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Traction Bar Instructions

Quantity in kit	☑	Part
1		Traction bar
1		Traction bar axle mount
4		ORDB8004 Bushing Halves, for axle side of traction bar
2		3” Long sleeve for 9/16” bolt, for axle side of traction bar
2		9/16” x 4-1/2” Bolts/lock nuts, for axle side of traction bar
2		9/16" x 4" Bolts/lock nuts, crossmember side of traction bar
1		Flex joint assembly
2		Shackle plates
1		2-1/8” Length of 2” x .120” tubing, to weld to crossmember
2		MO2758 Bushing halves, for tube welded to crossmember
1		2-5/8” Sleeves for 9/16” bolt, for tube welded to crossmember
2		1/8” Gusset, for tube welded to crossmember
1		¼” Gusset, for tube welded to crossmember

1. Install bushings/sleeves into the two rearward (axle side) eyes of the traction bar. These work just like leaf spring bushings.

2. Install flex joint into tip of traction bar:

    a. Lay traction bar on its side with the threaded part of the flex joint tube facing up

    b. Place washer into flex joint housing

c. Place bushing half into flex joint housing, both bushing halves are identical. Make sure the concave side of the bushing is facing up.

d. Install ball, it's symmetric so it can be installed either way

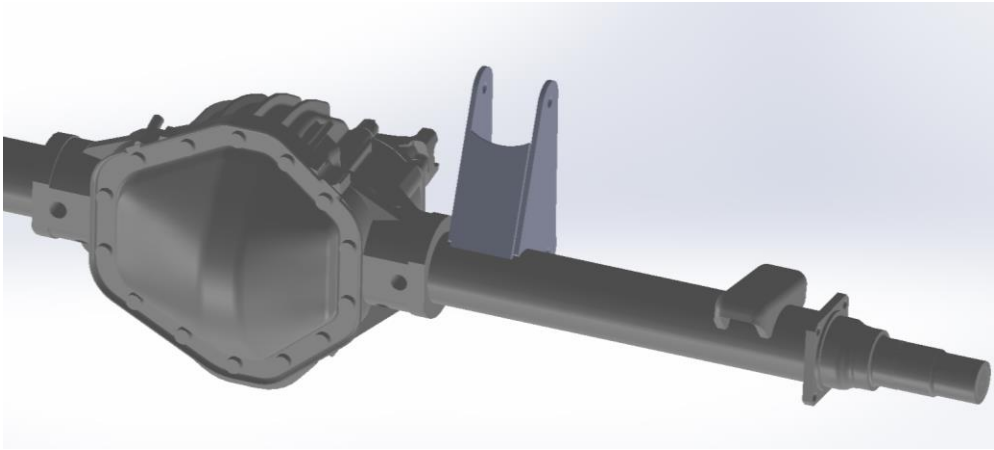
e. Install second bushing half, concave side down

f. Install threaded adjuster nut with the logo out. While a spanner wrench is the right tool here, a punch and hammer work just as good to tighten this nut. Snug is good here, make sure that one of the slots in the nut line up with the threaded hole for the set screw (see next step).

g. Apply thread locker to set screw and install it so that the adjuster nut is locked in place

3. Install shackles using supplied bolt through the flex joint at the tip of the traction bar.

4. The traction bar axle mount should be installed as close as possible to the center section. **Don't finish weld anything yet**



Your truck naturally wants to twist towards the passenger side under torque, basically your springs are resisting the torque running through the driveshaft and because your engine rotates clockwise, that makes the truck lean to the passenger side under torque. Your traction bar will actually try to lift up the corner of the vehicle that it's installed on as it resists the torque running through the axle tubes.

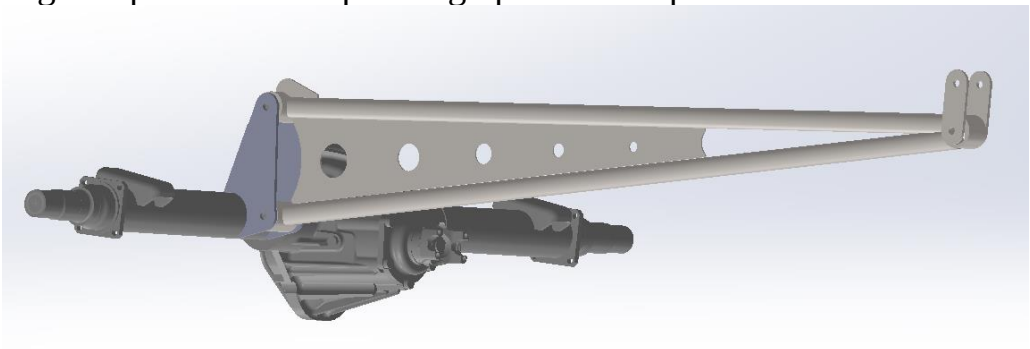
So if you install it on the passenger side the traction bar will resist the torque running through the driveshaft and your truck will stay nice and level. You can put the traction bar on the driver's side, but it will make the truck lean over more rather than less.

5. Bolt the traction bar to traction bar axle mount on passenger side. The "shark fin" gusset is at the top of the traction bar.

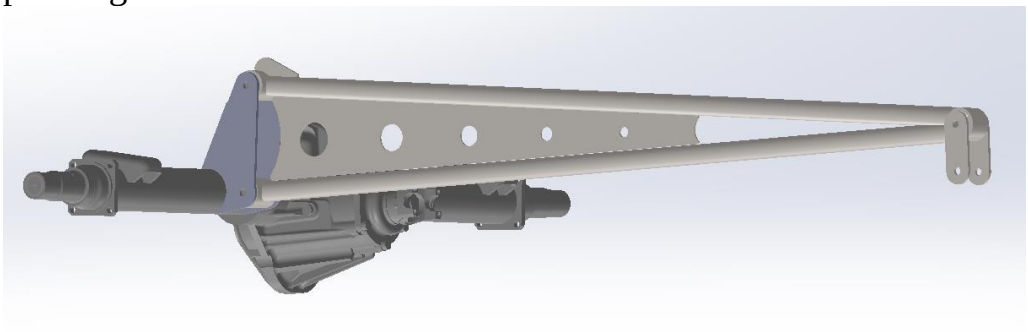
6. Rotate the traction bar up and down on the axle tube and see where it, and the crossmember, are going to work best in your application. The shackles can be pointing up or down (equally effective) and a slight angle on the shackle doesn't affect performance. The angle of the traction bar in relation to the ground doesn't really change the way that it works, angling the traction bar up on taller trucks is no big deal.

See drawing on next page

Example of traction bar installation on a taller truck, traction bar angled up and shackle pointing up to reach up to the frame



Example of traction bar installation on a truck with moderate or no lift, the traction bar is nearly level with the ground and the shackle is pointing down.

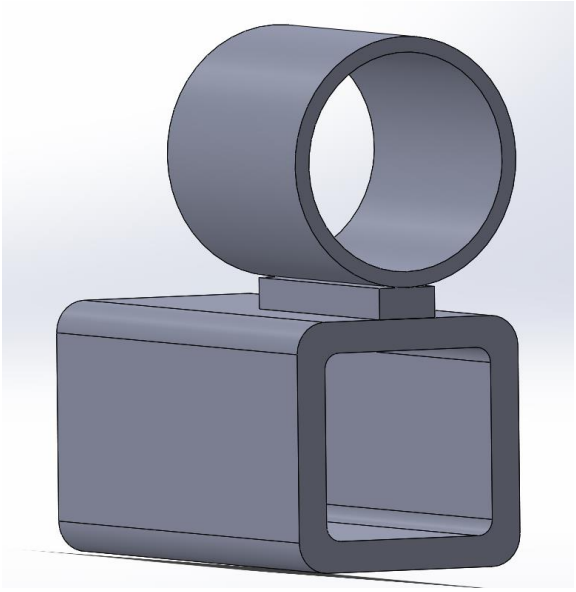


7. Tack weld the axle side bracket into place.

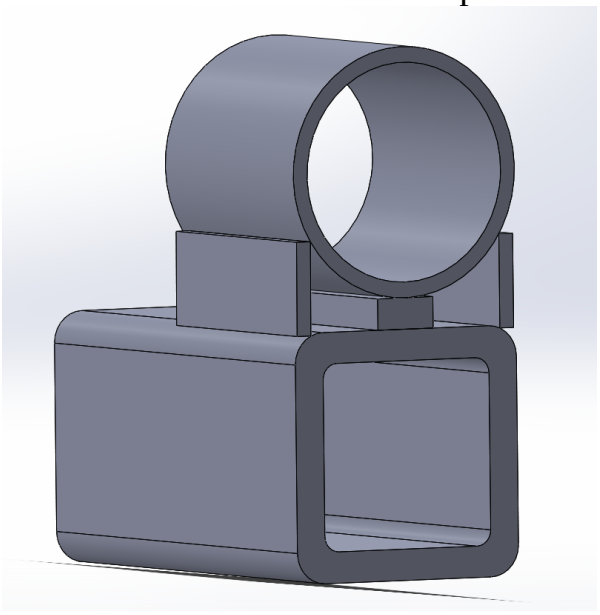
8. Assemble frame crossmember and bolt it in. If you purchased ours, you will need to cut the square tubing at the correct length for your frame at a 45 degree angle on each side. You will need to drill 4 holes in each frame rail.

We include three small pieces of plate to help tie the bushing assembly into the crossmember.

The single thicker piece goes directly under the bushing assembly tube and needs to be welded to both the tube and crossmember.



Once that's fully welded, the two thinner plates are welded between the crossmember and tube as pictured



9. Double check that the traction bar and frame crossmember line up the way you want them to, remove traction bar from brackets and finish weld the bracket to the axle tubes.

10. Because the traction bar controls the torque so much better and doesn't twist your springs, there is less "give" in the system. This is a good thing, it's what makes the traction bar make your tires hook up better and get rid of wheel hop, but because there is less "give" it's harder on the press fit between your axle tubes and the iron center section.

    Under hard use, the center section can break free from the tubes which usually destroys the driveshaft and sometimes ruins the axle housing. To help prevent that, we often weld the housing to the center section. There are a couple schools of thought on how to weld the center section to the tubes.

    a. The factory used plug welds, they almost act more as pins that keep the center section from being able to spin in relation to the tubes. At ORD, we typically use a hole saw to make as many extra holes for plug welds in the housing as we can, you basically run the hole saw down just until you're through the cast iron; try not to drill too far into the tube. Then turn the welder way up and burn in new plug welds.

    b. On paper, welding the iron housing right to steel tubes shouldn't work out too well, especially if you're using a MIG welder. However, using a MIG they really do melt together pretty nice and there is so much weld area there, that even if the welds aren't 100% right (due to the different materials) they hold up pretty well in the real world.