Detroit Speed
Caster/Camber Plate Kit
1982-92 Camaro/Firebird
P/N: 030330DS

The Detroit Speed Caster/Camber Plate Kit is a direct bolt-on kit that allows precise camber and caster adjustments at the strut tower. The kit features Speed-*LIGN* technology that allows consistent and precise movements without any unwanted movement after the adjustment is made. The camber and caster can be adjusted independent of each other and allows increased adjustment range over stock. The kit uses an aircraft-grade monoball for strut shaft attachment for smooth, precise articulation throughout suspension travel.



Item	Part Description	Quantity
1	Upper Strut Mount Assembly, LH	1
2	Upper Strut Mount Assembly, RH	1
3	Strut Mount Retainer Bracket, LH	1
4	Strut Mount Retainer Bracket, RH	1
5	Caster/Camber Plate Hardware	1
6	Instructions	1

NOTE: The Detroit Speed Caster/Camber Plate Kit is designed to be used with the 1987-92 F-Body strut mount retainers. If you have a 1982-86 vehicle, you will need to slot the back hole in the strut tower.

Hardware Checklist – Detroit Speed Caster/Camber Plate Kit			
Item	Description	Quantity	Check
1	M14-2.0 Nylock Jam Nut	2	
2	M14 Top Spacer	2	
3	Monoball Bushing – 0.750"OD x 0.670"ID x 0.720"L	2	
4	M10 Star Adjuster	6	
5	M8 Nylock Nut	6	
6	M8 Washer	6	

Fastener Torque Specifications	
Application	Torque (ft-lbs)
Lower Strut Mount	150
M14 Upper Strut Mount	45
M10 Strut Slider Mount	30
M8 Wheelhouse Mount	20

NOTE: There is a front suspension installation video available through the Detroit Speed website in the tech/install video section shown here:
https://www.detroitspeed.com/1982-92-camaro-firebird-installation-videos.

Installation:

1. To begin installation, chock the rear wheels and loosen the front lug nuts. Raise and support the front of the vehicle with jack stands under the frame. Remove the front wheels.

2. Support the lower control arm with a jack. **CAUTION: The coil springs are under tension. The proper spring compressor must be used.** If you have purchased the Detroit Speed/JRi Front Strut Kit, remove the two strut bolts so the lower control arm and spindle will drop down. **NOTE:** If you have not purchased the Detroit Speed/JRi front strut kit, it is possible to install this kit without removing the factory or aftermarket strut from the spindle however it will make the installation more difficult.

3. If your caliper brake hose is short you may need to remove it from the chassis clip for this installation.

4. Remove the cover from the upper mount assembly to gain access to the upper strut mount.

5. Remove the factory upper strut nut (Figure 1 on the next page). If you have left the strut attached to the spindle, lower the jack holding the lower control arm so the strut will drop out of the upper strut assembly. If you have removed the strut from the spindle, remove the strut.



Figure 1 – Remove Upper Strut Mount

6. Remove the three nuts holding the factory upper strut mount assembly from the wheelhouse (Figure 2). Hold the stud retainer plate in place as it will be loose from inside the wheel well.



Figure 2 – Remove the Upper Strut Mount Assembly

7. Install the Detroit Speed strut retainer in the wheel well. Be sure to install the correct one as there is a left and a right hand part. **NOTE:** If you have a 1982-86 vehicle, you will need to slot the back hole in the strut tower to allow the new strut plate to fit correctly and have full adjustment (Figure 3 on the next page).

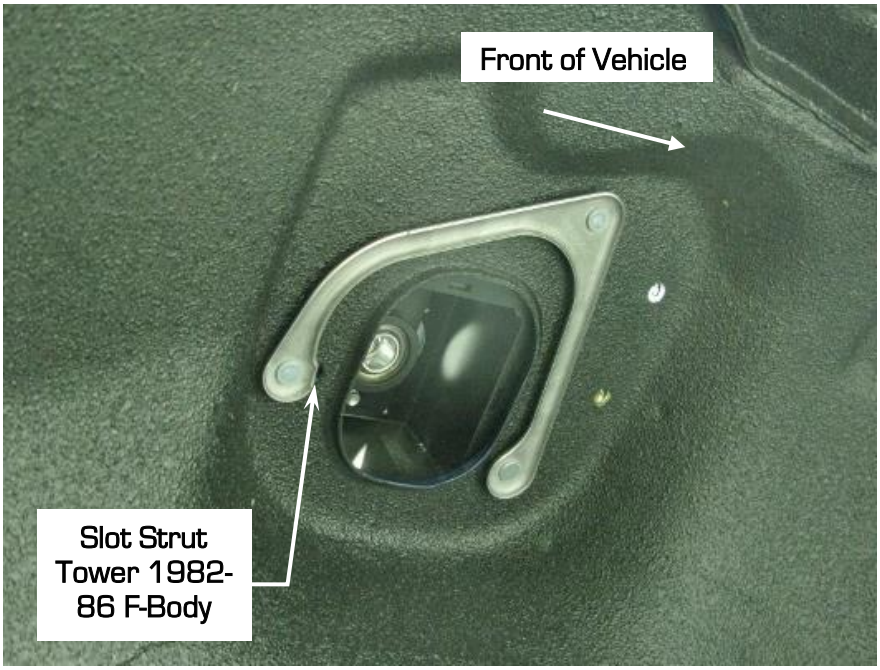


Figure 3 – Detroit Speed Strut Mount Retainer

8. Install the Caster/Camber Plate onto the wheelhouse with the stud retainer plate in place. Install the M10 star adjusters along with the M8 Nylock nut and washer on all three mounting studs (Figure 4). A good starting place will be to line up the star adjusters so the "0" tab is in the 4th notch from the center of the vehicle on the star adjuster base plate. Torque the M8 Nylock nuts to 20 ft-lbs.

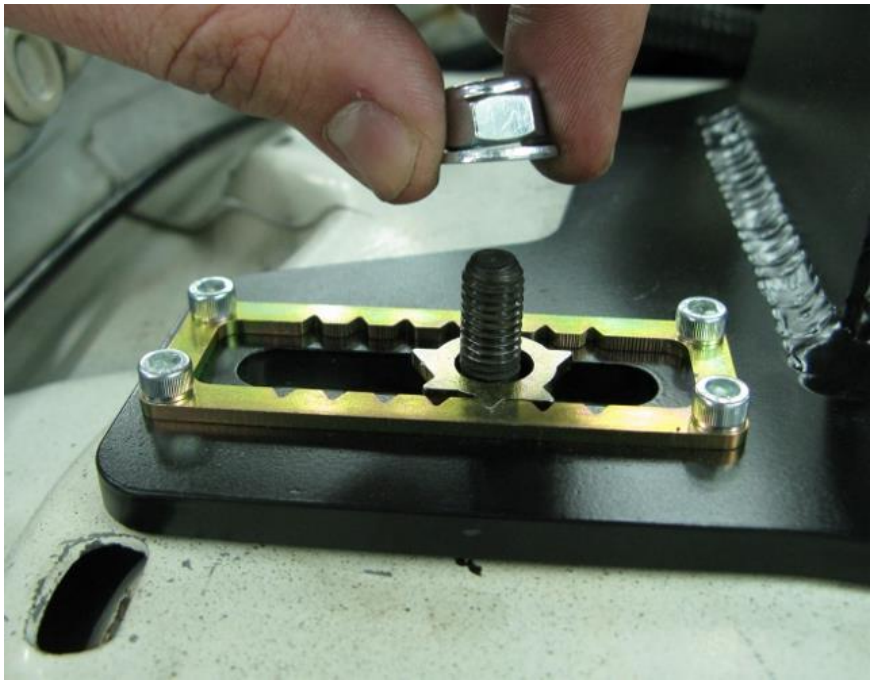


Figure 4 – Install Caster/Camber Plate

9. If you left the strut attached to the spindle, raise the jack holding the lower control arm up and carefully guide the upper strut mount through the monoball assembly. **NOTE:** If you have purchased the Detroit Speed/JRi Front Strut kit, refer to those instructions to complete the strut installation.

10. Place the 0.750" OD x 0.670" ID x 0.720" L monoball bushing over the upper strut mount so it slides into the monoball (Figure 5).



Figure 5 – Monoball Bushing

11. Install the M14 top spacer over the upper strut mount (Figure 6) followed by the M14-2.0 Nylock jam nut. Tighten the nut and then torque to 45 ft.-lbs.

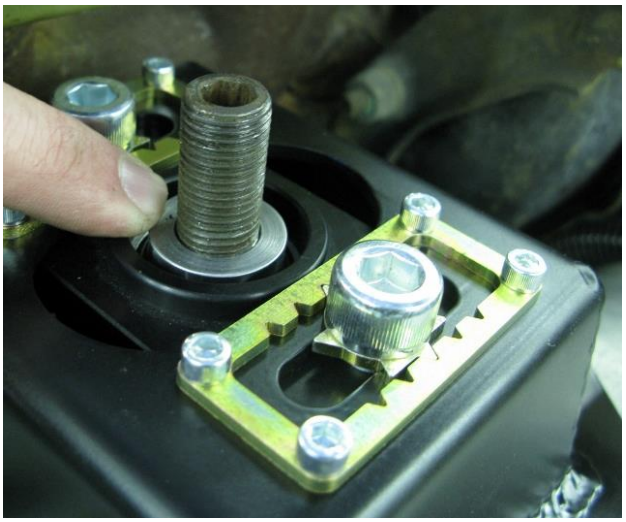


Figure 6 – M14 Top Spacer

12. If you have removed the strut from the spindle, re-install the two strut bolts and nuts at this time. Torque the two strut bolts to 150 ft-lbs. Re-attach the caliper brake hose to the chassis clip at this time if it has been removed.

13. Repeat steps 2 through 12 for the opposite side of the vehicle.

14. Reinstall the front wheels and torque to the manufacturer's recommended torque specs. Lower the vehicle to the ground.

15. The Detroit Speed patent pending Speed-*LIGN* adjustment device allows quick, accurate, and repeatable adjustments to be made without needing any additional components. Adjustments are simply made by loosening the attaching fastener enough so the Speed-*LIGN* adjuster can be released from the notched frame and then moved to the desired notch/position. Once the fastener is tightened, the Speed-*LIGN* adjuster locks the fastener in the desired position in the slot. The Speed-*LIGN* adjuster and the notched frame are clearly marked so that the adjuster position can be read and recorded.

16. The star adjusters have "0", "1/16" and "1/8" etched onto them for reference. When moving the star adjuster one notch on the star adjuster cage, that is equal 1/4" of movement. A professional alignment must be performed at this time. Detroit Speed recommends using the specifications shown below (Figure 7).

Alignment Specs w/Detroit Speed Caster Plate	
Camber	– 0.70° ± 0.20°
Caster	+ 5.50° ± 0.50°
Toe (Total)	0° (-1/32" Toe-out)

Figure 7 – Alignment Settings

17. The installation is now complete (Figure 8 & 9).



Figure 8 – Passenger Side



Figure 9 – Driver Side

If you have any questions before or during the installation of this product, please contact Detroit Speed at tech@detroitspeed.com or 704.662.3272

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