

# Instruction Guide

Rear Trailing Arm Kit  
78-88 G-Body



***Speedtech***  
**PERFORMANCE**

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

435.628.4300 [SPEEDTECHPERFORMANCE.COM](http://SPEEDTECHPERFORMANCE.COM)



4160 S. RIVER RD, ST. GEORGE, UT 84790



*Figure 1: 1987 Grand National, features our G-Body suspension, Blake Foster*

Congratulations on the purchase of your new Speedtech Performance rear trailing arms. 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 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 group, [Team Speedtech](#), on Facebook and share your pictures and your story.

Speedtech Performance sends you best wishes for your project!

# TABLE OF CONTENTS

<b>1.0</b>	<b>GENERAL INFORMATION</b>	<b>4</b>
1.1	THIS GUIDE	4
1.2	OVERVIEW	4
1.3	TOOLS	4
<b>2.0</b>	<b>CHECK IN PARTS AND HARDWARE</b>	<b>4</b>
2.1	CHECKING IN THE ORDER	4
2.2	CHECK IN TABLES	5
<b>3.0</b>	<b>GETTING STARTED</b>	<b>5</b>
3.1	LEVELING AND SUPPORT	5
<b>4.0</b>	<b>TRAILING ARM INSTALLATION</b>	<b>6</b>
4.1	UPPER ARMS	6
4.2	UPPER ARM – BOLT IN	6
4.3	LOWER TRAILING ARMS	6
4.4	AXLE CENTER	7
4.5	SHOCKS	7
<b>5.0</b>	<b>SWAY BAR INSTALLATION</b>	<b>7</b>
5.1	MOCKUP	7
5.2	END LINKS	8
<b>6.0</b>	<b>FINAL STEPS</b>	<b>9</b>
<b>7.0</b>	<b>CONGRATULATIONS</b>	<b>9</b>

## **1.0 GENERAL INFORMATION**

[Back to Table of Contents](#)

### **1.1 THIS GUIDE**

Thank you for purchasing your new Speedtech Performance rear trailing arms. 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.

### **1.2 OVERVIEW**

These instructions outline the rear trailing arms. Photos in the instruction process may vary slightly from your exact operation.

Speedtech recommends you inspect all of your car's suspension components prior to installation of our parts, such as bushings and brake lines which may be worn and could cause adverse effects. Replace parts as necessary. It is also suggested that you replace the upper axle housing bushings with factory replacement rubber bushings. This will allow the correct amount of power that the rear suspension requires. Axle mounted rubber upper trailing arm bushings are Moog #K6178.

### **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

## **2.0 CHECK IN PARTS AND HARDWARE**

[Back to Table of Contents](#)

### **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 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 TABLES

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	12mm x 3 1/2"
	8	Trailing Arm Stover Lock Nut	12mm
	6	Trailing Arm Bolt Sleeves	12mm
	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 3/4"
	6	Sway Bar Link Bracket Coarse Nylock Nut	3/8"
	8	Sway Bar Link Bracket Washer	3/8"

Figure 2: Check in tables including amounts, descriptions, and sizes

## 3.0 GETTING STARTED

[Back to Table of Contents](#)

### 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. 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 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 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 and watch that 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

[Back to Table of Contents](#)

### 4.1 UPPER ARMS

Using the factory upper arms, 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 lowers as needed in the same manner as the uppers. Install the trailing arms with the new bolts.
- Raise the axle to ride height and recheck pinion angle. If the angle is off, remove the rearward end of the lower trailing arms. Adjust the driver's side arm and reinstall. Adjust passenger arm to match bolt hole alignment and reinstall.

- Check pinion angle again. Then repeat the process until the desired pinion 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 the wheels are centered front to back in the wheel opening. Adjust trailing arms as needed. Always be sure pinion angle is rechecked as centering adjustments are made.

#### 4.5 SHOCKS

Reinstall coil springs and shocks.

### 5.0 SWAY BAR INSTALLATION

[Back to Table of Contents](#)

#### 5.1 MOCKUP

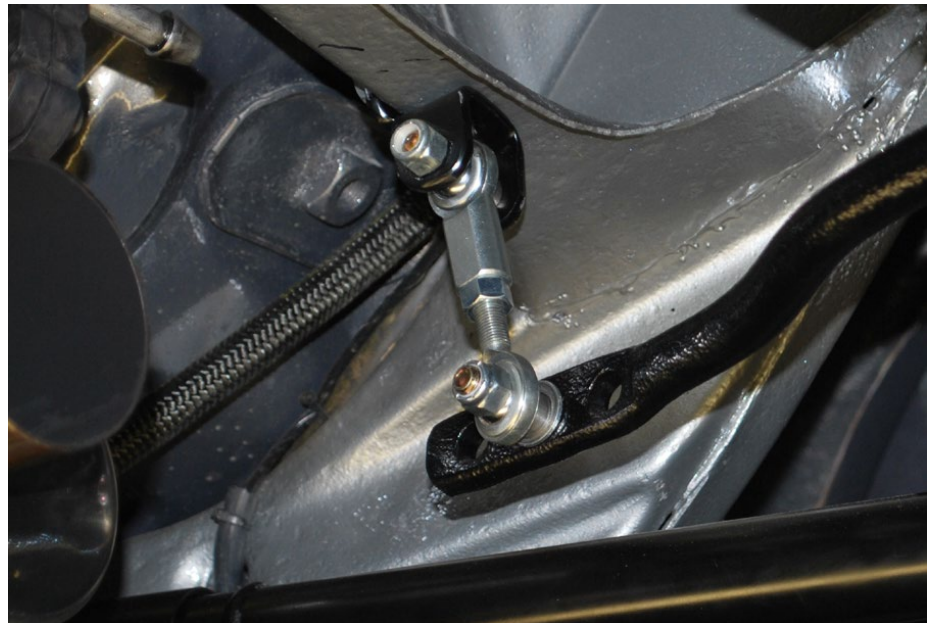
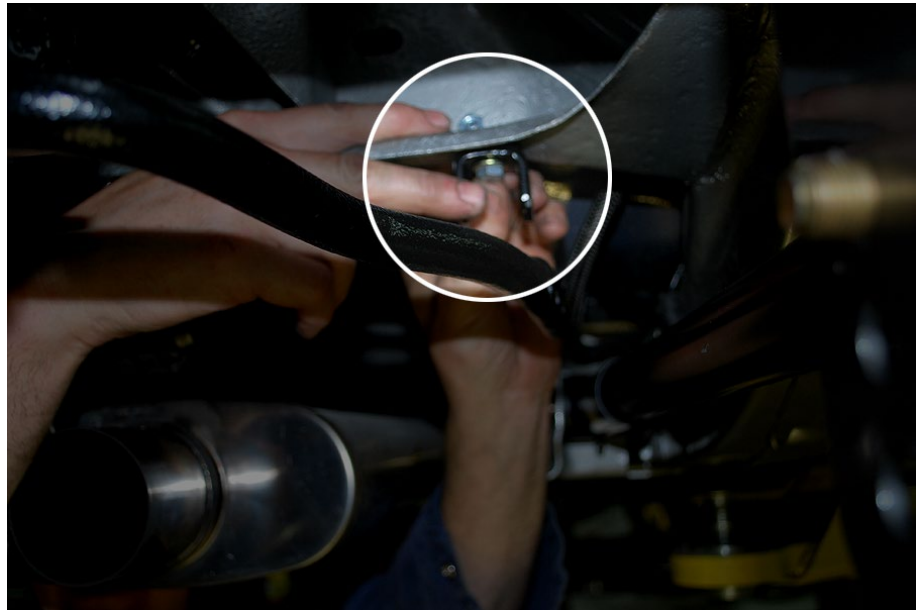
Use the sway bar hardware to attach bar to the rear axle. Do not fully tighten at this time. See sway bar instructions for further information.

## 5.2 END LINKS

**NOTE:** You will not be using the end links and associated hardware that come with the sway bar. Bolt the end links that come with the trailing arms to the sway bar on the inside of the bar, with the spacer between the link and the sway bar. Do not fully tighten yet. Attach the upper link brackets to the links and position with the vertical tab against the front of the frame cross member.

Be sure the links are standing vertically. Mark two holes to bolt down each of the brackets, one for the horizontal hole and one for a vertical hole. Remove the bracket from the links and drill the holes with the 3/8" bit. Bolt down the brackets, then bolt 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

[Back to Table of Contents](#)

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 you fill all grease fittings at this time. Speedtech suggests using Permatex Ultra Slick Synthetic Grease, but any high-quality chassis grease will do. For your Sweet power rack and pinion we recommend using Sweet or Jones brand full synthetic power steering fluid for best performance and to avoid overheating standard type fluids during performance driving situations.

This concludes the rear trailing arm instruction.

## 7.0 CONGRATULATIONS

[Back to Table of Contents](#)

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 rear trailing arm needs for your custom muscle cars.

Speedtech Performance, LLC  
4160 S. River Rd.  
St George UT, 84770  
(435) 628-4300