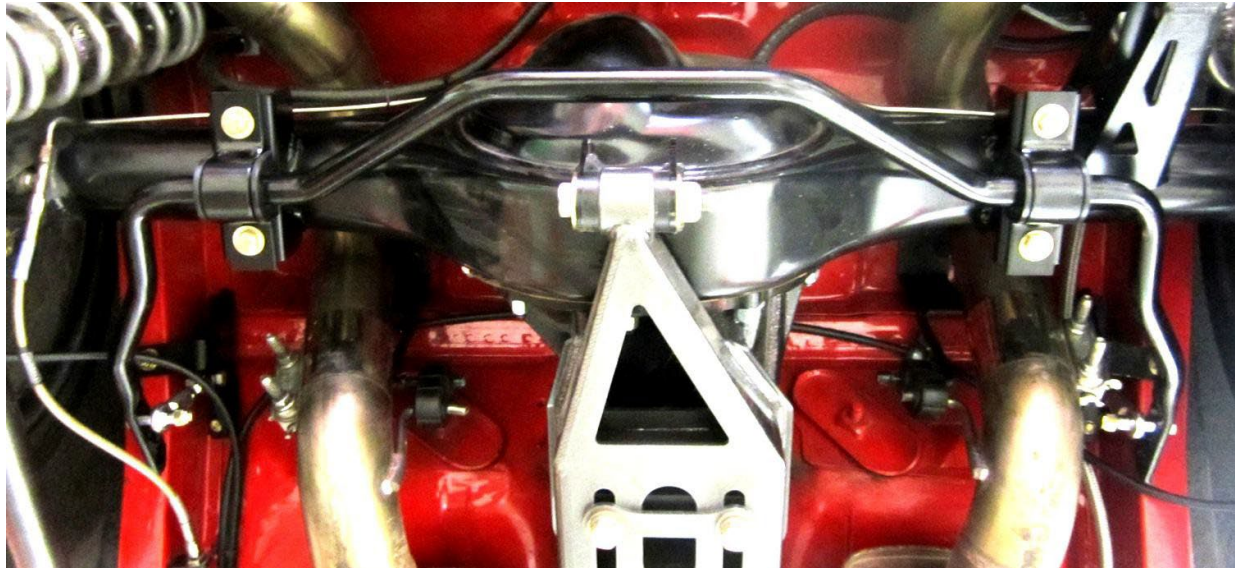


Instruction Guide

Torque Arm Rear Sway Bar
67-69 F-Body / 68-74 X-Body



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Figure 1: 1969 Camaro RedZed that features our ExtReme subframe and torque arm suspension [picture by Roger Maniscalco]

Congratulations on the purchase of your new Speedtech Performance torque arm rear sway bar. Use only approved and appropriately rated jack and jack stands, and be sure to take all safety precautions required to complete the job safely and correctly. If you have uncertainties, seek the assistance of a highly qualified workshop to assist you.

Read and understand all instructions thoroughly before you begin. Your main assembly and set up of your new torque arm rear sway bar can be done in a home garage with hand tools and basic welding equipment.

Speedtech enjoys seeing the progress our customers are making as they work through their builds. Join the group, [Team Speedtech](#), on Facebook and share your pictures and your story.

Speedtech Performance sends you best wishes for your project!

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1.0 GENERAL INFORMATION

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1.1 THIS GUIDE

Thank you for purchasing your new Speedtech Performance torque arm rear sway bar. Read through all instructions thoroughly before beginning and take all safety precautions required to do the job carefully and correctly. If you have uncertainty, seek the assistance of a highly qualified workshop.

The following instructions are intended for professional installers and are guidelines only. Speedtech Performance assumes no responsibility for the installation of any of its products installed by others. All products are intended to be installed by qualified professionals.

NOTE: Some items pictured may look different than the parts you have in the kit you received. For example, in this guide we have only used pictures of the torque arm rear sway bar for the early Camaro. Your application may have a slightly different shape; however, the part is functionally the same and is installed in the same manner described.

1.2 OVERVIEW

These instructions outline the torque arm rear sway bar. Photos in the instruction process may vary slightly from your exact operation.

Take necessary precautions when welding the inside of your vehicle and remove any close-by flammable materials including the seats, carpet, inner heater box, and insulation padding before performing this instruction. Be sure to wear proper protective gear when using power tools and keep sparks away from glass and other interior components when grinding and welding.

1.3 TOOLS

Installation of the Speedtech Performance ExtReme subframe can be done on the floor with a cut off wheel, basic welder, and simple hand tools.

Additional things to have before you start:

- Drill
- Floor Stands
- Floor Jack
- Welder
- 3/8" Drill Bit

2.0 CHECK IN PARTS AND HARDWARE

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2.1 CHECKING IN THE ORDER

Check in your order as soon as possible. To check in the order, Speedtech has provided tables which can be used as check lists, as displayed in figure 3. All bolts and nuts are NF unless otherwise noted. Hardware comes in several boxes. If you discover anything missing from your order, call your authorized dealer as soon as possible.

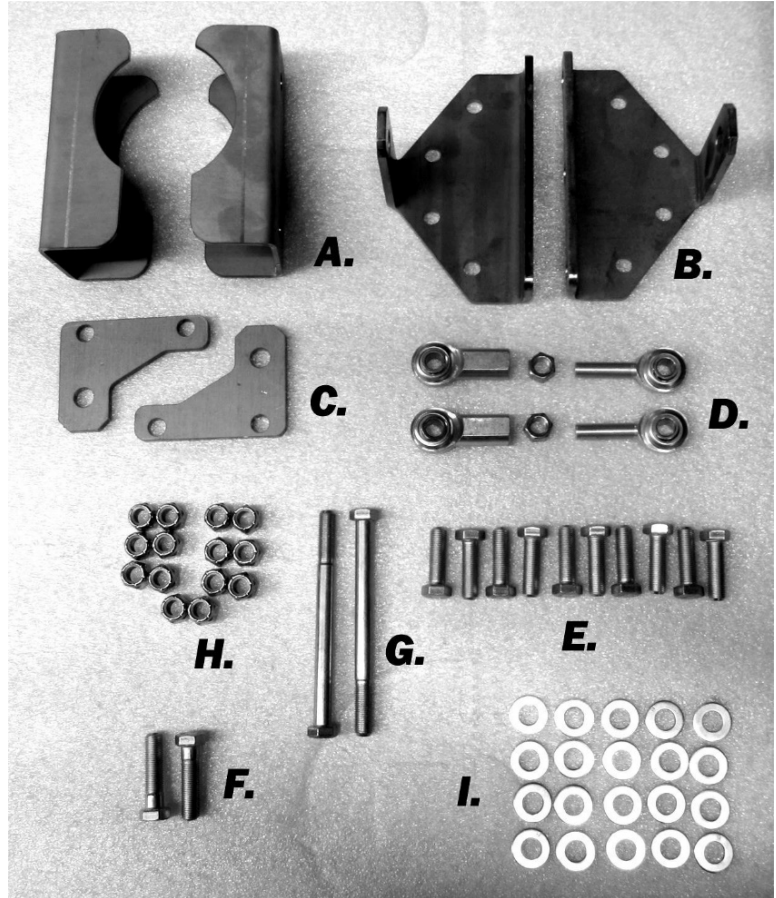


Figure 2: Numerous individual parts and hardware

2.2 CHECK IN TABLES

| X | # | Description | Size |
|---|----|-----------------------------|----------------|
| | 2 | A - Axle Housing Bracket | |
| | 2 | B - Frame Bracket | |
| | 2 | C - Interior L Bracket | |
| | 2 | D - Rod End Link Assemblies | 3 pieces |
| | 10 | E - Bolt | 3/8 x 1 1/4 NC |
| | 2 | F - Bolt | 3/8 x 1 1/2 NC |
| | 2 | G - Bolt | 3/8 x 4 1/2 NC |
| | 14 | H - Nylock Nuts | 3/8 |
| | 20 | I - Washers | 3/8 |

Figure 3: Check in table with amounts, descriptions, and sizes

3.0 GETTING STARTED

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3.1 LEVELING AND SUPPORT

WARNING: The vehicle should be on a level surface before you start.

First, jack up and properly support the vehicle's frame. The suspension should be at drive height when installing the bar. If the car is on a lift and the suspension is in droop when you install the kit, it will not line up properly when back on the ground. The sway bar brackets will all need to be testfit into place before final installation to achieve proper alignment of the bar and that no binding is experienced during the suspension's travel.

4.0 INSTALLATION

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4.1 MOCK UP

- Insert sway bar into greased poly bushings and attach bushing bracket to the axle perches. Do not fully tighten at this point.

- Position the brackets in the space between the two bends of the bar.

NOTE: The back portion of the bar behind the axle housing will point down slightly. Be sure not to install the bar upside down.

- You will find that the axle perches have one end shorter than the other. Either end can face forward, use the best positioning for proper bar to frame rail bracket alignment. Speedtech has found that typically you'll face the short end forward. Perches can be swapped side to side.

- **NOTE:** One cut out in the perch is larger than the other side. This larger cutout will go over the housing portion of the center section. See figure 4.

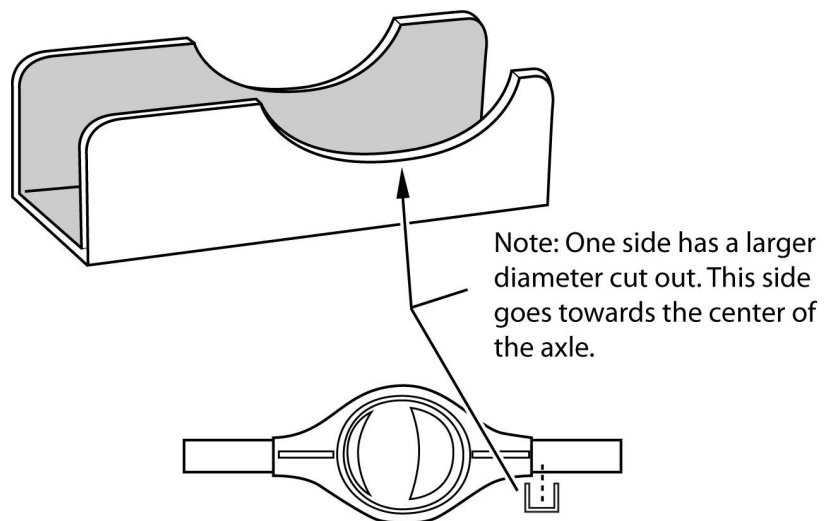


Figure 4: Larger cut out

- Lift the assembly into place and use C-clamps, ratchet straps, etc., to hold the sway bar, brackets, and perches in position against axle housing.

IMPORTANT: Do not weld at this time.

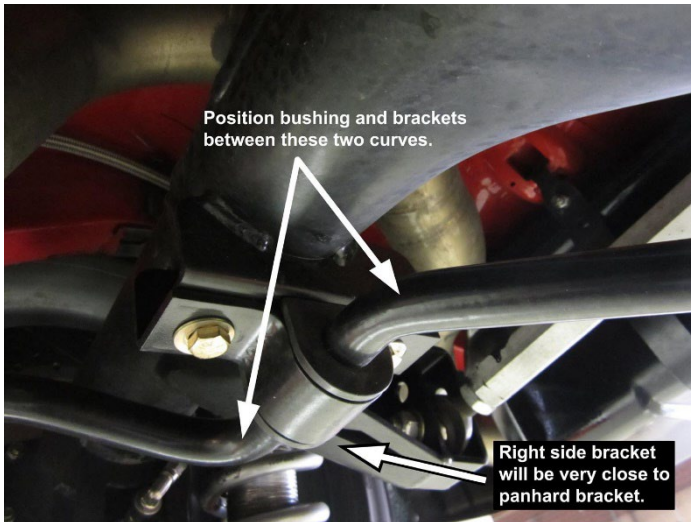


Figure 5: Two images depicting the assembly in place

4.2 FRAME BRACKETS

The frame rail brackets are the same for both sides. Because of this not all boltholes will be used on either side.

Attach the spherical bearing end links to the frame rail brackets using the 3/8x1 1/4" bolts. Typically, you'll use the front hole (see figure 6) for the front or middle sway bar hole, and use the next rearward bracket hole for the sway bar middle or rear hole.

NOTE: The remaining two holes will not be used. Refer to figure 6 for proper assembly of the rod end link. Note the end link is positioned on the inside of the bracket. The longer 3/8 x 1 1/2" bolt attaches to the sway bar end of the end link.



Figure 6: Frame brackets

4.3 FRAME RAIL BRACKET

Position the bracket on the frame rail so that the rod end link hangs down and lines up vertically with the sway bar's appropriate bolt hole. The tongue of the bracket will cover over the frame rail while the upper lip of the bracket will position near the inside of the frame rail. Mark the two lower holes in the bracket upper lip onto the floor pan. These holes will need to be drilled for the 3/8" bolts. The remaining third hole in the bracket lip will not be used.

The hole for the bracket tongue will also need to be drilled. In most cases, on Camaros and Firebirds this hole will line up with the seat belt bolt hole. It will not line up with the seatbelt hole on a Nova. An option for aligning the bracket on Camaro's is to use a long punch through the seat belt bolt hole to mark on the frame where the bolt would punch through. The provided 3/8 bolt is a grade 8; however, the length is slightly too short and the diameter is too thin to properly accommodate bolting down the seat belt. If seat belts are to remain in place, Speedtech recommends using a 7/16" or larger, grade 8 bolt in at least a 5" length.

A third option for any of the bracket to frame holes is to plug weld them. If welding, double-check the bracket is in place to properly prep the frame rail and floor pan for welding.

NOTE: The frame rail is basically thin sheet metal and does not require as much heat as you may think. Watch your heat and be careful not to blow through the rail. Always remember, measure twice and weld once.

In the right photo you can see the two floor pan bolts in place in the two forward holes above the end link (to the left of the link). These bolts will go through the floor pan behind the seat so rear seat removal is necessary to attach the nuts. Also, the rearward hole in the bracket and sway bar allow the end link to line up vertically.



Figure 7: Frame rail bracket set up

4.4 FLOOR BRACKET

After holes are drilled and positioning is verified, paint or powder coat brackets to protect them from the elements. Attach the bracket to the frame rail using the 3/8 x 1 ¼ bolts, washers and nuts. On the interior of the car, line up the L shaped flat bracket with the holes you drilled. This will sandwich between the floor and the nuts to help spread the load and tie the three bolts together. See figure 8.

At this time double check alignment of all brackets, perches, the sway bar end link, and the sway bar. Adjust as necessary. It is recommended to run the suspension through compression and extension to ensure there is no binding. This may be easiest with the shocks unbolted. If everything is aligned correctly, tighten all frame rail bracket bolts.

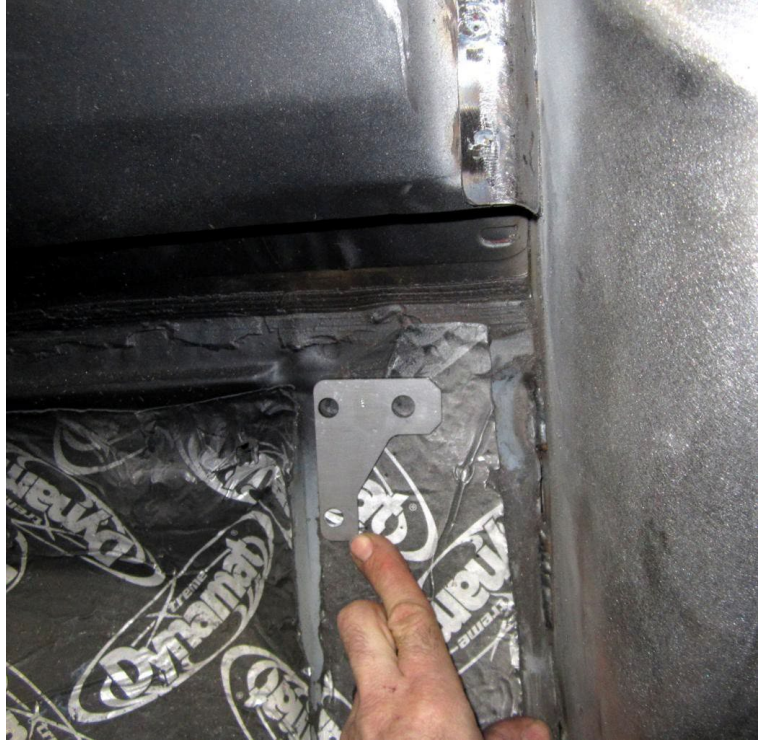


Figure 8: L shaped flat bracket that will sandwich between the floor and nuts

4.5 WELDING

Now mark spring perch locations on the axle housing. Once you disconnect bushing brackets from the perches, you can proceed to welding the axle brackets to the axle housing.

WARNING: Excessive heat can warp axle tubes. If you do not feel you have the necessary experience to weld on axle housings, seek experienced professional help.

With the axle housing prepped for welding and the perches in place, weld them to the axle. They do not need to be completely welded around the joint. Stitch weld them as seen in the photos. This will typically prevent excessive heat and warpage while providing a strong enough attachment. On the Panhard bracket side, you may need to weld inside the perch if there is not an accessible welding area on the outside. Paint the perches to protect them from the elements.

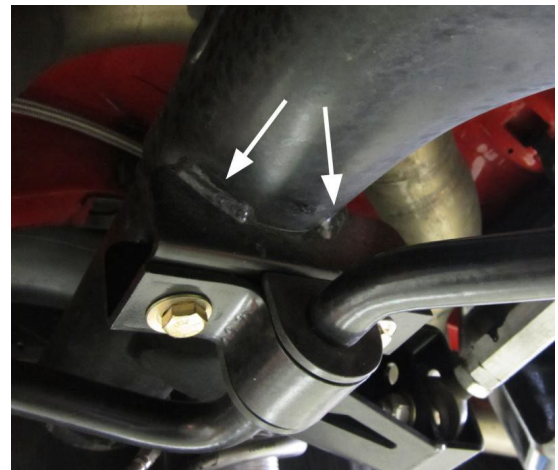


Figure 9: Stitch welding

5.0 CONGRATULATIONS

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Congratulations on completing your project! We know you will get many years of enjoyment from your project. Please join the group, [Team Speedtech](#), on Facebook. Team Speedtech is a community of customers, dealers, and factory employers that have a passion for pro touring muscle cars and are using Speedtech Performance products. You can ask questions and get advice from the group members and share your experience. Everyone enjoys seeing the videos and pictures during the progress of your project and Speedtech encourages you to share them!

Thank you for choosing Speedtech Performance and entrusting us with your torque arm rear sway bar for your custom muscle car.

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