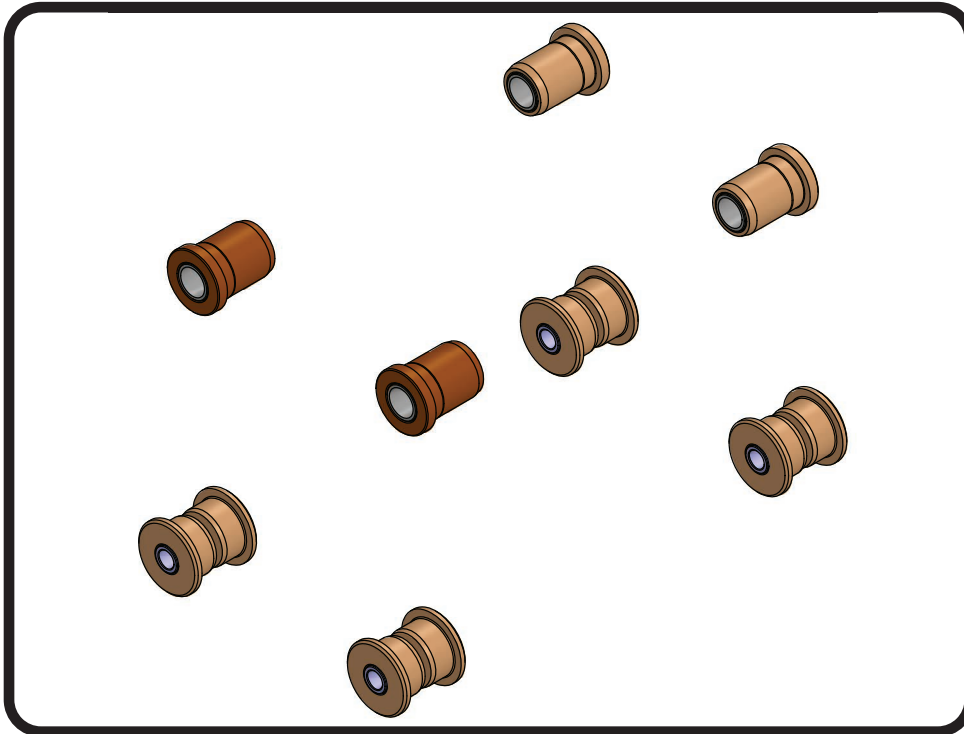




Part # 11569500 - 89-96 Corvette Delrin Bushing Kit



Recommended Tools



89-96 C4 Delrin Control Arm Bushing Kit Installation Instructions

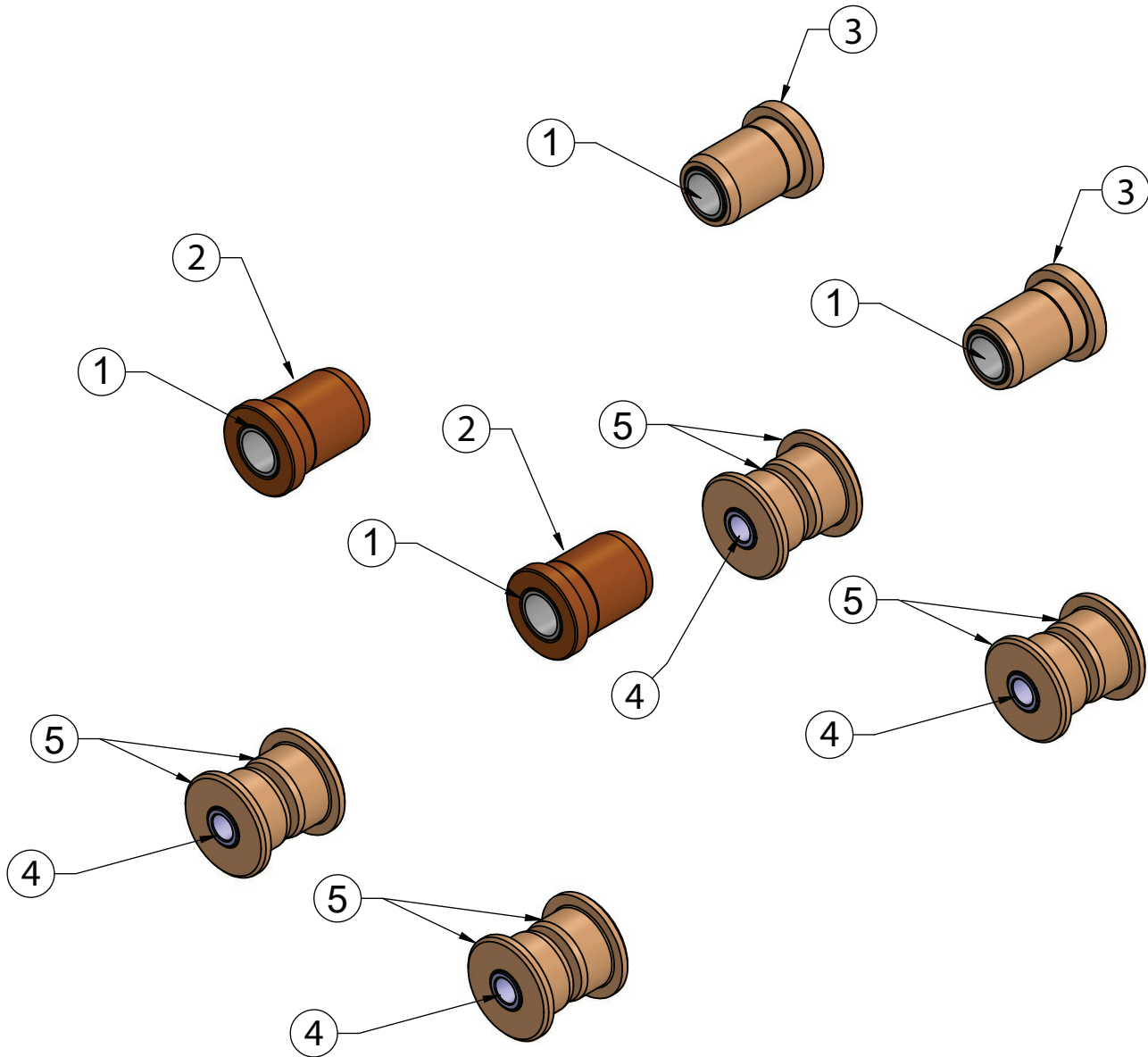
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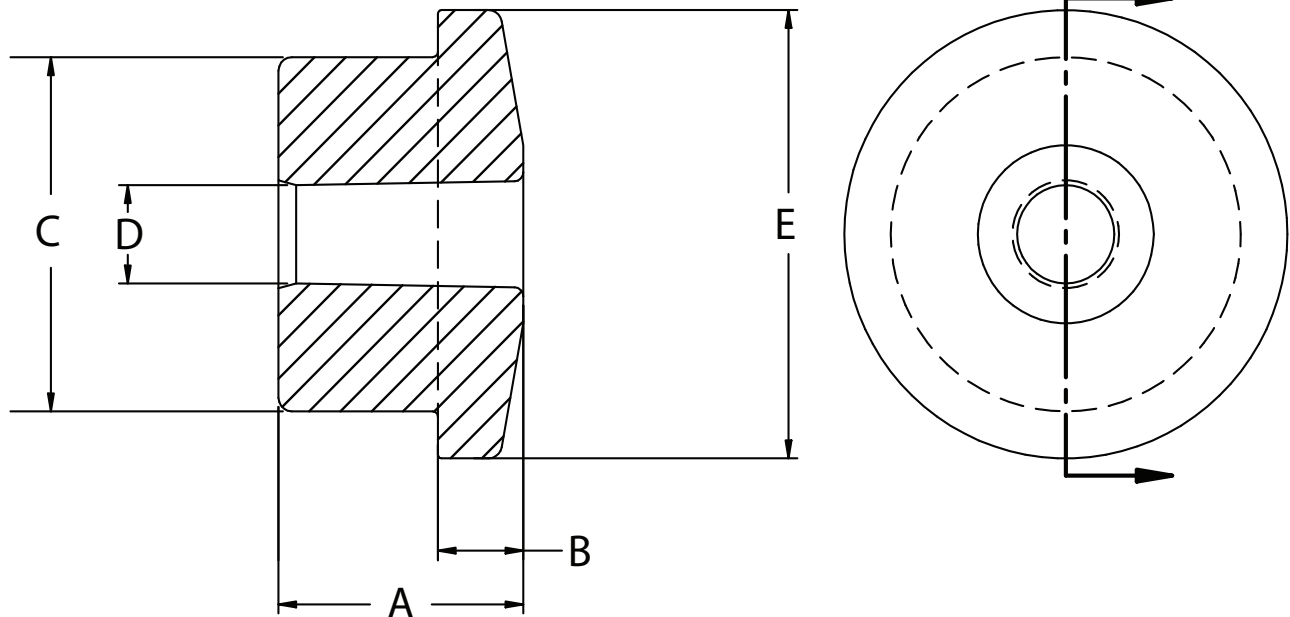
Included ComponentsIn the box



Item #	Part #	Description	QTY
1	90003108	Upper Inner Bushing Sleeve	4
2	70014075	Upper Forward Bushing	2
3	70014076	Upper Rear Bushing	2
4	90003109	Lower Inner Bushing Sleeve	4
5	70014082	Lower Bushing	8



Bushing & Sleeve Dimensions



Bushing Dimensions

Item #	Part #	A	B	C	D	E
2	70014075	2.075	.295	1.471	.990	1.750
3	70014076	2.080	.295	1.345	.990	1.750
5	70014082	.940	.188	1.530	.740	2.00

Inner Sleeve Dimensions

Item #	Part #	OD	ID	Over All Length
1	90003108	.988"	.800"	2.105"
4	90003109	.739"	.500"	2.125"

Disassembly

Congratulations on your purchase of the Ridetech C4 Control Arm Delrin Bushing Kit. This kit has been designed to help improve your Corvette's handling along with providing a lifetime of enjoyment. The Delrin Bushing Kit will improve your cars handling characteristics by eliminating the deflection at the bushing.

1. We recommend doing one control arm at a time to simplify installation of the bushings.
2. Raise the vehicle and support it by the frame, allowing the suspension to hang freely.
3. With the wheels and tires removed, disconnect the shocks, and sway bar linkage from the lower control arms, retaining the hardware.
4. Support the Rotor Assembly when removing any of the control arms to prevent unnecessary strain on the brake lines and ABS sensor wires.



Disassembly

5. With the rotor and hub supported, remove the Front Upper Control Arm by , first removing the ball joint nut and using a ball joint separator to release the ball joint from the control arm.
6. Remove the access panel above the control arm. If doing an early C4, you will need to prop the hood up to remove the hood prop from the passenger side.
7. Next, remove the (2) nuts attaching the upper cross shaft to the car. Mark any shims that may be behind the cross shaft. You will need to put these back in the same location when reinstalling the control arm. You will have to push the upper mounting bolts toward the engine to remove the upper control arm.

Front Upper Bushing Removal



8. Remove the outer nuts and washers and retain them. Press the bushings out of the control arm. We used a "H" press to remove ours. Use the cross shaft to push the bushings out. Push out the bushing with the small inner washer first. After pushing it out, the large inner washer can be removed from the cross shaft to be able to push the remaining bushing out.

9. Once the Bushing Assembly is removed from the arm, prep the bushing opening by cleaning it to remove any debris that may be left in the opening. **Remove the inner washer from the cross shaft, they will NOT be reused.**

Front Upper Bushing Installation



10. Install the Inner Sleeve in the upper control arm bushings. You can tap it in with a hammer or use an arbor press. The front upper bushings are 2 different sizes with the front bushing being the larger of the 2. Make sure you have the correct bushings for the location.



Front Upper Bushing Installation



11. Tap the bushing/sleeve into the control arm. Support the inside of the control arm, but make sure the opening is large enough for the control arm bushings to pass through.



12. Insert the cross shaft through the side of the control arm that doesn't have a bushing installed.



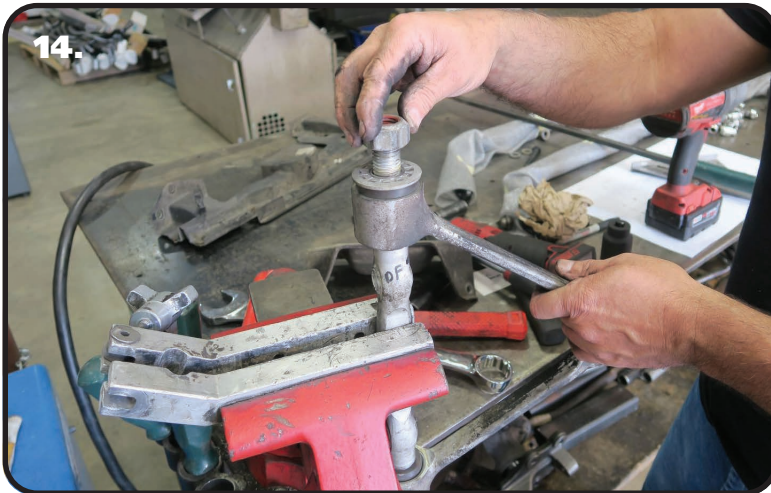
13. Tap the remaining bushing into the control. To do this, support the inside of the control arm. Again, make sure the opening is wide enough for the bushing to pass into it. We used a large deep well socket to tap the bushing in.

**Control Arm Mounting Bolts Torque Spec:
48 ftlbs**

Repeat on other side.



Front Upper Bushing Installation



14. Reinstall the OEM outer washers and nuts. Torque the nuts 35-40 ftlbs.



15. Reinstall the upper control arm. Make sure the upper mounting bolts are seated in the frame. Reinstall the shims stacks that came out of the car. Torque the nuts to 37 ftlbs.



16. Insert the upper ball joint into the spindle. Reinstall the castle nut and torque to 33 ftlbs. Check alignment of the cotter pin hole. If it does not line up with an opening in the castle nut, tighten the nut until it does line up. Reinstall the cotter pin and bend the ends to keep it in place.

Repeat on other side.



Lower Control Arm Removal



17. The spring travel limiter will need to be removed. There are 2 vertical bolts and 2 horizontal bolts.



18. Later cars have a brace on the back side of the crossmember that will need to be removed to allow for removal of the rear control arm bolt. Remove the nuts from the lower control arm bolts to prepare for control arm removal.



19. Support the hub/spindle and separate the ball joint from the spindle. With the ball joint separated, remove the control arm bolts and the control arm.



Lower Control Arm Bushing Installation

20.



20. Press the bushings out of the control arm. We used a "H" press to remove ours. Once the Bushing Assembly is removed from the arm, prep the bushing opening by cleaning it to remove any debris that may be left in the opening.

21.



21. Insert a bushing half in each opening of the control arm. The front and rear bushings are the same size.

22.



22. Tap the bushings in until they are seated.



Lower Control Arm Bushing Installation



23. Push the inner sleeves into the Delrin bushings. We used an Arbor Press, but a bench vise will work for this.

NOTE: If you are installing Ridetech CoilOvers, remove the transverse leaf spring before reinstalling the lower control arms. Refer to the CoilOver instructions.



24. Reinstall the lower control arms in reverse order of how they were removed.



25. Insert the lower ball joint into the spindle. Reinstall the castle nut and torque to 50 ftlbs. Check alignment of the cotter pin hole. If it does not line up with an opening in the castle nut, tighten the nut until it does line up. Reinstall the cotter pin and bend the ends to keep it in place.



Finishing.....



26. Reinstall the spring travel limiter.



27. Reinstall the crossmember brace if working on a later model Corvette.

27. If you are installing Ridetech HQ Series Shocks and Sway Bars, refer to their instructions.

Anytime you change suspension components, have the car aligned!