

GLOSSARY (Continued)

CPS

Cycles Per Second (Hz).

Cruise

Steady highway speed; neither accelerating nor decelerating; even pressure on accelerator pedal on level ground.

Deceleration

Slowing of vehicle by releasing foot from accelerator at cruise and allowing engine to slow vehicle without application of brakes.

Drivetrain

Includes all power transmitting components from the rear of the engine to the wheels, including clutch / torque converter and transaxle halfshafts.

Engine Imbalance

Some component in the engine which is normally smoothly balanced now causing a perceptible vibration in the vehicle.

Engine Misfire

One or more cylinders in the engine fails to fire at the proper time.

Engine Runup Test

Operation of engine through normal rpm range while vehicle is sitting still. Used for engine vibration check.

Gravelly Feel

A grinding or growl in a component, similar to the feel experienced while driving on gravel.

Harshness

A harder than usual behavior of a component, like riding a vehicle with overinflated tires usually associated with road impacts.

Hz

Hertz (Cycles Per Second).

Imbalance

Out of balance; more weight on one side of a rotating component causing shake or vibration.

Inboard

Toward the centerline of the vehicle. Refer to Outboard.

Isolate

Separate from the influence of other components.

NVH

Noise, Vibration and Harshness.

Neutralize (Normalize)

To return to unstressed position. Used to describe mounts. Refer to Bound Up.

Outboard

Toward the outside of the vehicle, rather than toward the centerline. Refer to Inboard.

Pumping Feel

A very slow vibration that results in a movement of vehicle components similar to pumping the service brakes slightly.

Radial/Lateral

Radial is in the plane of rotation, while lateral is at 90 degrees to the fore-and-aft plane on the vehicle.

Road Test

Operation of vehicle under conditions designed to recreate the condition.

Runout

Out of round or wobble.

Shake

Low frequency vibration; usually results in visual movement of components.

Tip-In Moan

A light moaning noise is heard when the vehicle is lightly accelerated between 40-64 km/h (25-40 mph).

Tire Force Vibration

Tire vibration caused by variations in the construction of the tire, resulting in a vibration when the tire rotates against the pavement. This condition may be present on perfectly round and perfectly balanced tires because of variations in the inner construction.

Tire Deflection

Bending of the body of the tire during rotation.

T.I.R.

Total indicator runout.

Tires—Flat Spots

Commonly caused by letting vehicle stand when tires are warm. Can be cured by operating vehicle until tires are warm. More likely a concern with Bias Belted Nylon reinforced tires than with radial tires.

Two-Plane Balance

Radial and lateral balance.

Vibration

Regular movement of a component that results in a sound or feel of movement.

Typical vibration frequencies, measured in cycles per second (Hz), are:

1. Engine accessories (up to 200 Hz).
2. Engine (50 Hz); firing (200 Hz).
3. Wheels and tires (13 Hz).
4. Wheel bearings (6 Hz).
5. Tip-in mode (120 Hz).