

Detroit Speed, Inc. Tubular Upper Control Arms 1978-1988 G-Body P/N: 030107

The Detroit Speed, Inc. Tubular Upper Control Arms are a bolt-on package for the 1978-1988 G-Body vehicle applications. 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
#0 Caster Adjusters (Installed in control arms)	4
#1 Caster Adjusters	4
M12 x 1.75 Grade 8 Nylock Nut	4
M12 Flat Washer	4
1/2"-20 Castle Nut (Installed on the ball joint)	2
Cotter Pin (Installed on the ball joint)	2
M14 Flat Washer (installed on the ball joint)	8
Instructions	1

Fastener Torque Specifications		
Application	Torque (ft-lbs)	
Upper Control Arm to Frame	45	
Upper Ball Joint to Spindle	60	

IMPORTANT: The upper ball joint is shipped <u>without grease</u> and must be lubed before use with a 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 vehicle 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 M12 nuts from the upper control arm cross shaft at the subframe, and remove the control arm from the vehicle.
- 4. Install the new upper control arm using the factory M12 bolts and the supplied M12 Flat Washers and M12 x 1.75 Grade 8 Nyloc Nuts. Torque bolts to 45 ft-lbs dry.
- 5. Install the new ball joint shaft in the spindle and install the supplied 1/2"-20 castle nut. **NOTE:** The control arms are shipped with four M14 flat washers, 1/2"-20 castle nut & cotter pin per ball joint for packaging. Remove all hardware from the ball joint before you install the ball joint into the spindle.
- 6. The use of one or more of the provided M14 washers may be required between the spindle and the castle nut to provide proper alignment of the cotter pin hole. Torque the nut to 60 ft./lbs. dry, and install the supplied cotter pin through the castle nut and ball joint. Tighten the castle nut to the nearest slot if necessary to align with the hole in the ball joint and install the provided cotter pin through the castle nut and ball joint. Make sure to bend the cotton pin after sliding it through the ball joint to insure it does not slide out of the ball joint.
- 7. 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.
- 8. 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	+ 7.0° +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. The bushings initially installed in the control arms have zero offset. The second set of caster adjusters you have received (labeled "1") can be used for additional caster or can be used for minimum caster. By rotating the adjusters 180 degrees, the caster can be increased or decreased to achieve the desired results. 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. Detroit Speed offers a Camber Shim Kit (p/n: 031716) seen below in Figure 3 or shims provided by your alignment shop can be used and placed between the frame attachment and cross shaft if needed.



Figure 3 - Camber Shim Kit

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

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