

Instruction Guide

Torque Arm Rear Suspension
67-69 F-Body / 68-74 X-Body



Speedtech
PERFORMANCE

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Figure 1: 1969 Camaro built by Speedtech Performance

Congratulations on the purchase of your new Speedtech Performance torque arm rear suspension. 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 torque arm 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!

TABLE OF CONTENTS

1.0 GENERAL INFORMATION.....	5
1.1 THIS GUIDE	5
1.2 OVERVIEW	5
1.3 TOOLS.....	5
1.4 OTHER CONSIDERATIONS.....	6
2.0 CHECK IN PARTS AND HARDWARE.....	6
2.1 CHECK IN TABLES	6
3.0 GETTING STARTED.....	8
3.1 LEVELING AND PREPERATION	8
4.0 INSTALLATION.....	9
4.1 CROSSMEMBER SIDE PLATES.....	9
4.2 CROSSMEMBER	11
4.3 REAR AXLE.....	11
4.4 AXLE DISASSEMBLY AND PREP	11
4.5 FORD 9”.....	12
4.6 GM 12 & 10 BOLT	14
4.8 LOWER SHOCK MOUNT	16
5.0 FRONT TORQUE ARM RECEIVER CROSSMEMBER.....	17
5.1 OVERVIEW OF INSTALLMENT	17
6.0 TRAILING ARMS AND FRONT SPRING POCKETS.....	17
6.1 PREPARE FRONT SPRING POCKET.....	17
6.2 TRAILING ARMS	18
6.3 INSTALL THE SPRING POCKETS.....	19
7.0 TORQUE ARM.....	19
7.1 DELRIN BUSHINGS	19

7.2	INSTALLATION	20
7.3	UPPER SHOCK MOUNT	20
7.4	LOWER SHOCK MOUNT	20
7.5	TRAILING ARM	20
7.6	ARM INSTALL	21
7.7	PANHARD BAR	22
7.8	FINAL CHECKS	23
7.9	FRONT MOUNT	23
7.10	DISASSEMBLE.....	23
7.11	FRONT SPRING POCKETS	24
8.0	FINAL STEPS	24
8.1	WELDING	24
8.2	SANDWICH PLATES.....	25
8.3	FINISHING.....	25
9.0	FINAL ASSEMBLY	26
10.0	CONGRATULATIONS.....	26

1.0 GENERAL INFORMATION

[Back to Table of Contents](#)

1.1 THIS GUIDE

Thank you for purchasing your new Speedtech Performance ExtReme torque arm suspension. 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.

NOTE: This kit requires welding to install. The upper rear crossmember, lower arm mounted support brackets, torque arm crossmember, and subframe connector are permanently welded to the unibody. Speedtech recommends that before welding and after trimming and fitment of the various components, that care is taken to protect all nonassessable surfaces. A quality weld through primer strategically placed works well. After welding, finish the underside as desired. In some cases, tunnel work also has to take place to allow driveline clearance.

If you have opted to use your current rear axle housing rather than ordering a new Speedtech prepped axle housing, you will need to remove the existing leaf spring axle pad mounts and have the torque arm rear axle brackets welded on. A guide for the bracket location is included later in these instructions. We highly recommend you use a professional shop familiar with welding brackets onto rear axles, one who has an axle jig and/or the ability to straighten the axle tubes should they warp during welding.

Before you finish welding this guide will take you through a complete mockup of the rear suspension.

1.2 OVERVIEW

These instructions outline the torque arm rear suspension. The system has been designed to work with ExtReme Speedtech Performance subframe. Some photos in the installment process may vary slightly from your exact application.

Take necessary precautions when welding the inside of your vehicle and remove any close-by flammable materials including the seats, carpet, inner heater box, and insulation padding before performing this instruction. Be sure to wear proper protective gear when using power tools and keep sparks away from glass and other interior components when grinding and welding.

If you are unsure of how to use the tools or 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 torque arm rear suspension can be done on the floor with a basic welder, cut off wheel, and simple hand tools.

Additional things to have before you start:

- Welder
- Drill
- Grinder
- Floor stands
- Floor jack
- Weld through primer

1.4 OTHER CONSIDERATIONS

The Speedtech Performance torque arm rear suspension design may cause some of the current components to no longer be valid on the chassis, these may include:

- Exhaust
- Brake Lines
- Drive shaft (if changing front subframe, engine and/or transmission)
- Wheels and lug nuts: All Speedtech's suspension systems, where the wheel bearing is replaced, will use a double roller sealed bearing with stud spacing of 5 on 4.75 and stud threads are 12 X 1.5 mm.

2.0 CHECK IN PARTS AND HARDWARE

[Back to Table of Contents](#)

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.

2.1 CHECK IN TABLES

All bolts and nuts are NF unless otherwise noted.

TORQUE ARM

X	#	Description	Size
	1	Torque Arm	Welded Arm
	1	Torque Arm Bow Tie	1/4" Plate
	1	Torque Arm Pin Bushing	Delrin (Plastic)
	1	Pin Bushing Bolt	3/8" x 3/4"
	1	Pin Bushing USS Plate Washer	3/8"
	1	Pin Bushing Lock Washer	3/8"
	2	Axle Housing Collar Bushing	Delrin (Plastic)
	1	Axle Housing Collar Bolt Sleeve	9/16" ID
	1	Axle Housing Bolt	9/16" x 3-1/4"
	1	Axle Housing Stover Lock Nut	9/16"
	2	Axle Housing Washer	9/16"

SHOCKS

	2	Upper Shock Hex Bolts	1/2" x 2-1/2"
	2	Upper Shock Mount Nylocks	1/2"
	2	Upper Shock Mount Washers	1/2"
	2	Lower Shock Mount Standoff	Aluminum
	2	Lower Shock Short Bolts	5/8" x 1"
	2	Lower Shock Hex Bolts	5/8" x 3-1/2"
	2	Lower Shock Nylocks	5/8"
	4	Lower Shock Mount Washers	5/8"

PANHARD BAR

	1	Panhard Bar	29-1/2" Long
	1	Left Hand Rod End	5/8" LHT
	1	Right Hand Rod End	5/8" RHT
	1	Left Hand Jam Nut	5/8" LHT
	1	Right Hand Jam Nut	5/8" RHT
	2	Panhard Bar Mount Bolts	1/2" x 2-1/2"
	2	Panhard Bar Mount Nylocks Nuts	1/2"
	4	Panhard Bar Mount Washers	1/2"

LOWER TRAILING ARMS

	2	Trailing Arms (Assembled)	24-1/2" Eye to Eye
	2	Axle Mounting Bolts	1/2" x 3-1/2"
	2	Axle Mounting Nylocks Nuts	1/2"
	2	Axle Mounting Washers	1/2"
	2	Spring Pocket Mounting Bolts	1/2" x 4-1/2"
	2	Spring Pocket Mounting Nylocks Nuts	1/2"
	2	Spring Pocket Mounting Washers	1/2"
	2	Spring Pocket Mounting Spacer	Plastic Puck

TORQUE ARM FRONT CROSSMEMBER

	1	Crossmember Box Frame	Welded Arm
	2	Solid Body Mounts	Aluminum Puck
	2	Solid Body Mount Cups	Aluminum Cups
	2	Body Mount Bolts	5/8" x 3-1/2"
	2	Body Mount Washers (Large)	5/8"
	2	Body Mount Lock Washers	5/8"

TORQUE ARM REAR CROSSMEMBER

	1	Crossmember Frame	Welded
	2	Crossmember Frame Rail Brace (Mirrored)	Bent Plate
	2	Crossmember Frame Trunk Plates	Rectangle Plate
	2	Crossmember Spacer Plates	Small Rectangle
	4	Through Floor Sandwich Bolts Long	3/8" x 2"
	4	Through Floor Sandwich Bolts Short	3/8" x 1-1/4"
	16	Sandwich Plate Washers	3/8"
	8	Sandwich Plate Nylocks	3/8"

SPRING POCKET ADDITIONAL BOLTS

	10	Spring Pocket Bolts	3/8" x 1-1/4" NC
	14	Spring Pocket Washers	3/8"
	4	Spring Pocket Nylocks	3/8" NC

OPTIONAL CONVERTIBLE FRONT CROSSMEMBER

	4	Crossmember Bridge Bolts	3/8" x 1-1/4" NC
	4	Crossmember Bridge Laga Washers	3/8"

One of the following kits will be included:

FORD 9in PINION MOUNT

	1	Pinion Mount	Billet
	5	Pinion Mount Bolts	3/8" x 2-1/4"
	5	Pinion Mount Washers	3/8"
	2	Torque Arm Bolts	1/2" x 2
	2	Torque Arm Lock Washers	1/2"
	2	Torque Arm Washers	1/2"

GM 10 or 12 BOLT MOUNT

	1	10 Bolt or 12 Bolt Ring	Welded
	1	Pinion Snout Clamp Lower	Billet
	1	Pinion Snout Clamp Upper	Billet
	2	Torque Arm Bolts	1/2" x 2
	2	Torque Arm Lock Washers	1/2"
	2	Torque Arm Washers	1/2"
	2	Clamp Bolts	1/2" x 2" SHCS

Figure 2: Check in tables of parts with amounts, descriptions, and sizes

3.0 GETTING STARTED

[Back to Table of Contents](#)

3.1 LEVELING AND PREPERATION

- Unpack all the components and organize them on a table with their accompanying hardware. Use the check list above.
- Level the car above a smooth work surface.
- Disassemble the rear of the car. Remove the exhaust, driveshaft, axle, suspension, fuel tank, and all fluid lines.
- Prepare the inside of the car and the trunk area for welding on the bottom side for the car as well as installation of the sandwich plates and spring pockets.
- Dry fit the rear crossmember side reinforcement plates, lining the hole up with the bump stop mount, on the inside and bottom of the frame rail.
- Disconnect the battery.

4.0 INSTALLATION

[Back to Table of Contents](#)

4.1 CROSSMEMBER SIDE PLATES

Put the side reinforcement plates on place and hold them in place with a clamp being careful not to crush the unibody frame rail. Lift the rear crossmember up and hold it tight to the side reinforcement plates, centering the crossmember in the chassis. The rear edge of the crossmember should be approximately 21" from the original leaf spring shackle mount center line, presented in figure 3.

There will be up to a 1/4" gap between the crossmember and the side plates/frame rails. This is normal and is intended to accommodate variances in the factory assembly. Mark the position of the crossmember.

NOTE: There is always a chance the car you are working on has had previous collision damages repaired, corrosion repaired, and floor or trunk pans replaced. Any of these repairs, and other repairs or modifications, could affect the fitment of the crossmember and create a tighter fit or wider gap between the crossmember and side reinforcement plates.

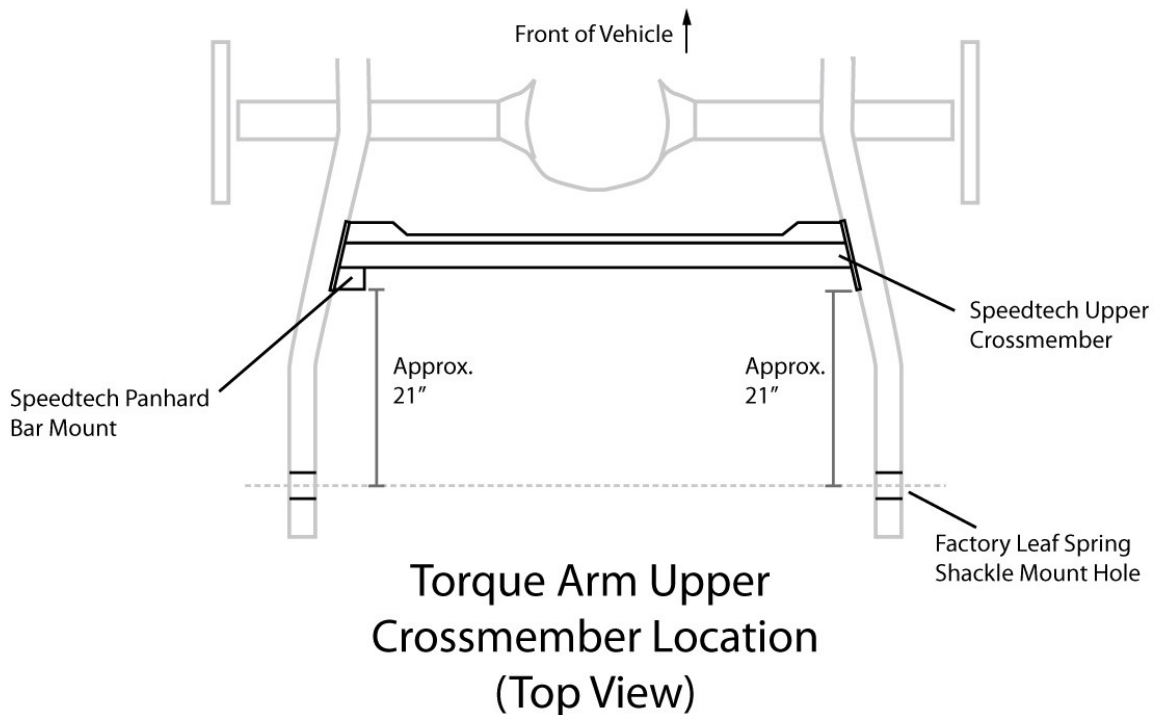


Figure 3: Diagram of torque arm upper crossmember location



- Clear all the paint and coating inside the marked area, exposing the raw metal on the frame rail.
- Use weld through primer where appropriate and weld the side reinforcement plates.
- Prepare surfaces where the new upper main crossmember will be welded to the chassis side reinforcement plates.
- Clean the edges of the powder coated main upper crossmember where it will be welded to the chassis.

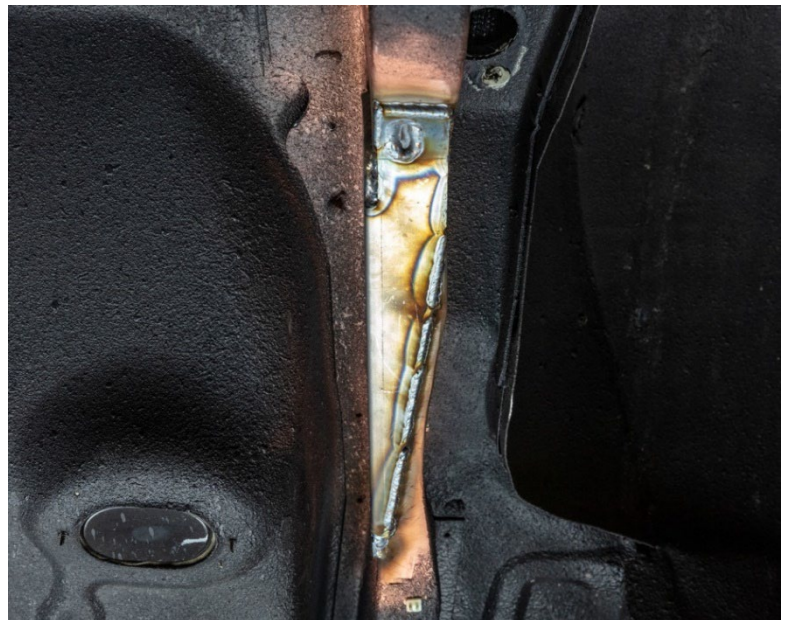


Figure 4: Two images of the raw metal on the frame rail

4.2 CROSSMEMBER

- Check fitment of the crossmember and its position in the chassis. Another indication of good positioning is the sandwich plate will touch the truck pan and the top of the sandwich plate will be welded to the crossmember.
- When you are happy with the position of the crossmember in the chassis tack it to the side reinforcement plates. The tack welds should be substantial enough to support the rest of the mockup process.

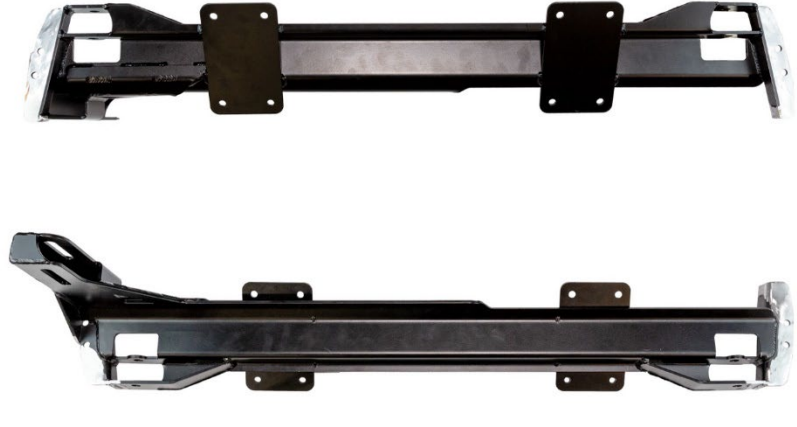


Figure 5: Two depictions of the crossmember fitment

4.3 REAR AXLE

The majority of Speedtech Performance clients who order our torque arm rear suspension will at the same time order a new Ford 9" axle housing. If you have ordered a new 9" housing for your project it will already have all the needed brackets on it and you can skip this section. If you did not order a new prebuilt rear end housing you will need to modify your existing axle housing. The



required modifications include cutting off existing brackets and welding on brackets that came in your kit for both a 9" and a positraction housing. Welding on the housing can cause distortion that will need to be corrected. Special tools are needed to check the housing after being subjected to intense heat to be sure it is straight and true before reassembly.

4.4 AXLE DISASSEMBLY AND PREP

Strip the axle down to a bare housing and remove any brackets that will interfere with the new trailing arm, shock, and Panhard bar brackets.

NOTE: Speedtech offers support for GM 10 and 12 bolt housings, and Ford 9" housings. Follow the corresponding instructions below that match the build you are doing.

4.5 FORD 9"

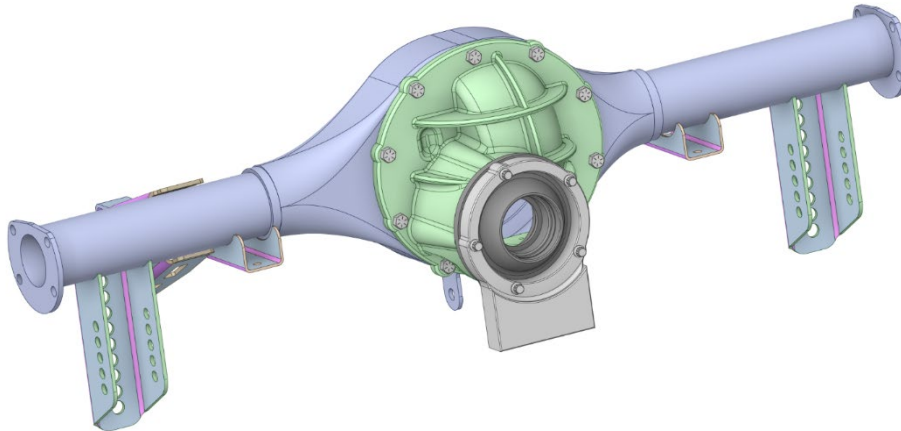
Weld additional brackets to your rear axle housing according to figure 7.

NOTE: Welding will cause axle tube warpage of some degree. Be sure to verify straightness of housing before assembling the complete rear. If you don't have the proper tools or are unsure how to do this seek out professional help. If you order an axle from Speedtech, these brackets will all be pre welded in place.

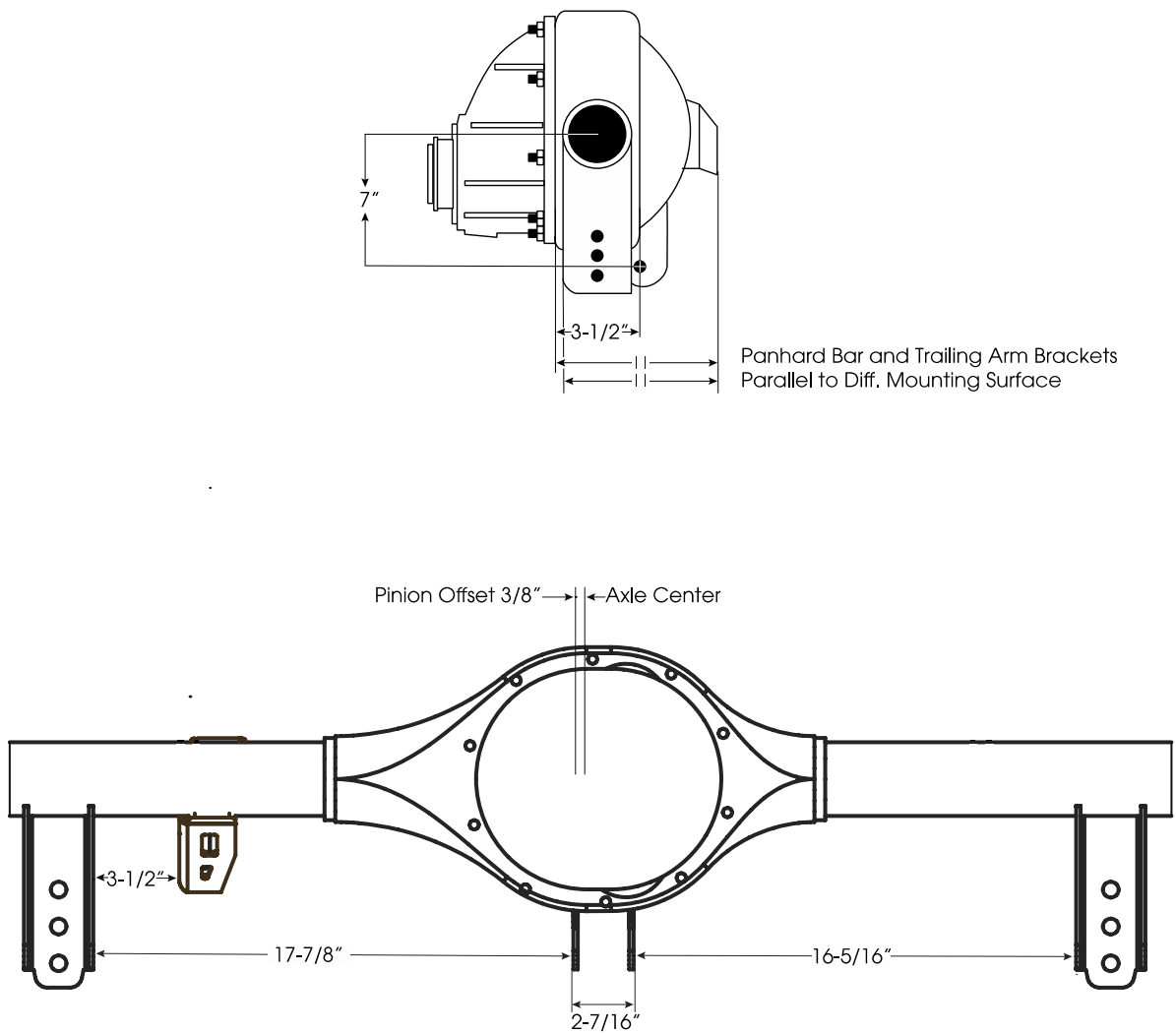
NOTE: The pinion mount is a straight bolt-on over the existing pinion support. This bracket is designed to work with the original Ford pinion mount clocking position. Some aftermarket 9" centers have non-Ford clocking. Non-Ford pinion mount clocking will not work correctly. Please verify that your center is correct. Speedtech has a pinion support specifically for the Moser 9" center section. If you are not sure, please contact your axle manufacturer before beginning the installation.

- Removes all the original pinion support bolts.
- Bolt on the billet pinion mount using the new bolts.
- Torque bolts to 55 ft.lb.

Figure 6: Pinion mount attached to the pinion support



'67-69 Camaro 9" Diff. Housing Bracket Weldment Guide



Trailing Arm
 Panhard Bar 912703-01
 Center Tabs 912705
 Sway Bar Tabs 820172

Updated 04/2023

Figure 7: Diagram of housing bracket weldment guide

NOTE: Speedtech supports two different 3rd members: standard steel and the more advanced billet center section. The bolts and pinion support shape for these two members are different. Verify that the pinion mount kit matches the rear-end housing. If you have ordered the aluminum center section with the through bolts in the case, they are a heavy-duty unit and the pinion support mounting studs are 7/16" instead of the standard 3/8" bolts. Speedtech will provide special length studs for this center that will work with the torque arm pinion mount. You will have to drill out the 5 mounting holes in the Speedtech pinion mount to fit the 7/16 studs. This can be done carefully with a hand drill but would be better done on a drill press.

4.6 GM 12 & 10 BOLT

The diagram shows a generic rear end housing as viewed from the rear. The rear torque arm pivot mount tabs are not weld on, they are integrated into a ring that is sandwiched between the rear end and the differential cover. The tabs are not centered, and you need to be sure it is installed correctly.

After welding is complete and the housing has cooled, check that the axle is straight and true. Seek professional assistance if you are unsure of how to complete this.

Test fit the ring with the pivot mount brackets before putting the rear end together. If required, clear casting flash from the housing to ensure a tight fit. Do this by dry fitting the ring, mark the interference areas, and grind the flash off the housing.

Assemble the rear end per the manufactures recommended process before installing the rear cover. Next, install the ring with the pivot mount brackets.

Clean the sealing surface and apply a bead of silicone. Set the mounting ring in place and apply an additional silicone bead on the mounting ring surface. Then install the cover on top of the ring.

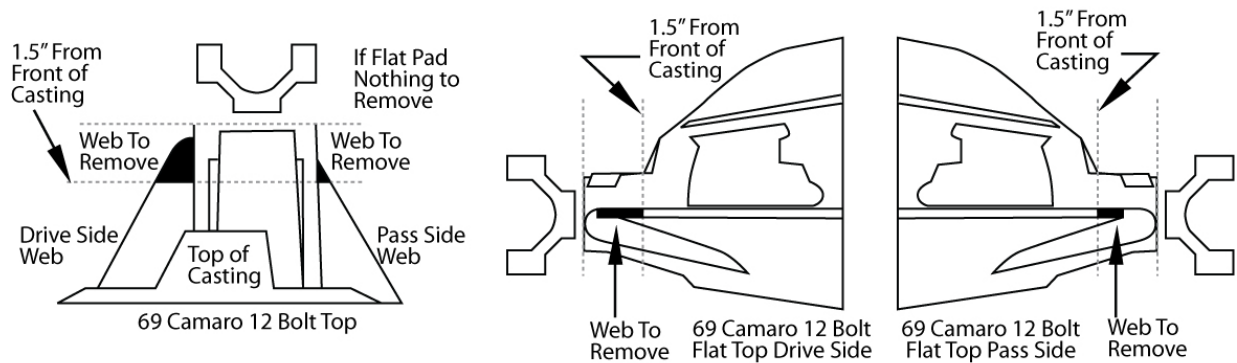
Ensure bolts are long enough to take torque and not damage threads. Torque to manufacture's specs, otherwise 20 ft.lb.

Install the billet aluminum pinion clamp. Every pinion snout casting is unique and will have to be modified to fit. Dry fit the billet clamp onto the pinion mount, mark interference areas. (Refer to figure 9).

Figure 8: Billet aluminum pinion clamp



Please study these diagrams carefully. You will need to trim your 12 bolt housing to properly fit the pinion mount.



**** Be cautious to note where factory pinion bearing oil passage is when grinding!**

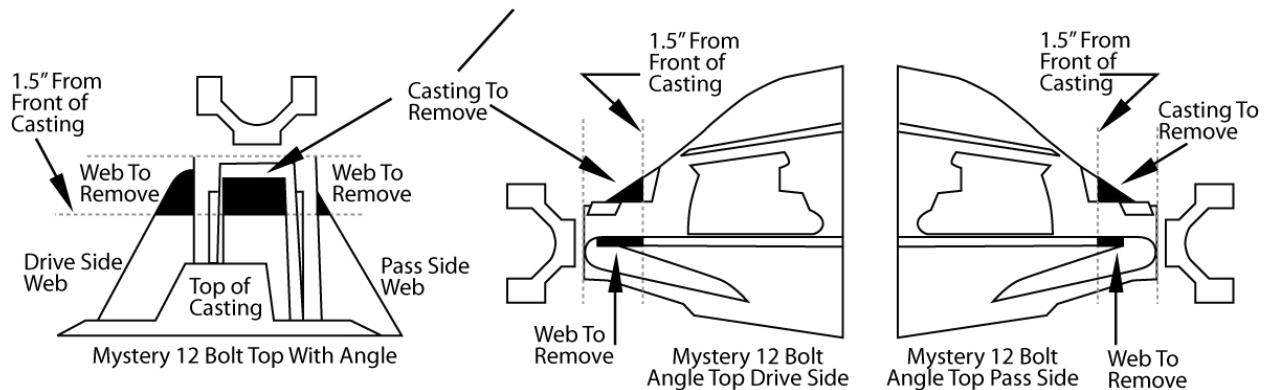


Figure 9: Fitting the billet clamp onto the pinion mount

- Cut and grind pinion snout to fit billet pinion clamp.
- **IMPORTANT:** Keep in mind factory pinion bearing oil passage.
- Protect the now exposed cast to prevent rust.
- Bolt on the billet aluminum pinion clamp using the (2) SHCS.
- **IMPORTANT:** On final assembly use red Loctite and torque to 90 ft.lb.
- **IMPORTANT:** Retorque after the first 500 miles.

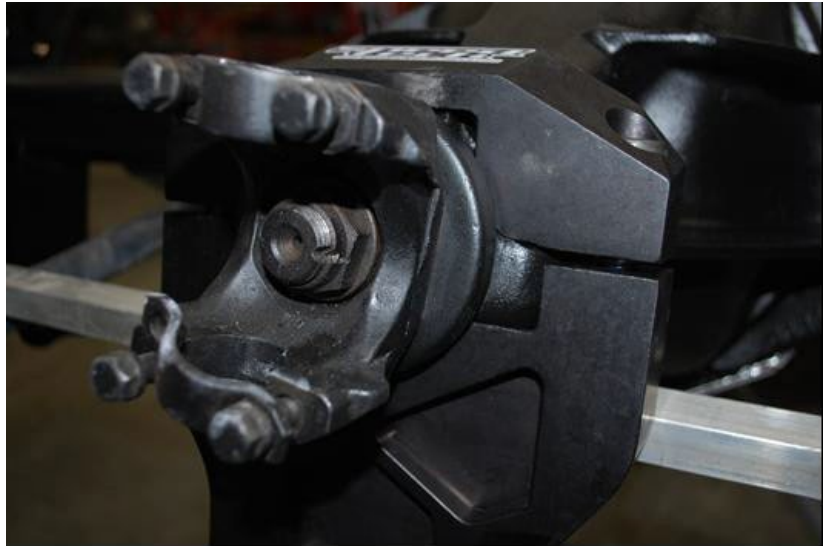
NOTE: Some 10 bolt axle housings will require that the billet pinion mount be slightly modified to fit the pinion snout. Use your discretion for your application.

4.7 MANUFACTURE INSTRUCTIONS

Follow all 3rd party instruction on assembling the 3rd member (Ford), gearing, axle, pinion, and seals.

Use the brake manufactures instructions to install the brake components and center caliper over the rotor.

Figure 10: Modified bolting



4.8 LOWER SHOCK MOUNT

NOTE: The lower shock mount location is adjustable to accommodate many different ride heights, wheel sizes, and shock options. Measure and set the standoff location unique to your build on final assembly.

- Locate the billet shock mount standoffs, (2) 5/8" short bolts and washers.
- Bolt the standoffs onto the back side of the shock extenders. Use the 5/8" shoulder bolt to keep the second hole aligned.
- The standoffs can be oriented either way to match your shock length and desired ride height. Ride height can be checked during the mock up.

A good starting point for the Camaro is having the shoulder bolt come through the bottom hole.

- The shoulder bolt will be installed when the shock is installed.
- **IMPORTANT:** On final assembly, use red Loctite; torque to 120 ft.lb.

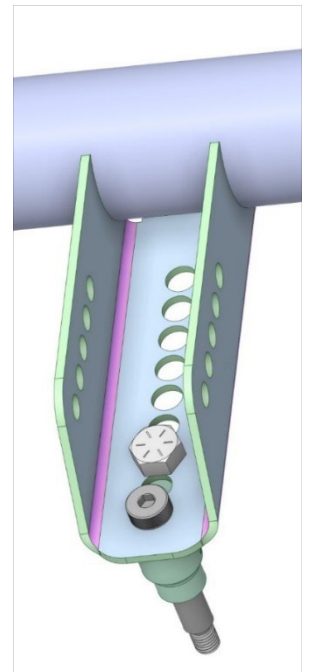
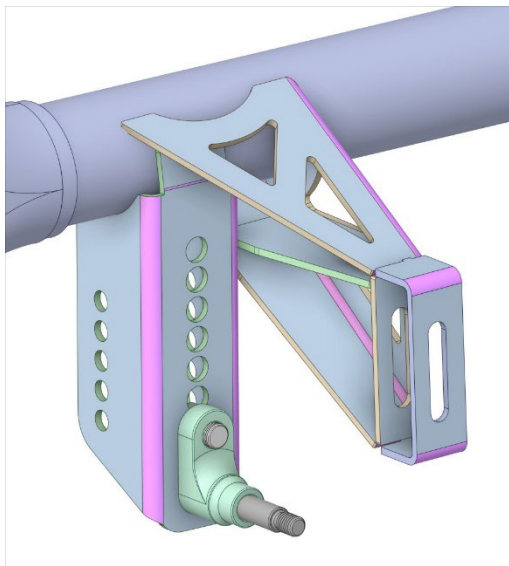


Figure 11: Shock extenders

5.0 FRONT TORQUE ARM RECEIVER CROSSMEMBER

[Back to Table of Contents](#)

5.1 OVERVIEW OF INSTALLMENT

The front crossmember for the torque arm is mounted tight to the floor above the body mounts. Provided in the kit are solid body mounts for this location that are 3/16" shorter to ensure that your subframe remains in the original position. The mounting holes in the crossmember are slotted to allow for adjustment of the mount.

Support the front of the subframe on jack stands and remove the bolts for the rear subframe / body mounts. Slip the torque arm mounting crossmember in between the floor and the top of the new body mount. Make sure the crossmember tabs are pointing forward. Reinstall the bolts. Torque to 160 ft lbs.



Figure 12: Front torque arm receiver crossmember

6.0 TRAILING ARMS AND FRONT SPRING POCKETS

[Back to Table of Contents](#)

6.1 PREPARE FRONT SPRING POCKET

Drill two 3/8" holes near the "C" cutout, as presented in figure 13. These holes will be used in addition to the stock holes for a stronger connection with the car. Later in the process you'll pull up the carpet to avoid damaging it before transferring the holes to the chassis.



Figure 13: Front Spring Pocket

6.2 TRAILING ARMS

Prepare the lower trailing arms.



Figure 14: Trailing Arm

Set the arm's length by screwing in or out the two halves to 24-1/2" collar center to center (26-1/2" end to end).

When installing the trailing arms ensure the grease zerk tips are oriented down.

NOTE: The bolt sleeves and bushings will already be installed in the trailing arms when you receive them. Locate the 1/2"x 4.5" bolts, 1/2" Nylock nuts and the black Delrin spacer. Then install the lower trailing arms into the leaf spring pockets with the small sticker indicating D (driver) or P (passenger) at the front. Do not completely tighten the bolts at this time as they use Nylock lock nuts and you will be removing them again later in the installation. The spacers should be installed towards the outside of the car and grease fittings should point downward. Install the spring pocket and trailing arm assemblies back into the car and snug the bolts. Later, you will torque the 1/2" bolt to 90 lbs., the spring pocket factory bolts to 35 lbs., and the two additional 3/8" bolts you'll add to the spring pockets to 40 lbs.

Pictured is the final spring pocket and trailing arm assembly. Note that the rotating portion of the trailing arm is towards the front, and the spacer is towards the outside of the car.



Figure 15: Two images depicting the spring pocket and trailing arm assembly

6.3 INSTALL THE SPRING POCKETS

NOTE: Nova and X bodies came from the factory with two different front leaf spring pockets. Some fit snug to the floor (A), and most have a gap between the pocket and the floor (B). If you have type (B) then you will need to purchase style (A) '67-69 Camaro front leaf spring pockets, part numbers 3892751 (left) and 3892752 (right).

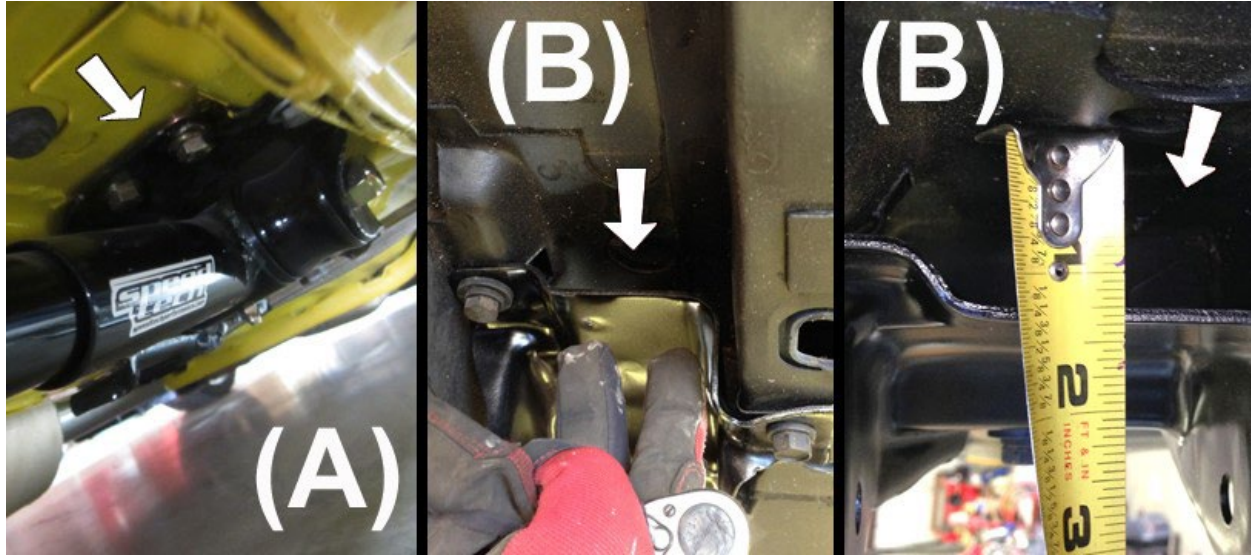


Figure 16: Two different front leaf spring pockets

7.0 TORQUE ARM

[Back to Table of Contents](#)

7.1 DELRIN BUSHINGS

Before we can load the system to the chassis for mockup, you want to assemble the torque arm.

- Locate and install the torque arm Delrin bushing on the front pin.
- Apply blue Loctite on the 3/8 bolt. Bolt the front pin bushing using a flat washer and the lock washer. Torque to 40 ft.lb.
- Assemble the rear pivot collar bushings and sleeve in the torque arm. You will be able to tap these into position with a mallet. The sleeve will slightly stand proud to the two Delrin bushings.



Figure 17: Two images depicting individual tools for the torque arm assembly

7.2 INSTALLATION

NOTE: For the mockup you may find it is easier to take the springs off the coilovers so you can manipulate the rear axle to ride height and move it through its range of travel to check clearance.

NOTE: General guidance on shock installation is superseded by information provided by the shock manufacture.

7.3 UPPER SHOCK MOUNT

Hang the shock from the upper main crossmember. It is not necessary during mockup to torque the fasteners but you should at least use the nut to ensure the bolt cannot fall out.

7.4 LOWER SHOCK MOUNT

Lift the assembled axle into position, securing it on jack stands at the approximate height.

Bolt the shock to the installed lower standoffs using the (2) 5/8" x 3-1/2" bolts and nylocks.

Slide in the bolt from the bracket on the rear end into the shock standoff and into the lower shock mount. Hold everything in place using the bolt and nylock nut. Then, repeat for the other side.

7.5 TRAILING ARM

Bolt the rear of the trailing arms to the axle lower bracket. Make any minor adjustments to the spring pockets so there is not any preload in the lower arm and can easily swing in and out of the bracket. Loosely bolt in place. On final assembly use anti-seize, torque to 90 ft.lb.

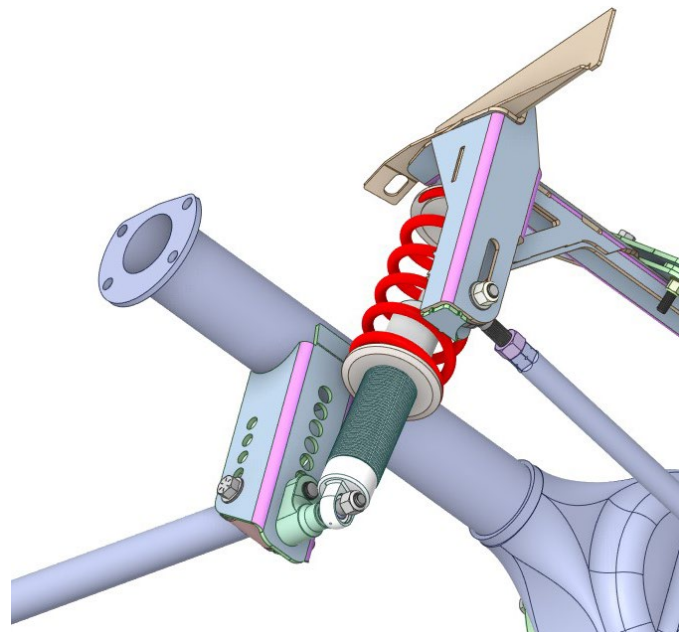
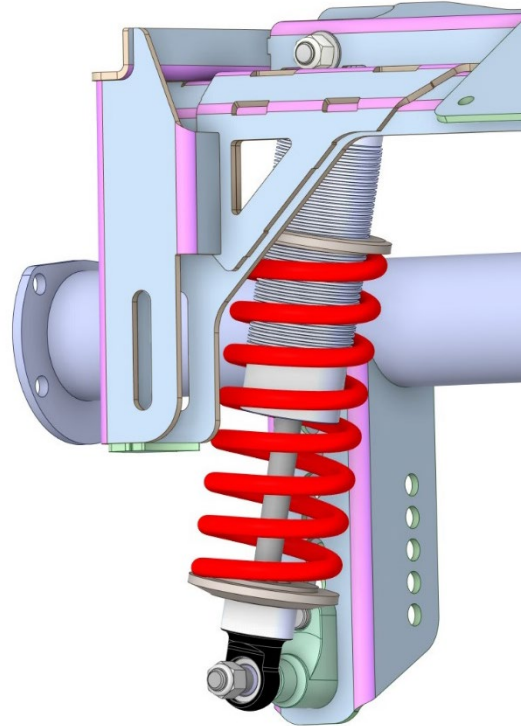


Figure 18: Two depictions of the shock mounts

TIP: It may be helpful to use a ratchet strap anchored at the rear of the chassis to hold the rear axle from rotating forward as you lower the jack.

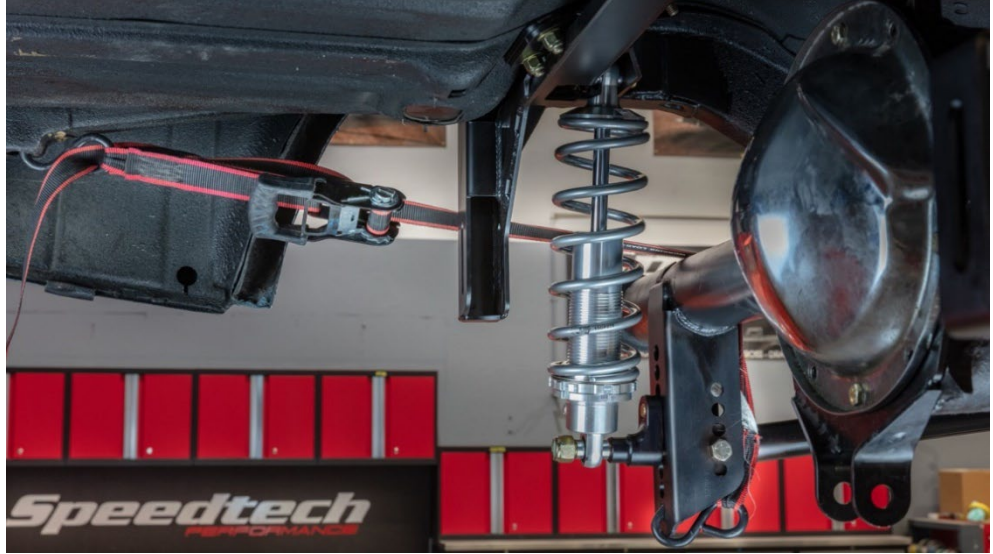


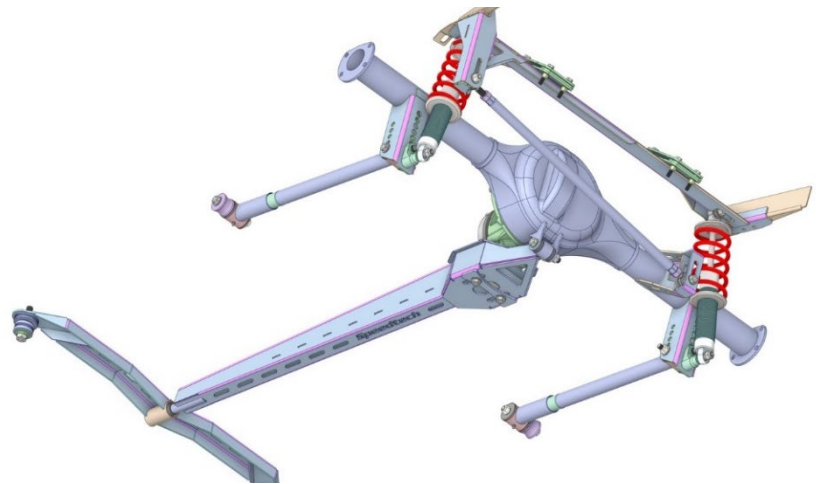
Figure 19: Using a ratchet strap

7.6 ARM INSTALL

Install the previously assembled torque arm.

Insert the front of the torque arm with the pin bushing into the front crossmember receiver.

You may want to install the drive shaft before the torque arm is installed to ensure good clearance around it. The drive shaft angle should be relative to the transmission output shaft and pinion angle. This is covered in greater detail below and is not required until final assembly.



Lift the rear of the torque arm up into the torque arm pivot and push the bolt through.

Loosen the ratchet stop holding up the front of the rear end. Install the two bolts with a bowtie to secure the pinion mount to the torque arm.

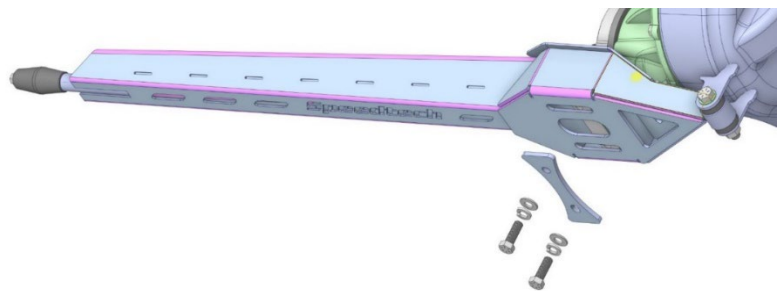


Figure 20: Arm install depictions

7.7 PANHARD BAR

Assemble the Panhard bar.

- Apply anti-seize onto the rod end threads.
- Thread the jam nuts onto the rod ends.
- Install the rod ends onto the Panhard bar and make sure that the rod ends have equal engagement into the bar.

Install the Panhard bar onto the car using (2) 1/2" x 2-1/2" bolts, nylocks, and (4) washers.

Bolt the Panhard bar into the slot on the frame and the slot on the prepared axle.
The rod end fits inside the two slots.

The bar should be level at ride height. Use the washers on the outside of both slots.

On final assembly, torque to 90 ft.lb.

Center the axle inside the frame by taking measurements between the rotor and the frame. Spin the Panhard bar, lengthening or shortening the bar assembly as needed to center the axle. Tighten the jam nuts.

NOTE: The axle centering will have to be measured again during the final alignment of the car. The finished weight needs to be sitting on the frame for an accurate alignment. Details are described under the finalization section.

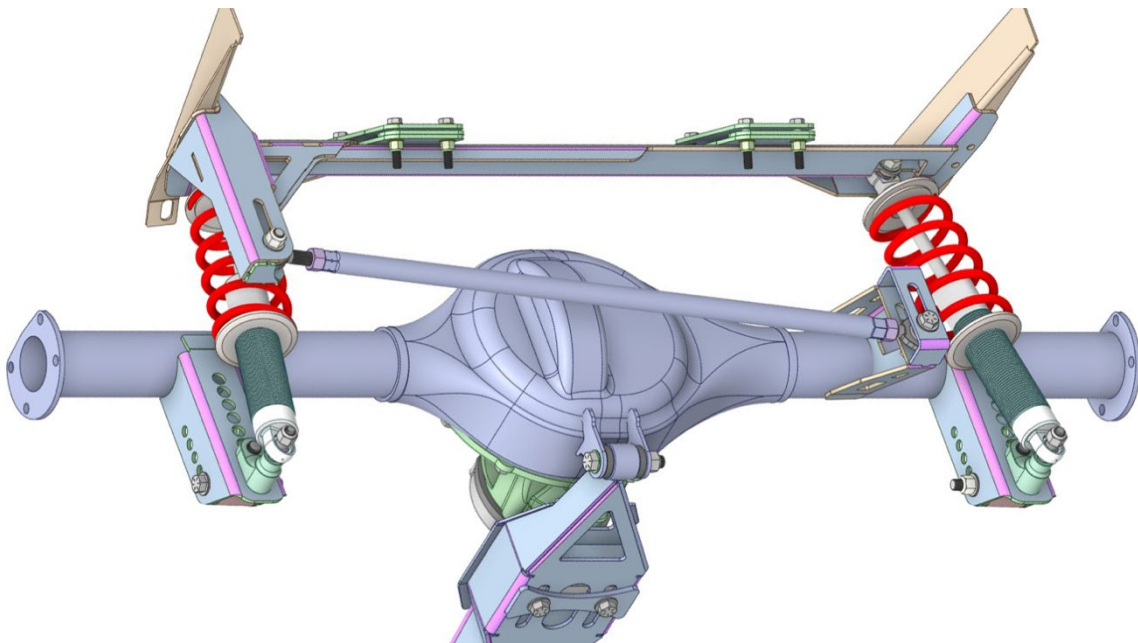


Figure 21: Two images depicting the weld in frame components

7.8 FINAL CHECKS

NOTE: Now that all the components are mocked up into the car, general measurements can be made to ensure alignment and wheel placement is satisfactory. Make any minor adjustments to the attachment components as needed. Final alignment will be done after the components are welded and the weight of the car is on the system.

While the system is mocked up you can:

- Tighten all loose bolts snugly so there is no slop in the between the components.
- Set up your lower shock mounting position to target shock travel being centered at ride height.
- Speedtech recommends to set up the trailing arms to be level at ride height.
- Speedtech recommends to set up the Panhard to be level at ride height.
- Measure and check fitment of all components.
- Check that there is proper clearance for all the suspension components.
- Make sure they will not hit each other throughout the motion of the system.
- Fit the wheels on the axle and check the location of the wheel in the wheel well.
- Make sure it is centered and even from front to back.
- Measure that the rear axle is square with the front axle.
- Check that there is no side load on the trailing arms.
 - Unbolt them one side at a time and see if they easily swing out and back into their locations.
- Check the heights of all the key areas that they are all level side to side.
- If you discover any issues that require moving the upper main crossmember you will have to cut your tack welds, reposition it, and mockup the system again.

Without disturbing the position of the front spring pockets, torque the three factory bolts for the front spring pockets.

7.9 FRONT MOUNT

There is some adjustment available in the front torque arm receiver crossmember. With the rear subframe bolts loose, you can maneuver the crossmember to optimize alignment with the torque arm. When the position is such that there is no preload on the torque arm, torque the subframe rear bolts to 160 ft lbs.

7.10 DISASSEMBLE

With all checks completed, you can now disassemble the system and remove it from the chassis. Remember the rear axles may want to roll forward after the torque arm is removed so you will want to secure it as you would for mockup.

7.11 FRONT SPRING POCKETS

With the front spring pockets in position and the trailing arms hanging down you can take out the rear seat bottom and lift up the rear carpet and anything else that could potentially be damaged when making the two new additional holes in the chassis for the front spring pocket. Now drill the holes in the floor using the holes you previously put in the front spring pockets as a guide for the location of where to drill.

Install a nut and bolt in each of the four new holes and torque to 40 ft/lbs.

8.0 FINAL STEPS

[Back to Table of Contents](#)

8.1 WELDING

When welding on the chassis take care not to overheat the frame rails. They are thin and extra time is needed to prevent damage/blow through of the sheet metal.

Weld the crossmember to the reinforcement plates.

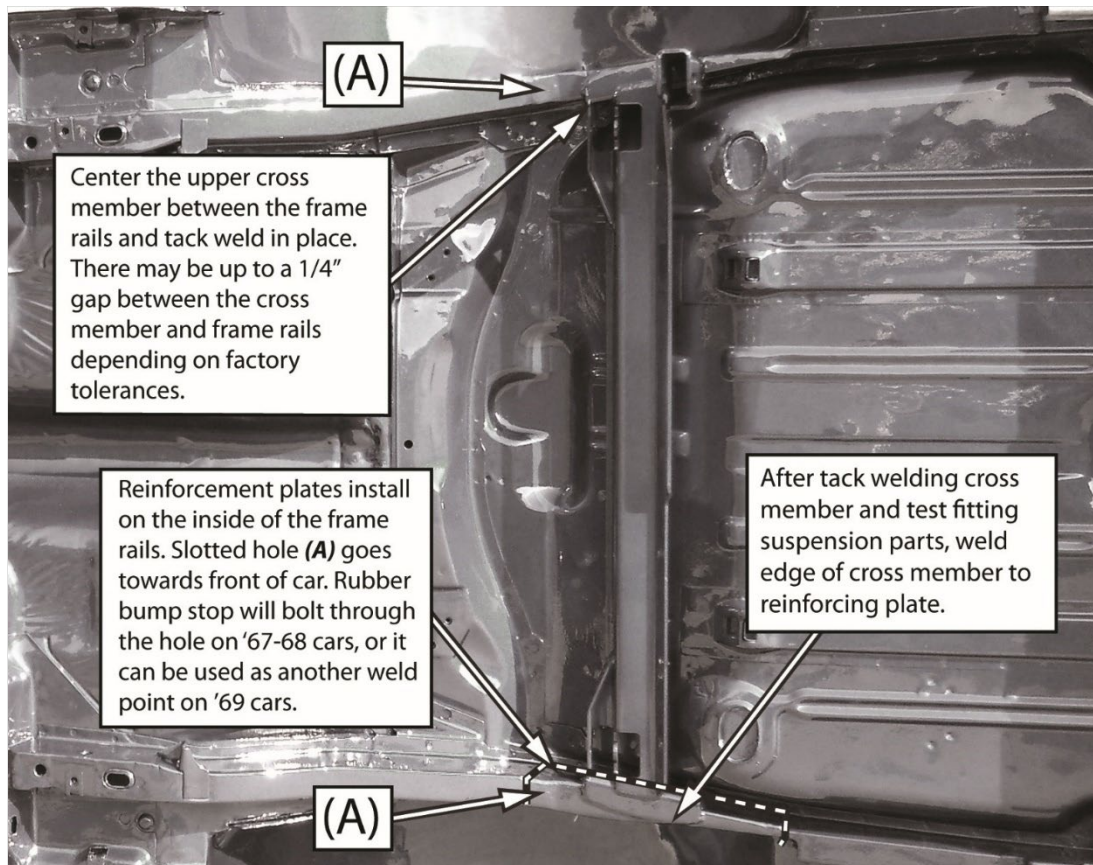


Figure 22: Sandwich plates diagram

8.2 SANDWICH PLATES

From under the car, using the pre-drilled holes in the lateral support plates as a guide, drill the eight 3/8" holes through the trunk floor. The floor and crossmember plates will be at slightly different angles. Use the smaller shims (B.) between the crossmember plates and the floor at the back/bottom side (see figure 22). If there is any remaining small gap between the plate and floor, they will typically suck down as the bolts are tightened. If there is an excessive gap, use washers or fabricate additional shims to take up the extra gap. Align the second pair of plates in the trunk and insert the eight bolts and nuts as stated in figure 22. Tighten to 40 ft lbs.

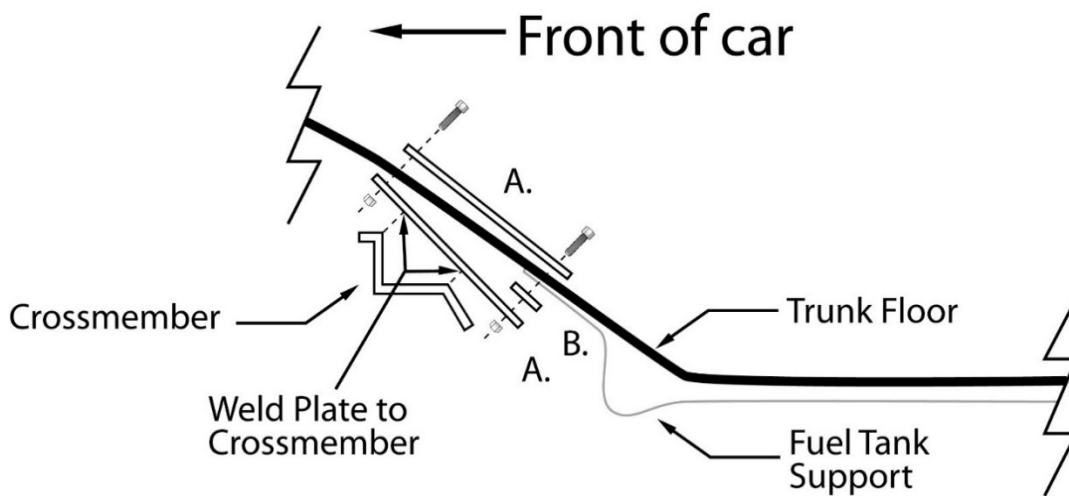
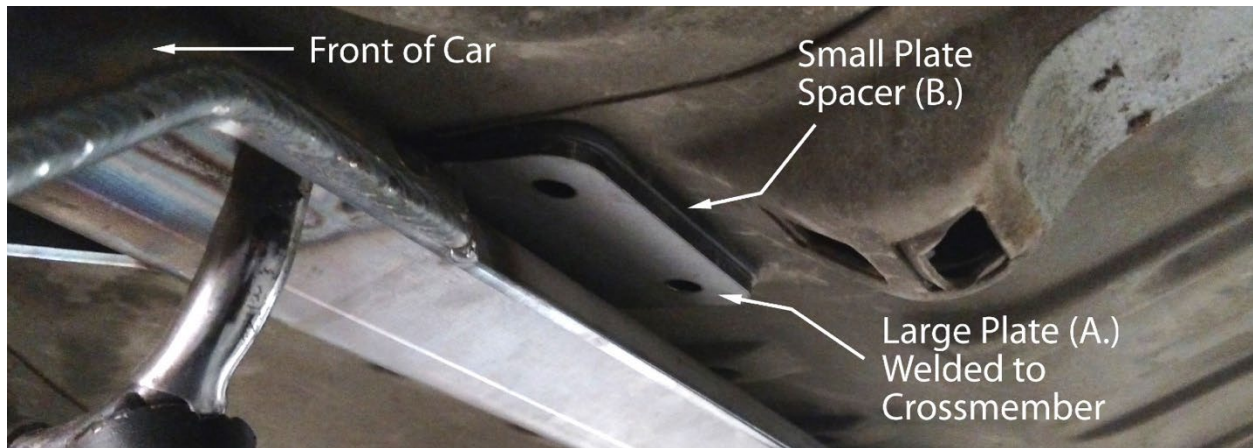


Figure 23: More images showing the welding instructions

8.3 FINISHING

Finish/refinish the welds and any bare metal to your specification to mitigate corrosion. We recommend painting or using an insulating bed-liner.

9.0 FINAL ASSEMBLY

[Back to Table of Contents](#)

[SEE TORQUE ARM INSTRUCTION GUIDE](#)

10.0 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 torque arm needs for your custom muscle cars.

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