Instruction Guide

Rear Trailing Arm Kit
64-72 A-Body

Speedtech PERFORMANCE

CHASSIS - SUSPENSION - PRO TOURING - AUTOCROSS - DRAG RACING - CUSTOM BUILDS

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Figure 1: 1970 Chevelle features our A-Body suspension [photo by Barrett-Jackson]

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

Read and understand all instructions thoroughly before you begin. The main assembly and setup of your new rear trailing arms can be done in a home garage with hand tools.

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

Speedtech Performance wishes you the best with 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 rear trailing arms. Read all instructions thoroughly before beginning, and take all required safety precautions to do the job carefully and correctly. If you are unsure, seek assistance from 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 designed for installation by qualified professionals.

1.2 OVERVIEW

These instructions outline the rear trailing arms. Photos in the instruction process may vary slightly from your exact operation. For example, this guide uses only pictures of the A-Body trailing arms. Your application may have a somewhat different shape, but the part is functionally the same and is installed in the same manner described.

Speedtech recommends inspecting all of your car's suspension components before installing parts, such as bushings and brake lines, which may be worn and could cause adverse effects. Replace parts as necessary. Speedtech recommends replacing the upper axle housing bushings with factory-replacement rubber bushings. This will allow the correct amount of rear-suspension manipulation. The axle-mounted rubber upper trailing arm bushings are Moog #K5161.

1.3 TOOLS

Installation of the Speedtech Performance rear trailing arms can be done on the floor with simple hand tools.

Additional things to have before you start:

- Socket / Wrench
- Floor Stands
- Floor Jack
- Drill With 3/8” Bit

2.0 CHECK IN PARTS AND HARDWARE

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2.1 CHECKING IN THE ORDER

Check your order as soon as possible. To check the order, Speedtech has provided a table that can serve as a checklist, as shown in Figure 2. 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.

2.2 CHECK IN TABLE

X	#	Description	Size
	2	Upper Trailing Arm	
	2	Lower Trailing Arm	
	2	Sway Bar End Link Assemblies	
	2	Sway Bar End Link Brackets	
	8	Trailing Arm Bolts	1/2 x 4”
	8	Trailing Arm Stover Lock Nut	1/2"
	6	Trailing Arm Bolt Sleeves	1/2"
	16	Trailing Arm Flat Washers	12mm
	4	Sway Bar Link Bolts – Fine	3/8 x 2”
	4	Sway Bar Link Nylock Nuts – Fine	3/8”
	4	Sway Bar Link Washers	3/8”
	6	Sway Bar Link Bracket Bolts	3/8” x ¾”
	6	Sway Bar Link Bracket Coarse Nylock Nut	3/8”
	8	Sway Bar Link Bracket Washer	3/8”
For Sway Bar Mounting to Optional 9” Axle			
	4	Hex Bolts, NF	3/8” x 1.50”
	4	Nylock Nuts, NF	3/8”
	8	Flat Washers, SAE	3/8”

Figure 2: 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 adequately support the vehicle's frame. Do this with jack stands: two supporting the rear axle and two supporting the front of the frame. Remove the rear wheels. With the rear axle supported, record the pinion angle at ride height. You will need to match this number after your new trailing arms are installed. An easy way to do this is to attach your pinion gauge to the heads of two rear-end cover bolts that align vertically.

Support the rear of the frame with jack stands. Remove the shocks so you don't stretch the brake hose. Carefully lower the rear axle until you can remove the coil springs. Support the axle with jack stands. Place another jack stand under the pinion u-joint to keep the rear axle from rotating once it is unbolted. Remove the upper trailing arms.

4.0 TRAILING ARM INSTALLATION

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4.1 UPPER ARMS

To make new arms the same length as the original arms, use the factory upper arms and line up the bolt holes with those on the Speedtech upper arms. If an adjustment is needed, the trailing arms can be adjusted by using the threading.

4.2 UPPER ARM – BOLT IN

Using the new bolts, install the Speedtech upper trailing arms with the grease fitting pointing downward.

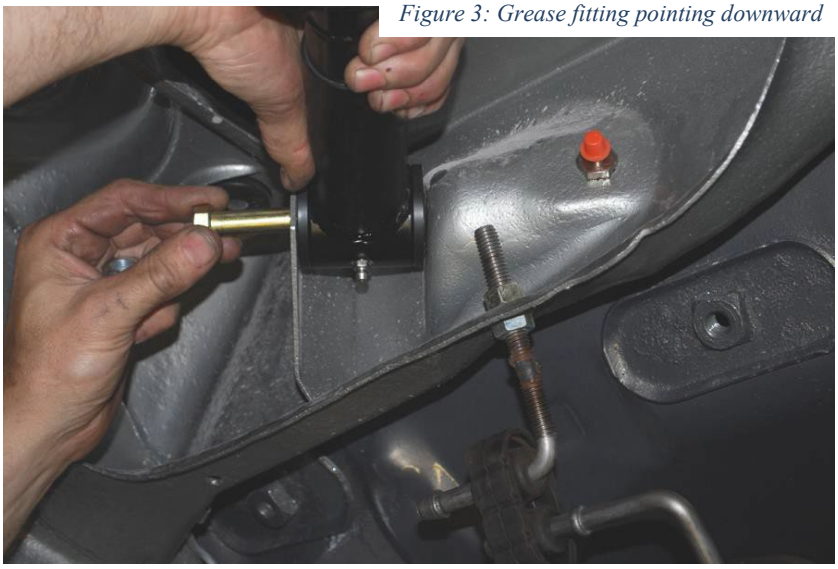

Figure 3: Grease fitting pointing downward

4.3 LOWER TRAILING ARMS

- Remove the factory lower trailing arms.
- Adjust the Speedtech lower arms as needed in the same manner as the upper arms. Install the trailing arms with the new bolts.
- Raise the axle to ride height and recheck the pinion angle. If the angle is off, adjust the length of the trailing arms equally to adjust the pinion angle, keeping the rear axle centered in the wheel opening and in the frame.
- Recheck pinion angle. Then repeat the process until the desired angle is achieved.

Figure 4: Lowering the trailing arms

4.4 AXLE CENTER

Check to make sure the rear axle is laterally centered side-to-side in the car, and that the wheels are centered front-to-back in the wheel openings. Adjust trailing arms as needed. Always recheck the pinion angle as centering adjustments are made.

4.5 SHOCKS

Reinstall coil springs and shocks.

5.0 SWAY BAR INSTALLATION

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5.1 MOCKUP

Use the sway bar hardware to attach the bar to the 10 or 12-bolt axles. Do not fully tighten at this time. See sway bar instructions for further information. Optional 9” axles will use the included hardware.

5.2 END LINKS

NOTE: Do not use the end links or hardware that come with the sway bar. Instead, attach the end links included with the trailing arms to the inside of the sway bar. Make sure you place the spacer between the link and the sway bar. Do not fully tighten the bolts at this time.

Next, attach the upper link brackets to the end links. Position the vertical tab of the bracket against the front of the frame crossmember, and make sure that the links are standing vertically. Mark two holes for each bracket: one for the horizontal and one for the vertical.

Once the brackets are clamped into place, cycle the suspension through its travel range to check for any interference or issues, then continue drilling and mounting. After the holes are marked, remove the bracket from the links and drill the holes with a 3/8” bit. Once the holes are drilled, bolt the brackets into place and then secure the links to the brackets.

NOTE: Tighten all bolts.

Figure 5: Two images that depict the bolting of the end links

6.0 FINAL STEPS

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Be sure that all measurements are correct and double-check that all components have proper clearance throughout your suspension's travel range. Torque all bolts to spec. Tighten all loose suspension bolts and double-check all bolts to ensure they are all tight. It is recommended that you fill all grease fittings now. Speedtech recommends Permatex Ultra Slick Synthetic Grease, but any high-quality chassis grease will work. For your Sweet power rack-and-pinion, we recommend using Sweet or Jones-brand whole synthetic power steering fluid for best performance and to avoid overheating with standard-type fluids during performance driving.

This concludes the instruction on the rear trailing arm.

7.0 CONGRATULATIONS

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Congratulations on completing your project! We know you will enjoy your project for many years. Please join the Team Speedtech group on Facebook. Team Speedtech is a community of customers, dealers, and factory employees who are passionate about pro touring muscle cars and use Speedtech Performance products. You can ask questions, get advice from group members, and share your experience. Everyone enjoys seeing videos and pictures throughout the progress of your project, and Speedtech encourages you to share them!

Thank you for choosing Speedtech Performance and entrusting us with your rear trailing arm needs for your custom muscle cars.

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