

1962-1967 Chevy Nova 4-Link Installation Instructions

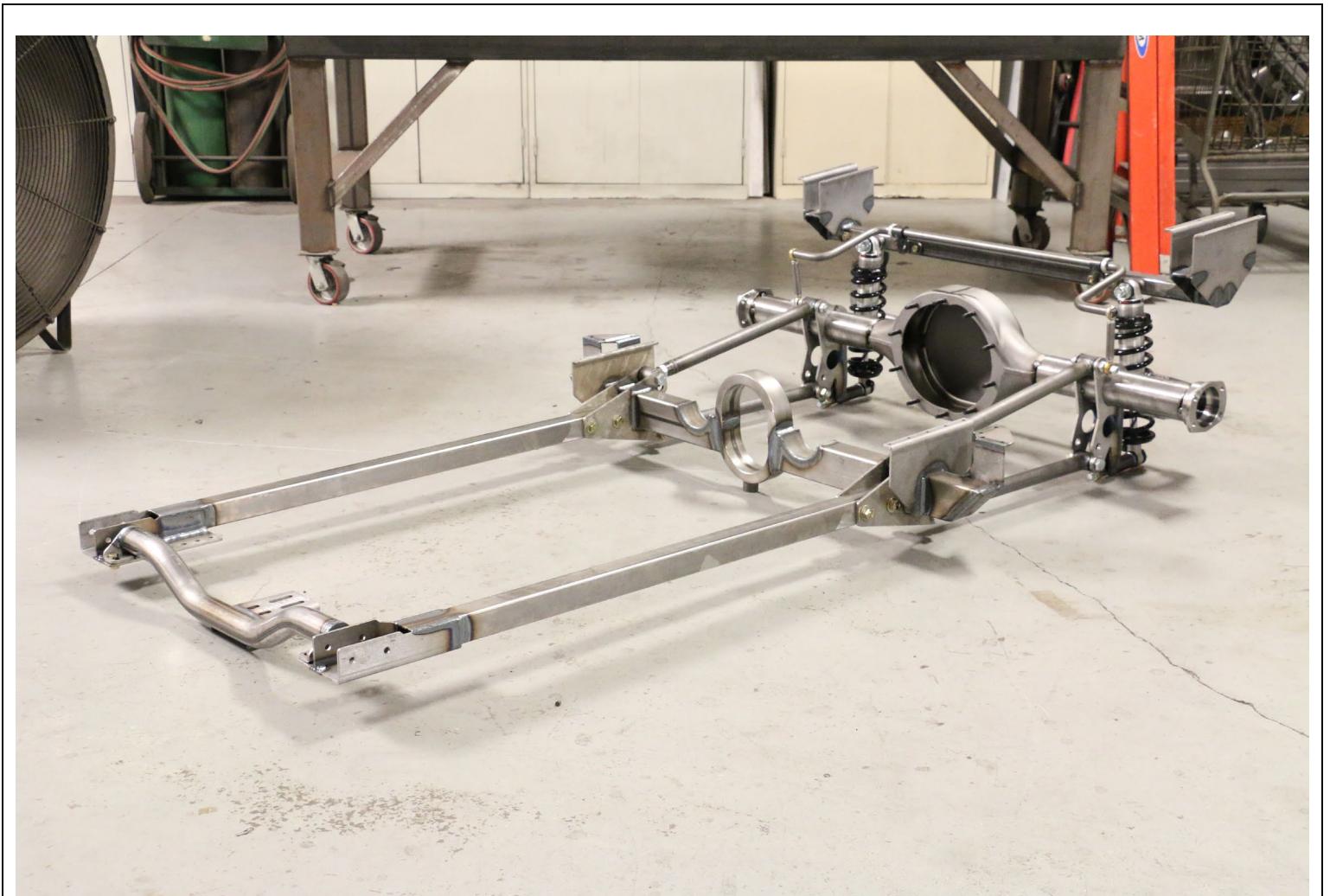
Tech line: 1-855-693-1259

www.totalcostinvolved.com

Read and understand these instructions before starting any work!

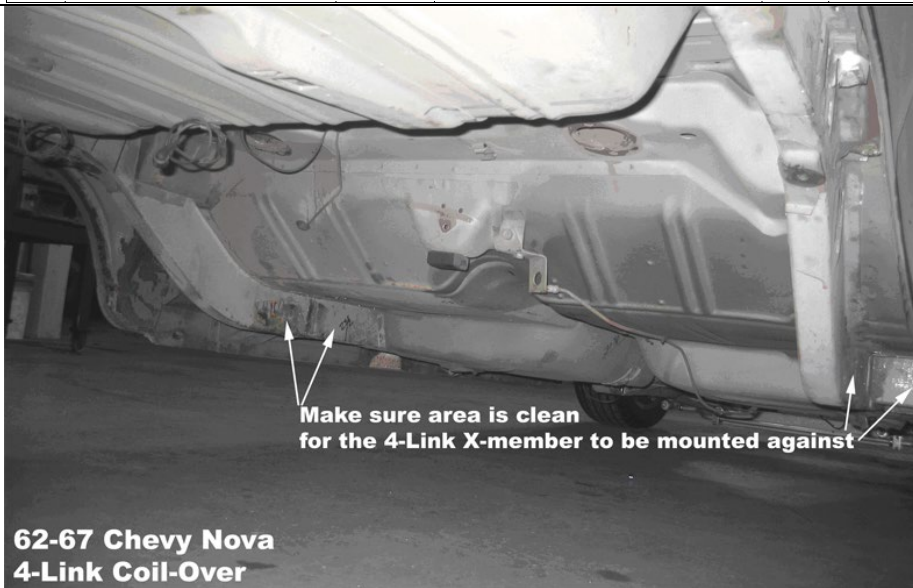
USE THE PARTS LIST BELOW TO MAKE SURE YOUR KIT IS COMPLETE BEFORE INSTALLATION.

IF ANY PIECES ARE MISSING, PLEASE CONTACT: Total Cost Involved Engineering 855-693-1259



Parts List

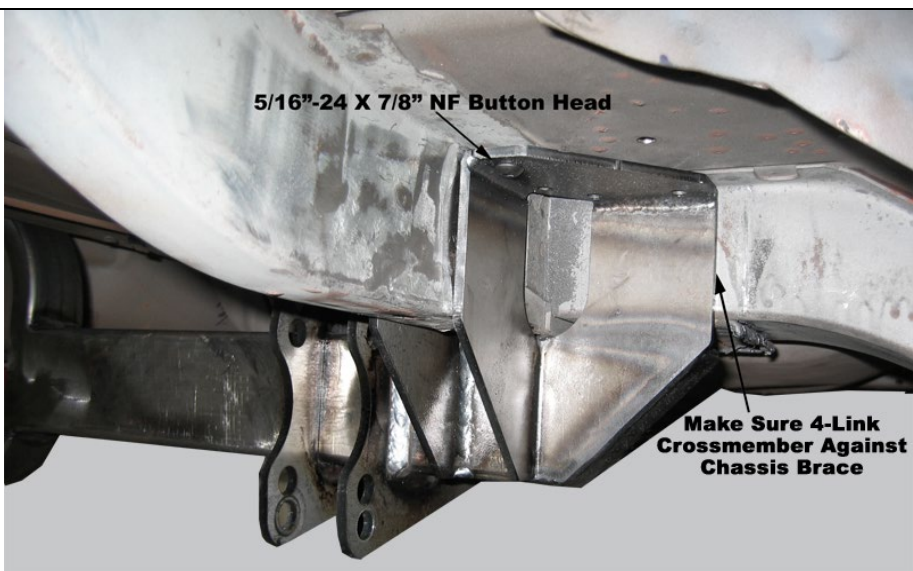
1	4-link Loop Cross-Member	1	Shock Cross-Member	2	Sub-Frame Connectors	4	3/8 by 3.5" Bolts & Nuts
2	Top Steel Re-Enforce Plates	2	Top Steel Re-Enforce Plates	1	35 3/16" Rear Panhard Bar	4	1/2 by 3.5" Bolts & Nuts
36	5/16 by 1 1/4" BH-Bolts & Nuts	2	TCI All American Coil-Over's	1	5/8" RH Rod End w Nut	2	1/2 by 2" Bolts Washers & nuts
4	18 inch 1/4" 4-Link Bars	2	Top Spacer 5/8"	1	5/8" LH Rod End w Nut	1	5/8 by 3" Bolt Washers & Nut
		2	Bottom Spacer 2 1/2"				
4	3/4" Stainless Adjustors	2	5/8 by 5" Bolt/Nut	1	Cross-member Panhard Bracket	OP	Rear Anti-Roll Bar Optional
		2	5/8 by 7" Bolt/Nut				
4	5/8 by 2 3/4" BH Bolts & Nuts	4	Plastic End Caps	1	Axle Housing Panhard Bracket	OP	Trans X-member Optional
		1	E-Brake Bracket				



Start by removing the E-brake bracket, bump stop bracket and front leaf spring hanger from the vehicle. When removing brackets use a spot weld remover. Don't pry the bracket out as it will damage the sheet metal. Prepare the rail section making sure that the surface is free from any left over spot welds and uneven surfaces.

McMaster-Carr: Spot Weld Hole Cutter
Part Number 4096A11

Harbor Freight Tools:
Spot Weld Hole Cutter
Part Number 95343



Install the 4-link cross-member firmly up against the floor and tight against the chassis brace. The 4-link bars attachment holes need to face towards the rear of vehicle. Use a C-clamp vise grip to hold it in place. Drill two holes per side going up through the floor making sure the cross member doesn't move. Mount the re-enforcement plates inside the vehicle making sure all the holes match up. The 5/16" button heads install from the top. Lightly tighten the four bolts at this point. With the plate secure you can now drill the remaining holes from inside the vehicle. Install the rest of the hardware and torque to 30 ft lbs.

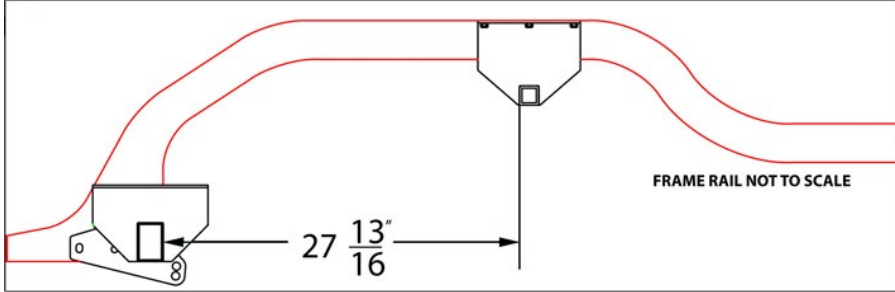


NOTE: If the crossmember doesn't slide into place the floor may have sagged over the years and the frame rails have moved outward. This can be resolved by placing a jack under the transmission tunnel and lifting the tunnel up. If the car is on a hoist, use a ratchet strap to hold the car to the hoist. Place a screw jack, trans jack, etc. into the tunnel and raise it. You'll see the floor move as you go & the rails will pull inward. Stop as soon as the crossmember fits and seat it against the floor.

This can also be done on the ground with a floor jack, ratchet strap & a piece of 4x4 or anything similar to push at the top of the tunnel. Open the doors. Wrap the ratchet strap around the car & under the floor jack. Snug up the strap & raise the jack just enough to get the crossmember into place.



Position the sub-frame connectors onto the front of the 4-link cross member with the tranny mount plate facing inward. Install one of the $\frac{1}{2}$ " x 3.5" bolts into the rear most holes on the coilover cross member but leave them finger tight. Raise the front of the sub-frame connector into position. Make sure that the connector is pushed up all the way against the floor. With the sub-frame connector in position drill four $\frac{3}{8}$ " holes through the connector and into the frame channel. Install the four $\frac{3}{8}$ " x 3.5" bolts and the remaining $\frac{1}{2}$ " bolts and tighten.



Installing the rear shock cross-member into position. The frame channels angle inward towards the front of the vehicle. Here is another way to identify the proper placement. There are two extra holes on the cross member for the panhard bracket on the passenger side. Using the 4-link cross-member as a reference measure $27 \frac{13}{16}$ " from the back face of the 4-link cross-member to the front face of the shock cross member as shown. Clamp the cross member in place and drill two holes per side up through the floor. Install the reinforcing plates inside making sure all the holes match up. The $\frac{5}{16}$ " button heads install from the top. Lightly tighten the four bolts at this point. With the plate secure you can now drill the remaining holes from inside the vehicle. Install the rest of the hardware and torque to 30 ft lbs.



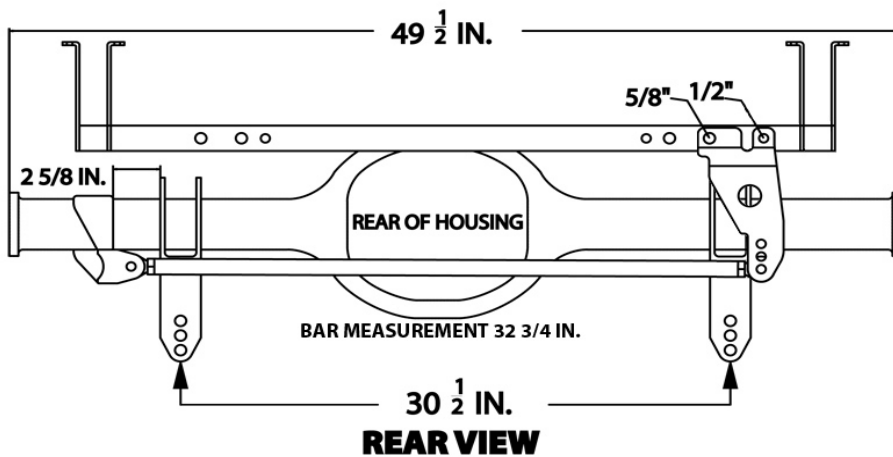
Mini Tub Option

If the mini tub option is being installed there are several differences to be aware of.

1. The rear end housing length is 47.25".
2. The shock crossmember is shipped with only the inner frame plates welded on. The outer plates and bridge plates are shipped loose.
3. The crossmember tubing will need to be trimmed flush with the finished tub/frame face.
4. Depending on the depth of the mini tubs, the bridge plate will need to be trimmed to fit between the inner and outer frame plates or possibly not used.
5. The folded edge of the outer frame plate will need to be removed.
6. The outer plate will be welded to the outside of the frame.



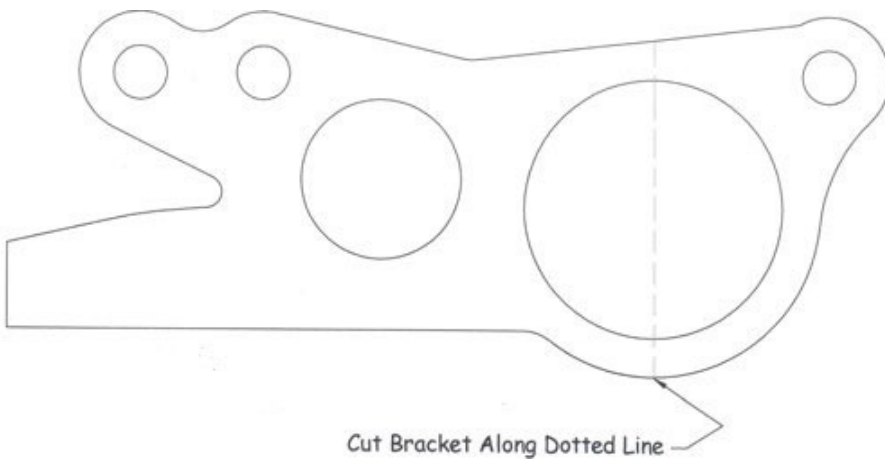
The picture to the left shows an installation where the space was maximized for the largest tire. The outer plate has been welded directly to the inner plate and frame rail.



The rear axle housing pictured is 49½" housing width (54½" axle flange to axle flange) and the pinion offset ½" to the passenger side to allow for the off-set driveshaft tunnel. The axle bracket centers are 30½", with the pinion angle up 1 degree referenced from the axle bracket face.

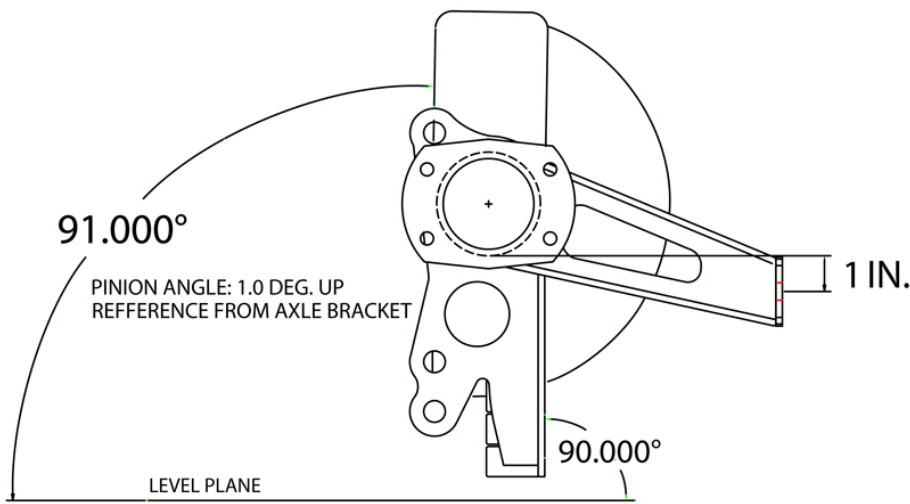
NOTE: The axle housing is 47¼" for the min tub option.

*SEE IMAGE ON THE NEXT PAGE



We prefer that the axle brackets be installed on the tubes before the bearing flanges are installed.

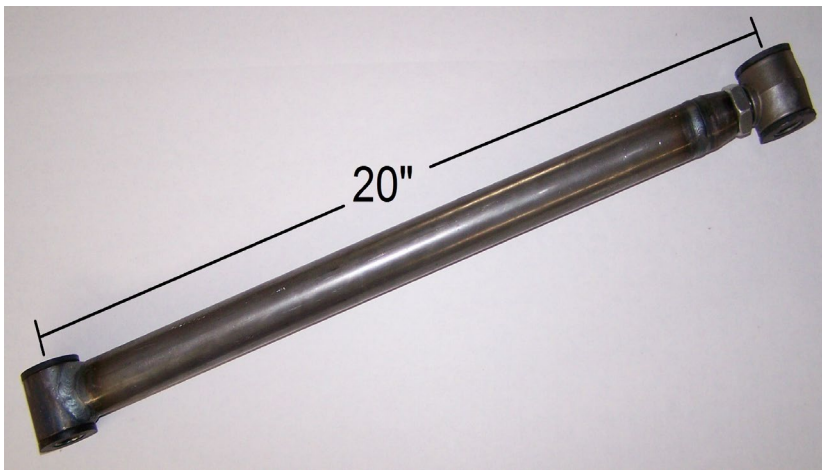
If your axle ends are already on the axle the brackets will need to be cut in half to fit over the axle tubes. Take extra care in realigning and welding them back together.



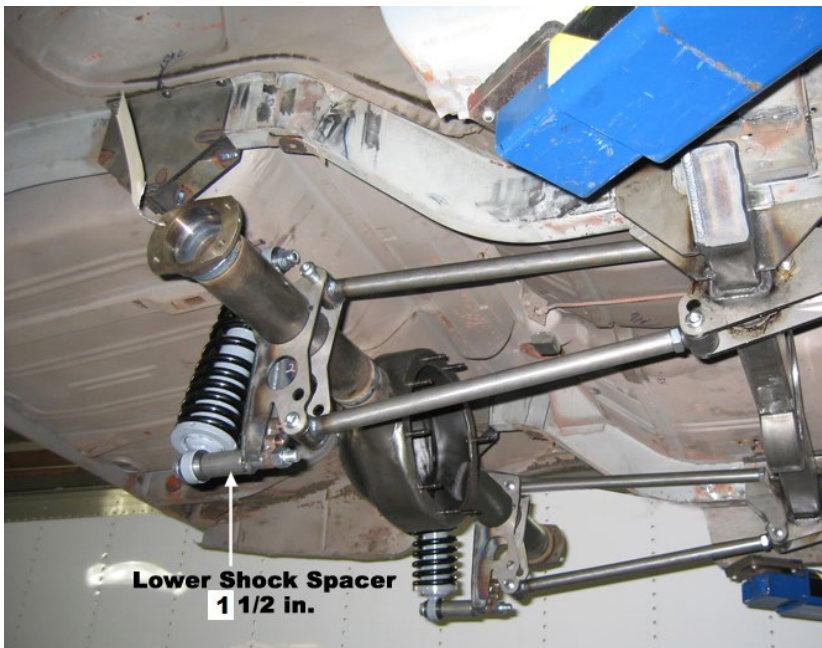
DRIVER SIDE VIEW

The panhard bar bracket is located on the driver's side of the housing with the channel side facing out. The bracket is located 2 5/8" from the outer edge of the driver's side axle bracket. *SEE IMAGE ON THE PREVIOUS PAGE

With the axle brackets 90 degrees from level the 1/2" hole in the panhard bracket will be 1" below the bottom of the axle tube (3" axle tubes only). Tack weld and double check all measurements and then fully weld. The cross member mounted panhard bracket will be bolted up with a 5/8 by 3 inch bolt & washer on the inside hole and 1/2 by 3 inch bolt & washer on the outside hole



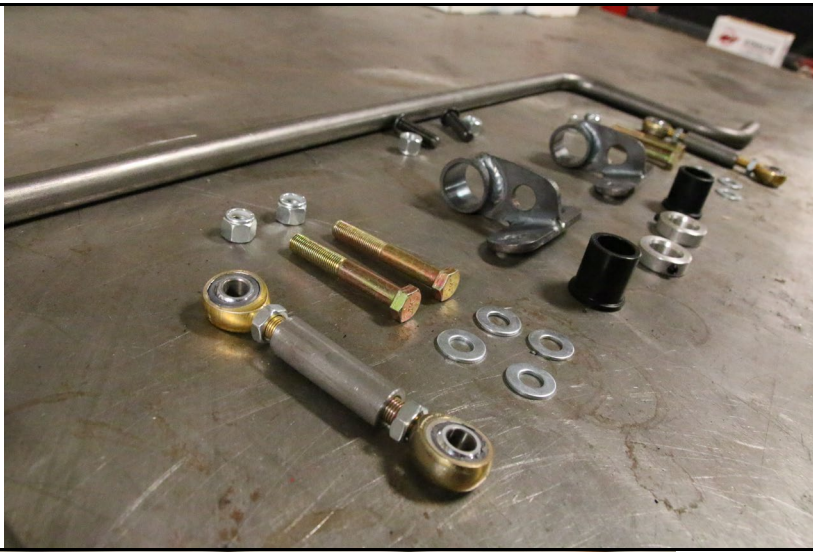
Adjust the 4-Link bars to 20" centers. Place the adjuster side of the lower link bars into the lowest hole on the driveshaft loop cross member brackets and install the 5/8 x 2 3/4" bolts. Install the upper link bars into the highest hole on the driveshaft loop cross member brackets and install the 5/8 x 2 3/4" bolts. Now you can connect the link bars to the axle housing using the 5/8" hardware. The lower link bar should be mounted into the lowest hole on the bracket. *NOTE* If you purchased the rear Anti-sway bar there is a special shoulder bolt used on the top link bar attachment. The shoulder side points outward.



Mount the top of the shock to the inner most holes on the cross-member using the 5/8" x 4" bolts. Washers are used on both sides of the shock.

The lower shock mount uses a 5/8 x 6" bolt with washers on each side of the shock and the 1 1/2" long spacer in the lowest hole in the axle bracket.

The panhard bar bracket is installed using the two 1/2 x 2" bolts and 1/2" button heads on the rod ends. At ride height the bar should be close to level. Centering adjustments are made by turning the bar to lengthen or shorten with left and right hand rod ends. Tighten the jam nuts on the Panhard and link bars and all attachment hardware.



Optional anti-sway bar components.



Optional anti-sway bar installation:
See the photo on the left for assembly of the sway bar mounting flange, bushing and retainer.

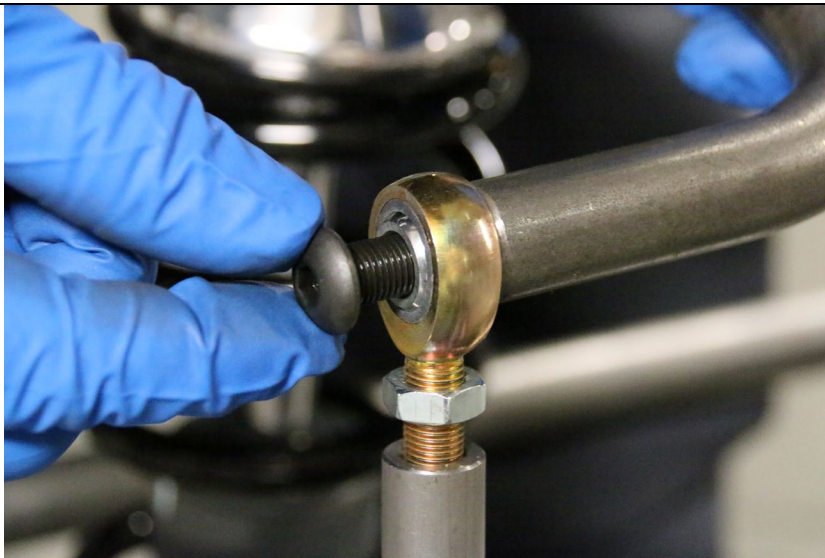
1. Mounting flange
2. Bushing (shoulder facing out)
3. Retaining collar.



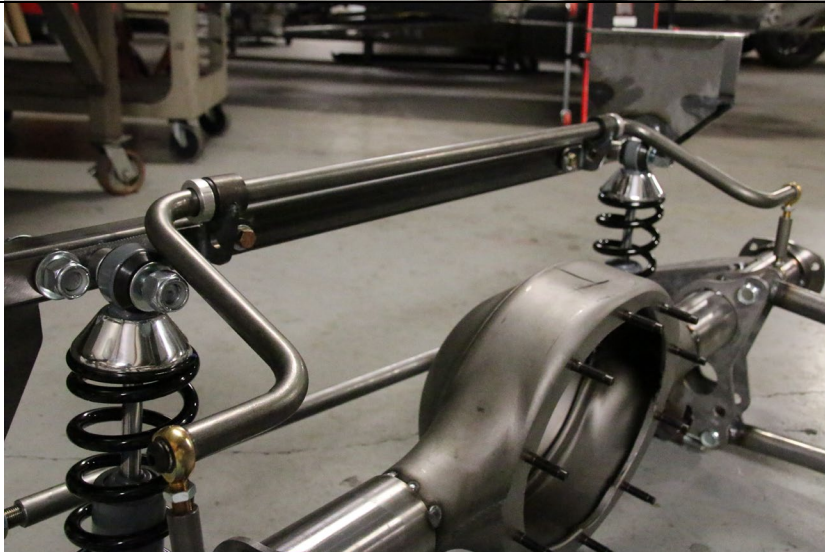
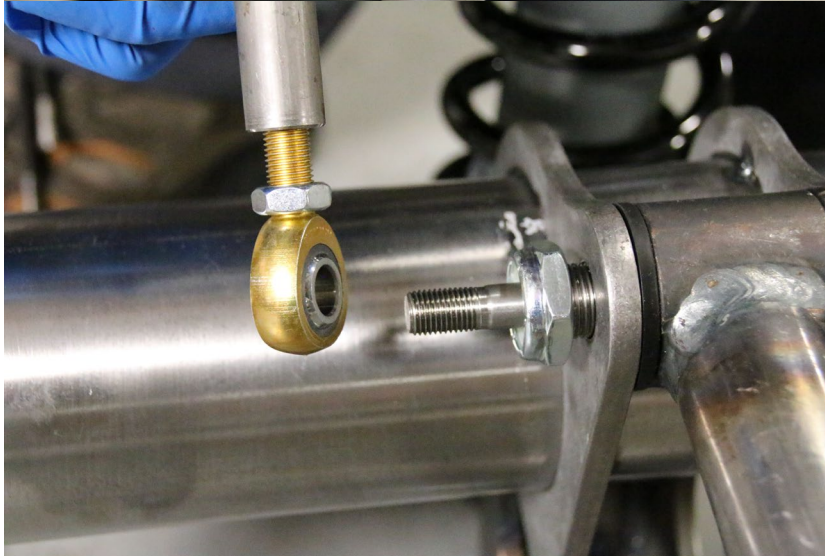
Apply urethane energy grease to the inside of the bushing and slide it into the mounting flange. Leave the retaining collar loose for now. Use the provided 3/8" heims and hardware to install the arms onto the special shoulder bolts at the top 4-link bar attachment.



Install the sway bar assembly onto the shock cross member as shown. The sway bar mounts on the front side and above the cross member.
See photo to the left.

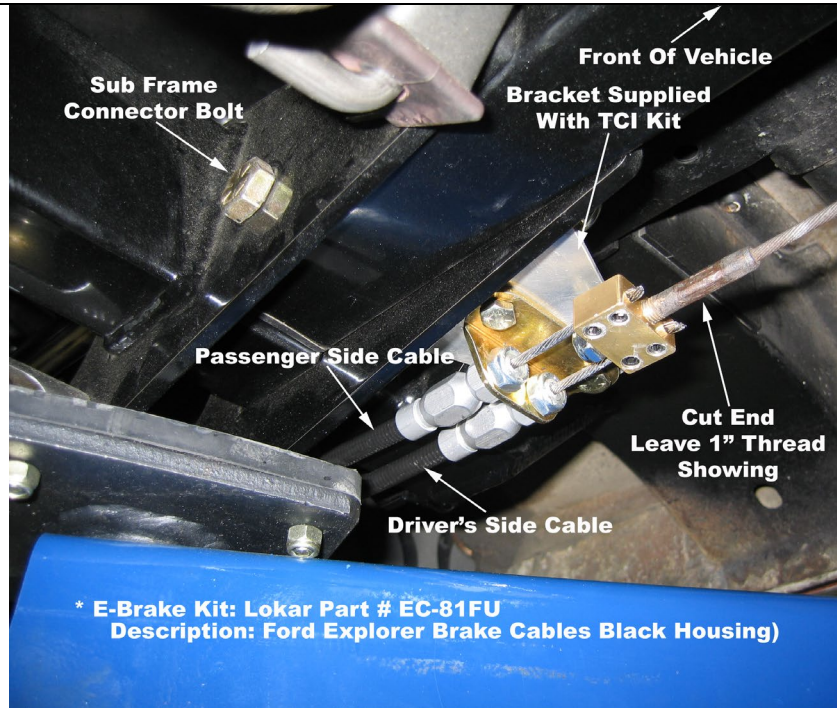


Assemble the sway bar links and install them onto the sway bay and rear end housing as shown.



Slide the sway bar left/right as needed to center it in the mounts. Slide the retaining collars up against the bushing and tighten the set screws.

Leave the sway bar links neutral for now. Adjust as needed once the car is at the desired right height and load.



The provided bracket for mounting the emergency brake cable kit needs to be bolted to the two 1/2 inch bolts on the outside of the driver's side sub-frame connector at the 4-link cross-member.

Lokar Emergency Brake kit
Part number—EC-81FU

REAR END 54.5" AF to AF 62-65 Nova & Acadian	WHEEL SIZE	BACK SPACE	TIRE SIZE
	15x8	4"	255/60/15
	16x8	4"	255/50/16
	17x8	4"	255/40/17
	18x8	4"	255/40/18
66-67 Nova & Acadian	20x8	4"	255/30/20
	15 X 8.5"	4"	265/60/15
	16 x 8.5"	4"	265/50/16
	17 X 8.5"	4"	265/40/17
	18 X 8.5"	4"	265/40/18
DSE Mini Tub 52.25" AF to AF 62-65 Nova & Acadian 66-67 Nova & Acadian	20 X 8.5"	4"	265/30/20
	WHEEL SIZE	BACK SPACE	TIRE SIZE
	18x10	5.25"	295/35/18
	18x11	5.25"	315/30/18

No returns or exchanges without a RMA#.

Packages must be inspected upon receipt & be reported within 10 days.

If you are missing parts from your kit, TCI Engineering will send the missing parts via FedEx or U.S. mail ground.

Returned packages are subject to inspection before replacement/refund is given. (Some items will be subject to a 15% restocking fee)

Thank you for your business!

