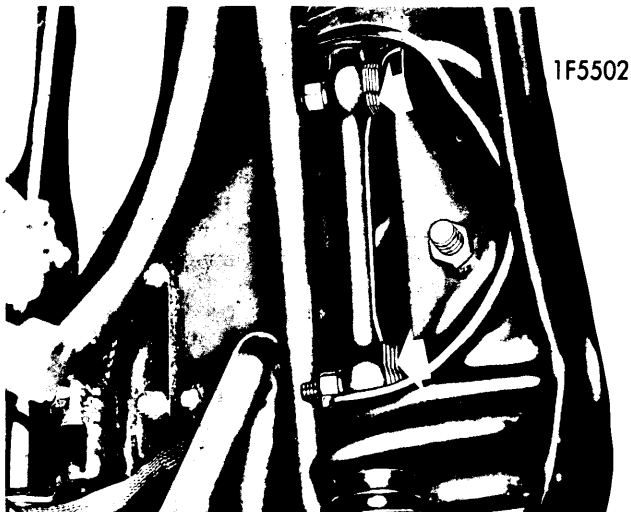


# Wheel Alignment

## GENERAL MOTORS (Cont.)



CASTER & CAMBER ADJUSTMENT SHIMS (TYPICAL)

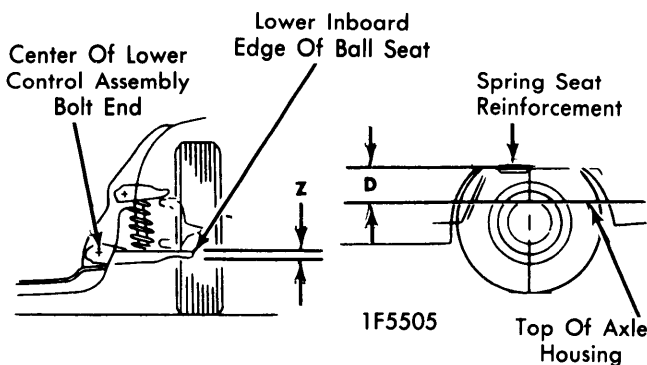
### VEGA

#### TIRE INFLATION (COLD)

Inflate tires to manufacturers specifications, found on rear face of drivers door, before attempting to check or adjust wheel alignment.

#### RIDING HEIGHT

Follow procedure given for Chevrolet while observing following dimensions. Dimension "Z" should be 2.08" ±.38" and "D" should be 10.05" ±.38" (see illustration).



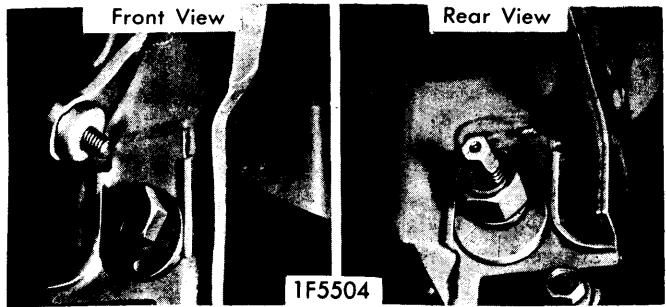
VEGA RIDING HEIGHT MEASUREMENTS

#### CAMBER

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

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.



VEGA CASTER & CAMBER ADJUSTMENT

### CORVETTE

#### TIRE INFLATION (COLD)

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

#### RIDING HEIGHT

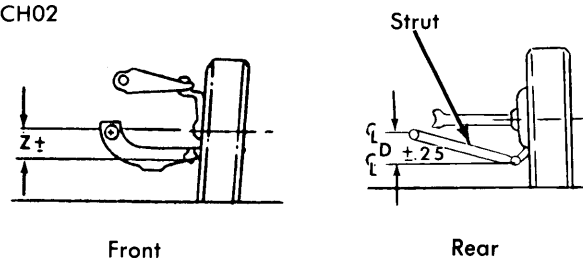
With car on smooth level floor, lift car about 1 1/2" at front bumper and allow vehicle to settle on its own. Repeat twice more, then measure distance "Z" (see illustration). Push car down three times allowing it to settle on its own and measure distance "Z" again. True "Z" measurement is average of two readings.

Repeat procedure at rear bumper and measure "D" as shown in illustration. Measurements must be within specifications ±.38".

Corvette	⓪ "Z" (In.)	⓪ "D" (In.)
Standard Suspension	2.85	2.24
Gymkana Suspension	2.54	2.15

⓪ - Side to side variation maximum of 1/2". All specifications are ±3/4".

4CH02



RIDING HEIGHT MEASUREMENT (CORVETTE)

#### CASTER (FRONT)

To adjust caster, loosen front and rear bolts of upper control arm support shaft and add or remove shims from either bolt as required. Adding shims at front bolt or removing shims at rear bolt will decrease caster. A 1/32" shim will change caster 1/2°.

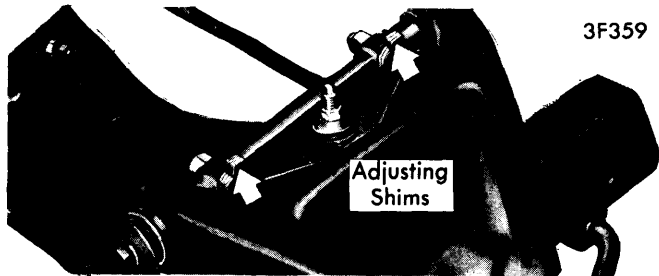
#### CAMBER (FRONT)

To adjust camber, add or remove shims in equal amounts at both front and rear bolts of upper control arm support shaft. A 1/32" shim will vary camber 1/6°. After adjustments are completed tighten upper control arm support shaft bolts.

## GENERAL MOTORS (Cont.)

### CAMBER (REAR)

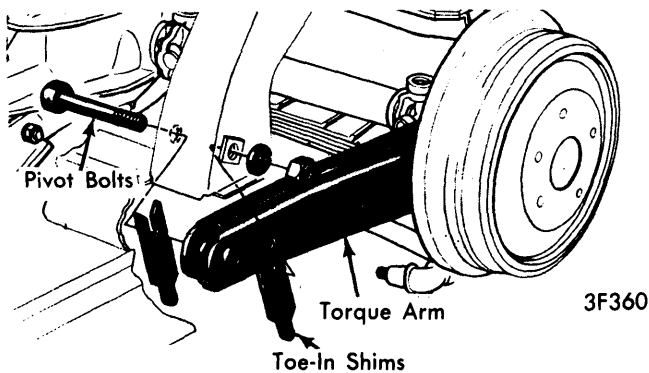
Camber adjustments are made by adjusting eccentric cam and bolt assembly located at inboard mounting of strut rod. To change camber setting, loosen locknut on cam bolt and rotate cam and bolt assembly until specified camber is obtained. Tighten locknut.



**CORVETTE CASTER & CAMBER ADJUSTING SHIMS (FRONT)**

### TOE-IN (REAR)

Rear wheel toe-in angle is adjusted through use of variable thickness shims inserted between torque arm and frame side member web at forward pivoting joint. Shims are slotted to slide over bushing pivot bolt on either side. To adjust, loosen pivot bolt, shim outboard gap as necessary to obtain solid stack-up between outer end of torque arm bushing and inner wall of frame side member, and when adding shims to inner side of control arm do not use thicker shim than necessary or force insertion of shim as this may cause toe-in setting to change. After shims are securely installed, tighten pivot bolt.



**CORVETTE REAR SUSPENSION TOE-IN SHIMS**

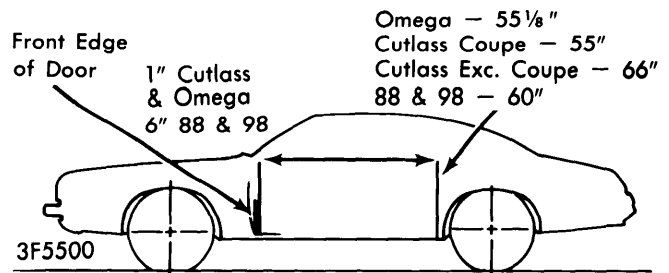
### OLDSMOBILE (EXCEPT TORONADO)

#### TIRE INFLATION (COLD)

Inflate tires to recommended pressures listed on rear of left front door on Omega and Cutlass models, and inside glove box door on 88 and 98 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  $\pm 3/8$ " or front to rear  $\pm 1/2$ ".



**OLDSMOBILE RIDING HEIGHT**

#### Riding Height Specifications

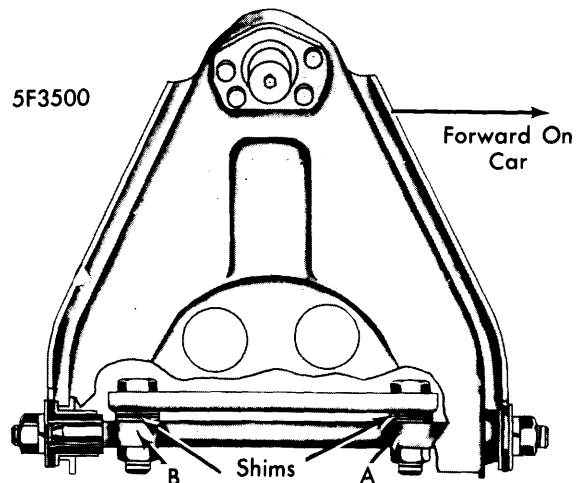
Application	Front	Rear
Omega	9 3/4"	9 3/4"
Cutlass (Exc. Wagon)	10 1/4"	10 1/4"
Cutlass Wagon	10 5/8"	10 5/8"
88 (Exc. Wagon)	9 1/2"	9 1/2"
88 Wagon	10 1/8"	10 1/4"
98	9 3/4"	9 3/4"

### CASTER

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. **NOTE** — Difference between front and rear shim packs must not exceed .340" on Omega or .400" on Cutlass, 88 & 98. With weight of car on wheels tighten nuts to 80 ft. lbs. (Omega) or 100 ft. lbs. (All Others).

### CAMBER

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. With weight of car on wheels, tightening nuts to 80 ft. lbs. (Omega) or 100 ft. lbs. (All Others).



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

**OLDSMOBILE CASTER & CAMBER ADJUSTING SHIMS**