



Part # 12109590 - 1967-1970 Mustang Delrin Control Arm Bushings



Recommended Tools







1967-1970 Mustang Delrin Control Arm Bushings

Installation Instructions

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Major ComponentsIn the box

Part #	Description	QTY	
90002618	Upper Control Arm Cross Shaft	2	
70012644	Upper Control Arm Bushing Outer Shell		
90002630	Upper Bushing Inner Sleeve		
70012646	Upper Delrin Control Arm Bushing		
70012588	Lower Bushing Inner Sleeve		
70012591	Lower Control Arm Bushing Large Outer Shell		
70012592	Lower Large Delrin Control Arm Bushing	2	
70012593	Lower Large Bushing Spacer		
70012641	Lower Control Arm Bushing Small Outer Shell		
70012642	Lower Small Delrin Control Arm Bushing		
70012643	Lower Small Bushing Spacer		
70012625	Strut Rod Bushing, Inner Delrin Ball		
70012626	Strut Rod Bushing, Outer Cap	4	
90002631	Strut Rod Bushing, Inner Sleeve	2	
90002632	Strut Rod Bushing, End Spacer		
99800000	11/16"-18 Jam Nut - Strut Rod Nuts	8	
99501048	1/2" Knurled Studs - Upper Control Arm Cross Shaft Studs	4	

Hardware -

Part #	Description	Usage	QTY
99562007	9/16"-18 Mechanical Lock Nut	Upper Control Arm Shaft Nuts	4
99563002	9/16" SAE Flat Washer	Upper Control Arm Shaft Washers	4
99503001	1/2" SAE Flat Washer	Upper Cross Shaft Mounting	4
99502015	1/2"-13 Mechanical Lock Nut	Upper Cross Shaft Mounting	4

Getting Started.....

This Mustang Bushing Kit contains: 2 Upper Cross Shafts, 4 Upper Control Arm Bushing Assemblies, 2 Lower Control Arm Bushing Assemblies and 2 Strut Rod Bushing Assemblies. The Upper Bushings are all the same. The Kit contains 2 different size Lower Control Arm Bushing Assemblies, you will need to determine which is correct for your application. Be sure to match the correct Bushings with the correct locations.

The Front Control Arms will need to be removed from the car. If it has any shims, mark them, they will be reinstalled in the same location they were removed from. Detach the Strut Rod from the Control Arm. Retain the OEM hardware for reassembly. Refer to the Factory Service Manual for disassembly procedure.





Delrin Bushing Installation

There are several ways the Delrin Bushing Assemblies can be installed. No matter the method used, the Control Arm needs to be **SUPPORTED** to keep from distorting the Control Arm. We recommend cutting spacers to go inside the Control Arms when using a Press to install the Bushings. We have used several different methods to install the Bushing Assemblies. We are going to cover the one that worked best for us. When installing the Bushings, the Outer Shell will be installed in the Arm by itself. Next, Press in the Delrin Bushing, followed by the Inner Sleeve.

DUE TO VARIATIONS IN THE THREADS OF THE CONTROL ARM, WE RECOMMEND TACK WELDING THE BUSHING SHELLS TO THE CONTROL ARM.

1. Measure the **Outside Width** of the Control Arms and write it down before starting Bushing Removal. You will use this dimension to check the Control Arms after the new Delrin Bushings are installed. The OEM Bushings are removed by threading them out of the Control Arm. It is easier to do with the cross shaft clamped in a vise.

The Cross Shaft must be put in place before installing the Bushing Shells in the Upper & Lower Control Arms.



3. UPPER CONTROL ARM

- 2. Disassemble the Bushing being installed. When installing Bushings in the control arms, insert the Cross Shaft before installing any Bushings. Support the back side of the flange the Bushing is being Installed in. They can be supported by either the piece of Metal or by the Bench Vise with the Jaws opened wide enough to let the Bushing Shell pass through (Figure 2).
- **3.** We used a socket to drive the Outer Shell into the control arm. Drive it in until the Shell stops against the control arm.
- **4**. Press the Delrin Bushing & Inner Sleeve into the Bushing Shell. Again, we used a socket large enough to clear the threads of the cross shaft. Tap them in until the Bushing stops against the Shell and the Inner Sleeve stops against the cross shaft.
- **5.** Install the 9/16" Washer & 9/16" Lock Nut and finish pushing the Bushings in with the hardware. Tighten Hardware to eliminate any gaps between the Bushings and cross shaft. **(Figure 3)** Shows the Control Arm Bushings assembled with the hardware installed.
- **6.** Install the 1/2" Knurled Bolts into the cross shaft.

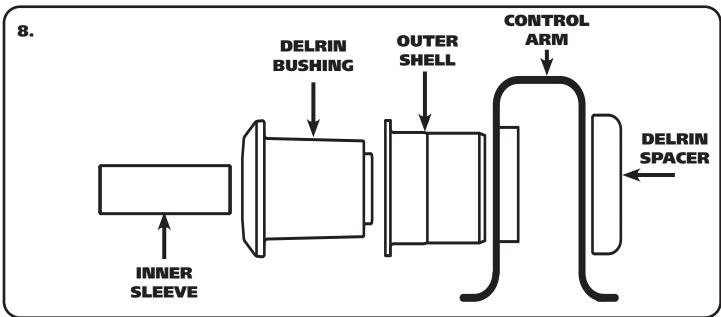




Bushing Installation



7. Remove the OEM Lower Control Arm Bushings. This Kit contains 2 different sizes of Lower Control Arm Bushings. Use your control arm to determine which size is needed. Use (Figure 8) to help with determine the Bushing assembly order. Support the back side of the Flange the Bushing is being Installed in. Use a piece of metal clamped in a Bench Vise for the Lower Control Arms.



5. Install the Outer Shell into the control arm. Next, install the Delrin Bushing into the Outer Shell followed by the Inner Sleeve. With the Delrin Bushing and Inner Sleeve installed, install the Delrin Spacer over the SMALL end of the Delrin Bushing. The ROUNDED surface will be out, away from the control arm.





Strut Rod Delrin Bushing Installation



9. A Delrin Bushing setup for the strut rod is also included in this kit. The liner that is installed in the frame hole has to be removed. Use a chisel to distort it and remove it. In **(Figure 9)** we distorted it from the bottom edge and removed it.



10. Refer to **(Figure 12)** for the Delrin Strut Rod Bushing assembly order. The Delrin Strut Rod Bushing will insert into the frame bushing hole with the rounded side of the bushing outward. A Bushing needs to be installed on both the front and rear side of the frame.

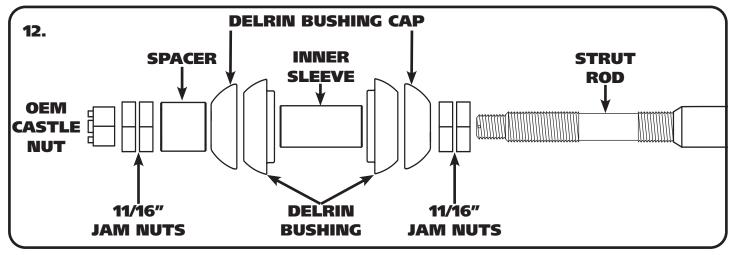


11. Install the Inner Sleeve in the Strut Rod Bushings. Center the Sleeve in the Bushings, this will also help hold the Bushings in place during reassembly of the strut rod.





Bushing Installation



13. Install (2) 11/16" Jam Nuts on the INNER THREADS of the strut rod followed by the Delrin Bushing Cap. Insert the strut rod through the Bushing Sleeve until the Ball is nested into the Bushing Cap. Install a second Bushing Cap on the strut rod followed by the Spacer. Next, install the (2) 11/16" Jam Nuts on the OUTER THREADS. Install the OEM castle nut on the end of the strut rod with a cotter pin through it. Position isn't critical, it will be adjusted when the front end is aligned.

NOTE: The OEM Lock Nuts can be reused in place of the jam nuts if they are in good condition.

- **14.** Reinstall the lower control arm using the OEM eccentric bolt. Reattach the strut rod to the lower control arm using the OEM hardware.
- **15.** Reinstall the spindles using the OEM Hardware.

Note: The Delrin is self-lubricating, no lubricant is needed.