

MOUNTING AND BALANCING

When getting new tyres for your vehicle, they must be properly mounted and balanced before installation. Mounting is the process of putting the tyre onto the wheel. After the tyre has been mounted onto the wheel, the wheel tyre assembly must be properly balanced. Balancing is the process of counteracting any heavy spots in the wheel tyre assembly, ensuring the mass is evenly distributed. Once the tyres and wheels have been properly mounted and balanced, they can be installed onto the vehicle.

When mounting wheels & tyres on to the vehicle, ensure the following checks are made:

- Wheels are not damaged in any way
- There is no dirt or oily build up between the hub and the wheel
- Lugs are properly torqued
- Both tyre beads are securely mounted
- Any retaining clips on the brake drums are removed

Before tyres even leave the factory, they are put on a balancing machine. Only tyres that meet the factory's requirements for balance are sent out to retail stores. At the point of sale, tyres are mounted and, once again, their balance is put to the test: this time on a spin balancer. The spin balancer is a computer that spins the wheel tyre assembly, senses heavy spots, and gives a location readout so the technician can apply weight to counter the heavy spots.

The most common sign of unbalanced tyres are vibration problems. Vibration problems can affect the speed, handling and mileage of your vehicle. Tyres are manufactured to close tolerances, and, when mounted and balanced properly, you should not have any problems. However, as tyres wear, their mass can become unevenly distributed, negatively affecting the original balance. Every time the tyre is removed and re-mounted onto the rim it is mandatory that it be re-balanced. Also, if you hit anything – like a pothole or curb – it is a good idea to have your tyres rebalanced. This is a simple process for someone with the right tools, and should only take about 10 minutes per wheel+tyre assembly.

The best type of balance is a dynamic balance. (Some rim designs will not allow this type of balance and you would have to settle for a static balance)