Instruction Guide

Chicane Coilover Bracket
67-69 F-Body / 68-74 X-Body

Speedtech PERFORMANCE

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

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Figure 1: 1968 Camaro features our Chicane Conversion Brackets [photo by Craig Street]

Congratulations on the purchase of your new Speedtech Performance ExtReme chicane coilover brackets. 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 ExtReme chicane coilover brackets 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

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.

While Speedtech's chicane coilover brackets work great as an upgrade for your factory suspension, it is also designed to meet the needs of those intending participate in off highway road racing and autocross competition. To achieve maximum benefit from our system you should anticipate adjusting and tuning of the suspension to achieve optimum performance specific to the vehicle, driver and type of racing. Some of this, such as tuning sway bars and shock settings, can be done track side through making adjustments and seeing/feeling how the car reacts to these changes. We recommend a tire probe pyrometer and good quality air pressure gauge be in your track side tuning kit.

WARNING: Once assembled you will need a professional wheel alignment performed. Driving a vehicle without a proper alignment can be dangerous, towing is recommended to transport the car prior to the alignment being performed.

1.2 OVERVIEW

These instructions outline the chicane coilover brackets. Photos in the instruction process may vary slightly from your exact operation. For example, in this guide Speedtech has only used pictures of the chicane coilover brackets for the early Camaro. Your application may have a slightly different shape the part is functionally the same and is installed in the same manner described. Additionally, this system has been designed to work with a factory subframe or chassis.

1.3 TOOLS

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

Additional things to have before you start:

- Silicon Based Grease
- Anti-Seize
- Wrench Set
- Torque Wrench
- Floor Stands
- Floor Jack
- Plasma Cutter (if possible)

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 TABLE

Upper Control Arms

X	#	Description	Size
	1	Drivers Side Chicane Coilover Bracket	Depends on Vehicle
	1	Passenger Side Chicane Coilover Bracket	Depends on Vehicle
	2	Upper Shock Mount Shoulder Bolt	½ x 2 1/4 NC
	2	Nylock Nuts	3/8 NC

Figure 2: Check in table with the amounts, descriptions, and sizes

3.0 GETTING STARTED

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3.1 DISCONNECT BATTERY

Since you will be cutting and welding, disconnect the battery before any removal begins.

3.2 LEVELING AND SUPPORT

The vehicle should be on a level surface before you start. Jack up and properly support the vehicle's frame. Remove the front wheels. For cars with drop off style rotors, reinstall one lug nut if needed to prevent the rotor from falling off.

4.0 FACTORY DISASSEMBLY

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4.1 SUSPENSION REMOVAL

Remove upper control arms, coil springs, and shocks. You may remove the spindle if you feel it is necessary.

5.0 CUTTING

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5.1 UPPER SHOCK MOUNT

Remove the existing upper shock mount by cutting along the factory weld, where the arrows are located in figure 3.

IMPORTANT: Do not cut off the upper control arm mount.

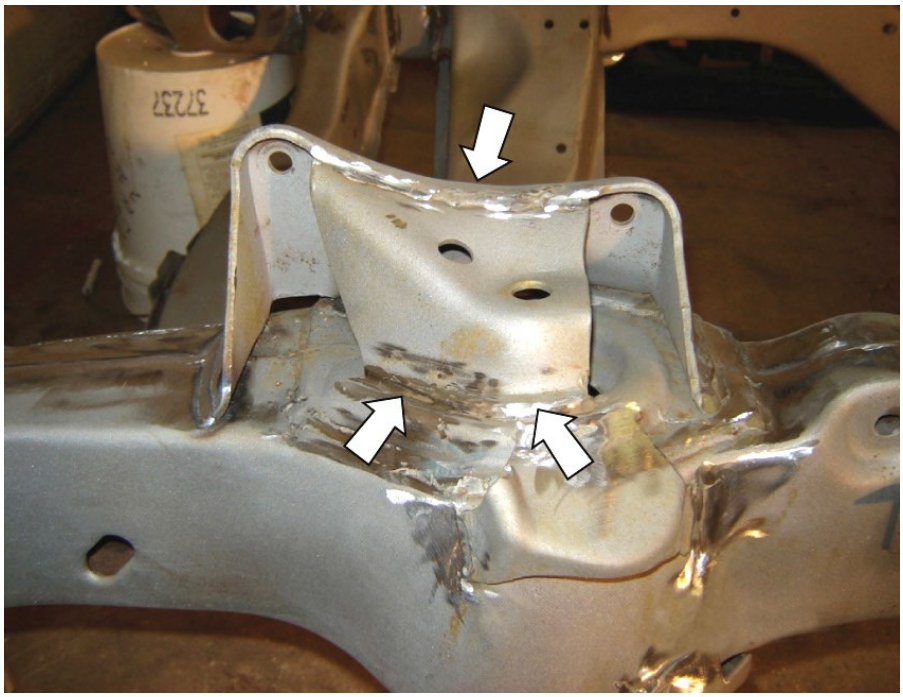

Figure 3: Cutting arrows

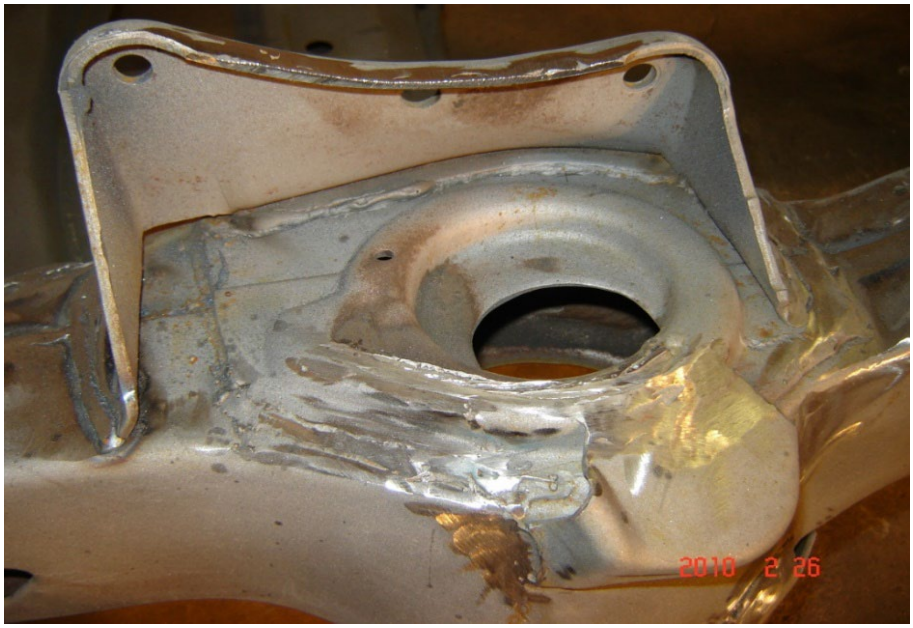

Figure 4: Final product of cuts

5.2 INNER SPRING CUP

After the shock mount is removed, you will need to remove the inner spring cup and clearance the hole to about 4 ½" in diameter. This is best done with a plasma cutter or oxyacetylene torch. Clean up the rough edges as needed.

Figure 5: Cut line for the inner spring cup

Figure 6: Final product after cutting the inner spring cup

6.0 COILOVER ASSEMBLY

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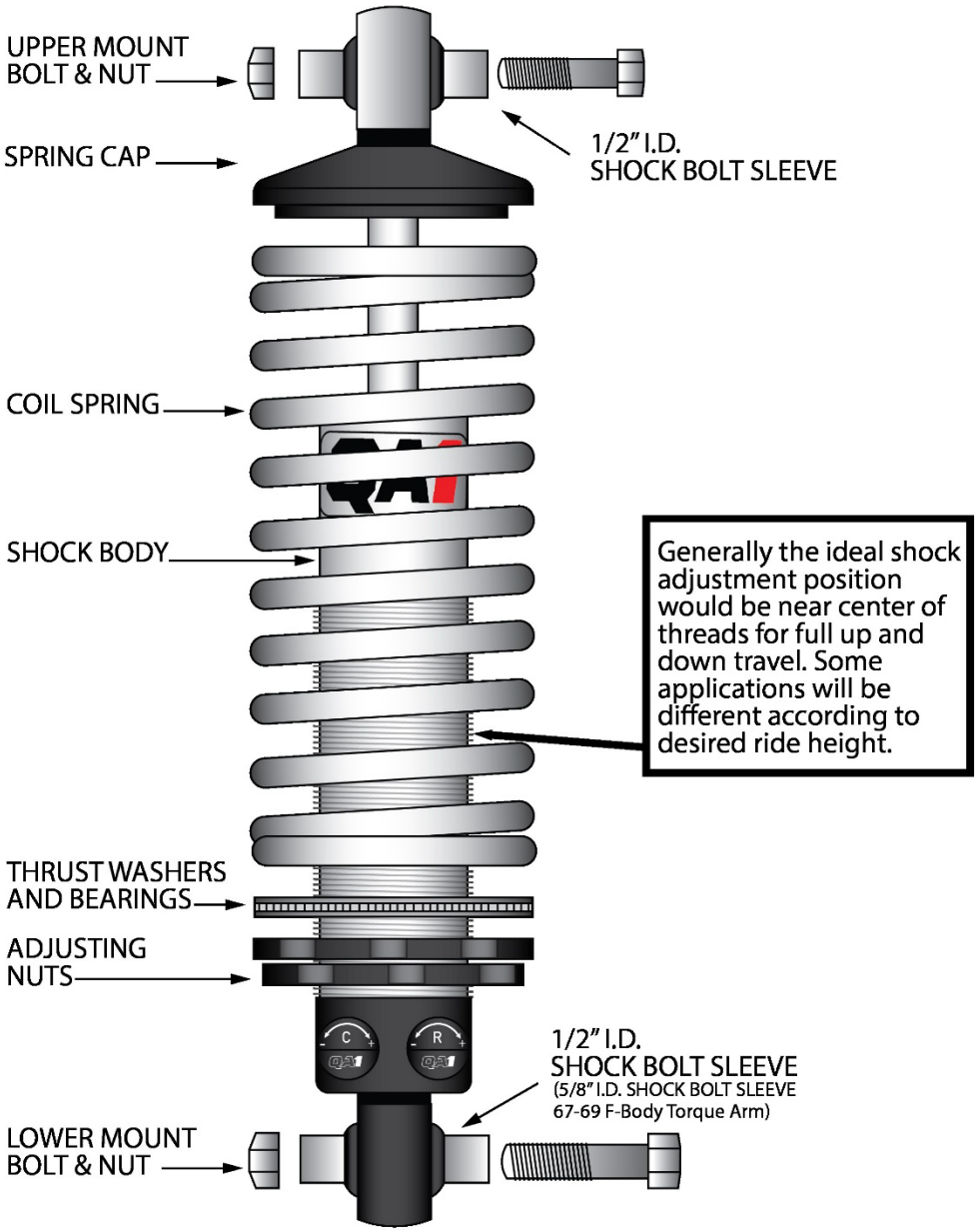
Assemble the coilover shocks as per the supplied instructions. Be sure to place the “T” bar in the lower mount and secure it with external snap rings. Make sure the snap rings are seated in the grooves correctly.

Figure 7: Coilover assembly



7.0 MOCK UP

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7.1 LOWER

Mockup the lower control arm and coilover shock assembly to make sure the upper chicane mount is located in the correct location. This also ensures that all shock components clear the frame. To allow you to work with both hands and keep everything in place, support the lower control arm and shock assembly. Speedtech recommends a small piece of chain or nylon rope. Align them so that the lower control arm is level to the ground and set the shock approximately in the middle of its travel. This will be close to the finished ride height. You must be sure the shock is not mounted in a way that binds the bushings and/or bearings.

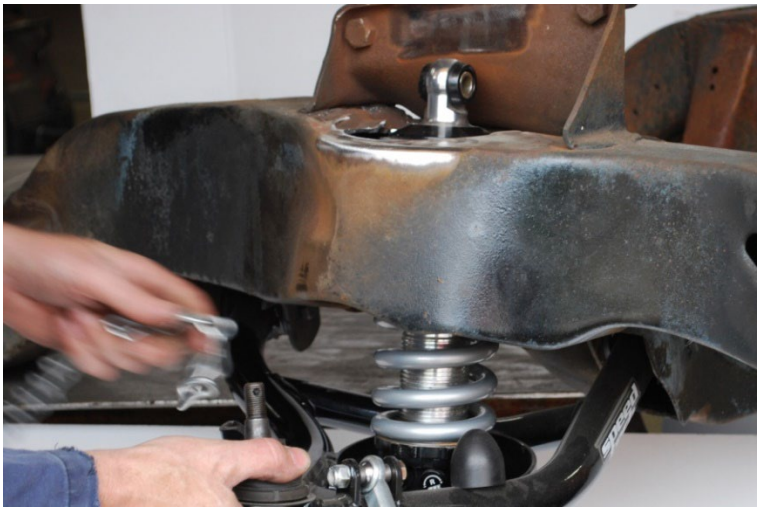

Figure 8: Mockup of the lower mount

7.2 UPPER

Assemble the chicane bracket to the shock top eyelet. Visually center the shock and measure the clearance from the outside of the spring to the frame. Optimal clearance is 3/8" to 1/2". If needed, remove the shock/spring assembly and trim the hole. Align the bracket into position so that the shock is centered in the hole and will travel without hitting the frame. When you are sure everything is aligned properly, tack weld the upper chicane mount in this location.

Figure 9: Mockup of the upper mount

7.3 TEST

Remove the shock assembly and then remove the spring from the shock. Reinstall the shock into the lower control arm and the chicane bracket to test again for any binding throughout the control arm's range of motion.

8.0 WELDING / INSTALLATION

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8.1 FINAL WELDING

Now that you have double checked everything and there is no bind and no clearance issues, you can do the final weld of the chicane upper bracket.

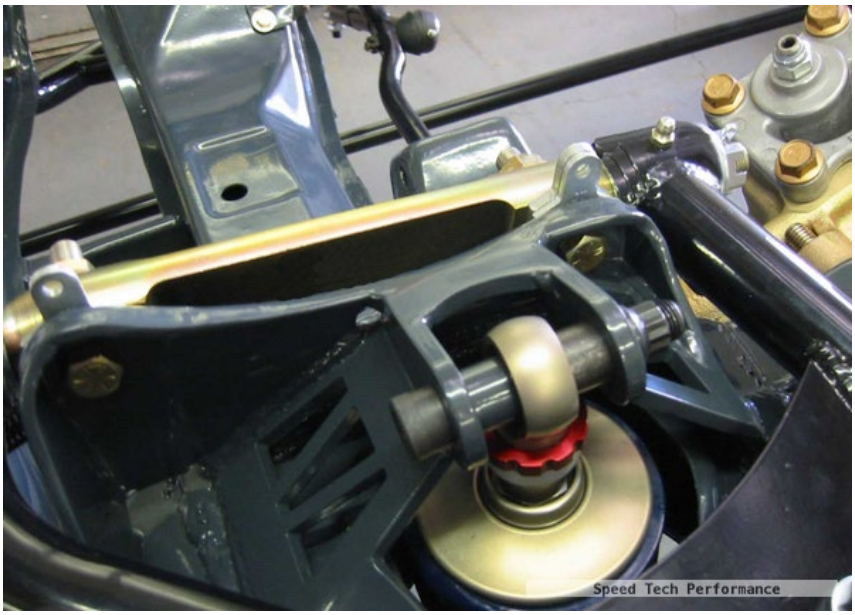

Figure 10: Final weld

8.2 COATING

Once all welding is completed you can paint or powder coat your subframe/chassis.

8.3 SUSPENSION

Reassemble and install all suspension components.

9.0 ALIGNMENT / TORQUING

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9.1 TORQUE

- Lower control arm nuts 40 ft/lbs
- Upper control arm nuts 50 ft/lbs
- Upper shock mount 30 ft/lbs
- Lower T bar mounting nuts 40 ft/lbs

9.2 ALIGNMENT

Be sure to double-check all the fasteners. Set the car to the approximate ride height by adjusting the shock lower spring nuts. This should be done before aligning the car. When finished, take the vehicle to a competent professional alignment shop to have an alignment performed.

NOTE: Use alignment specifications below, not alignment shop pre-programmed factory Specs.

These specs are only suggestions and may need additional changes to achieve the optimum settings for your driving style or situation.

Daily Driving, Street Performance Specifications

Driver Side	Passenger Side
4 Degrees positive Caster	4 ½ Degrees positive Caster
0 to ½ Degree negative Camber	0 to ½ Degree negative Camber
3/ 32 Total Toe-in	3/ 32 Total Toe-in

Aggressive Track Alignment Specifications

Driver Side	Passenger Side
5 ½ Degrees positive Caster	6 Degrees positive Caster
½ to 1 Degree negative Camber	½ to 1 Degree negative Camber
3/ 32 Total Toe-in	3/ 32 Total Toe-in

Original Alignment Specifications

**For reference purposes only. Do not use these specs.

Driver Side	Passenger Side
½ Degree positive Caster	½ Degree positive Caster
¼ to ½ Degree negative Camber	¼ to ½ Degree negative Camber
1/8 Total Toe-in	1/8 Total Toe-in

Figure 11: Alignment specifications

10.0 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 chicane coilover brackets and suspension needs for your custom muscle cars.

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