

# Instructional Guide

*Chicane Coilover Bracket  
70-81 F-Body*



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

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

435.628.4300 SPEEDTECHPERFORMANCE.COM    

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

## Revision Sheet

Release No.	Date	Revision Description
Rev. 0	7/25/22	Created - CF
Rev. 1		
Rev. 2		
Rev. 3		

### Installation Guide Approval Memorandum

I have carefully assessed the Installation Guide for **UPPER CONTROL ARMS**. This document has been completed in accordance with the expectations as follows.

APPROVAL - Please initial the appropriate statement.

\_\_\_\_\_ Engineering: The document is accepted pending the changes noted.

\_\_\_\_\_ Workshop: The document is accepted pending the changes noted.

\_\_\_\_\_ The document is not accepted.



*Figure 1 1970 Trans AM, features our Chicane Conversion Brackets – @thisautotour*

Congratulations on the purchase of your new Speedtech Performance Chicane Coilover Brackets. Installing this system will require the removal of your old suspension from the car. Use only approved and appropriately rated jack and jack stands, be sure to take all safety precautions required to do the job safely and correctly. If you are unsure seek the assistance of a highly qualified workshop to assist you.

Read and understand all instructions thoroughly before you begin. For the most part, assembly and set up of your new suspension can be done in a home garage with hand tools and basic welding equipment. As your final step, review each assembly step again to be sure all fasteners are correctly secured and torqued to specification.

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

From everyone at Speedtech Performance we send you all best wishes for your project!

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# Installation Guide

## TABLE OF CONTENTS

### 1. GENERAL INFORMATION

- 1.1 THIS GUIDE
- 1.2 OVERVIEW
- 1.3 TOOLS

### 2. CHECK IN PARTS AND HARDWARE

- 2.1 CHECKING IN THE ORDER
- 2.2 CHECK IN TABLES

### 3. GETTING STARTED

- 3.1 DISCONNECT BATTERY
- 3.2 LEVELING AND SUPPORT

### 4. FACTORY DISASSEMBLY

- 4.1 SUSPENSION REMOVAL

### 5. CUTTING

- 5.1 UPPER SHOCK MOUNT
- 5.2 INNER SPRING CUP

### 6. COILOVER ASSEMBLY

### 7. MOCK UP

- 7.1 LOWER
- 7.2 UPPER
- 7.3 TEST

### 8. WELDING/INSTALLATION

- 8.1 FINAL WELDING
- 8.2 COATING
- 8.3 SUSPENSION

### 9. ALIGNMENT/TORQUE

- 9.1 TORQUE
- 9.2 ALIGNMENT

### 10. CONGRATULATIONS

- 10.1 WRAP UP

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## 1.0 GENERAL INFORMATION

[Back to Table to Contents](#)

### 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.

**NOTE!** Some Items pictured may look different then the parts you have in the kit you received. For example, in this guide we have 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.

### 1.2 Overview

These instructions outline the Chicane Coilover Brackets. The system has been designed to work with a factory subframe or chassis. Some photos in the install process may vary slightly from your exact application.

**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.

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.

### 1.3 Tools

Installation of the Speedtech Performance Chicane Coilover Brackets can be done on the floor with simple hand tool, 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)

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## 2.0 CHECK IN PARTS AND HARDWARE

[Back to Table to Contents](#)

### 2.1 Checking in the Order

Best practice will be to check in your order as soon as possible after receiving the order. To check in the order we have provided tables, these can be used as check lists for your order. If you discover anything missing from your order, call your authorized dealer as soon as possible.

### 2.2 Check in Tables

#### 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	1/2" x 1 3/4"
	2	Nylock Nuts	3/8" NC

## 3.0 Getting Started

[Back to Table to Contents](#)

### 3.1 DISCONNECT BATTERY

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

### 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

[Back to Table to Contents](#)

### 4.1 SUSPENSION REMOVAL

Remove upper control arms, coil springs and shocks. Spindle removal is optional as well.

## 5.0 CUTTING

[Back to Table to Contents](#)

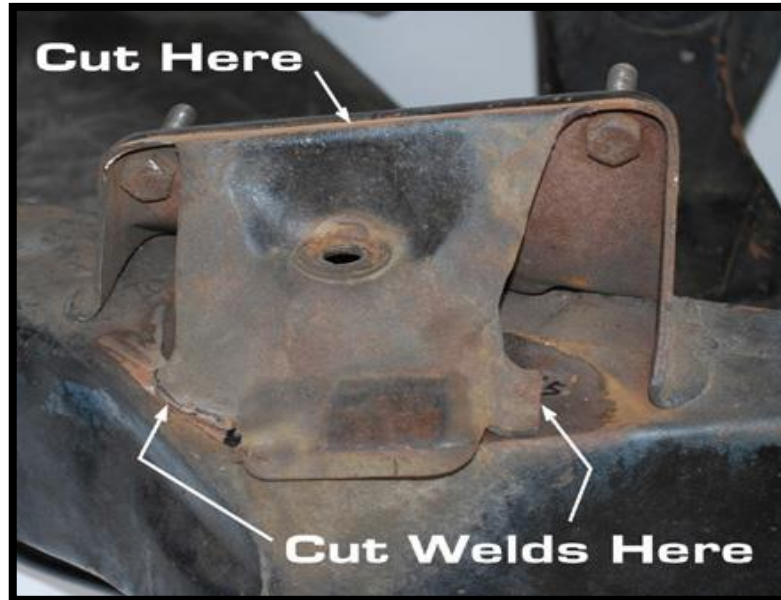


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## 5.1 UPPER SHOCK MOUNT

Remove the existing Upper Shock mount by cutting along the factory weld (arrows).

**DO NOT CUT OFF THE UPPER CONTROL ARM MOUNT!**



Below is what you should end up with.



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## 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.



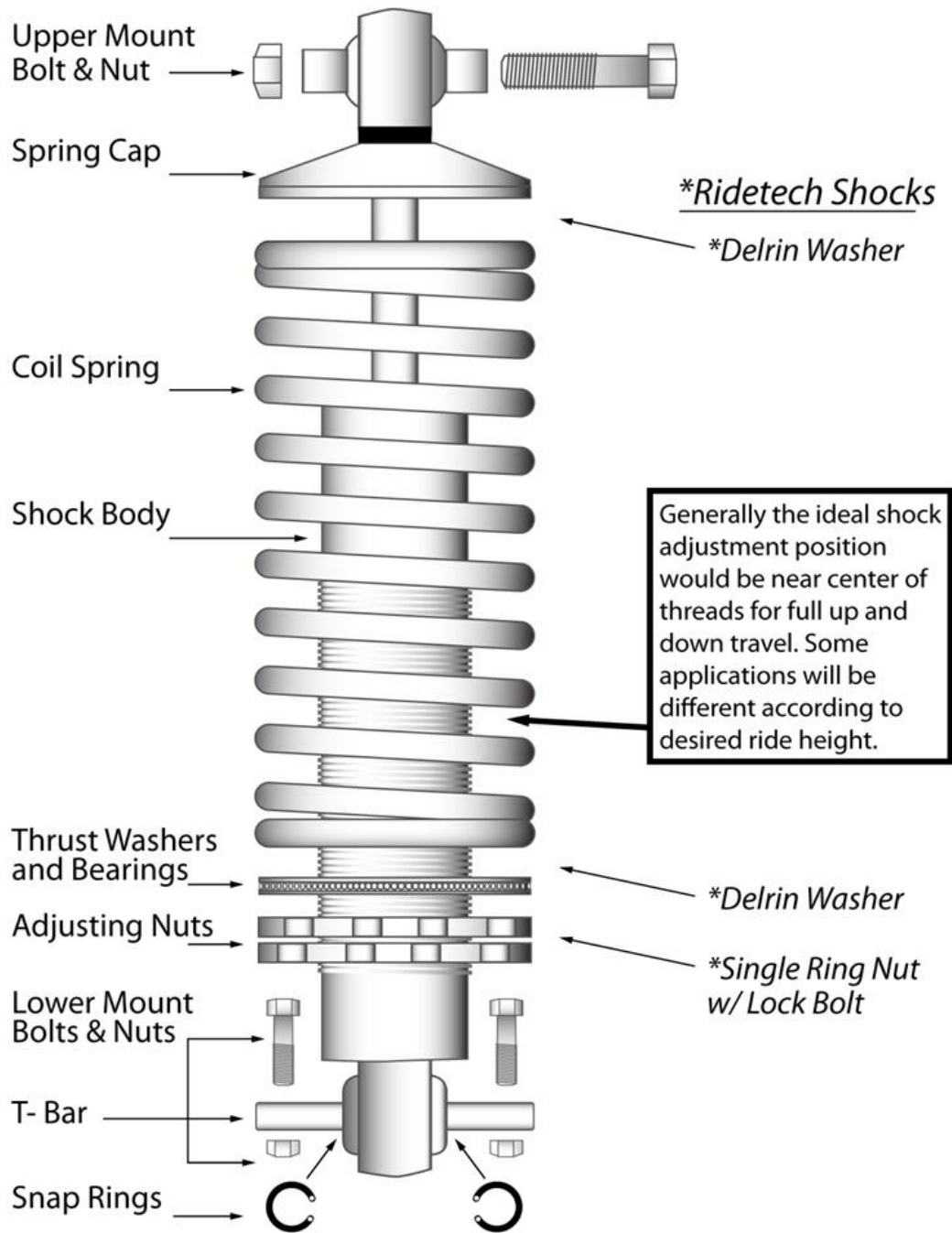


## 6.0 COILOVER ASSEMBLY

[Back to Table of Contents](#)

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.

### Viking Shocks



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## 7.0 MOCK UP

[Back to Table to Contents](#)

### 7.1 LOWER

**Do not skip this step.** Mock up 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. We recommend 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.

### 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.



### 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.

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## 8.0 WELDING / INSTALLATION

[Back to Table to Contents](#)

### 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.



### 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

[Back to Table to Contents](#)

### 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.

**See specifications on the next page.**

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## 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

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## 10.0 Congratulations

[Back to Table to 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 like-minded individuals using Speedtech Performance products. The Group's members include customers, our dealers and factory employees - each with a passion for Pro Touring muscle cars. You can ask questions and get advice from the group members as well as share your experience. Within the group we enjoy seeing the videos and pictures during the progress of your projects so post up. We also encourage you to share pictures and videos of your finished projects out on the road, at the show & shine, on track or however you get enjoyment from your ride, we want to see it!

Thank you for choosing Speedtech Performance! We know you have a choice, and we appreciate that you entrust us with your chassis and suspension needs for you custom muscle cars.

Speedtech Performance, LLC  
4160 S. River Rd.  
St George UT, 84770

(435) 628-4300