



Part # 11539590 - 1963-1982 Corvette Delrin Control Arm Bushings



Recommended Tools



**1963-1982 Corvette Delrin Control Arm Bushings
Installation Instructions**

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Major ComponentsIn the box

Part #	Description	QTY
70012382	Upper Control Arm Bushing Outer Shell	4
70012517	Lower Control Arm Bushing Outer Shell	4
70012419	Delrin Upper Control Arm Bushing	4
70012572	Delrin Lower Control Arm Bushing	4
90002521	Upper Bushing Inner Sleeve	4
90002538	Lower Bushing Inner Sleeve	4

Hardware

Part #	Description	Usage	QTY
99433006	7/16" Split Lock Washer	Lower Control Arm Shaft Bolts	4
99373009	3/8" Split Lock Washer	Upper Control Arm Shaft Bolts	4
90002263	Red Loctite	Control Arm Shaft Bolts	1

Getting Started.....

The Front Control Arms will need to be removed from the car. Refer to the Factory Service Manual for disassembly procedure.

This Corvette Bushing Kit contains: 4 Upper Control Arm Bushing Assemblies and 4 Lower Control Arm Bushing Assemblies. The Upper Bushings are all the same and the Lower Bushings are the same. Be sure to match the correct Bushings with the correct locations.

There are several different ways that the Bushings can be removed from the Control Arms. If you have an Air Chisel, a Wide Flat Bit works well. If you don't have access to an Air Chisel, they can be removed by first, drilling out the rubber with a Hand Drill and Drill Bit. With the Rubber removed, distort the Bushing Shell with a Hammer and Chisel and Knock it out. No matter the process used, the main objective is to **NOT** distort the Control Arm.

WE RECOMMEND MARKING DRIVER AND PASSENGER CONTROL ARMS AND CROSS SHAFTS. ALSO, MARK THE ORIENTATION OF THE CROSS SHAFTS.

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

Just like Bushing Removal, 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, Inner Sleeve as an assembly. **WE DO NOT RECOMMEND INSTALLING THE BUSHINGS COMPLETELY ASSEMBLED.**



Delrin Bushing Installation

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

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. Use a STIFF piece of Metal clamped in a Bench Vise for the Lower Control Arms (Figure 2). The Upper Control Arm can be supported by either the same piece of Metal or by the Bench Vise with the Jaws opened wide enough to let the Bushing Shell pass through (Figure 3).

3. Use another Piece of Metal or Strong Wood to Drive the Outer Shell into the Control Arm until the Shell stops against the Control Arm.

4. Press the Inner Sleeve into the Delrin Bushing.

5. Start the Delrin Bushing/Inner Sleeve into the outer shell installed in the control arm (Figure 4). Align the cross shaft in the inner sleeves as you insert them. Tap the Delrin Bushing/Inner Sleeve into the shell until the outer lip of the delrin bushing seats against the outer shell. **TAP THE BUSHING IN USING THE CENTER OF THE BUSHING.**

6. Reinstall the Outer Washer using the OEM Bolt, but replace the Lock washer with the supplied Lock washer and apply Loctite to the threads. Tighten Hardware to eliminate any gaps between the Bushings and Cross Shaft.

7. Reattach the Control Arms to the car using the OEM Hardware.

8. Attached the spindle to the upper ball joint. Leave the lower disconnected to install the Coil Spring.

Torque Specs:

Upper Control Arm Mounting:	50 ftlbs
Lower Control Arm Front Mounting:	70 ftlbs
Lower Control Arm Rear Mounting:	100 ftlbs
Upper Ball Joint:	45 ftlbs, tighten to align cotter pin
Upper Bushing Bolt:	35 ftlbs
Lower Bushing Bolt:	55 ftlbs
Lower Ball Joint:	75 ftlbs, tighten to align cotter pin

