

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

1993 Jeep Cherokee

1993 WHEEL ALIGNMENT
Chrysler Corp. Specifications & Procedures

Jeep; Cherokee, Grand Cherokee, Grand Wagoneer, Wrangler

WHEEL ALIGNMENT PROCEDURES

CAMBER MEASUREMENT

Check camber to determine if any components are bent or damaged. Camber angle is NOT adjustable. If angle is not to specification, components causing problem must be replaced. See ALIGNMENT SPECIFICATIONS.

CASTER ADJUSTMENT

Check caster angle. See ALIGNMENT SPECIFICATIONS. If caster is not to specification, adjust by adding or removing shims at rear of lower control arms on all except Wrangler, or between front axle pads and spring brackets on Wrangler. See Fig. 1 or 2.

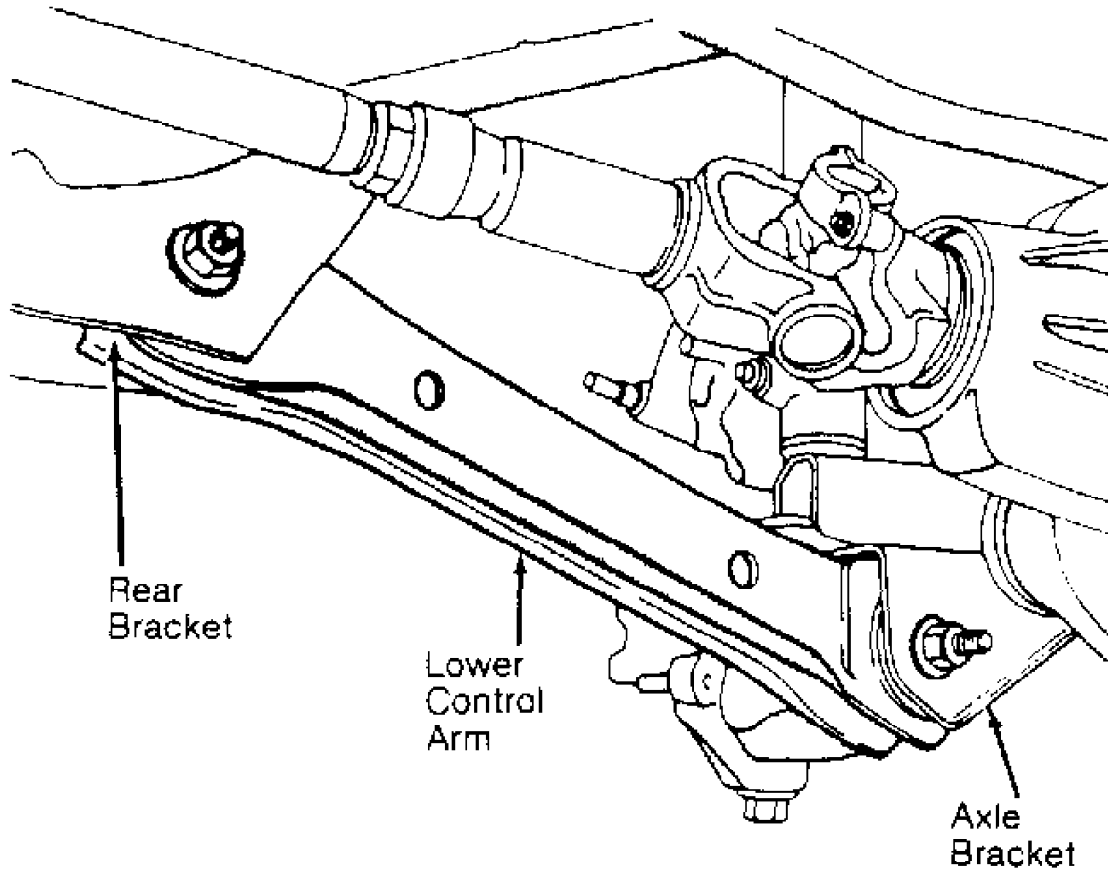


Fig. 1: Identifying Lower Control Arm (Except Wrangler)
Courtesy of Chrysler Corp.

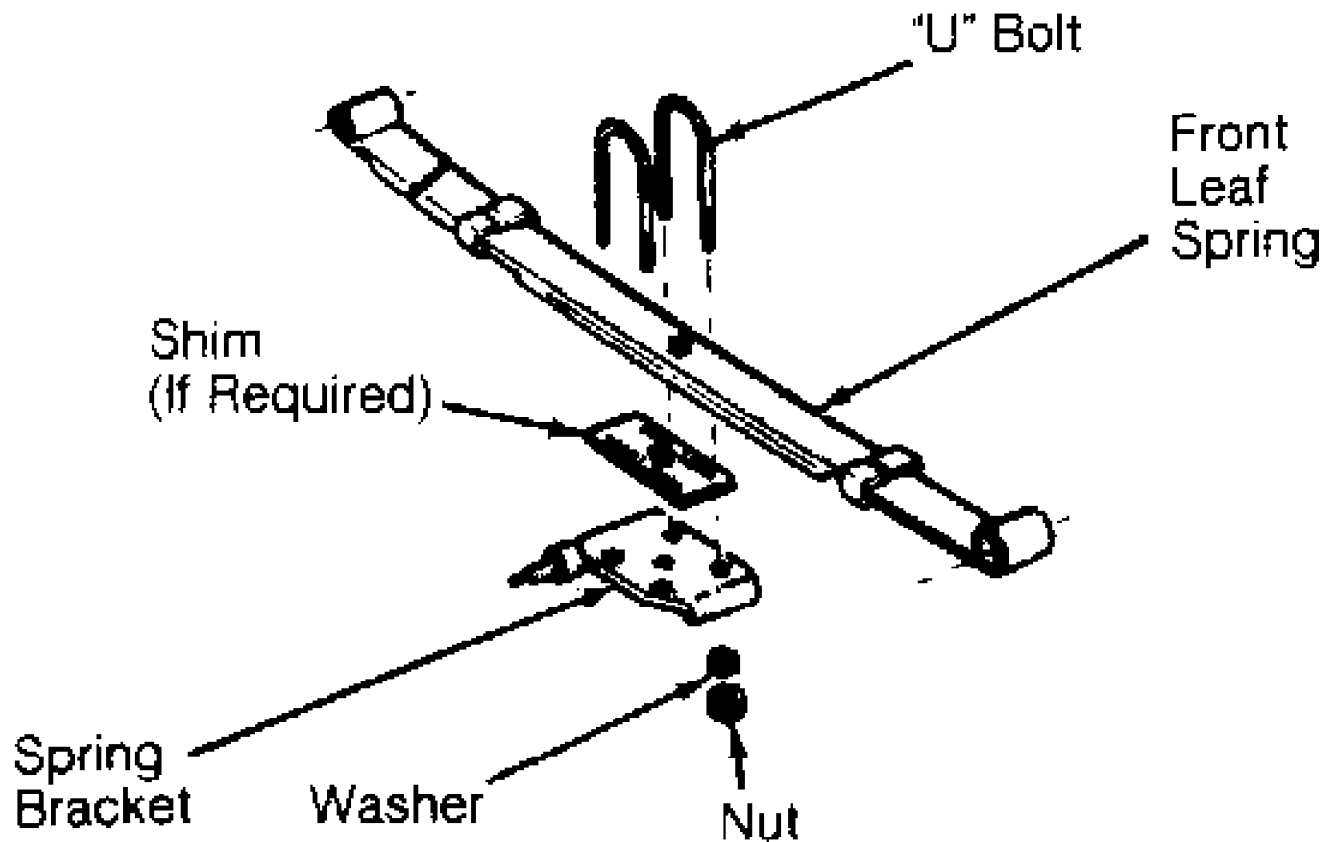


Fig. 2: Identifying Front Leaf Spring Bracket (Wrangler)
 Courtesy of Chrysler Corp.

NOTE: On 4WD vehicles, shim adjustment will change caster angle and front drive shaft angle. If both angles cannot be adjusted to specifications, drive shaft angle has priority and should be adjusted for its specified angle. See appropriate article in DRIVE AXLES.

TOE-IN ADJUSTMENT

Except Wrangler

1) Center front wheels straight ahead. Measure toe and compare to specifications. See ALIGNMENT SPECIFICATIONS.

2) Center steering wheel by counting the turns required to hit left and right steering stops. Center steering wheel mid-way between stops. Loosen drag link adjustment sleeve clamp bolts. See Fig. 3.

3) Rotate sleeve to adjust right wheel toe to specification. Position clamp bolts so threaded bolt ends face upward and to rear of vehicle. Tighten drag link sleeve bolts to specification. See TORQUE SPECIFICATIONS TABLE at the end of this article.

4) Loosen clamp bolts at each end of tie rod. Rotate tie rod to adjust left wheel to toe specification. See ALIGNMENT SPECIFICATIONS. When adjustment is complete, position sleeve as described earlier and tighten to specifications. See TORQUE SPECIFICATIONS TABLE at the end of this article.

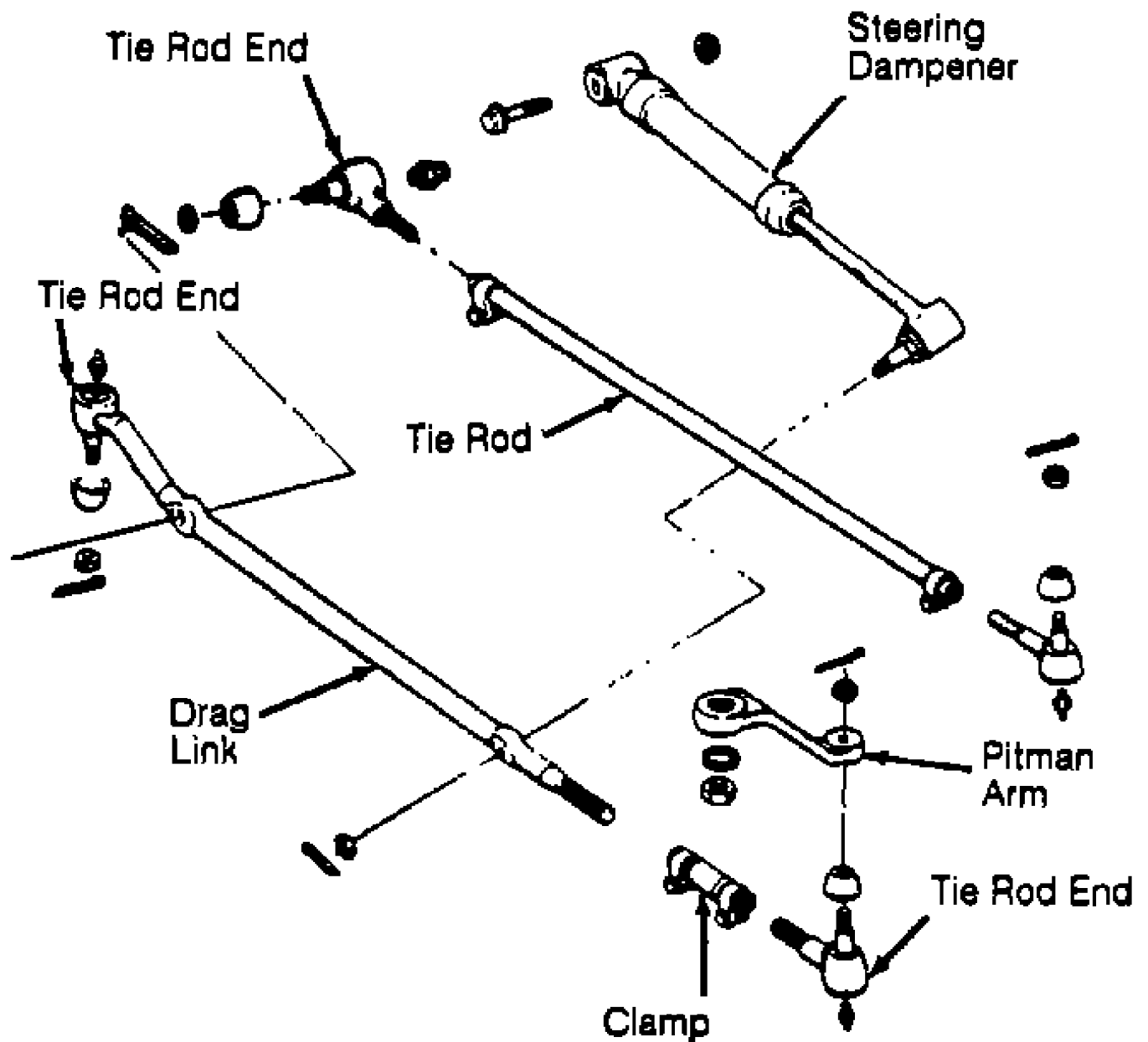


Fig. 3: Exploded View Of Steering Linkage (Except Wrangler)
 Courtesy of Chrysler Corp.

Wrangler

1) Center front wheels straight ahead and lock steering wheel in centered position. Measure toe and compare to specifications. See ALIGNMENT SPECIFICATIONS.

2) Loosen tie rod adjustment sleeve clamp bolts. See Fig. 4. Rotate sleeve to adjust toe to specification. See ALIGNMENT SPECIFICATIONS. After adjustment, position clamp bolts so threaded ends face rearward and are angled upward. Tighten sleeve clamp to specification. See TORQUE SPECIFICATIONS TABLE at the end of this article.

3) If necessary, steering wheel can be centered by adjusting the drag link adjustment sleeve. When adjustment is complete, position sleeve as described earlier and tighten to specifications. See TORQUE SPECIFICATIONS TABLE at the end of this article.

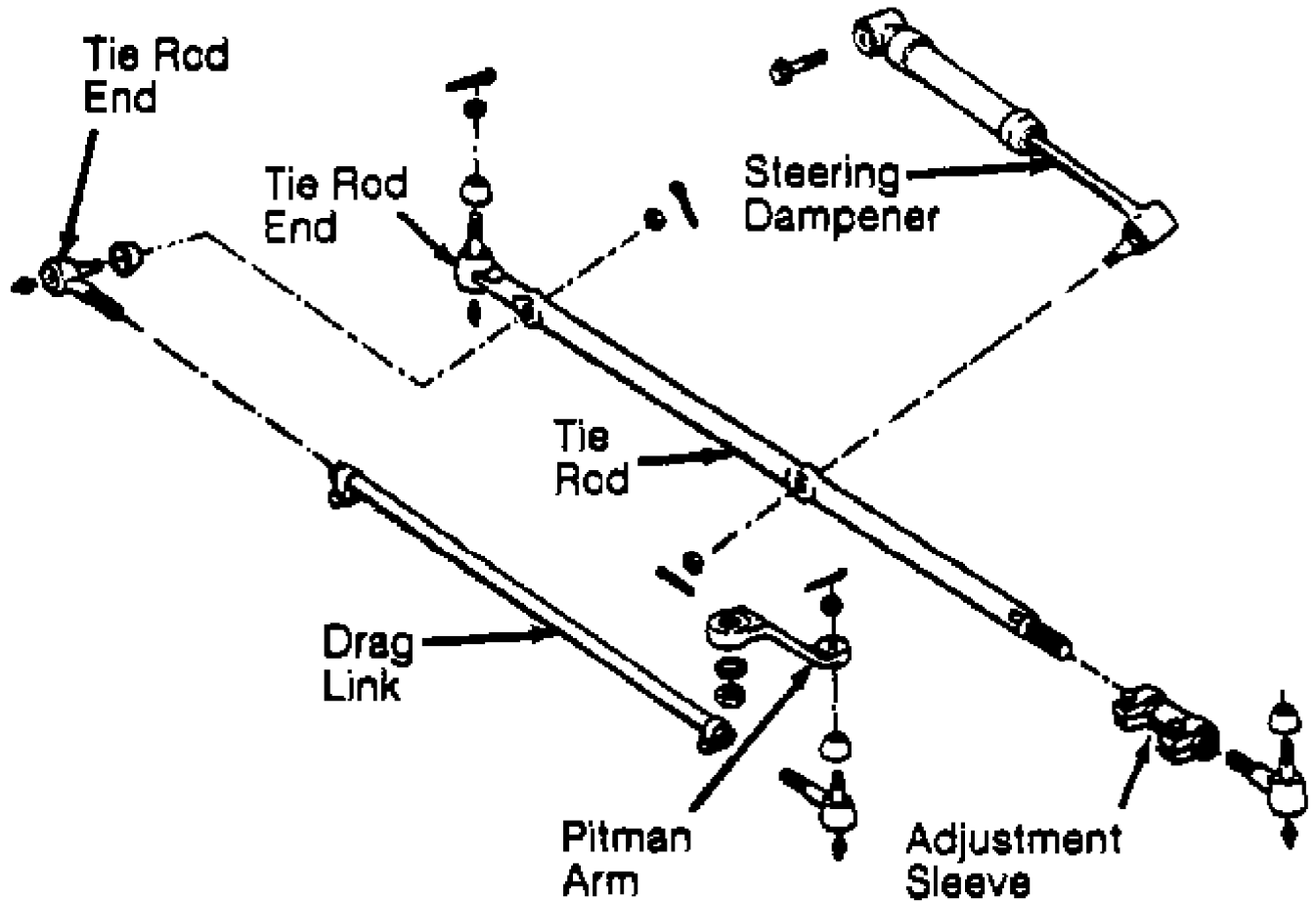


Fig. 4: Exploded View Of Steering Linkage (Wrangler)
 Courtesy of Chrysler Corp.

ALIGNMENT SPECIFICATIONS

WHEEL ALIGNMENT SPECIFICATIONS TABLE

Application	Preferred	Range
Cherokee		
Camber (1)	0	-.75 to .50
Caster (1)	6	5 to 7
Toe-In (1)	0	-.06 to .06
Toe-In (2)	0	-.03 to .03
Toe-Out On Turns (1)	32.5	32.5
Grand Cherokee & Grand Wagoneer		
Camber (1)	-0.25	-.75 to .50
Caster (1)	7	6.5 to 7.5
Toe-In (1)	.25	.25 to .44

Toe-In (2)	.....	.12	.....	.12 to .22
Toe-Out On Turns (1)	.....	33	.....	33
Wrangler				
Camber (1)	.....	0	.....	-0.5 to 0.5
Caster (1)	.....		.....
Manual Transmission	.....	8	.....	6.5 to 9.0
Automatic Transmission	.....	6.5	.....	5.25 to 7.25
Toe-In (1)	.....	0	.....	-.1 to .1
Toe-In (2)	.....	0	.....	-.05 to .05
Toe-Out On Turns (1)	.....	33	.....	33

- (1) - Measurement in degrees.
(2) - Measurement in inches (mm).

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application	Ft. Lbs. (N.m)
Cherokee	
Drag Link Sleeve Clamp Bolts	36 (49)
Lower Control Arm Nuts	133 (180)
Tie Rod Sleeve Clamp Bolts	14 (19)
Wheel Lug Nut	65-90 (88-122)
Grand Cherokee & Grand Wagoneer	
Drag Link Sleeve Clamp Bolts	36 (49)
Lower Control Arm Nuts	130 (176)
Tie Rod Sleeve Clamp Bolts	25 (34)
Wheel Lug Nut	65-90 (88-122)
Wrangler	
Drag Link Sleeve Clamp Bolts	36 (49)
Spring Bracket "U" Bolt Nut	90 (122)
Tie Rod Sleeve Clamp Bolts	14 (19)
Wheel Lug Nut	65-90 (88-122)