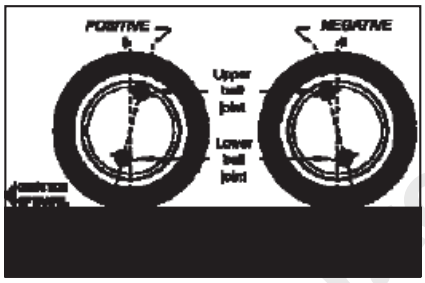
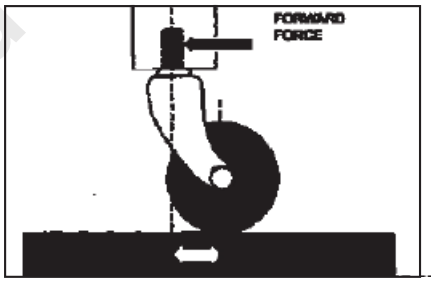
Pictures and diagrams are shown for illustration purpose only. NOT vehicle specific.

Wheel Alignment Geometry

What is Castor?

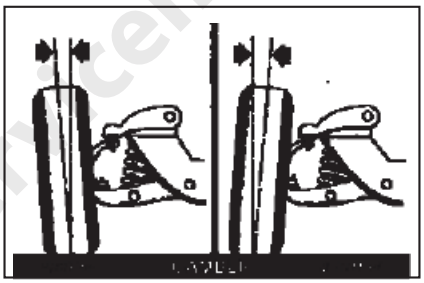


CASTOR is the backward or forward tilt of the steering axis. Positive castor (backward tilt) means that a line drawn from the steering axis intersects the road ahead of the point where the wheel contacts the road so the wheel is pulled instead of pushed.

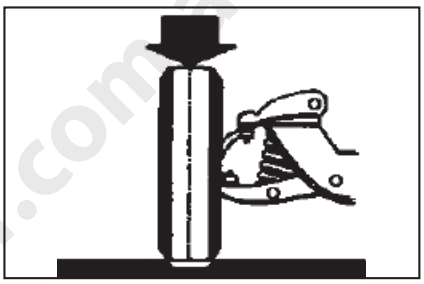


Think of an ordinary furniture castor moving as shown above.As soon as it is pushed in another direction, the wheel returns to the above position. This effect causes the wheels to maintain a straight-ahead position or to return to straight ahead when coming out of a turn.

What is Camber?

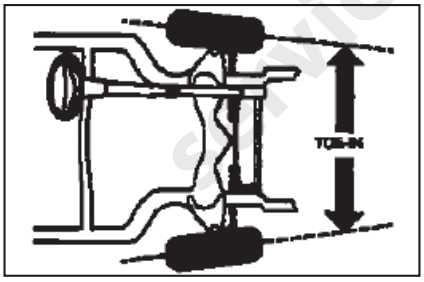


CAMBER is the inclination of the wheel from the vertical. Viewed from the front, if the top of the wheel leans outwards, camber is positive.

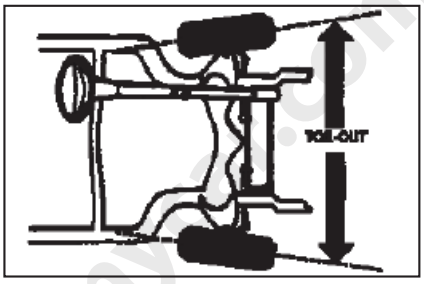


Maximum tyre life is obtained with zero average running camber. If the wheel leans in one direction, the tyre trea on that side carries more weight and wears faster. The manufacturer designs a specified camber into a vehicle take loading and suspension characteristics into accoun

What is Toe?

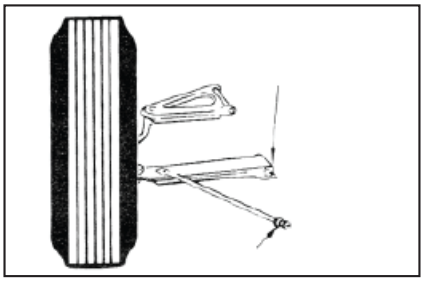


TOE is the difference in distance between the front and rear of the front tyres. Toe-in occurs if the tyres point in when viewed from the front; toe-out, if they point out. Toe-in compensates for the tolerances in the steering linkage which allow the wheels to move out at highway speeds.



Excessive toe creates a feather-edge across both front tyres.
Note: A little too much toe-in causes wear on the outside of the left front tyre and a little too much toe-out causes wear on the inside of the right front tyre.

Short & Long Arm Suspension type



Double Wishbone type