

Wheel Alignment Specifications

Caster		Cross Caster (L - R)	Camber	Cross Camber (L - R)	Total Toe	Steering Wheel Angle
Left	Right					
<p>Important: Caster is relative to frame. The caster values must be compensated for the measured frame angle. Frame angle is positive when higher in the rear and negative when lower in the rear. Refer to Front Caster and Camber Adjustment .</p>						
4.25° ± 1.00°	4.75° ± 1.00°	-0.50° ± 0.75°	+0.25° ± 0.60°	0.00° ± 0.60°	+0.10° ± 0.20°	-1.00° ± 3.50°

Trim Height Specifications

Suspension	Z Height	D Height
Trim Height must be verified and adjusted before aligning the vehicle.		
With RPO ZM6	122 mm (4.8 in) ±6 mm (0.24 in)	132 mm (5.2 in) ±6 mm (0.24 in)
Without RPO ZM6	122 mm (4.8 in) ±6 mm (0.24 in)	140 mm (5.5 in) ±6 mm (0.24 in)

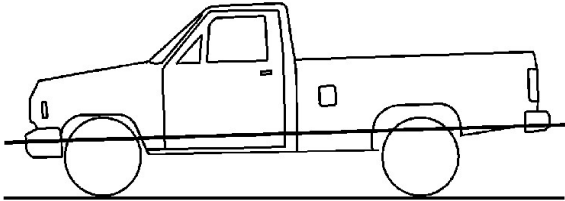
Fastener Tightening Specifications

Application	Specification	
	Metric	English
Tie Rod Jam Nut	68 N·m	50 lb ft
Upper/Lower Control Arm Cam Bolt Nuts	190 N·m	140 lb ft

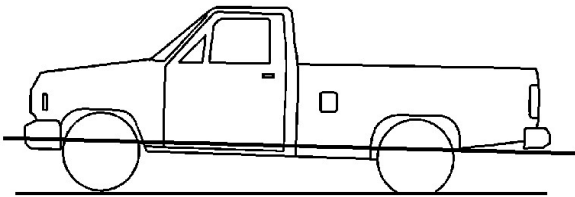
Front Caster and Camber Adjustment

Important: Caster measurements or valves must be compensated for the measured frame angle.

- Caster is relative to frame, the caster values must be compensated for the measured frame angle by using a digital protractor or equivalent on a flat portion of the frame in front of the rear tire.



- Frame angle is positive when higher in the rear. Measure both sides of the frame and take an average from those measurements. Then add the average frame angle to the caster reading when making adjustments.

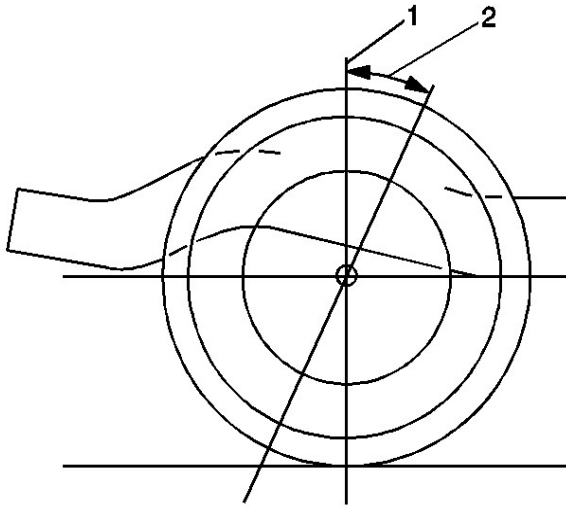


- Frame angle is negative when lower in the rear. Measure both sides of the frame and take an average from the measurements. Then subtract the average frame angle from the caster reading when making adjustments.
- The caster and camber adjustments are made by rotating the offset cam bolt and the cam in the slotted frame bracket in order to reposition the control arm.

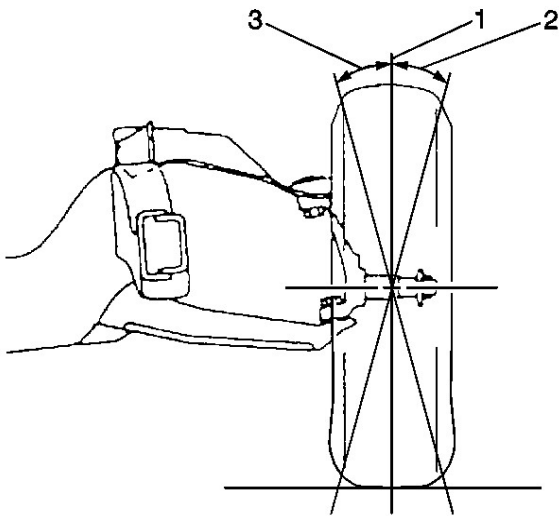
Important: Before adjusting the caster and camber angles, jounce the front bumper three times to allow the vehicle to return to normal height.

Measure and adjust the caster and the camber with the vehicle at curb height. The front suspension Z dimension is indicated in Trim Heights. Refer to [Trim Height Specifications](#) in Suspension General Diagnosis.

- For an accurate reading, do not push or pull on the tires during the alignment process.



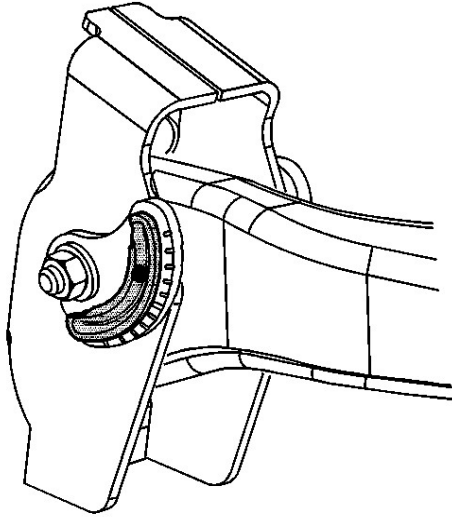
- Determine the caster angle (2). Be sure to compensate for frame angle where required.



- Determine the positive camber (2) or negative camber (3) angle.
- Remove the pinned adjusting cam insert. Do not reinstall the cam insert.

Notice: Refer to [Fastener Notice](#) in the Preface section.

- Loosen the upper control arm cam adjustment bolts.



- Adjust the caster and the camber angle by turning the cam bolts until the specifications have been met.

When the adjustments are complete, hold the cam bolt head in order to ensure the cam bolt position does not change while tightening the nut.

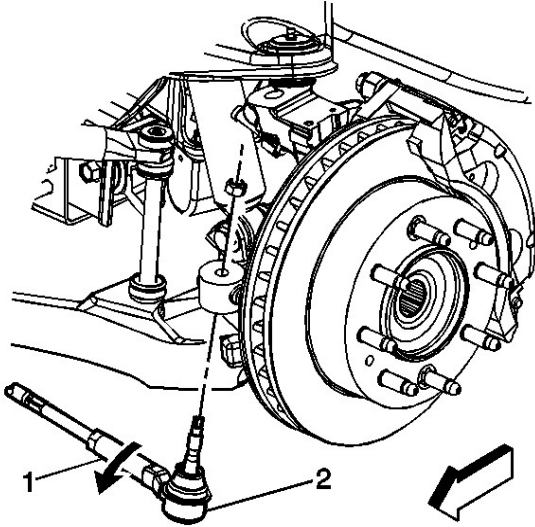
Tighten

Tighten the cam nuts to 190 N·m (140 lb ft).

- Verify that the caster and the camber are still within specifications. Refer to [Wheel Alignment Specifications](#) .

When the caster and camber are within specifications, adjust the toe. Refer to [Front Toe Adjustment](#) .

Wheel Alignment - Steering Wheel Angle and/or Front Toe Adjustment



- Loosen the jam nut on the tie rod (1).
- Rotate the inner tie rod (2) to the required toe specification setting. Refer to [Wheel Alignment Specifications](#) .

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

- Tighten the jam nut on the tie rod.

Tighten

Tighten the tie rod jam to 68 N·m (50 lb ft).

- Check the toe setting after tightening.
- Re-adjust the toe setting if necessary.