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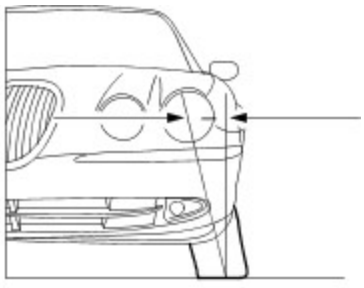
Wheel Alignment Angles

Camber, caster and toe are adjust able on the front suspension system. Only the toe is adjustable on the rear suspension system. Camber and caster are adjusted by means of eccentric cams on the lower arm mounting bolts. The front toe is adjusted by use of the front tie-rod. The rear toe is adjusted by the use of toe link assemblies connecting the knuckles to the rear sub-frame.

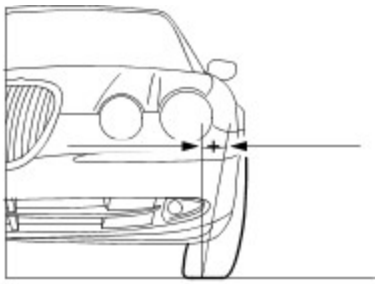
Camber

Negative Camber



VUJ0000415

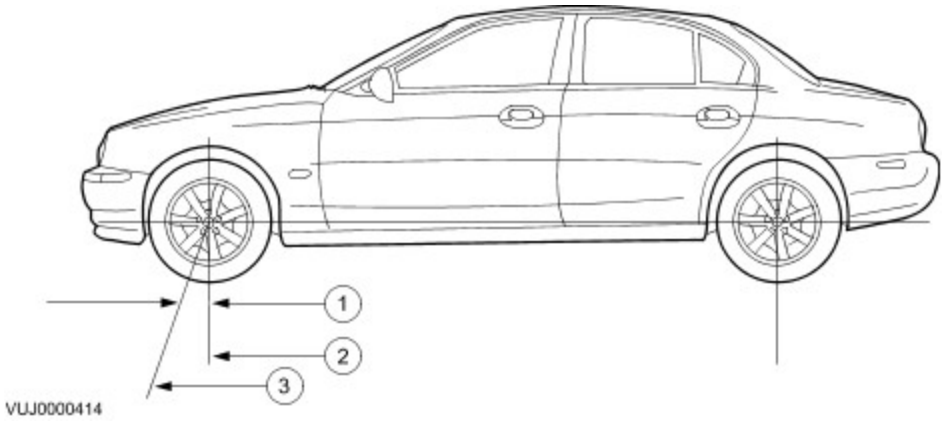
Positive Camber



VUJ0002051

Camber is the v ertical tilt of the wheel when v iewed from the front. Camber can be positiv e or negativ e and has a direct effect on tire wear.

Caster



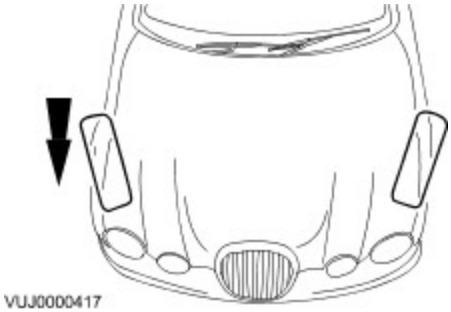
VUJ0000414

Item	Description
1	Positive caster
2	True vertical
3	Steering axis

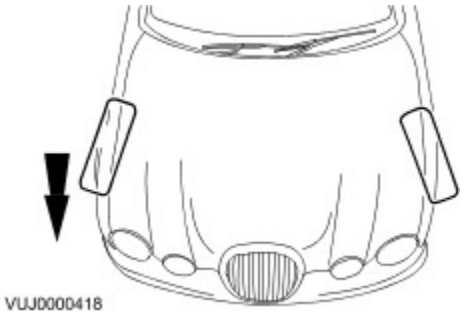
Caster is the deviation from vertical of an imaginary line drawn through the ball joints when viewed from the side. The caster specifications in this section will give the vehicle the best directional stability characteristics when loaded and driven. The caster setting is not related to tire wear.

Toe

Positive Toe (Toe-In)


VUJ0000417

Negative Toe (Toe-Out)


VUJ0000418

The vehicle toe setting:

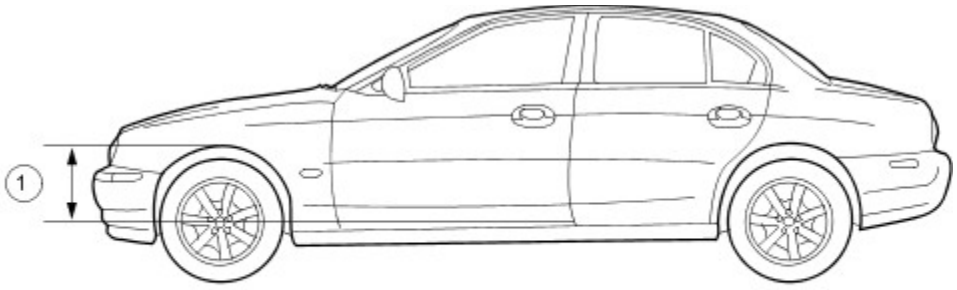
- affects tire wear and directional stability.

Ride Height

NOTE:

All ride height measurements are carried out with vehicle empty and 9 liters of fuel in tank (showroom condition).

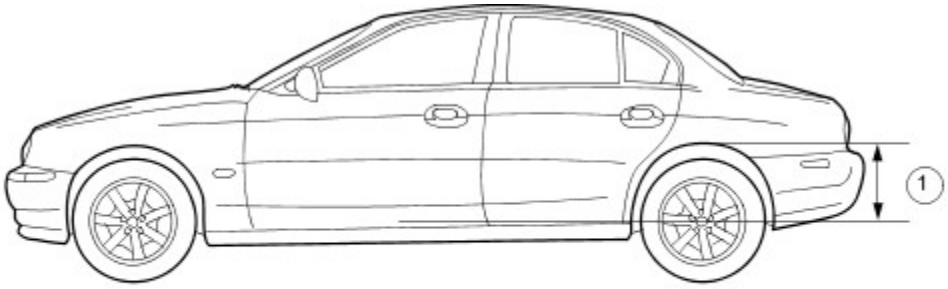
Front Ride Height Measurement



VUJ0001972

Item	Description
1	Ride height

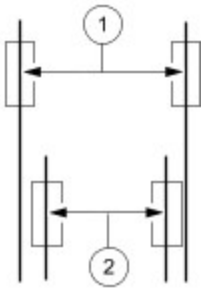
Rear Ride Height Measurement



VUJ0002028

Item	Description
1	Ride height

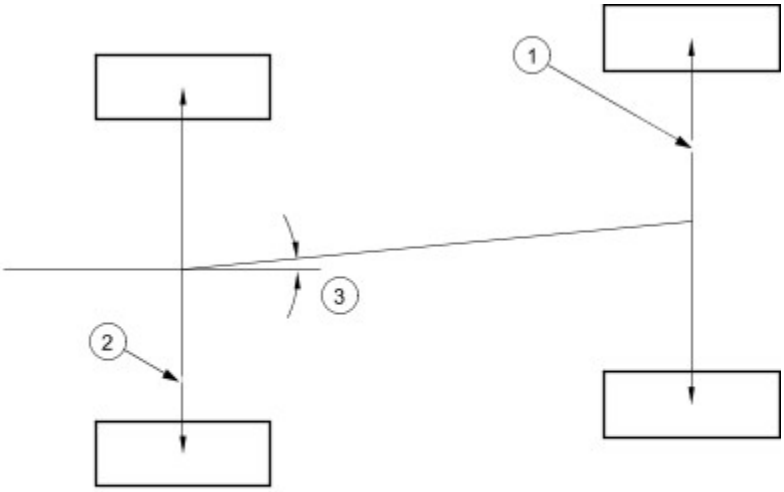
Wheel Track



A0001102

Item	Description
1	Front track
2	Rear track

Crabbing



E31475

Item	Description
1	Front track
2	Rear track
3	Crabbing angle

Crabbing is the condition in which the independent rear suspension (IRS) system is not square to the chassis. Heavily crowned roads can give the illusion of crabbing.

Wander

Wander is the tendency of the vehicle to require frequent, random left and right steering wheel corrections to maintain a straight path down a level road.

Shimmy

Shimmy, as observed by the driver, is rotational oscillations of the steering wheel which may come and go over time, generally resulting from wheel and tire imbalances.

Shimmy can be experienced at any speed but generally between 50 to 90 miles/hour (80 to 145 km/h) and is most often experienced on smooth roads at steady speeds.

Nibble

Sometimes confused with shimmy, nibble is a condition resulting from tire interaction with various road surfaces or brake disc irregularity and observed by the driver as small rotational oscillations of the steering wheel.

Poor Returnability of the Steering

Poor returnability of the steering is used to describe the poor return of the steering wheel to center after a turn or the steering correction is completed.

Drift/Pull

Pull is a tugging sensation, felt by the hands on the steering wheel, that must be overcome to keep the vehicle going straight.

Drift describes what a vehicle with this condition does with hands off the steering wheel.

- A vehicle-related drift/pull, on a flat road, will cause a consistent deviation from the straight-ahead path and require constant steering input in the opposite direction to counteract the effect.
- Drift/pull may be induced by conditions external to the vehicle (i.e., wind, road crown).

Vague On-Center Feel

Vague on-center feel is characterized by little or no buildup of turning effort felt in the steering wheel as the wheel is rocked slowly left and right within very small turns around center or straight-ahead (under 20 degrees of steering wheel turn). Efforts may be said to be "flat on center."

- In the diagnosis of a roadability problem, it is important to understand the difference between wander and vague on-center feel.