GENERAL MOTORS (Cont.)

CHEVROLET

TIRE INFLATION (COLD)

Inflate tires to manufacturers specifications, found on tire inflation placard attached to left front door.

RIDING HEIGHT

With car on smooth level floor, lift car about 1½" at front bumper and allow vehicle to settle on its own. Repeat twice more, then measure the "Z" and "J" height in the settled position after third lift. Repeat procedure and average the readings for true measurement. When measuring "D" and "K" height, follow same procedure except lift and push on rear bumper. Measurements must be within specifications *(see specifications table).*

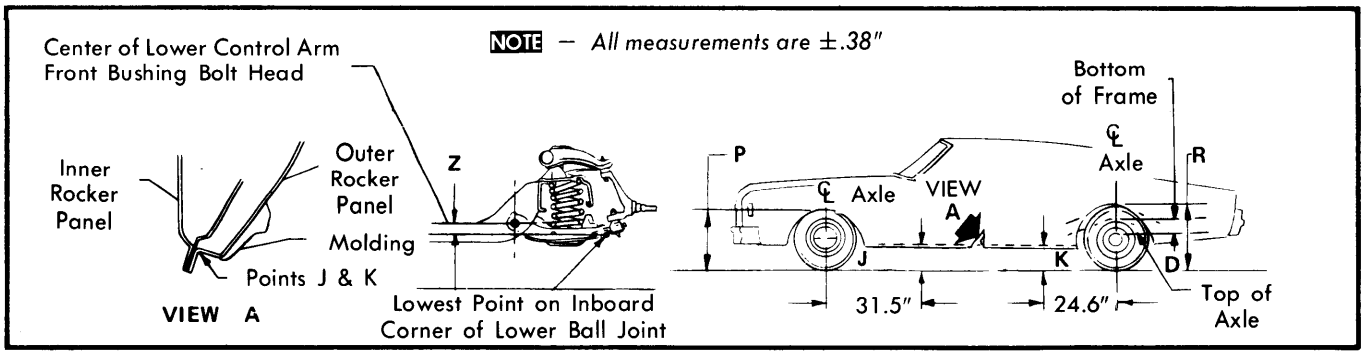

Fig. 18 Riding Height Measuring Points (Caprice & Impala)

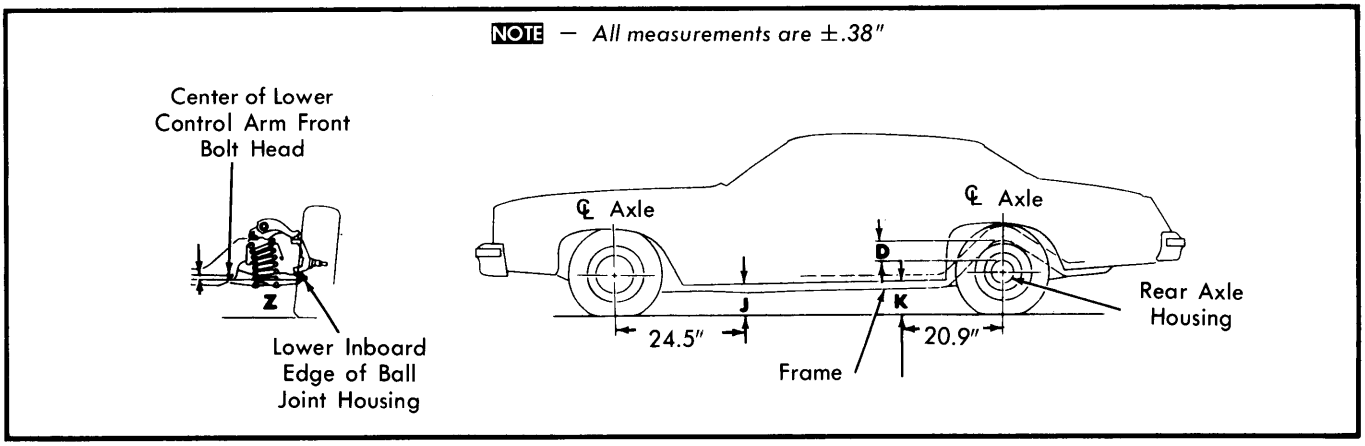

Fig. 19 Riding Height Measuring Points (Monte Carlo, Malibu & El Camino)

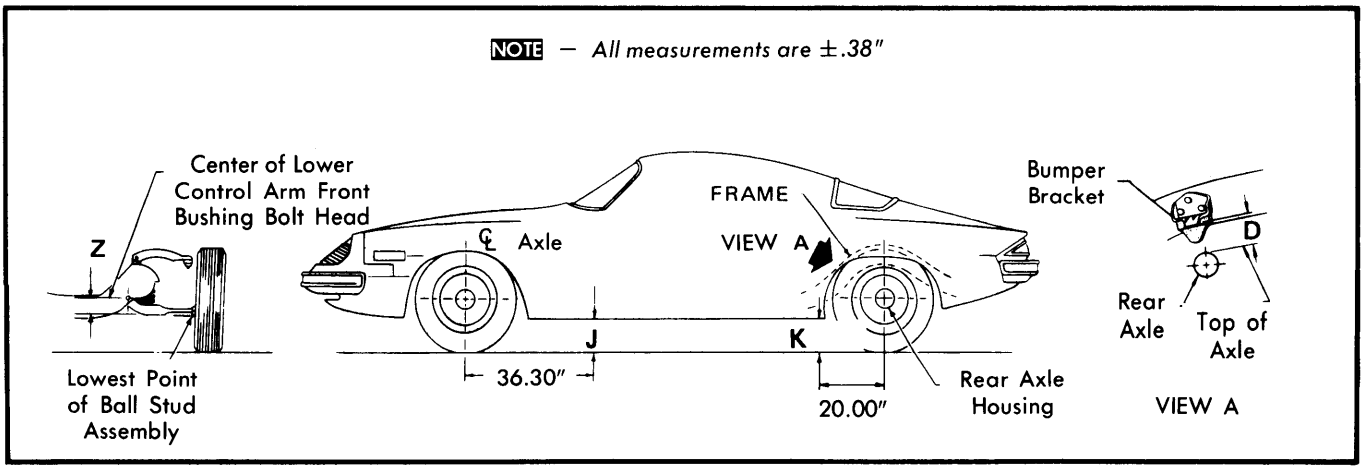

Fig. 20 Riding Height Measuring Points (Camaro)

GENERAL MOTORS (Cont.)

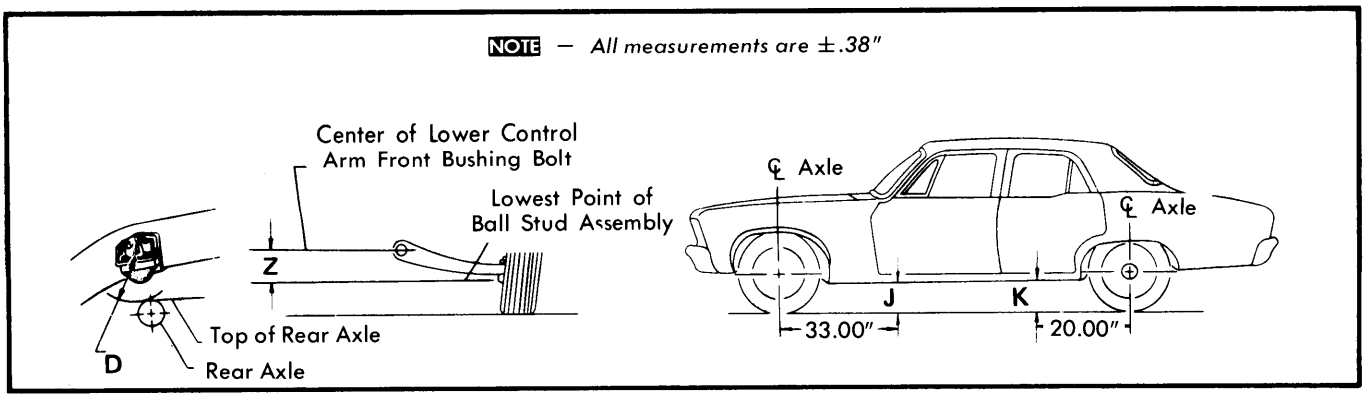

Fig. 21 Riding Height Measuring Points (Nova)

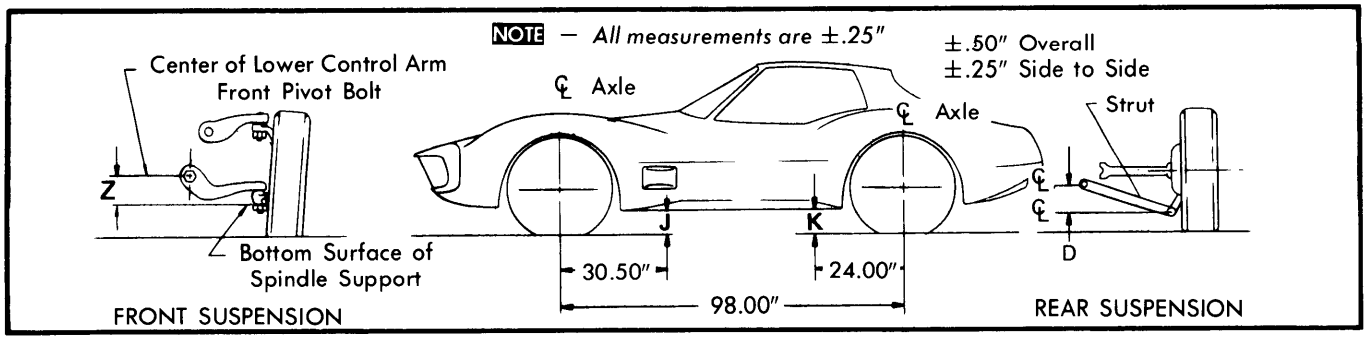

Fig. 22 Riding Height Measuring Points (Corvette)

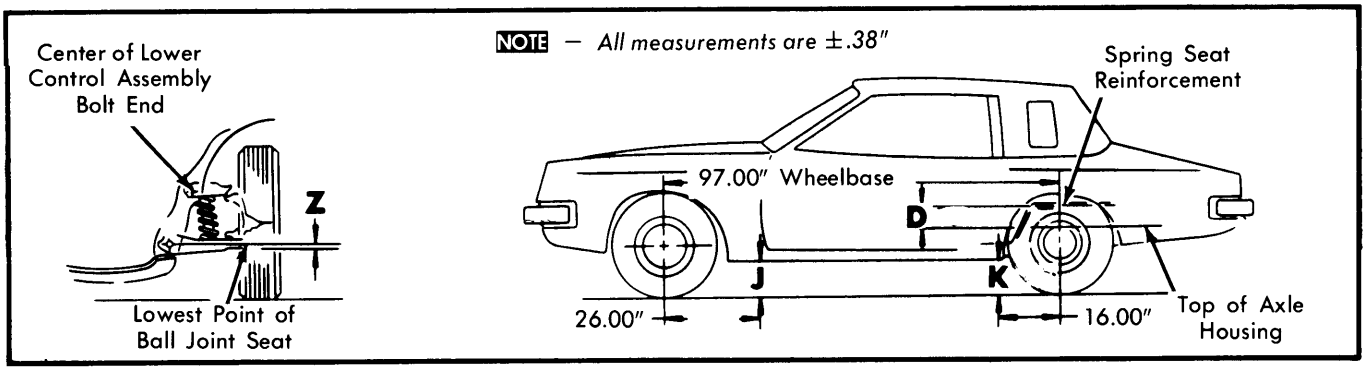

Fig. 23 Riding Height Measuring Points (Monza)

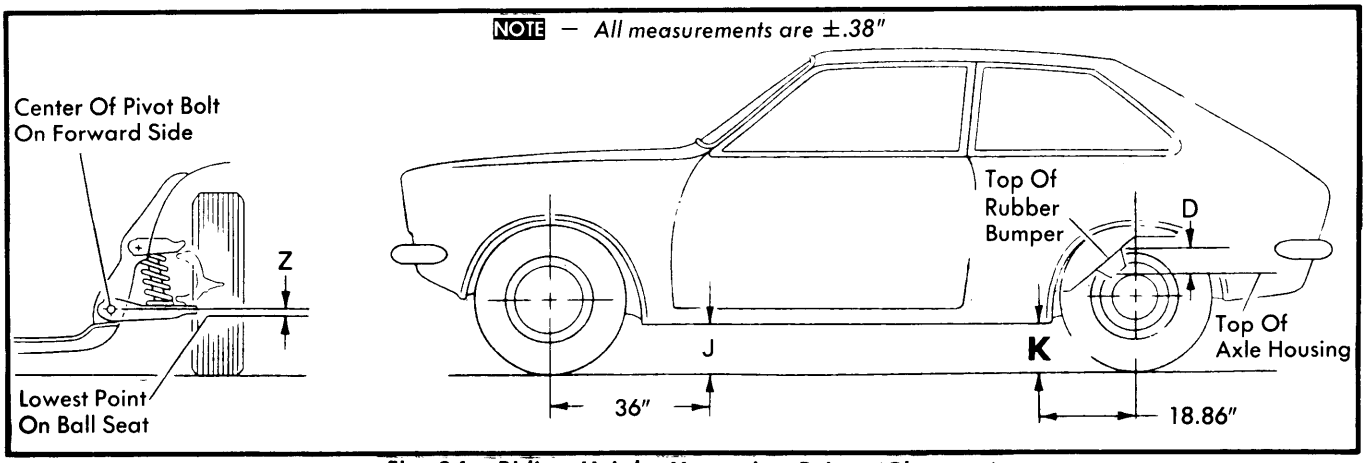

Fig. 24 Riding Height Measuring Points (Chevette)

GENERAL MOTORS (Cont.)

RIDING HEIGHT SPECIFICATIONS

NOTE — *To obtain readings "Z" and "J", raise front bumper about 1 ½" and let loose. Repeat three times. Take measurements. Repeat procedure pushing bumper down 1 ½" three times and releasing. Take measurements. Average the two measurements. Follow a similar procedure to obtain measurements "D" and "K" only lift and lower rear bumper.*

Application	Tires	Z	J	K	D
Caprice & Impala①	FR78-15	2.80"	10.51"	10.63"	6.46"
	GR78-15	2.44"	20.51"	10.63"	6.10"
	GR70-15	2.44"	10.51"	10.63"	6.10"
	HR78-15	2.21"	10.55"	10.66"	5.03"
Malibu					
Sedan & Coupe	P185-75R14	2.60"	9.96"	10.27"	5.67"
	P195-75R14	2.40"	9.96"	10.27"	5.43"
	P205-75R14	2.01"	9.96"	10.27"	5.12"
Wagon	P195-75R14	2.40"	9.96"	10.27"	5.47"
Monte Carlo	P205-75R14	2.36"	9.72"	9.68"	4.80"
El Camino	P205-75R14	2.05"	9.92"	10.31"	5.12"
Camaro	E78-14	1.87"	8.20"	7.85"	4.57"
	FR78-14	2.19"	8.20"	7.85"	4.86"
Camaro Z28	GR70-15	1.42"	8.20"	7.85"	4.08"
Nova	E78-14	1.48"	9.71"	9.69"	5.61"
	FR78-14	1.79"	9.71"	9.69"	5.84"
Monza					
Coupe & Hatchback					
4-Cylinder	A78-13	2.28"	7.75"	7.75"	10.16"
	B78-13	2.13"	7.75"	7.75"	10.03"
	BR78-13	2.42"	7.75"	7.75"	10.03"
	BR70-13	2.24"	7.75"	7.75"	10.12"
V6 & V8	B78-13	2.18"	7.75"	7.75"	10.03"
	BR78-13	2.53"	7.75"	7.75"	10.29"
	BR70-13	2.32"	7.75"	7.75"	10.09"
Wagon					
4-Cylinder	R78-13	2.37"	7.75"	7.75"	10.30"
	BR78-13	2.09"	7.75"	7.75"	10.04"
	BR70-13	2.09"	7.75"	7.75"	10.04"
V6	B78-13	2.13"	7.75"	7.75"	10.04"
	BR78-13	2.43"	7.75"	7.75"	10.13"
	BR70-13	2.19"	7.75"	7.75"	10.09"
Corvette					
Exc.Hvy. Duty Susp.	P225/70R-15	3.00"	8.68"	8.57"	2.33"
Hvy. Duty Susp.	P225/70R-15	3.06"	8.68"	8.57"	2.53"
Chevette	P155/80D-13	2.21"	9.02"	8.86"	5.31"
	P155/80R-13	2.36"	9.02"	8.86"	5.14"

① — Reading "P" should be 29.06" and "R" should be 28.82" for HR78-15 (Wagons) and 29.21" for other models.

GENERAL MOTORS (Cont.)

Fig. 25 Caster & Camber Adjusting Shims (Except Monza & Chevette)

CAMBER (EXCEPT MONZA & CHEVETTE)

Loosen bolts and nuts attaching upper control arm shaft to frame. Adding an equal number of shims at both front and rear bolt will decrease camber while subtracting an equal number of shims will increase camber. Tighten bolts when adjustments are completed. **NOTE** – *Normal shim pack will leave at least two threads of bolt exposed beyond nut. Difference between front and rear shim packs must not exceed .40".*

CASTER (EXCEPT MONZA & CHEVETTE)

Loosen bolts and nuts attaching upper control arm shaft to frame. To decrease caster, add shims to front bolt or remove shims from rear bolt. To increase caster, remove shims from front bolt or add shims to rear bolt. Tighten bolts when adjustments are completed. **NOTE** – *Normal shim pack will leave at least two threads of bolt exposed beyond nut. Difference between front and rear shim packs must not exceed .40".*

CAMBER (MONZA)

To adjust, loosen front lower control arm pivot nut and rotate cam until proper setting is achieved. Hold cam bolt head while tightening nut.

CASTER (MONZA)

To adjust, loosen rear lower control arm pivot nut and rotate cam until proper setting is obtained. Hold cam bolt head while tightening nut. Recheck camber after setting caster.

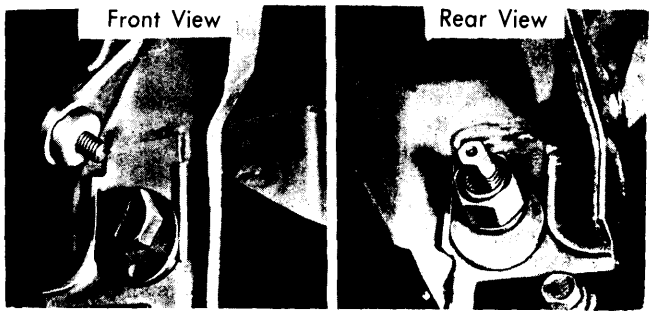

Fig. 26 Caster & Camber Adjustment (Monza)

CAMBER (CHEVETTE)

Remove upper ball joint, rotate joint one half turn and reinstall with flat surface of upper flange facing inboard side of control arm. This will increase camber angle approximately 1°.

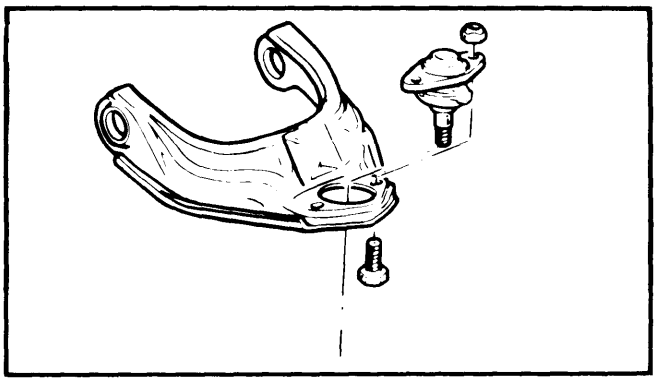

Fig. 27 Chevette Camber Adjustment

CASTER (CHEVETTE)

Adjust caster by realigning washers located between legs of upper control arm. **NOTE** – *Always use two washers with a combined thickness of .427" (12 mm).*

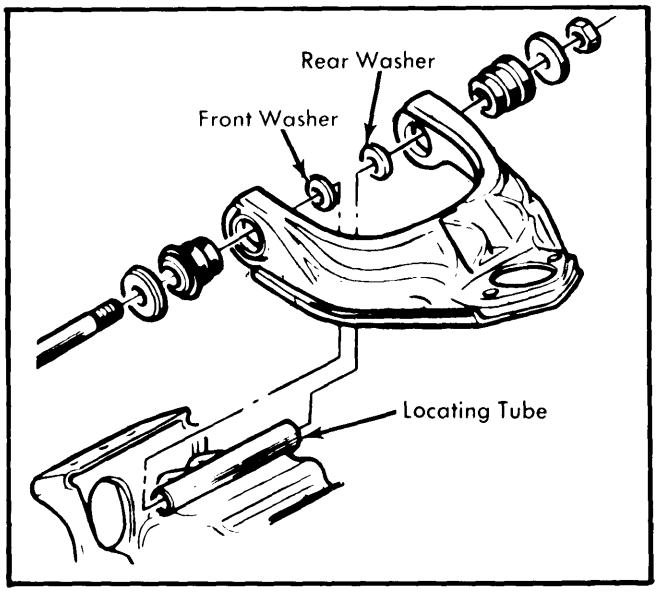

Fig. 28 Chevette Caster Adjustment

GENERAL MOTORS (Cont.)

CAMBER (CORVETTE REAR)

Camber adjustments are made by adjusting eccentric cam and bolt assembly located at inboard mounting of strut rod. To change camber setting, loosen locknut on cam bolt and rotate cam and bolt assembly until specified camber is obtained. Tighten locknut.

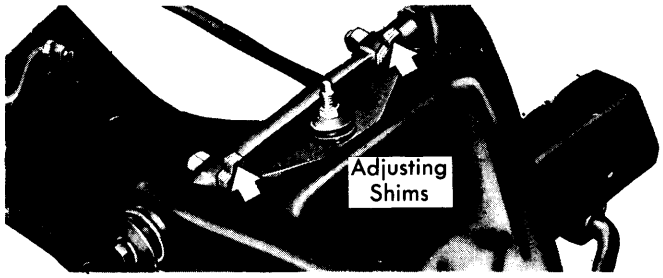

Fig. 29 Front Caster & Camber Adjusting Shims (Corvette)

CORVETTE REAR TOE-IN

1) To adjust rear wheel toe-in angle add various thicknesses of shims ($\frac{1}{64}$", $\frac{1}{32}$", $\frac{1}{8}$", $\frac{1}{4}$") between torque control arm and frame side member at forward pivoting point.

2) Shims are slotted to slide over bushing pivot bolt on either side. To adjust, loosen pivot bolt and position torque control arm to obtain specified toe-in. Shim the gap between torque control arm bushing and frame side inner wall. See *Fig. 30*.

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. Then install cotter pin through shims. See *Fig. 30*. Tighten pivot bolt to 50 ft. lbs.

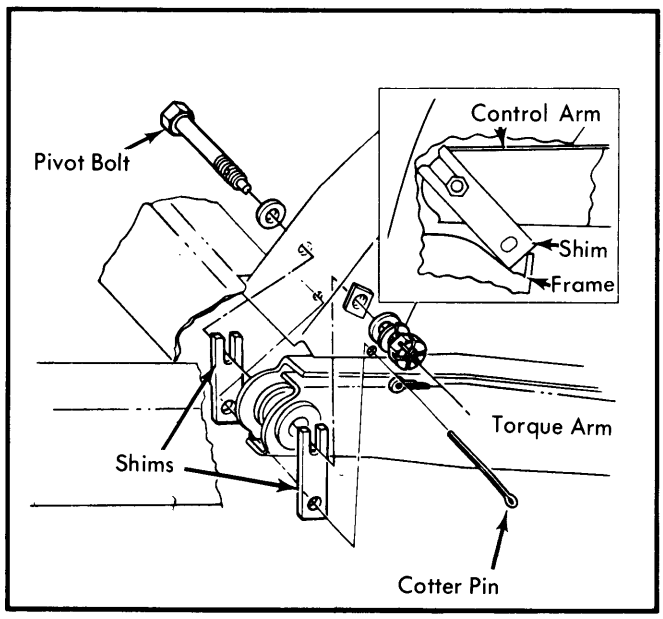

Fig. 30 Rear Suspension Toe-in Shims (Corvette)

OLDSMOBILE (EXCEPT TORONADO)

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

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 illustration. Measured heights may differ side to side ± ¾ " and front to rear ± ¾ ".

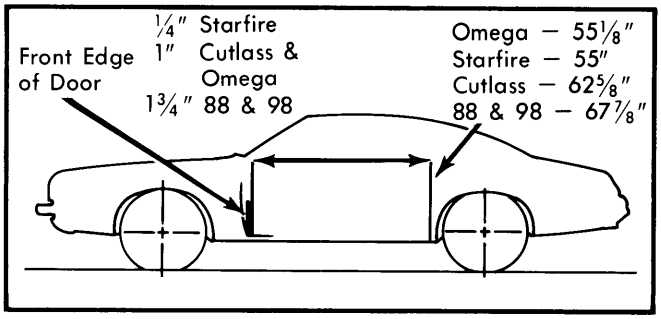

Fig. 31 Riding Height Measuring Points (Oldsmobile Except Toronado)

RIDING HEIGHT SPECIFICATIONS

Application	Front	Rear
Starfire	7.75"	7.75"
Omega	9.62"	9.50"
Cutlass (Exc. Wagon)	10.38"	10.50"
Cutlass Wagon	10.50"	10.62"
88 & 98	10.00"	10.25"

CASTER (EXC. STARFIRE)

Loosen pivot shaft-to-frame nuts. CAUTION – *Bolts are splined to frame and should not be turned.* To decrease positive caster (increase negative caster), add shims at front bolt. To increase positive caster (decrease negative caster), remove shims at front bolt.

CAMBER (EXC. STARFIRE)

Loosen pivot shaft-to-frame nuts. CAUTION – *Bolts are splined to frame and should not be turned.* 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.*