

Detroit Speed Rear Tubular Sway Bar Kit 1979-93 Mustang & 1979-86 Capri P/N: 042223DS

The Detroit Speed Rear Tubular Sway Bar Kit is a bolt-on package for the Fox body platform. The rear sway bar can be used separately or with our rear suspension to provide the ultimate in handling. The rear sway bar offers dual rate adjustment for increased vehicle tuning and will keep body roll to a minimum. The rear sway bar is powdercoated gloss black and includes all necessary mounting hardware for installation including split lock collars that positively locates the sway bar in the correct location.



ltem	Description	Quantity
1	3/4" Tubular Sway Bar	1
2	2-3/4" Rear Sway Bar Axle Clamp	2
3	Sway Bar End Link Bracket	2
4	7/16"-20 x 2-3/4" x 5-1/2" U-Bolt	2
5	3/4" ID Polyurethane Sway Bar Bushing	2
6	Sway Bar Frame Bushing Bracket	2
7	3/4" Double Split Lock Collar	2
8	7/16" Sway Bar End Link Kit	2
9	Steel Bushing 1/2" ID x 3/4" OD x 1/4" L	4
10	5/16"-18 Steel Rivet Nut	10
11	Rivet Nut Installation Tool	1
12	Super Grease	1
13	7/16"-20 Nylock Nut	4
14	7/16" SAE Flat Washer	4
15	5/16"-18 x 1-1/2" L Hex Head Bolt	1
16	5/16"-18 x 3/4" L Hex Head Bolt	8
17	5/16" SAE Flat Washer	10
18	3/8" Split Lock Washer	1
19	Instructions	1

Fastener Torque Specifications			
Application	Torque (ft-lbs)	Threads	
Sway Bar Bracket to Frame rail	15	Blue Loctite 242	
Sway Bar Links	30	Red Loctite 262	
Sway Bar Clamp to Rear Axle Brackets	45		
Split Lock Collar	14	Blue Loctite 242	

<u>NOTE:</u> There is an installation video available through the Detroit Speed website under install video shown here: detroitspeed.com/blog/post/rear_sway_bar_kit.

IMPORTANT:

All work should be performed by a qualified technician. Please read the entire set of instructions and fully understand all of the steps involved before beginning the project. Always make sure to wear the appropriate safety equipment for the job and properly support the vehicle. If you have any questions before, during, or after the installation, feel free to contact Detroit Speed by phone at (704) 662-3272 or by email at tech@detroitspeed.com.

Installation:

- 1. Confirm that all components and hardware have been included in the kit using the parts list and picture for reference on page 1.
- 2. On a smooth level surface, block both sides of the rear tires. Loosen the rear lug nuts and jack up the front and then the rear of the vehicle. Support the car in the front and the rear by securely placing jack stands under the frame so the car is sitting level. Remove the rear wheels and tires.
- 3. If your vehicle is equipped with a rear sway bar from the factory, remove it from the vehicle by removing the two sway bar bolts located in the lower trailing link on both sides of the vehicle (Figure 1).





Figure 1 - Remove Stock Sway Bar

4. Place the 7/16"- $20 \times 2-3/4$ " x 5-1/2" U-bolts over the rear axle tubes (Figure 2 on the next page). **NOTE**: It may be necessary to move the brake lines slightly to allow the U-bolts to slide under the brake line.



Figure 2 - Position U-Bolts

5. Use the provided Super Grease to lubricate the inside of the polyurethane bushings (Fig. 3).





Figure 3 - Lubricate Bushings

6. Spread the polyurethane bushings so they fit around the sway bar (Figure 4). Locate the bushings as close to the 90° bends on the sway bar as possible.



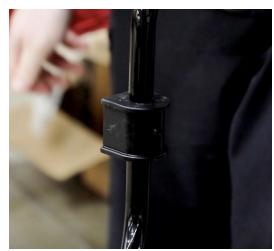


Figure 4 - Install Bushings

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7. Place the sway bar mounting brackets over the bushings (Figure 5).



Figure 5 - Install Brackets

8. Install the sway bar axle clamps so they line up correctly on the rear axle tube with the U-bolt (Figure 6).



Figure 6 - Install Axle Clamps

9. Place the sway bar bushing bracket on the rear axle clamp and through the U-bolt. Thread the 7/16"-20 Nylock nuts and washers on the U-bolt. Repeat this process for the other side of the axle. (Figure 7).



Figure 7 - Install Sway Bar to Axle Page 4 of 12

10. Center the sway bar on the rear axle with the clamps as wide on the sway bar as possible so that they are close to the bends. Make sure the U-bolts are vertical and snug the 7/16"-20 Nylock nuts on the U-bolts (Figure 8).





Figure 8 - Center and Tighten Sway Bar

11. Support the rear axle under the center section and remove the lower shock bolts. Lower the rear axle to allow the rear axle to drop down (Figure 9).





Figure 9 - Remove Lower Shock Bolts

12. Next, you will need to drop the rear exhaust. Spray penetrant fluid on the bolts. Remove the exhaust at the flanges in front of the rear axle (Figure 10).



Figure 10 – Remove Rear Exhaust

13. Spray penetrant fluid on the exhaust hanger isolators. Pry the isolators off the body side hangers near the front of the upper trailing arm and at the back by the exhaust tips on both sides of the vehicle (Figure 11). Let the exhaust sit on top of the rear axle.





Figure 11 - Remove Exhaust from Hangers

14. Next, carefully adjust the fuel line on the passenger side by hand towards the inboard side of the vehicle, moving it away from the frame rail (Figure 12).

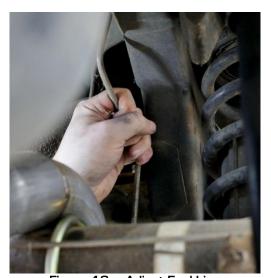


Figure 12 - Adjust Fuel Line

15. To locate the sway bar end link bracket, place it against the frame rail centering it on the factory upper link torque box frame rail reinforcement. The end link bracket flange on the inside frame rail will sit against the upper link torque box (Figure 13). **NOTE**: The driver side and passenger side bracket are the same.



Figure 13 - Passenger Side End Link Bracket

16. Holding the bracket in position, transfer punch the lower hole of the bracket to the bottom side of the frame rail. Remove the bracket and drill out this marked location to a final drill size using a 17/32" drill bit (Figure 14). **NOTE:** It is recommended that pilot holes be drilled first before drilling the 17/32" holes.





Figure 14 - Drill End Link Bracket Hole

- 17. Install the provided nut insert into the hole that was drilled in the previous step using the provided nut insert tool in the four drilled holes. **NOTE**: There are ten nut inserts provided however only eight will be used for this installation.
- 18. Start by assembling the tool and the nut insert to resemble Figure 15 using the provided 5/16"-18 x 1-1/2" L hex head bolt. Place the 3/8" split lock washer into the grooved side of the tool. Place the 5/16" flat washer on the bolt and install it through the tool. Thread the nut insert onto the bolt. Hold the nut insert with a pair of pliers and tighten the bolt with a 1/2" wrench so that the nut insert collapses the split lock washer into the tool. **NOTE**: Apply a liberal amount of grease on the flat washer to prevent galling.





Figure 15 - Nut Insert w/Installation Tool

19. With the tool assembled, place the nut insert into the drilled hole. Hold the larger hex with a 3/4" wrench and tighten the bolt using a 1/2" wrench. Tighten the assembly so that the bolt will no longer turn (Figure 16 on the next page).





Figure 16 - Install Nut Insert

20. Remove the nut insert tool and place the end link bracket to the frame rail. Install one of the provided 5/16"- $18 \times 3/4$ " L hex head bolt and 5/16" washer through the lower hole in the bracket and into the nut insert. Snug the fastener while keeping the bracket up against the frame rail (Figure 17)

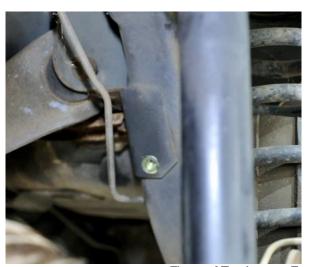




Figure 17 - Locate End Link Bracket

21. Transfer punch the three remaining holes in the end link bracket to the frame rail (Fig. 18). **NOTE**: You may need to move the rear axle up to gain better access to the inside frame rail.





Figure 18 - Transfer Punch Frame Rail

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22.Lower the rear axle and remove the end link bracket. Drill out the top hole on the bottom side of the frame rail to a final drill size using a 17/32" drill bit. **NOTE**: It is recommended that pilot holes be drilled first before drilling the 17/32" holes. Using the nut insert tool, install another nut insert into the 17/32" hole (Figure 19)





Figure 19 - Install Nut Insert

23. Raise the rear axle back up to gain access to drill the two marked locations on the inside frame rail. Drill out the two remaining holes to a final drill size using a 17/32" drill bit (Figure 20). **NOTE:** It is recommended that pilot holes be drilled first before drilling the 17/32" holes.



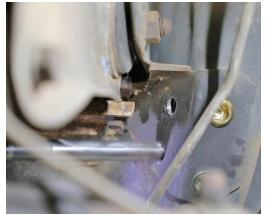


Figure 20 - Drill Inside Frame Rail

24. Next, install two more nut inserts into the holes drilled on the inside frame rail using the nut insert tool (Figure 21).





Figure 21 - Install Nut Inserts

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25. Place the end link bracket up against the frame rail and install four of the 5/16"- $18 \times 3/4$ " L hex head bolts and washers. **NOTE**: It is common for nut inserts to shift during the squeezing step. You may need to open up the through holes in the end link bracket as needed. Apply medium strength blue Loctite 242 to the threads of the bolts. Torque to 15 ft-lbs. Carefully adjust the fuel line on the passenger side back underneath the frame rail (Figure 22).



Figure 22 - Install End Link Bracket

- 26. Repeat Steps 15 through 25 for the opposite side of the vehicle.
- 27. Slide the exhaust isolators back onto the exhaust hangers (Figure 23). Re-install the exhaust at the flanges in front of the rear axle.





Figure 22 - Re-install Exhaust

28. Remove the hardware from the end links. Install the provided 1/2" ID x 3/4" OD x 1/4" L steel bushings on each of the end link studs (Fig. 23). Repeat this step for the other end link.



Figure 23 – Install End Link Spacers
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29. Raise the sway bar up to the frame rail. Install the end link from the inboard side through the sway bar and the end link bracket so that the studs face the outside of the vehicle. (Fig. 24).



Figure 24 - Install End Links

30. Apply high strength red Loctite 262 to the threads and install the provided hardware. Torque to 30 ft-lbs and tighten the end link jam nut. When tightening the hex nuts on the sway bar end links, use a 9/16" wrench on the link and a 5/8" wrench on the end link nut (Figure 25). **NOTE:** There are two mounting holes in the sway bar. Detroit Speed recommends starting with the forward mounting hole in the sway bar and adjust from there to your driving style.



Figure 25 - Tighten End Links

- 31. Repeat Steps 29 and 30 for the opposite side of the vehicle.
- 32. Support the rear axle at ride height using jack stands under the rear axle with the vehicle level. Adjust the sway bar mounting bracket so it is 90° to the ground using a level placed against the U-bolts (Figure 26).



Figure 26 - Level Sway Bar Brackets
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33. Keeping the axle brackets level from the previous step, torque the sway bar U-bolts at the rear axle to 45 ft-lbs (Figure 27). **CAUTION**: If you are using the factory suspension, cycle the rear axle up and down to verify that the sway bar and/or sway bar endlinks have clearance with the springs and/or lower control arms.



Figure 27 - Torque U-bolts

34. Separate the split lock collars into two pieces and place them around the sway bar so they are tight against the inside of the sway bar bushings on both sides of the rear axle. Reassemble the collar using medium strength blue Loctite 242 on the bolts and torque to 14 ft-lbs (Figure 28).



Figure 28 - Install Split Lock Collars

35. Install the wheels and tires and carefully lower the vehicle to the ground. Torque the rear wheels to the manufacturer's recommended torque specifications. The installation of the sway bar is now complete.

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