



**Detroit Speed, Inc.**  
**Tubular Lower Control Arms**  
**1982-92 Camaro/Firebird**  
**P/N: 031209**

The Detroit Speed Inc., Tubular Lower Control Arms replace the stock lower control arms on 1982-92 Camaro/Firebird vehicles. We have taken great pride in designing, developing, machining, and fabricating this product. The tubular lower control arms are shipped complete with lower ball joints, steering stops, and greaseable Delrin™ bushings. They are shipped ready to install on the vehicle.



Item	Part Description	Quantity
1	LH Lower Control Arm Assembly	1
2	RH Lower Control Arm Assembly	1
3	Sway Bar End Link Assembly	2
4	9/16" - 18 Castle Nut (Installed on ball joint)	2
5	Cotter Pin (Installed on ball joint)	2
6	Instructions	1

Fastener Torque Specifications	
Application	Torque (ft-lbs)
Control Arm to Frame	65
Sway Bar End Links	40
Lower Ball Joint	90

NOTE: There is a front suspension installation video available through the Detroit Speed website in the tech/install video section shown here:

<https://www.detroitsspeed.com/1982-92-camaro-firebird-installation-videos>.

### Installation Instructions

1. Secure the vehicle on jack stands and remove the front wheels.
2. Disconnect the anti-roll bar end link assembly at the lower control arm.
3. Remove the cotter pin and nut from the lower ball joint. Separate the lower ball joint from the spindle. **CAUTION:** The springs are under tension, use a floor jack under the lower control arm to carefully separate the lower ball joint from the spindle.
4. Remove the two bolts that secure the lower control arm to the frame.
5. Remove the lower control arms from the vehicle.
6. Install the new lower control arm using the factory hardware or newly obtained hardware. Install the front lower control arm bolt first, then the rear bolt. Install both bolts from front to rear so the bolts are pointing to the rear of the vehicle. Torque the bolts between the control arm and the frame to 65 ft-lbs.
7. Properly position the coil spring on the lower control arm and install the coil spring. **NOTE:** Use a floor jack under the lower control arm to compress the coil spring into position.
8. Insert the lower ball joint stud into the spindle. Thread the supplied 9/16" - 18 castle nut onto the lower ball joint stud. Tighten the nut to the manufacturer's torque recommendation of 90 ft-lbs and install the cotter pin. Make sure to bend the cotter pin after sliding it through the ball joint to insure it does not slide out of the ball joint.
9. Disassemble the bushing end of the provided sway bar end links and install into the sway bar. Before tightening the bushing end of the link, insert the lower link end into the lower control arm and install the provided nut. Tighten the upper bushing end until the bushings start to compress and torque the lower nut to 40 ft-lbs.
10. **The Detroit Speed Tubular Lower Control Arms are shipped without grease.** Be sure to grease both the ball joints and the Delrin™ bushings. Detroit Speed offers Valvoline multi-purpose grease available as P/N: 140110 is needed.
11. Due to possible interference between the Tubular Lower Control Arms and the tie rod adjuster sleeve, Detroit Speed recommends replacement of the factory sleeves with our Billet Tubular Tie Rod Adjusters (Detroit Speed p/n: 090103B).



Figure 1 - Billet Tie Rod Adjusters

12.A professional alignment must be performed at this time. If using the Detroit Speed Caster/Camber Plate Kit (P/N: 030330), we suggest using the alignment specifications shown in Figure 2 below on the left. If not, Detroit Speed recommends using the settings shown below in Figure 2 on the right.

Alignment Specs w/Detroit Speed		Alignment Specs w/Stock Caster Plate	
Camber	- 0.70° ± 0.20°	Camber	- 0.30° ± 0.50°
Caster	+ 5.50° ± 0.50°	Caster	+ 4.80° ± 0.50°
Toe (Total)	0° (-1/32" Toe-out)	Toe (Total)	0.00° ± 0.20°

Figure 2 - Suggested Alignment Specifications

13.The installation is complete.

If you have any questions before or during the installation of this product please contact Detroit Speed at [tech@detroitsspeed.com](mailto:tech@detroitsspeed.com) or 704.662.3272

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