



**Detroit Speed, Inc.**  
**Tubular Upper Control Arms**  
**1967-1969 Camaro/Firebird, 1968-1974 Nova**  
**P/N # 030101**

The Detroit Speed, Inc. Tubular Upper Control Arms are a bolt-on package for 1967-69 Camaro/Firebird along with the 1968-74 Nova. The geometry is greatly improved over stock by increasing the camber gain and improving the roll camber. The control arm package is a complete and comprehensive package and includes all necessary items to complete the installation.



Part Description	Quantity
Upper Control Arm Assembly	2
#1 Caster Adjusters (Installed in control arms)	4
#2 Caster Adjusters	4
7/16"-14 Nyloc Nut	4
7/16" Stainless Steel AN Flat Washer	4
1/2"-20 Castle Nut (Installed on the ball joint)	1
Cotter Pin (Installed on the ball joint)	1
Instructions	1

Fastener Torque Specifications	
Application	Torque (ft-lbs)
Upper Control Arm to Frame	50
Upper Ball Joint to Spindle	50

**IMPORTANT: The upper ball joint is shipped without grease and must be lubed before use with quality chassis grease.**

1. Chock the rear wheels and loosen the front lug nuts. Raise the front of the vehicle and support the front of the vesicle with jack stands under the frame. Remove the front wheels.
2. Support the lower control arm with a jack and remove the 1/2" nut from the upper control arm ball joint. Use a ball joint removal tool to separate the ball joint from the spindle. **NOTE: Please use extreme caution during this step to insure the lower control arm does not slip off the jack which could cause the coil spring to dislodge causing serious injury.**

3. Remove the two 7/16" nuts from the upper control arm cross shaft at the frame, and remove the control arm from the vehicle.
4. Install the new upper control arm using the factory 7/16" bolts and the supplied 7/16" stainless steel AN flat washers and 7/16"-14 Nyloc Nuts. Torque bolts to 50 ft-lbs dry. **NOTE: Depending upon vehicle build variation and front brake line routing in your vehicle, the right front brake hard line may need to be adjusted. The bracket that holds the hard line to the frame may need to be relocated outboard to allow room for additional caster. The hard line has enough movement to facilitate this. This should be addressed if needed for brake line integrity.**
5. Install the new ball joint shaft in the spindle and install the supplied 1/2"-20 castle nut. Torque the nut to 50 ft/lbs dry, and install the supplied cotter pin through the castle nut and ball joint. Make sure to bend the cotter pin after sliding it through the ball joint to insure it does not slide out of ball joint.
6. Remove the jack from the lower control arm and reinstall the front wheels. Lower the vehicle back onto the ground, and torque the lug nuts to the wheel manufacturer's specifications.
7. A front wheel alignment must be performed after installation. We suggest using the alignment specifications in the table below:

Alignment Specifications	
Camber	- 0.75° ± 0.2°
Caster	+ 3.0° +1.0 / - 0.5°
Toe-in (Total)	1/16" ± 1/16"

**Additional Alignment Notes:**

Additional caster adjusters are supplied at no charge for caster adjustment if needed. Installing the caster adjuster with the attachment hole forward in the control arm will position the entire control arm rearward in the vehicle and create additional positive caster. The same adjusters can be rotated 180 degrees for the opposite effect on caster. Finally, the second set of caster adjusters you have received (labeled "2") can be used for additional caster or can be used for minimum caster. On a factory 1967 Camaro front subframe, you may need to grind the front side of the upper control arm mount bracket when trying to achieve +6.0° or more of positive caster. Under a full jounce condition the front upper control arm tube may interfere with the mounting bracket. Figure 1 below shows the bushing removed and Figure 2 shows the bushing installed.



**Figure 1 - Bushing Removed**



**Figure 2 - Bushing Installed**

Camber should be adjusted by using shims provided by the alignment shop and placed between the frame attachment and cross shaft if needed.

If you have any questions, please call Detroit Speed, Inc. at (704) 662-3272.

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