

“Harshness”

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1 What is “Harshness”?

“Harshness” refers to when an impact noise and vibration are created when a vehicle goes over uneven surfaces, such as joints in paved roads, steps, or protrusions.

In terms of a physical sense, the body would feel the vibration from the seat, floor, or steering wheel from the strong shock (Fig. 1) on the tires from the road surface in the vertical direction or front-back direction being transmitted to the vehicle body through the suspension.

This phenomenon became an issue along with the spreading of radial tires, which have less envelope characteristics ^{Note 1)} compared to bias tires.

Harshness is also related to rigidity of the front-back direction and vertical direction of the suspension. The greater the rigidity is, more severe the harshness becomes.

Note 1) Property in which the tire tread surface wraps around a protrusion to absorb the force from the protrusion when the tire goes over it.

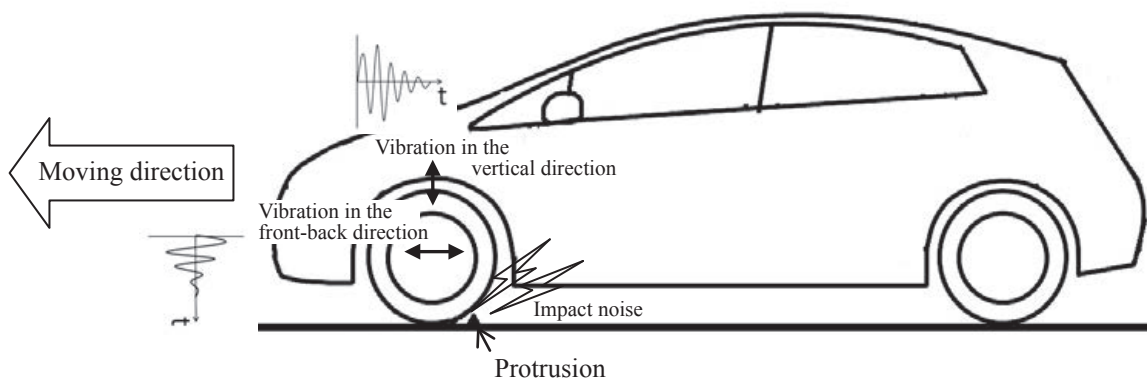


Fig. 1 Impact noise and vibration transmitted to the vehicle body when going over a protrusion