



TECHNICAL BULLETIN

Pirelli Tire North America Market Quality

Date: May 15, 2007

Sales Segment:

All Passenger, Light Truck and SUV Tires

Subject:

Plus Size Changeover, Brake and Wheel Clearance

Summary:

Modifications from the Original Equipment fitment using Plus Size Changeover, Brake Upgrades and Wheel Diameter Clearance must be considered to ensure proper vehicle operation.

Plus Size Changeover

When fitting a Plus Size Conversion you must consider the Original Equipment fitment parameters of Load/Speed Index and Overall Wheel Diameter. (The plus concept increases the steering stability by lowering the aspect ratio of the tires and increases the contact patch while maintaining the same overall diameter, load index and speed index.). The following parameters will assist in ensuring proper vehicle operations:

- Overall Diameter: optimum within +/- 1%, acceptable within -3% to +2% of the related Original Equipment fitment.
- Load / Speed Index must be equal to or higher than that of the Original Equipment fitment
- Rim Width and Offset

Brakes:

Original Equipment brake components must operate according to the manufacturer's specification when performance package upgrades of wheels and tires are fitted. Brake upgrades may be required depending on the overall diameter of the Tire/Wheel combination, Tread Compounding, Tread Design, Contact Area and amount of Unsprung weight added to the suspension. Unsprung weight is the weight under the suspension, which moves up and down as the vehicle moves over uneven roads/surfaces and leans in corners. Always refer to the vehicle manufacture specifications when upgrading any brake components.

Clearance:

Interference between the tire/wheel and fixed parts of the vehicle must not exist. Check clearance with respect to the maximum range of suspension system (between empty and fully loaded vehicle), the same for the maximum range of the steering system (maximum left and right turns). Allowances must also be considered for the dynamic action of each individual suspension system.