GENERAL MOTORS (Cont.)

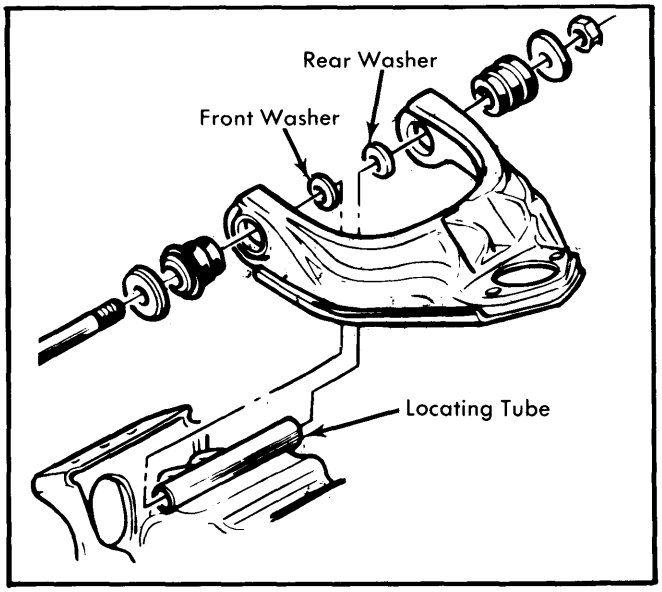


Fig. 28 Chevette Caster Adjustment

REAR WHEEL ALIGNMENT (CORVETTE ONLY)

Camber – 1) Back vehicle onto alignment machine. See *CADILLAC (Eldorado), Fig. 16.* Camber adjustments are made by adjusting eccentric cam and bolt assembly located at inboard mounting of strut rod.

2) To change camber setting, loosen lock nut on cam bolt and rotate cam and bolt assembly until specified camber is obtained.

Toe-In – 1) To adjust rear wheel toe-in angle, add various thicknesses of shims inside the frame side member on both sides of torque control arm pivot bushing.

NOTE – *When vehicle is backed onto alignment machine, toe-in will be read as toe-out and toe-out will be read as toe-in.*

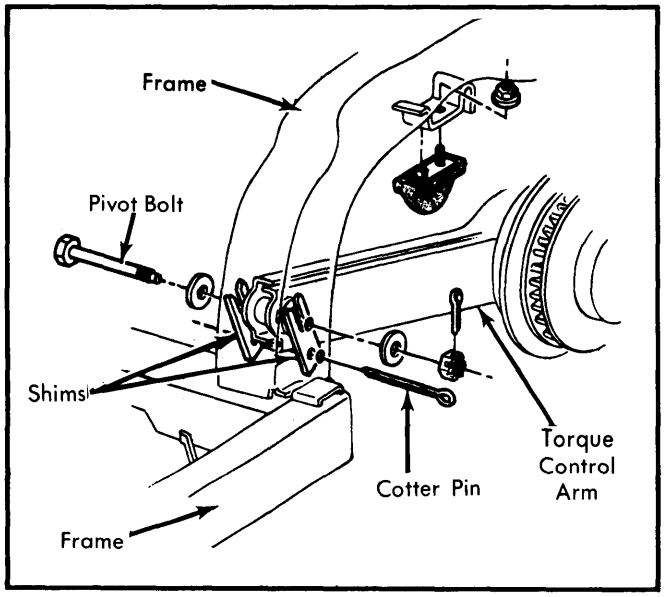


Fig. 29 Rear Suspension Toe-in Shims (Corvette)

2) Shims are slotted to slide over bushing pivot bolt on either side. To adjust, loosen pivot bolt, remove cotter pin retaining shims, and remove shims. Position torque control arm to obtain specified toe-in. Shim the gap toward vehicle centerline between torque control arm bushing and frame side inner wall. See *Fig. 29.*

NOTE – *Do not use thicker shims than necessary. Do not use excessive force when shimming or toe-in setting may change.*

3) Shim outboard gap as necessary to obtain solid stack-up between control arm and inner wall of frame side member. Then install cotter pin (loop outboard) through the shims. See *Fig. 29.* Tighten pivot bolt to 50 ft. lbs.

OLDSMOBILE

TIRE INFLATION (COLD)

Inflate tires to recommended pressures listed on rear of left front door on Omega and Starfire models, and inside glove box door on all other models.

RIDING HEIGHT

All Models (Exc. Toronado) – Check riding height with full gas tank, front seat rearward, tire pressure correct, doors closed and trunk empty. With vehicle on level floor, bounce several times and allow car to settle. Measure heights as shown in *Fig. 30.* Measured heights may differ side-to-side by ±¾".

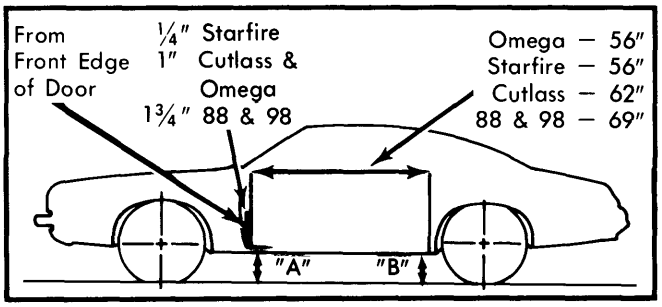


Fig. 30 Riding Height Measuring Points (Oldsmobile Except Toronado)

Toronado – 1) Check riding height with full gas tank, front seat rearward, tire pressure correct, doors closed and trunk empty. With vehicle on level floor, bounce several times and allow car to settle.

2) Measure heights from bottom of rocker molding to floor at points indicated in *Fig. 31.* Measured heights may differ side-to-side by ±¾".

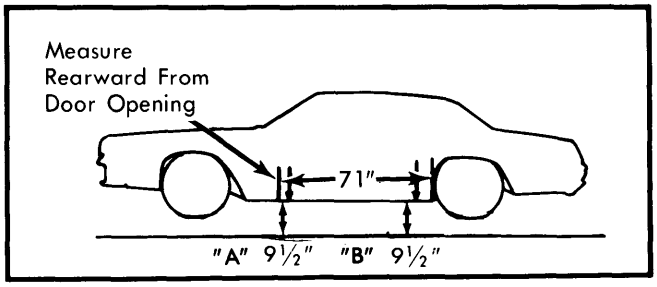


Fig. 31 Riding Height Measuring Points (Oldsmobile Toronado)

GENERAL MOTORS (Cont.)

3) To adjust front riding height, raise car at front crossmember to relieve strain on torsion bar adjusting bolt. Lubricate adjusting bolt before attempting to change riding height. Turn clockwise to increase counterclockwise to decrease front riding height.

Riding Height Specifications

Application	Front "A"	Rear "B"
Starfire	7.75"	7.75"
Omega	9.62"	9.50"
Cutlass (Exc. Wagon)	9.75"	9.75"
Cutlass Wagon	9.62"	9.62"
88 & 98	9.87"	9.87"
Toronado	9.50"	9.50"

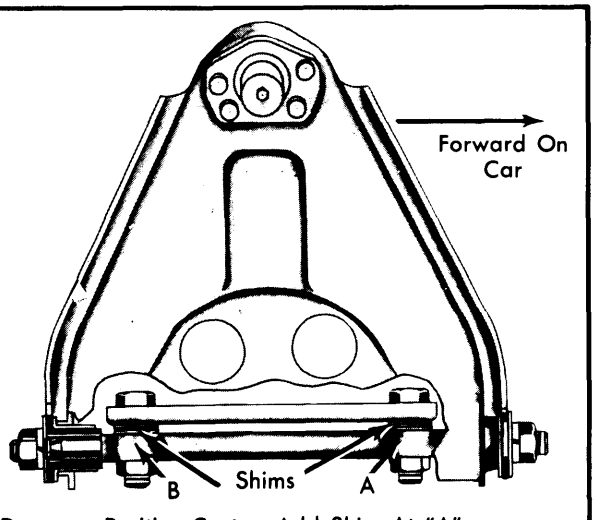
CASTER

All Models (Exc. Starfire and Toronado) – 1) Loosen pivot shaft-to-frame nuts. *See Fig. 32.*

NOTE – *Bolts are splined to frame and should not be turned. Loosen only the nuts. Do not remove weight of vehicle from front wheels.*

2) To decrease positive caster (increase negative caster), add shims at front bolt. To increase positive caster (decrease negative caster), remove shims at front bolts.

Starfire – Always adjust camber before adjusting caster. To adjust caster, loosen rear lower control arm pivot nut and rotate cam until specified caster setting is obtained. Cam action moves lower control arm forward or rearward. Tighten pivot nut and recheck caster setting. *See Fig. 26 in CHEVROLET section for illustration of cams.*



To Decrease Positive Caster: Add Shim At "A"
To Decrease Negative Caster: Remove Shim At "A"
To Increase Camber: Remove Shims At Both "A" And "B"
To Decrease Camber: Add Shims At Both "A" And "B"

Fig. 32 Adjusting Shims for Caster and Camber (All Models, Exc. Starfire and Toronado)

Toronado – 1) Note camber reading before adjusting caster. Hold front cam bolt and loosen nut. Turn cam to obtain a change equal to ¼ of the desired caster change. *See Fig. 33.*

NOTE – *At front cam bolt, a positive camber change produces a positive caster change, and a negative camber change produces a negative caster change.*

2) Hold cam bolt in position while tightening nut to 110 ft. lbs. Then hold rear cam bolt and loosen nut. Turn cam bolt to return CAMBER to its original setting. Hold cam bolt and tighten nut to 110 ft. lbs. Recheck both camber and caster settings.

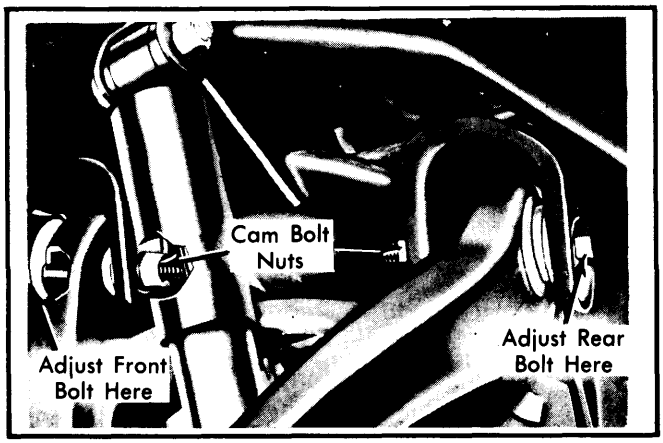


Fig. 33 Caster & Camber Adjusting Cams (Toronado)

CAMBER

All Models (Exc. Starfire and Toronado) – 1) Loosen pivot shaft-to-frame nuts. *See Fig. 32.*

NOTE – *Bolts are splined to frame and should not be turned. Loosen nuts only. Do not remove weight of vehicle from front wheels when adjusting shims.*

2) To increase positive camber, remove shims at both front and rear bolts. To decrease positive camber, add shims at both front and rear bolts.

NOTE – *By adding or subtracting an equal amount of shims from front and rear bolts, camber can be changed without affecting caster adjustment.*

Starfire – Loosen front lower control arm pivot nut and rotate cam until specified camber setting is obtained. Cam action moves lower control arm in and out. Tighten pivot nut and check camber setting. *See Fig. 26 in CHEVROLET section for illustration of cams.*

Toronado – 1) Adjustment is made by rotating eccentric cam assemblies at inner end of upper control arm front and rear legs. Hold 1 cam bolt and loosen nut. Turn cam to obtain change equal to ½ the needed corrections.

2) Hold cam bolt in this position while tightening nut to 110 ft. lbs. to maintain setting. Then, follow the same procedure with the other cam assembly. Caster setting then will not be affected. *See Fig.33.*

REAR WHEEL ALIGNMENT (TORONADO)

See CADILLAC, Rear Wheel Alignment (Eldorado).