

Instructional Guide

*Frame Brace Kit
71-76 B-Body*



Speedtech
PERFORMANCE

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

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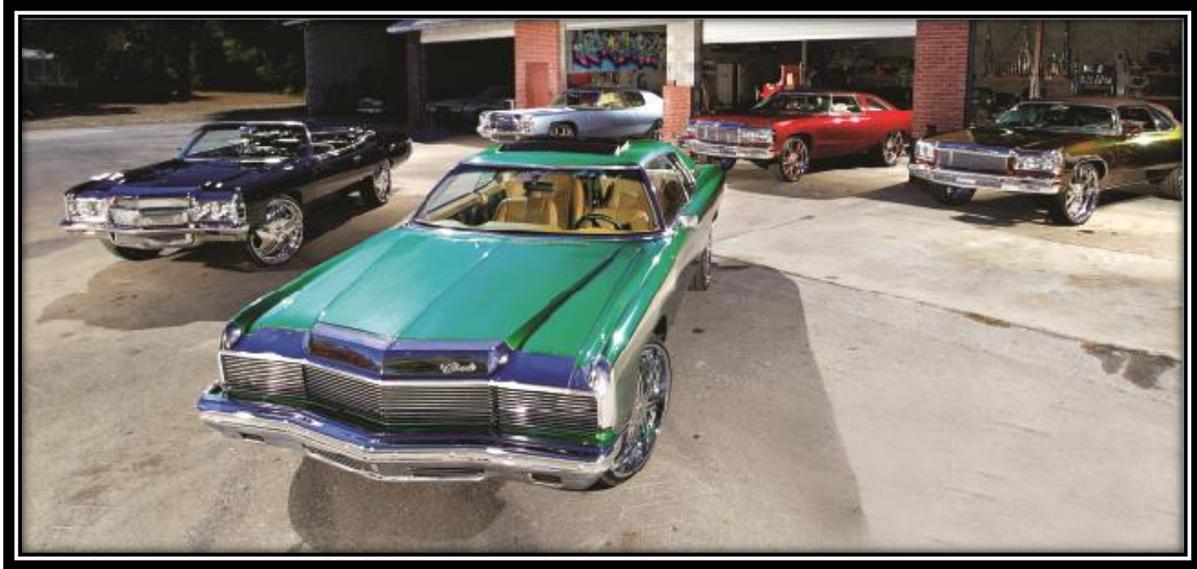


Figure 1 1971-76 Impala's, features our components – Zach Randolph

Congratulations on the purchase of your new Speedtech Performance Frame Brace Kit. 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 Frame Brace Kit can be done in a home garage with hand tools and basic welding equipment.

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!

Installation Guide

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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.

1.2 Overview

These instructions outline the Frame Brace Kit. The system has been designed to work with a factory set up. Some photos in the install process may vary slightly from your exact application.

This Frame Brace Kit can be installed with basic hand and power tools and requires a slight bit of welding. You will be required to drill some holes, cut and trim pieces for your exact set up. If you are unsure how to use the tools and materials and carryout the work required to install this cover, stop and seek a professional installer's help.

1.3 Tools

Installation of the Speedtech Performance Frame Brace Kit can be done on the floor with simple hand tool, cut off wheel and a basic welder.

Additional things to have before you start:

- Welder
- Drill
- Grinder
- Floor Stands
- Floor Jack

2.0 CHECK IN PARTS AND HARDWARE

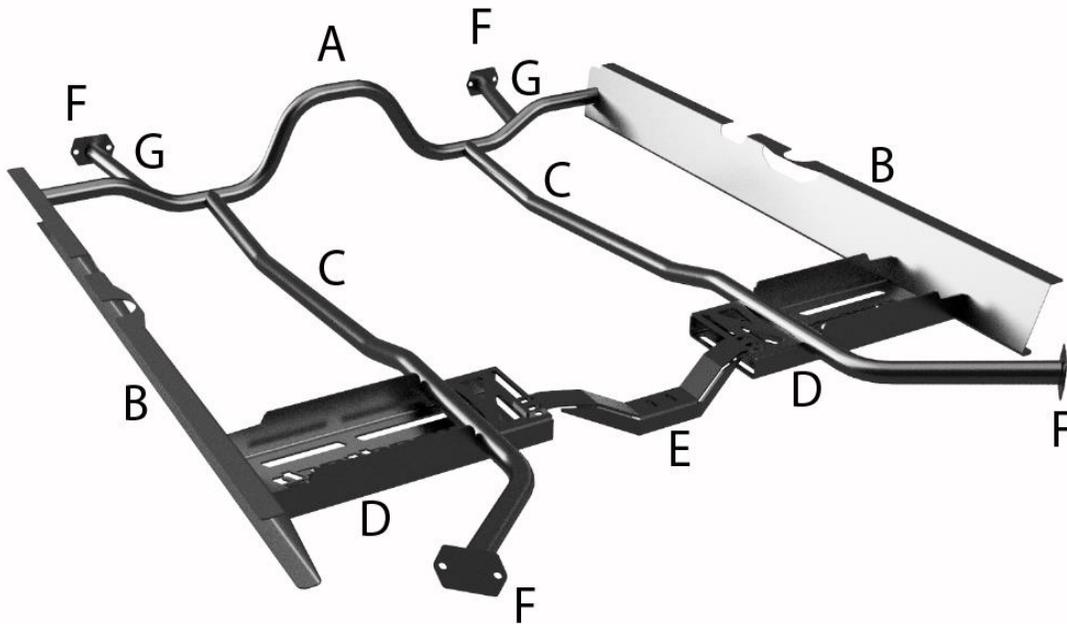
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2.1 Checking in the Order

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

X	#	Description	Size
	1	Side Frame Boxing Plate (B)	Driver
	1	Side Frame Boxing Plate (B)	Passenger
	1	Rear Crossmember (A)	
	1	Main Brace Tube (C)	Driver
	1	Main Brace Tube (C)	Passenger
	2	Transmission Crossmember Side Supports (D)	
	1	Transmission Crossmember (E)	
	4	Brace to Frame Plate (F)	
	2	Rear Brace Tubes (G)	
	4	Bolts	7/16 x 1 1/2 NC
	8	Flat Washer	7/16
	4	Nylock Nut	7/16



3.0 GETTING STARTED

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3.1 LEVELING AND SUPPORT

The vehicle should be on a level surface before you start. Jack up and properly support the vehicle's frame. This kit requires fitting and welding. If you do not have welding skills and/or access to a welder, make arrangements ahead of time to have them available during installation. We **highly recommend** removing the body from the frame. You will need to reunite the frame and body several times during the installation. A two-post style lift, although not required, will make the job go smoothly and easily.

3.2 CHASSIS PREP

Either sandblast the chassis or use a wire wheel/grinder to clean the surface where you will be welding.

3.3 SQUARE

Take measurements to ensure your chassis is level and square before starting.

3.4 REMOVAL

Remove the factory transmission crossmember

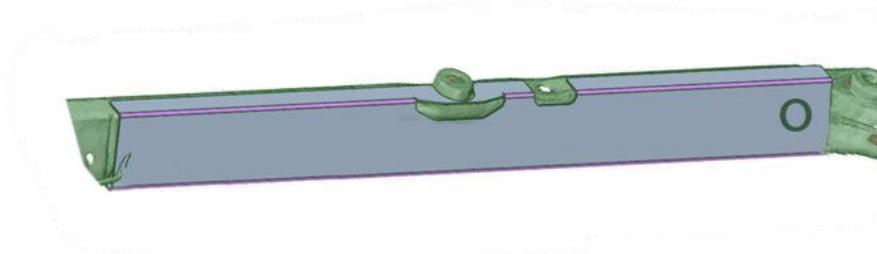
4.0 INSTALLATION

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4.1 SIDE BRACING PLATES (B)

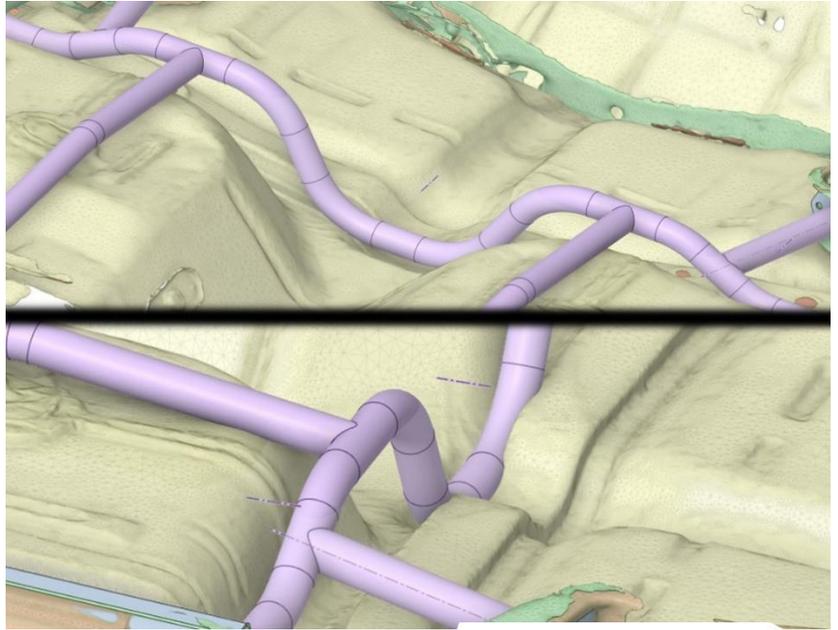
With the body removed from the car, place one of the side frame rail boxing plates in position and check for alignment. Lining the plate up should be fairly easy due to the areas designated for the factory body mount locations. Ensure that the pre-cut hole in the side plate is toward the rear of the rail.

1. Once one side is in place, tack weld to hold.
2. Slide the cross member into the hole of the tacked side, place the other side plate hole over the crossmember tube.
 - a. The center of the crossmember hoop should be centered between the side plates.
 - b. You may need to trim material off each side of the crossmember – be sure to remove the same amount of material from each end.
3. Tack weld the other side plate after lined up.

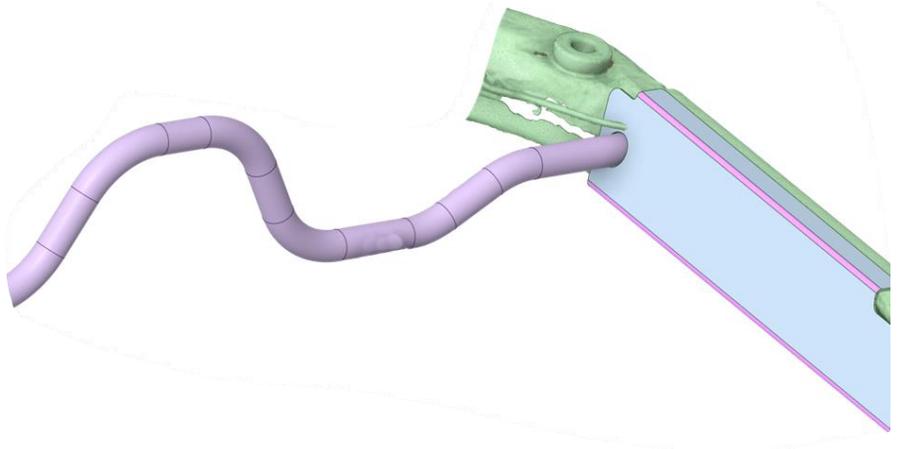


4.2 REAR CROSSMEMBER (A)

Install your body mounts onto the chassis and lower the body into place. It is **VERY** important that you line the rear crossmember up with the hat channel. This fit is tight so if not done correct, it can impede with the drive shaft.



Rotate the crossmember for the tightest fit. Tack weld in place to the side bracing plates.

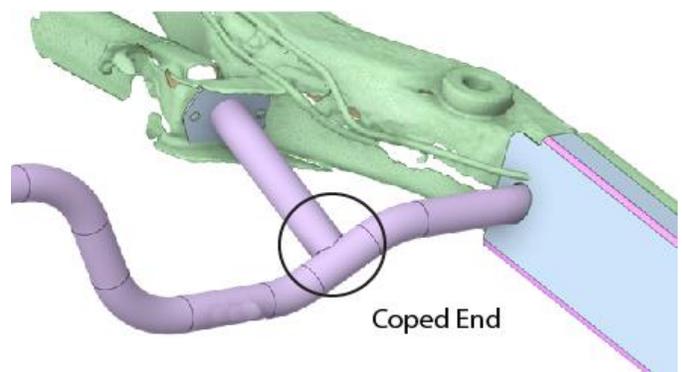


4.3 REAR BRACING TUBE (G)

Note that one side of the tube is coped, this side will be welded to the rear crossmember.

Test fit this tube into place, and it may need to be trimmed, keeping in mind there needs to be enough space to fit the frame plates (F) between the tube and chassis.

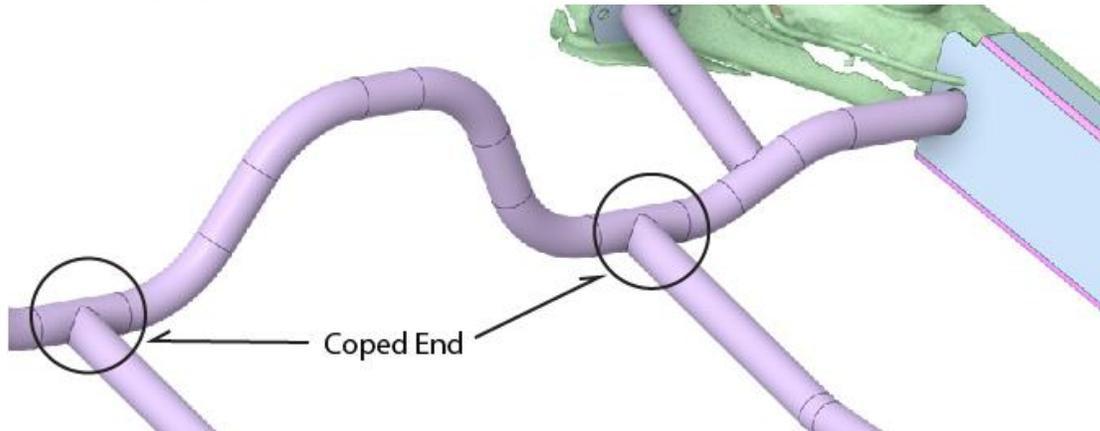
- Tack weld the frame plate to the chassis
- Tack weld the tube to the rear crossmember on the coped side
- Tack weld the tube to the frame plate



4.4 BRACING TUBES (C)

Note that one side of the tube is coped, this side will be welded to the rear crossmember.

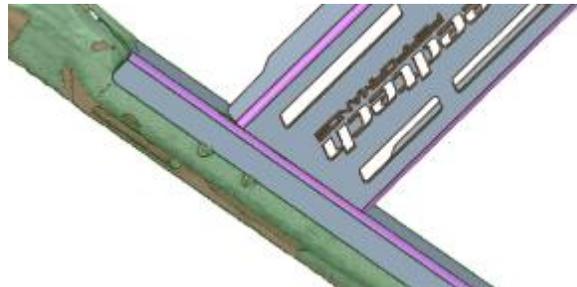
- Test fit this tube into place, and it may need to be trimmed in the front, keeping in mind there needs to be enough space to fit the frame plates (F) between the tube and chassis.



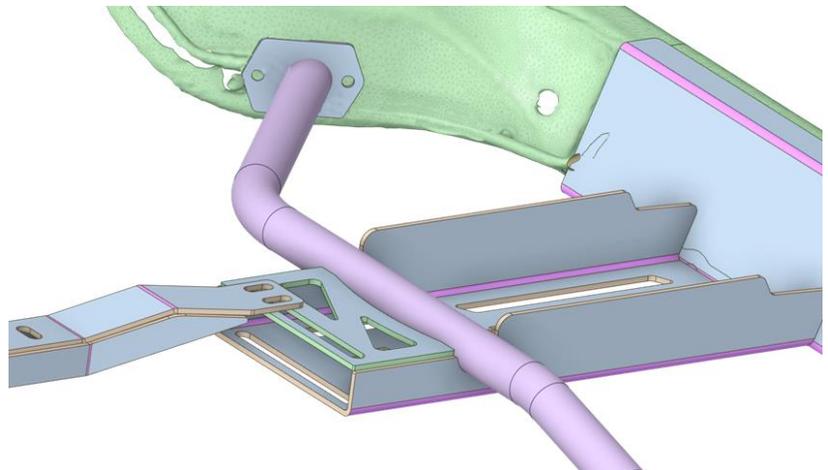
- Tack weld the tube to the rear crossmember on the coped side
- Locate where the frame plate needs to be placed
- Tack weld the frame plate to the chassis
- Tack weld the tube to the frame plate

4.5 TRANSMISSION CROSSMEMBER BRACE

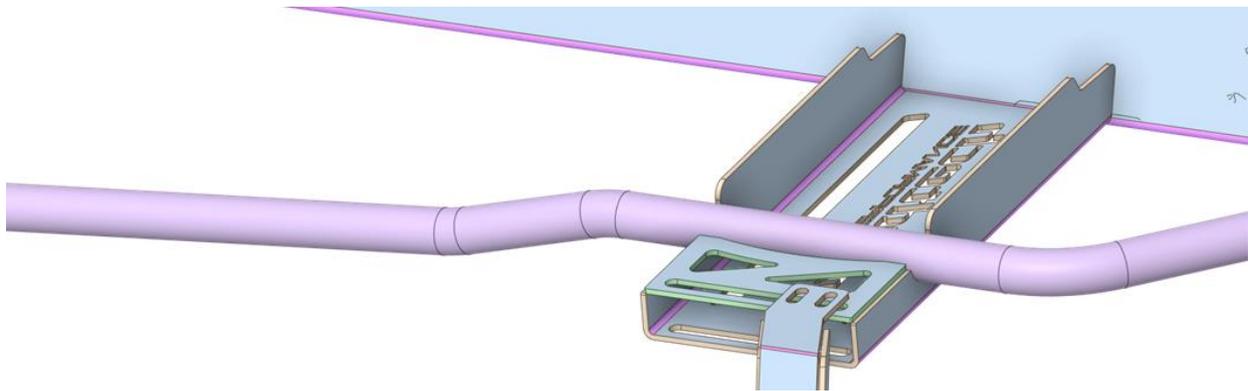
The bottom of the crossmember will line up with the top of the radius-bend of the side plate.



The center of the factory crossmember is roughly 7 inches from the front edge of the added side bracing plate. This may need to be adjusted due to your specific set up of engine and transmission. Use a bar or plate across the bottom of the chassis, using spacers to make sure the crossmember plates are level and parallel. Tack weld to the side brace plate.



Tack weld the side bracing tube to the transmission crossmember



5.0 FINAL STEPS

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5.1 WELDING

With all components now tack welded into position you can begin final welding. Remove the body from the chassis and re-measure to ensure the chassis is square and level. You can use a ratchet-strap to help hold the chassis square during welding. Remember to weld in smaller increments and move around front to back and side to side to allow cooling time for each area welded. The top and bottom of the side bracing plates should be stitch-welded every 3 inches with 3-inch welds.

5.2 FINISHING

Proper finish of your chassis will help with the longevity and quality of your build, painting or powder coating is recommended.

6.0 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 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.

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