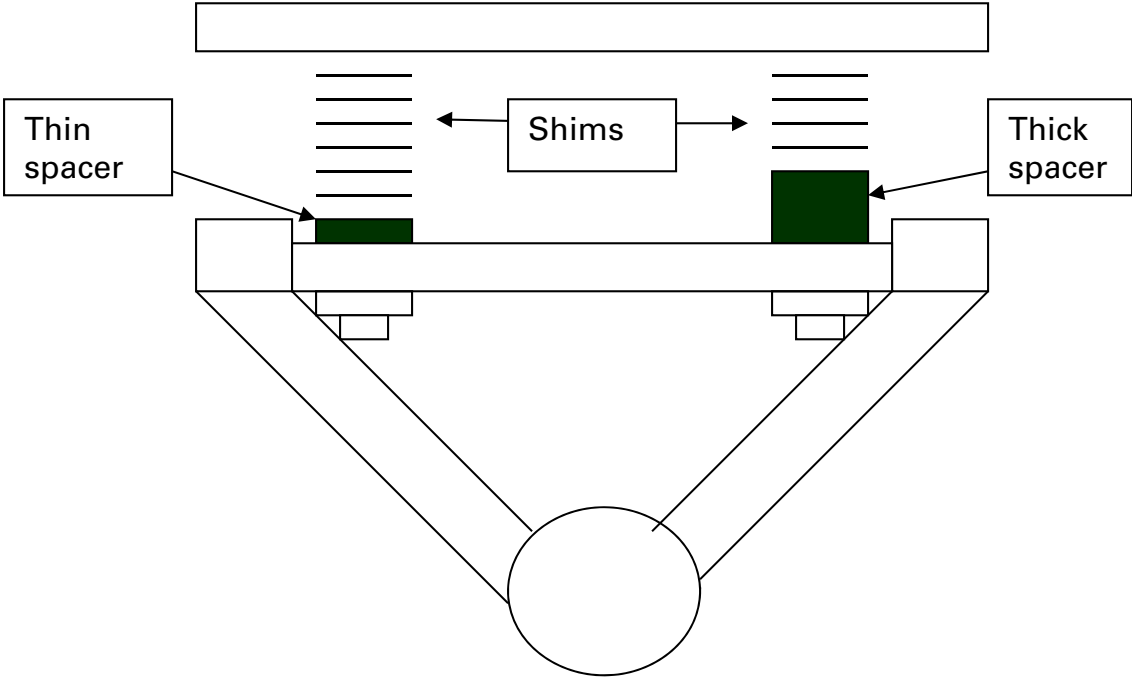


1984-1985 Alignment Modifications for Maximum Positive Caster

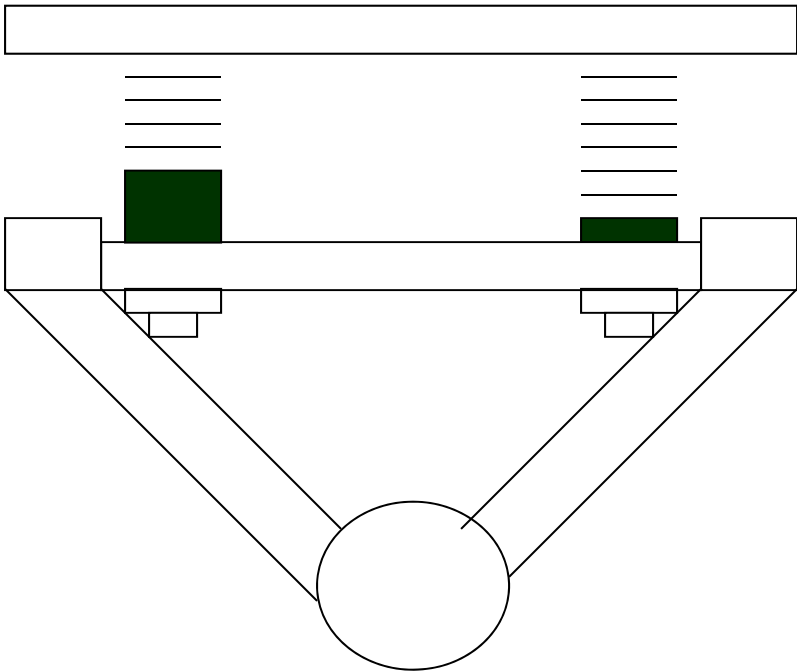
← Front of car

BEFORE



← Front of car

AFTER



## **OBJECTIVE: Reposition the Spacers to provide maximum positive caster**

The wheel/tire assembly does not require removal; in fact, it is best if your 84-85 Corvette is supported with minimal weight on the front tires. Jack the front of the Corvette up so that the wheels remain on the ground, there must be enough weight to keep the control arms from pulling downward once the retaining nuts are removed. This will allow removal of the spacers without disassembling the entire front end.

Remove one of the upper control arm retaining nuts. It works best if you pull the bolt rearward to remove the spacer then push it back in place after the spacer is out and install the nut loosely.

Once one spacer is out, swap the spacers as shown in the diagram above one at a time to prevent the control arm from losing its position. Keep the shims in the same position as they were until an alignment is performed. The thick spacer at the front of the upper control arm increases positive caster. This is what GM did from 1986 on with the upper control arm spacers during factory assembly. They swapped the spacers adding the additional positive caster from the factory and changed the factory alignment specifications.

For those who question the validity of the benefits GM made the change before any alignment components were modified. They found out that the geometry could be enhanced by modifying the upper control arms and spindle knuckles later in 1987. They made the geometry changes and kept the same positive caster specifications.

### **Alignment Specifications 1984-1996**

#### **FRONT**

	<b>LEFT</b>	<b>RIGHT</b>
<b>CASTER</b>	+6 1/2°	+7
<b>CAMBER</b>	- 1/4°	- 1/4°
<b>TOE</b>	Zero to 1/16 out	

#### **REAR**

	<b>LEFT</b>	<b>RIGHT</b>
<b>CAMBER</b>	- 1/2°	- 1/2°
<b>TOE</b>	0	

These are slightly modified alignment specifications from the GM factory service manual for the best possible road feel at speed and during cornering. The specifications were gleaned from

many miles of road testing and autocross events. This set-up will not wear tires prematurely and will enhance high speed feel with the most front tire load while still being able to handle parking lot maneuvers. One absolute fact; your front tires will wear on the outer edge due to the increased positive caster when these specifications are used on 1984-1985 Corvettes. All 1986-1996 Corvettes will experience outer edge tire wear and it is normal from scrubbing the edge during cornering. That is a small price to pay for the best possible handling. If you have the same tires front and rear rotating the tires every other oil change is a great idea to balance the outer edge wear.