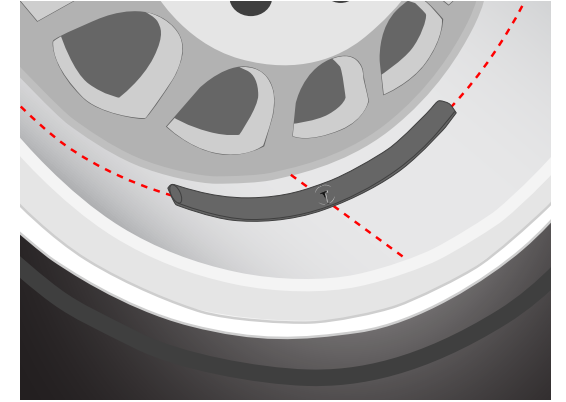
WARNING:

- **Even NEW wheels have residue on the wheel surface that will compromise adhesion of weights -- thoroughly clean new wheels.**
- **Shop rags leave residue on the wheel surface that will compromise the adhesion of weights.**
- **Brake Cleaner leaves residue on the wheel surface that will compromise the adhesion of weights and can damage wheel finishes -- use XACTCleaner.**
- **Avoid contact with the surface that has been cleaned.**

XACTCleaner is specifically engineered to remove contaminants and leave no residue. Apply XACTCleaner directly to the wheel surface. **Use a non-abrasive brush or sponge to scrub heavily soiled surfaces.** Always be sure to dry the surface with a clean paper towel.

4 Use the logo on the weight to position XACTBalance where it is called for by the balancer and **gently place** the weight into position.

BE CAREFUL: Do not let the adhesive touch anything after the protective backing is removed. When **gently placed** on the wheel surface, the weight **can be repositioned if necessary.**



5 Spin again to confirm balance.

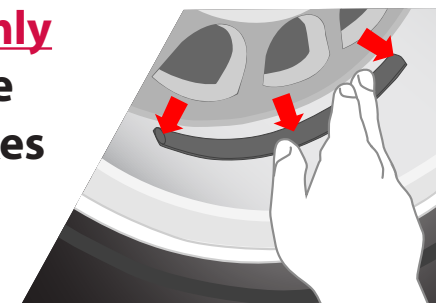
If the balancer calls for additional weight of 0.25 oz. (5 g.) or less, spin again before adding weight -- a second spin ensures the steel particles are fully adjusted to the current position.

If repositioning the weight does not balance the assembly, place additional weight as called for by the balancer. When adding another XACTBalance weight, add the second weight at the exact circumferential position requested by the balancer. The second weight should be attached next to and parallel with the first weight.

(Page 4 contains more information about situations that call for more than 3 oz. / 85 g. in a single location)



6 **Press firmly** into place (this makes the adhesion permanent).



For more information and tips to achieve the best results, please see the "Tips and Troubleshooting" section on page 4.