Instruction Guide

Rear Coilover Conversion Kit
64-72 A-Body

Speedtech PERFORMANCE

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

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Figure 1: 1966 El Camino features our A-Body suspension

Congratulations on the purchase of your new Speedtech Performance rear coilover conversion kit. 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 coilover conversion kit 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!

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1.0 GENERAL INFORMATION

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1.1 THIS GUIDE

Thank you for purchasing your new Speedtech Performance ExtReme rear coilover conversion kit. 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 A-Body Rear Coilover Conversion Kit. Photos in the instruction process may vary slightly from your exact operation.

Speedtech recommends that 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 you replace the upper axle housing bushings with factory replacement rubber bushings. This will allow the correct amount of manipulation that the rear suspension requires. Axle mounted rubber upper trailing arm bushings are Moog #K5161.

The Speedtech coilover bracket is designed to slip over and bolt on to the existing shock bracket.

NOTE: For determining left and right sides, remember the shock mount tabs are located inward.

1.3 TOOLS

Installation of the Speedtech Performance A-Body rear coilover conversion kit 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” and 5/16” 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 a table which can be used as a check list, 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	Aluminum Shock Adapter	
	4	Shock Mount Conversion Brackets	
	8	Upper Bracket Mount -Bolt	5/16 x 1
	2	Upper Bracket Mount -Bolt	5/16 x 1 ½
	4	Lower Bracket Mount -Bolt	3/8 x 1 ¼
	2	Shock Adapter Mount -Bolt	5/8 x 1
	2	Upper Shock Mount -Bolt	½ x 2
	2	Lower Shock Mount -Bolt	5/8 x 4 ½
	2	Rear Lower Trailing Arm Mount -Bolt	½ x 4 ½
	8	Nylock Nut	5/16
	4	Nylock Nut	3/8
	2	Nylock Nut	½
	2	Jam Nylock Nut	½
	4	Nylock Nut	5/8
	16	Washer	5/16
	8	Washer	3/8
	8	Washer	½
	4	Washer	5/8

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 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.

Remove the rear wheels if needed for extra room to work. With the rear axle supported, remove one side's shock and the rearward part of the lower control arm. Carefully lower the rear axle to the point that you can remove the coil springs.

NOTE: Doing one side at a time keeps the rear axle stable in position.

The Speedtech lower bracket for factory style axle brackets is the same for all years,'64-72.

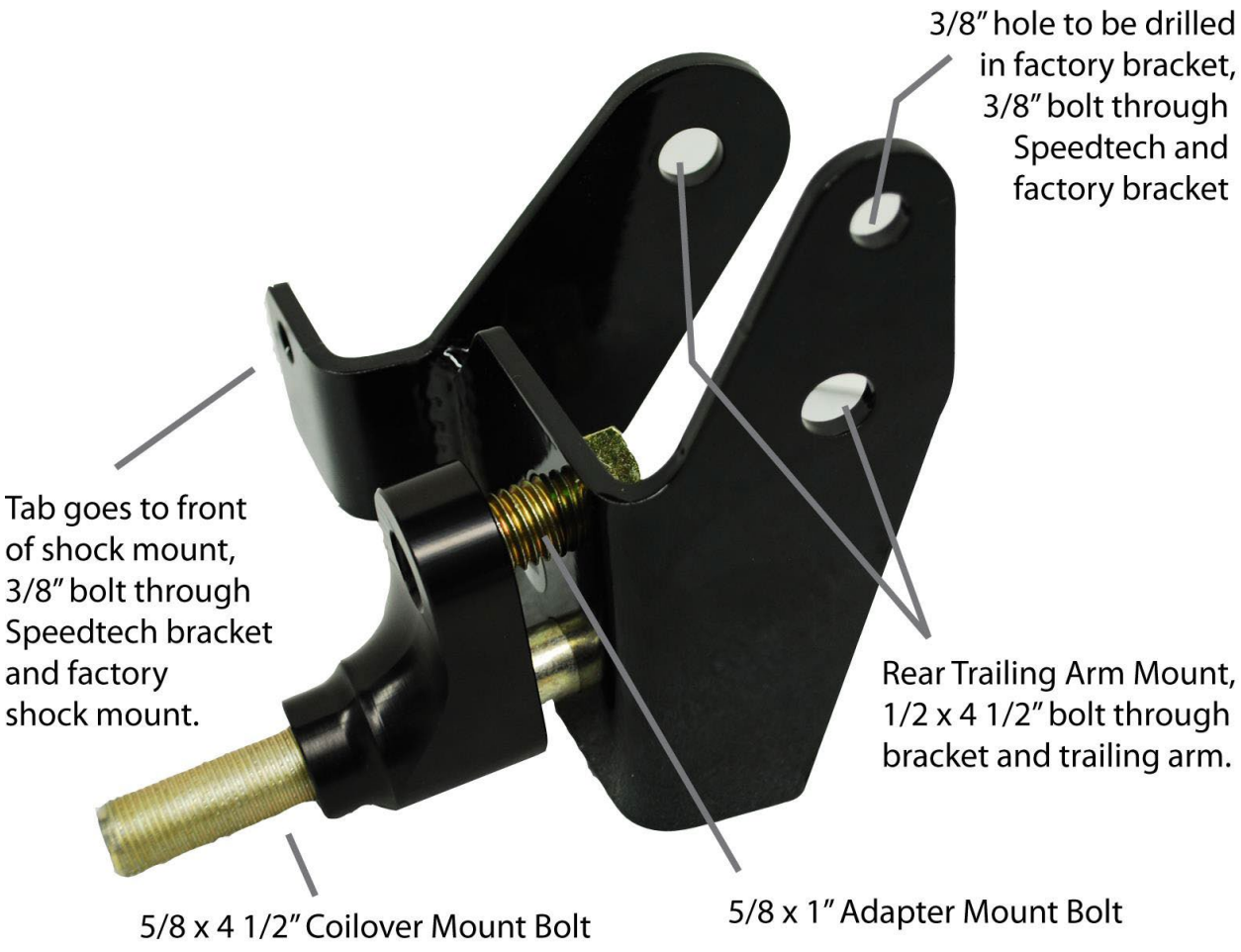

Figure 3: Getting started diagram

4.0 INSTALLATION

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4.1 LOWER BRACKETS

(Special Instructions for GTO in section 4.2.)

Attach the new lower conversion bracket to the factory shock mount/trailing arm bracket. First, bolt down the outer tab using a 3/8 x 1 ¼" bolt, (2) 3/8" washers and a 3/8" Nylock nut through the original lower shock mount hole.

NOTE: The tab is installed to the forward side of the shock mount! For determining left and right sides, the tabs go towards the outside of the car. Only snug the bolt, do not tighten completely.

Figure 4: Lower brackets

Using the upper 3/8" hole in the Speedtech bracket as a guide, drill a 3/8" hole in the side of the factory trailing arm bracket, just above the trailing arm mounting hole (see figure 3). Using a 3/8 x 1 ¼" bolt, (2) 3/8" washers, and a 3/8" Nylock nut, bolt down this part of the bracket. Now go back and tighten the other 3/8" bolt. Reattach the lower trailing arm to the bracket using the new ½ x 41/2" bolt, washers, and nut.

4.2 LOWER BRACKER - GTO

Speedtech has found some late 60's GTO's have unique control arm brackets that need to be modified for your Speedtech brackets to line up properly.

NOTE: The lower control arm bolt will line up correctly, however the factory axle bracket prevents the Speedtech bracket from rotating up into position, preventing the shock bolt holes from lining up in both brackets. See figure 5.

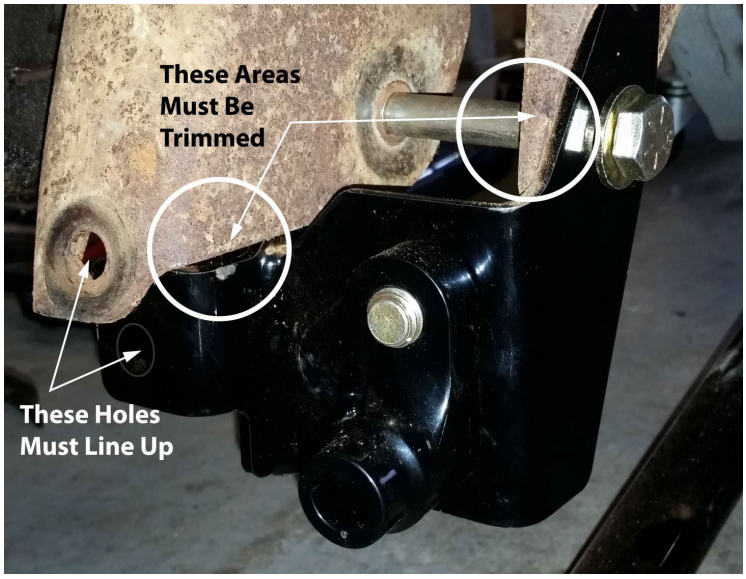
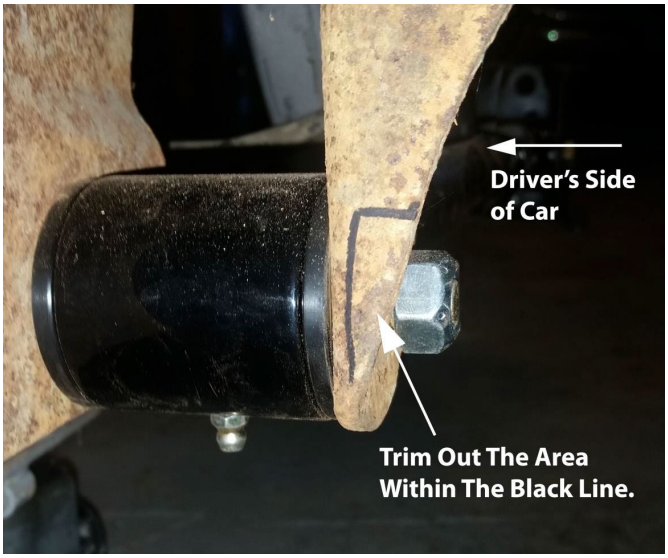


Figure 5: Lower bracket - GTO

Some slight trimming of the factory brackets is required to permit the Speedtech bracket to rotate up to line up the shock bolt holes, refer to figure 5 and cut lines on figure 6. Once trimming is completed and the bracket lines up properly, follow installment instructions on previous pages.

Figure 6: Two images presenting the cut lines

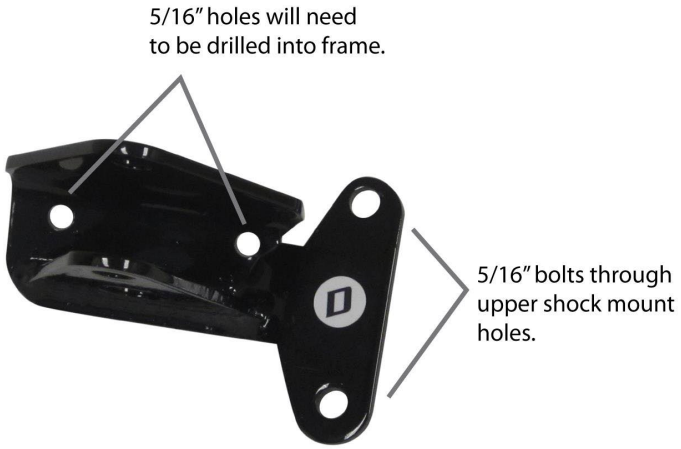


Install the billet shock mount adapter to the bracket using the 5/8 x 1" bolt. There are two possible positions to mount this adapter, each affecting ride height up or down. Speedtech recommends bolting the longer 5/8 x 4 1/2" bolt through the bottom hole as a starting point. If you want additional ride height lift, simply rotate the adapter vertically to move that longer bolt to the upper hole. Do not install the shock at this time.

4.3 UPPER BRACKET

NOTE: Speedtech knows that 1966-1967 were transition years for Chevelles. *Most* 1964-1966 and 1968-1972 Chevelles use the same upper shock bracket. *Most* 1967 Chevelles use a unique bracket. Because some 1966-1967 are different, both upper brackets are included in 1966-1967 kits. Use the appropriate bracket for your application.

4.4 MOST 1967 CARS



Using 5/16” bolts, washers and nuts, bolt the upper bracket into place through the original upper shock mount holes. Using the 5/16” holes in the Speedtech bracket as a guide, drill two 5/16” holes in the frame. Bolt down the bracket using the 5/16” bolts, washers, and nuts. DO NOT skip this step, as all 4 bolts are necessary to keep the bracket securely mounted. See figure 7.

Install your shocks. Be sure the 1/2” inside diameter bolt sleeve is located in the top shock eye and the 5/8” inside diameter bolt sleeve is located in the bottom shock eye.

Figure 7: Location of holes

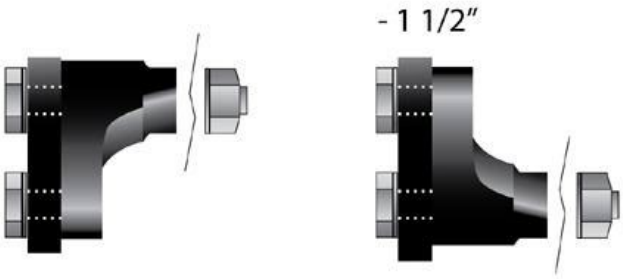
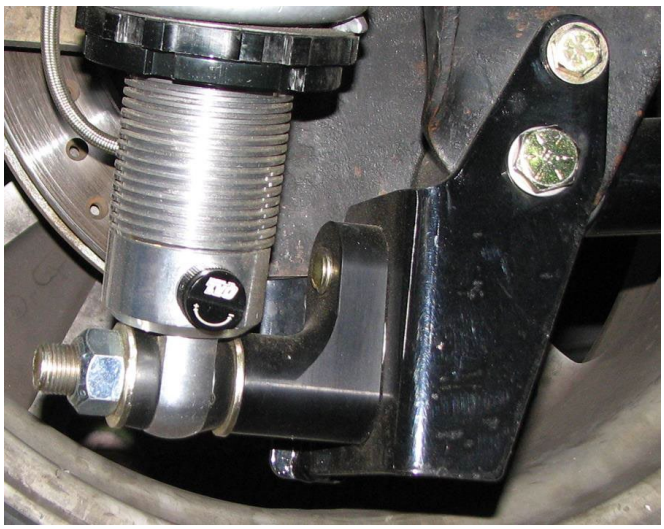


Figure 8: Model and image showing the installment of shocks



4.5 1964-1965, *MOST* 1966 AND 1968-1972

Place the upper bracket up into position using the factory upper shock mount holes to align the bracket. Using the Speedtech bracket as a guide, carefully mark the frame where the side 5/16” and third 5/16” upper hole will need to be drilled. For the third top bolt there are two predrilled holes in the bracket available for you to use. Either will work, however it is only necessary to use one hole, refer to figure 9) Drill the upper hole to 5/16”.

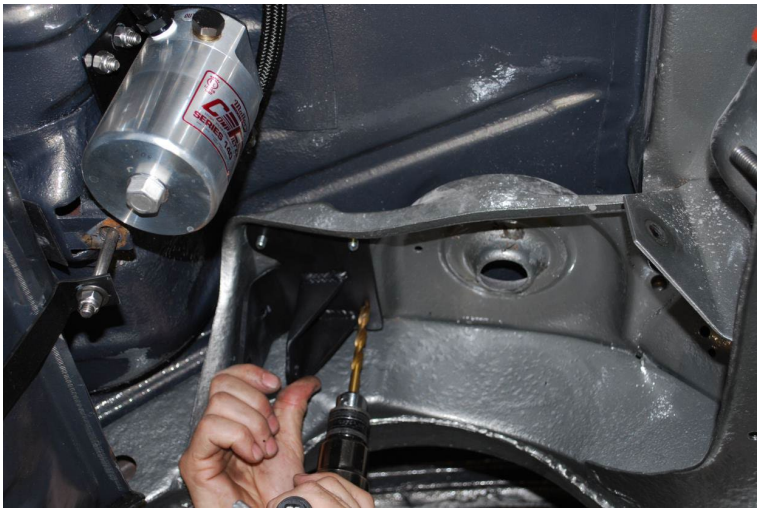
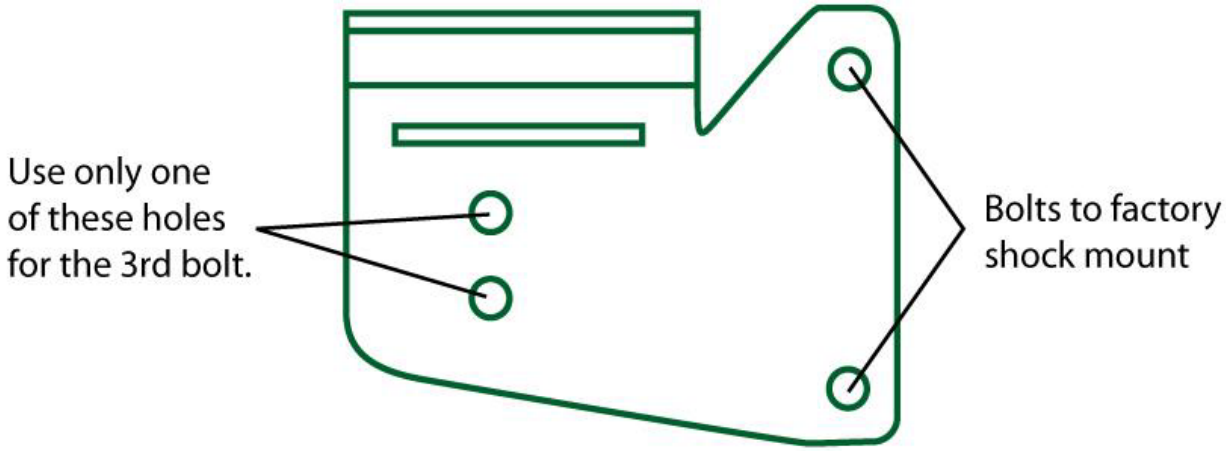


Figure 9: Photos of placing brackets into position and diagram of holes



You will find it is easier to bolt the shock to the upper bracket first, and then install the assembly into the frame. Make sure the ½ x 2 ½" upper shock mount bolt points towards the front of the car.

On 1964-65 cars there is a .640" tall spacer required on the bolt in position A, in figure 9. Use the 5/16 x 1 1/2" long bolt in this position. Using the correct 5/16" bolts and associated washers and nuts, install the bracket onto the frame.

5.0 COILOVER INSTALLATION

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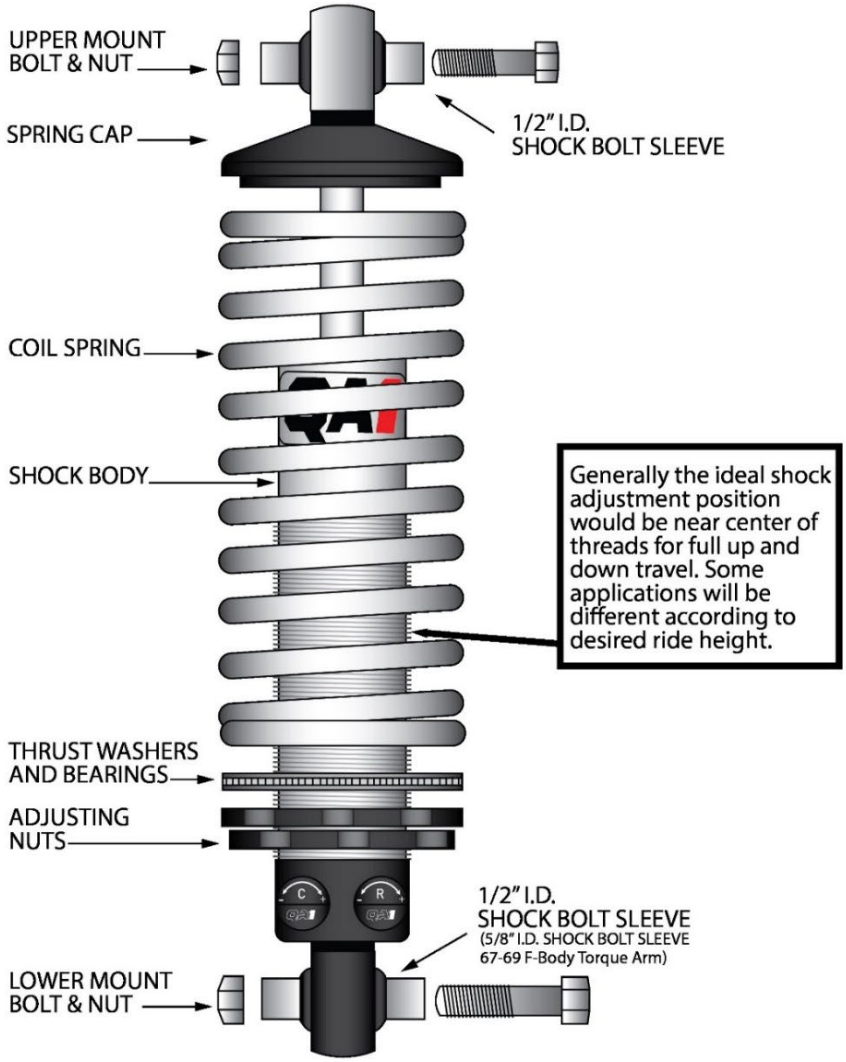
Figure 10: Assembly of coilover installation



Once all parts are installed in position, double-check to see that all bolts are tight. Repeat this process for the other side.

With the weight off the rear suspension, support the rear axle and set the initial ride height according to shock manufacturer instructions. Replace wheels and tires and carefully lower the vehicle back onto the ground. Now you can fine tune your ride height adjustments.

Because you have used factory mounting points as a base for this kit a wheel alignment may not be necessary. If you have installed adjustable trailing arms and/or changed front suspension components at the same time we do recommend having an alignment performed by a reputable source familiar with performance-based alignments on older vehicles. On the following page you will find baseline specs for a performance pro-touring type alignment. We do not recommend using alignment shop preprogrammed alignment specs for a performance handling vehicle.

6.0 FINAL STEPS

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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, Speedtech recommends using Sweet or Jones brand full synthetic power steering fluid for best performance and to avoid overheating standard type fluids during performance driving situations.

With the weight off the rear suspension, support the rear axle and set the initial ride height according to manufacturer recommendations. Replace wheels and tires and carefully lower the vehicle back onto the ground. Next, fine tune your ride height adjustments.

Wheel alignment may not be necessary because you have used factory mounting points as a base for this kit. If you have installed adjustable trailing arms and/or changed front suspension components at the same time, Speedtech recommends having an alignment performed by a reputable source familiar with performance-based alignments on older vehicles.

7.0 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 rear coilover conversion needs for your custom muscle cars.

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