



INSTALL INSTRUCTIONS:

Cognito HD Adjustable Track Bar for 2017-2020 Ford Super Duty F250/F350 4WD Trucks
SKU: 120-90406



PARTS LIST FOR SKU: 120-90406

QTY.	PART #	DESCRIPTION
1	8517	Track Bar Uniball End
1	90697	FSD Track Bar Pinch Clamp Coupler
1	RODEND-JMX-16T	JMX-16T with F-1 Fit
1	UNIBALL-WSSX16T-F1	Uniball Wssx16T 1.0" with F1 Tight Fit Teflon Liner
1	HARDWARE-10743-03441	2.125" Internal Retaining Ring
1	HP-9201	FSD TRACK BAR PIN KIT

HP9201 - FSD Track Bar Hardware Pack

QTY.	PART #	DESCRIPTION
1	6179	Ford Super Duty Track Bar Uniball Pin
1	6180	1.0 Uniball Misalignment Spacer
1	HARDWARE-0161381	1/2"-20X1-1/2" Lg. 12 Point Plain Finish Flat Screw
1	HARDWARE-33626	33626 1/2" Lock washer
2	6221	1" FSD Heim Spacer
2	6222	1" FSD Heim Bushing
1	HARDWARE-NYLOCK-3/4-16	Nylock Steel Silver 3/4-16 Grade 8
1	HARDWARE-33092	3/4" Zinc Plated SAE Flat

WARNING

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.

INTRODUCTION

The Cognito adjustable track bar kit provides a heavy duty and adjustable solution over using the OEM track bar. A large 1" rod end is used at the chassis connection, and the powder coated bar is made from large diameter and thick wall DOM tubing. Length adjustment is made easy on the vehicle to easily center the axle under the chassis after adding a leveling or lift kit.

REQUIREMENTS

- Installation requires a qualified mechanic
- Read instructions carefully and study the pictures before attempting installation.
- Retain the removed hardware for reuse.
- Ratchets, Sockets /Wrench (30mm, 27mm, 13mm, 1/2" 12-point), 12mm Allen key, Torque Wrench, Impact Gun, Sledge Hammer, Torch

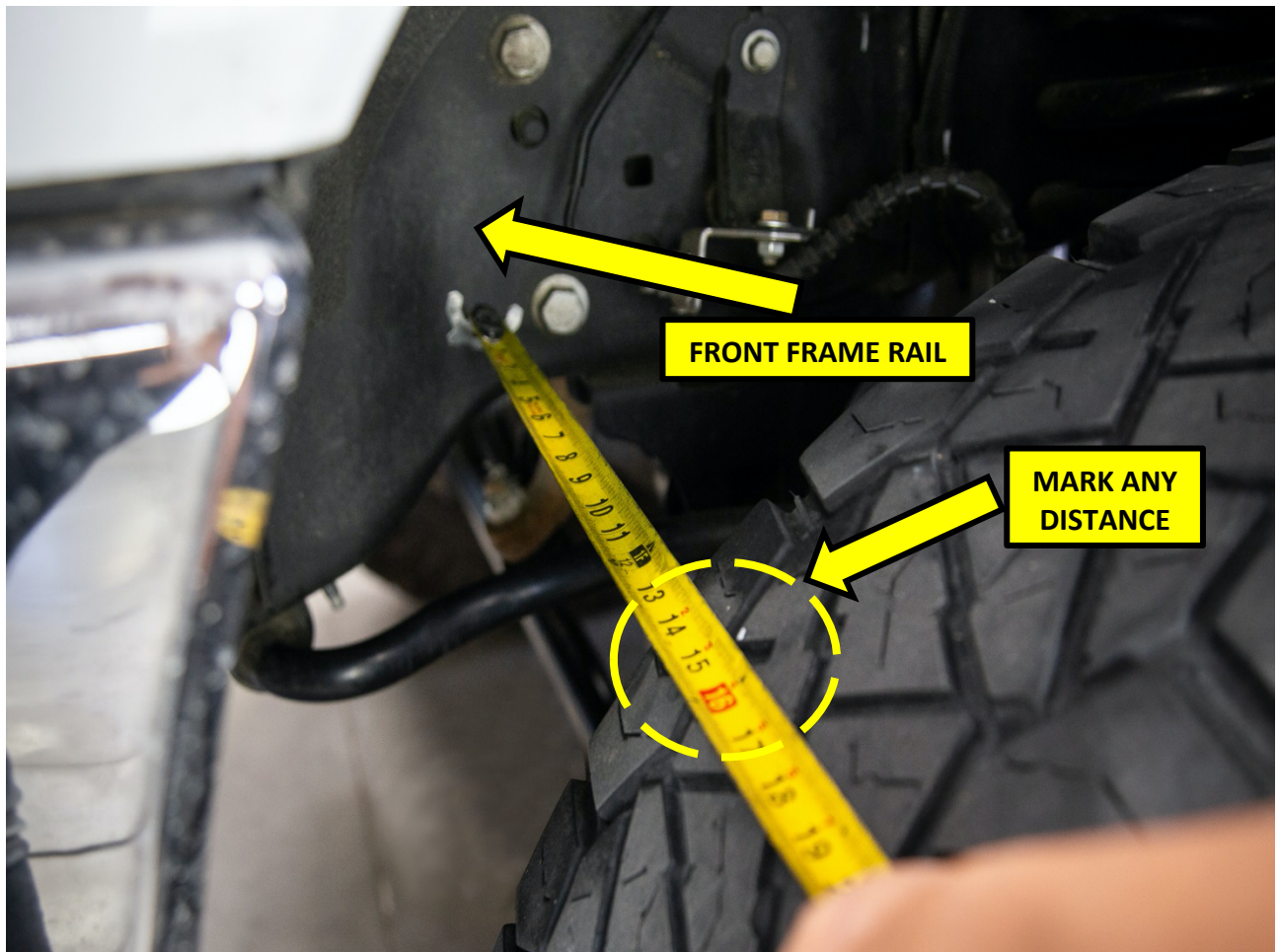
TECHNICAL INFORMATION

- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting
- Each kit, and options to kits, are packaged separately. Therefore installation procedures are covered in separate instructions. Familiarize yourself with each specific set of instructions before beginning.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM manual

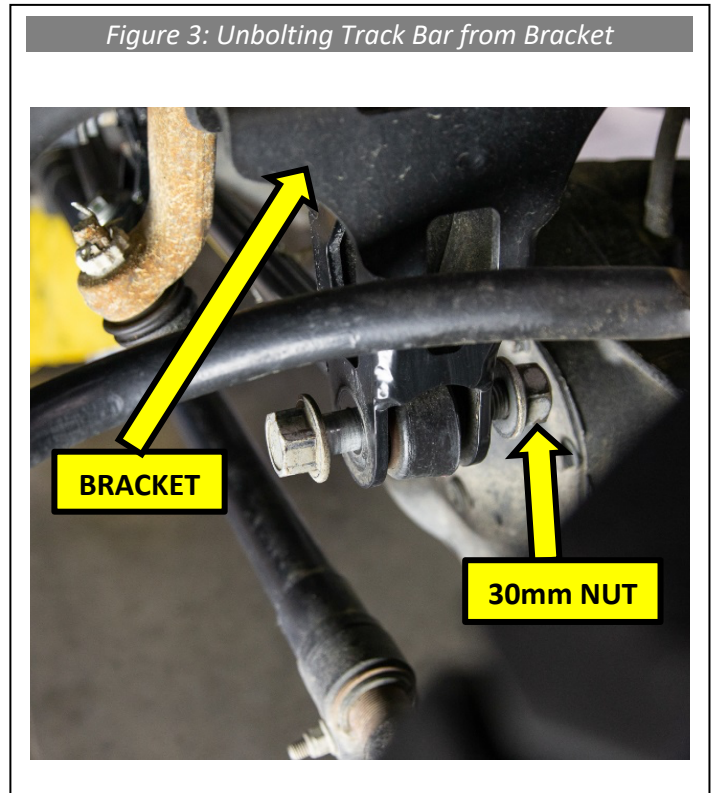
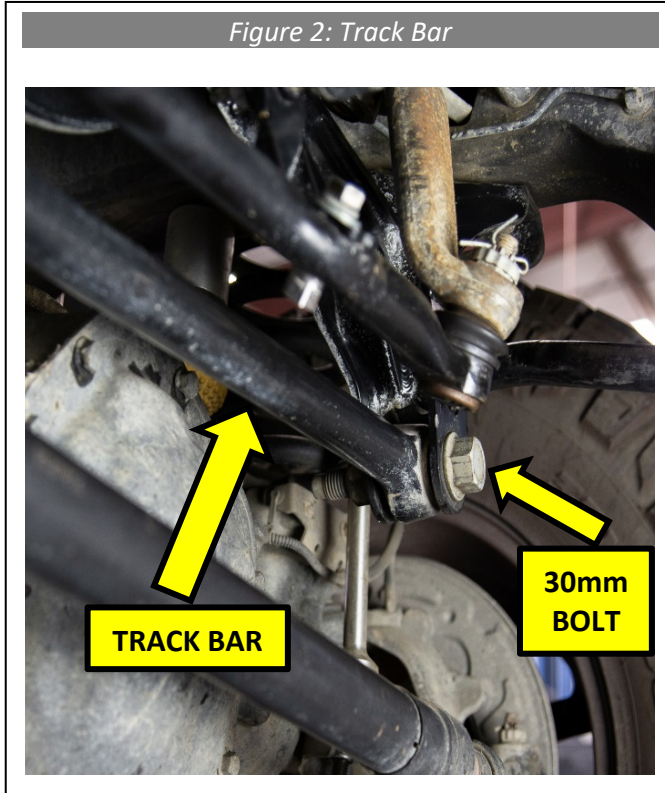
INSTALLATION

1. All hardware will be reused, so retain all removed hardware.
2. Before raising vehicle, set steering wheel straight, then measure and record the distance from the front frame rail to a reliable point on your tire. This will be needed to center the axle after installation. See Figure 1.

Figure 1: Marking Reference for Alignment



3. Remove the track bar to bracket nut with (1) 30mm socket and (1) 30mm wrench. See Figure 2.



4. As shown in figures 4 and 5, unbolt the track bar to axle ball joint nut using a 27mm wrench. Also, use 13mm wrench to hold the ball joint if it starts spinning.

Once the ball joint side is unbolted, a sledgehammer can be used to carefully knock it upwards until you can use hands to take it apart. You may use torch to slightly heat the bolt, in case if it's stuck and too hard to knock it out. Now you can take out OEM track bar and replace it.

Figure 4: Unbolting Ball Joint Side

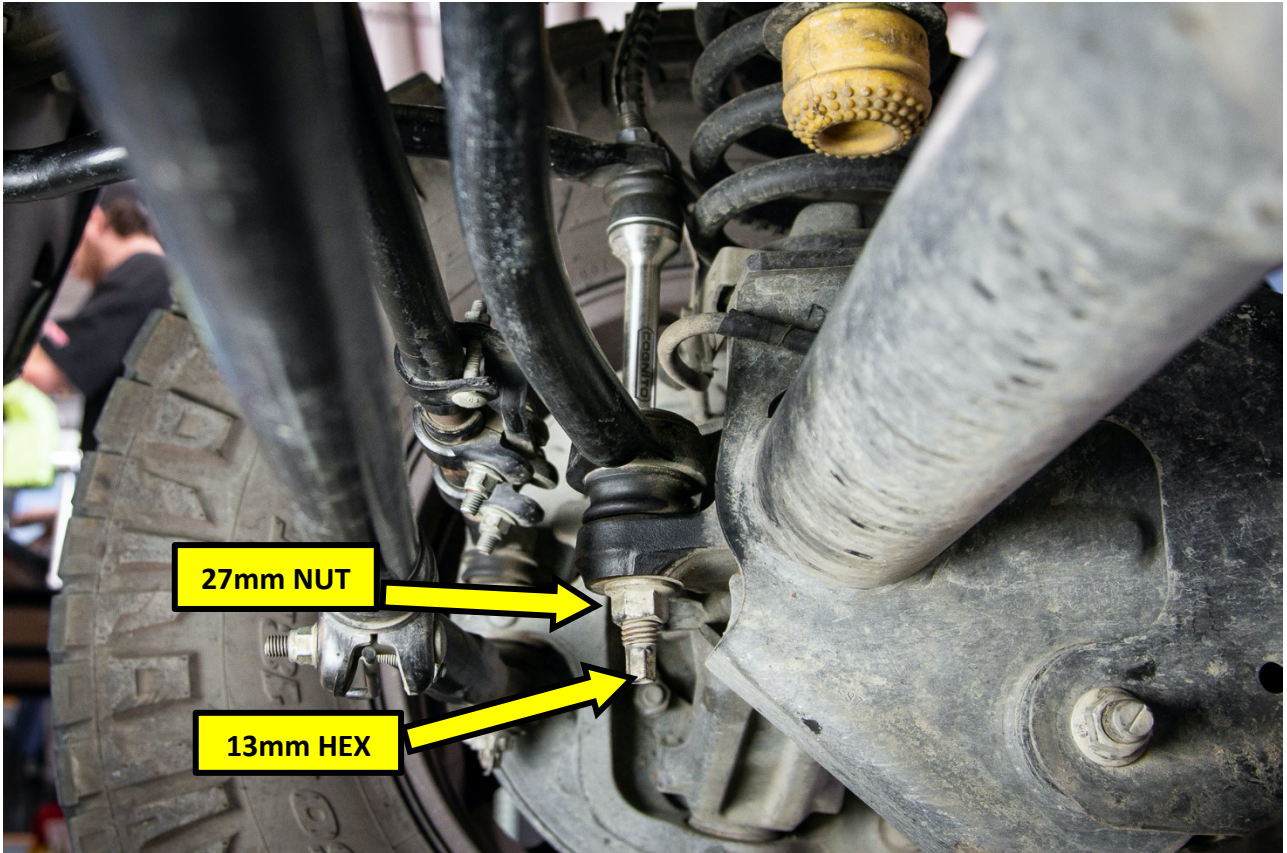
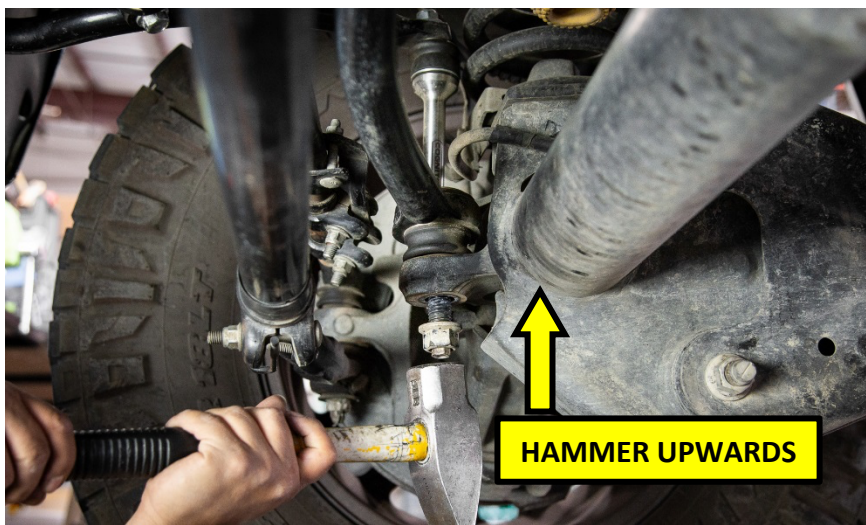


Figure 5: Removing Track Bar Ball Joint Side



- Loosen (4) adjuster clamp screws with a ¼" Allen key to remove tension from clamp. Thread both track bar ends into adjuster until track bar is as short as possible. **Caution: Do not force parts to thread together farther than they will easily go by hand. Doing so could damage the threads.** See Figure 6.

Figure 6: Shorten Track Bar Length before Installation

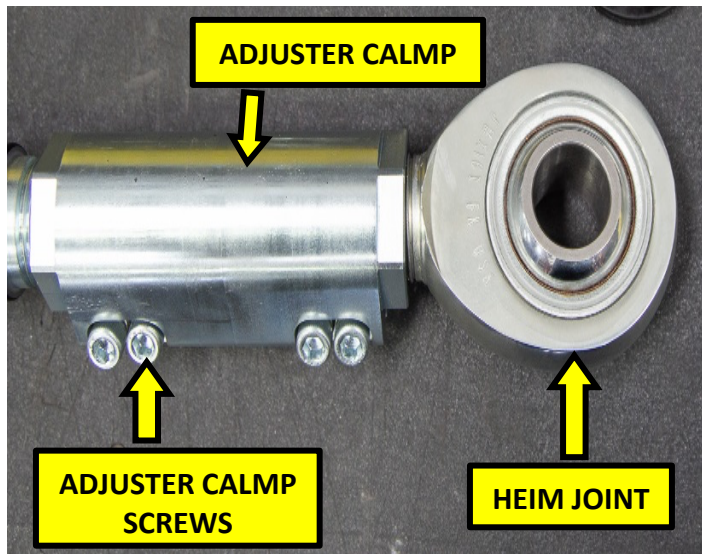
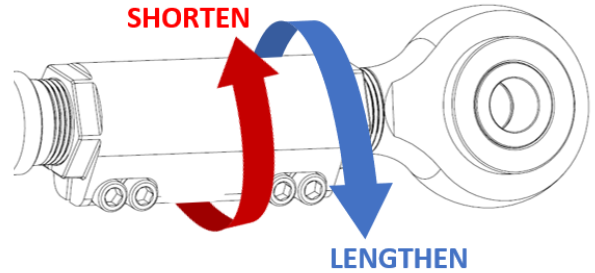


Figure 6.1: Adjusting Track Bar Length



- Install Heim joint bushings and spacers into Heim joint. See figure 9.

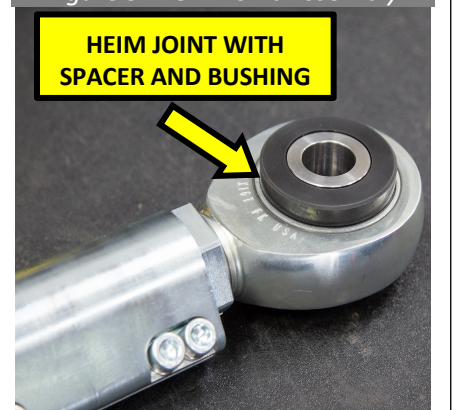
Figure 7: Installing Heim Spacer



Figure 8: Installing Heim Bushing



Figure 9: Heim Joint Assembly



7. Install the taper pin hardware into the axle end of the track bar in the order shown in figure 10. Apply a drop of Red Loctite to the very end of the threads on the taper pin bolt (threads furthest for the bolt head) before threading it into the taper pin.

Figure 10: Taper Pin Hardware



8. The tapered portion of the pin should be on the bottom of the track bar as shown in Figure 11. Leave the taper pin bolt finger tight.

Figure 11: Taper Pin Hardware



9. Install the track bar Heim joint assembly side into the bracket, tighten bolt using the 30mm wrench and then torque to 406 ft.-lbs., hold the nut on the other side with 30mm wrench if necessary

Figure 12: Torque Specification

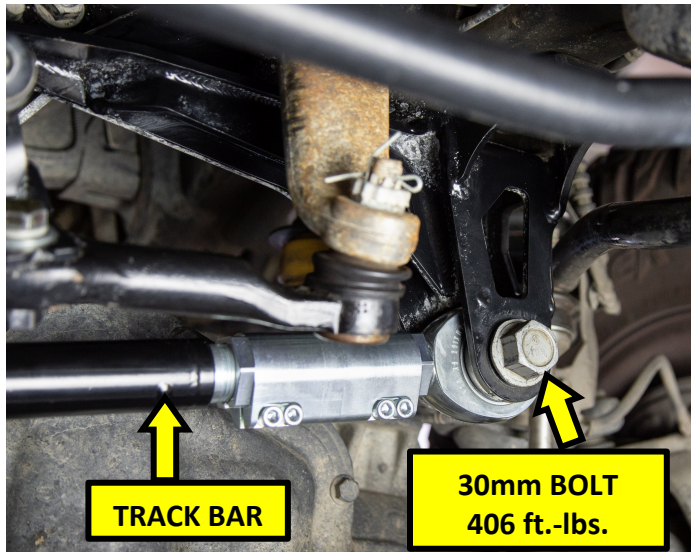


Figure 13: Installed Track Bar



10. Adjust the track bar length until you can install the track bar ball joint side into the hole and tighten the nut as shown in figure 14. Using torque wrench, torque the 27mm nut to 250 ft.-lbs. (figure 15).

Figure 14: Installing Track Bar Ball Joint Side

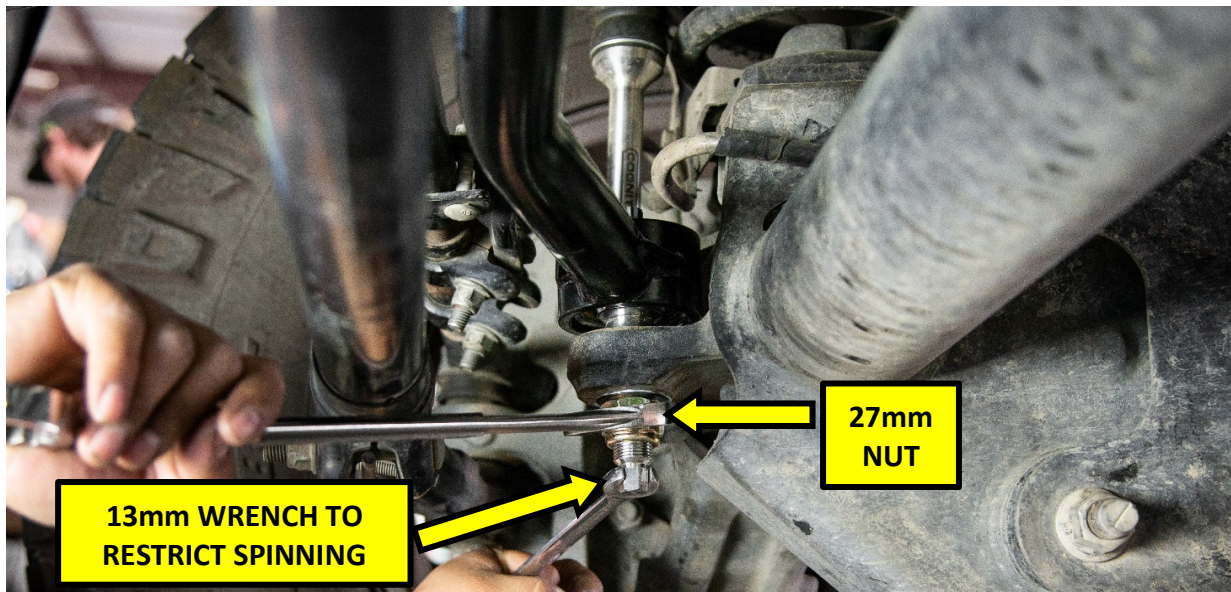
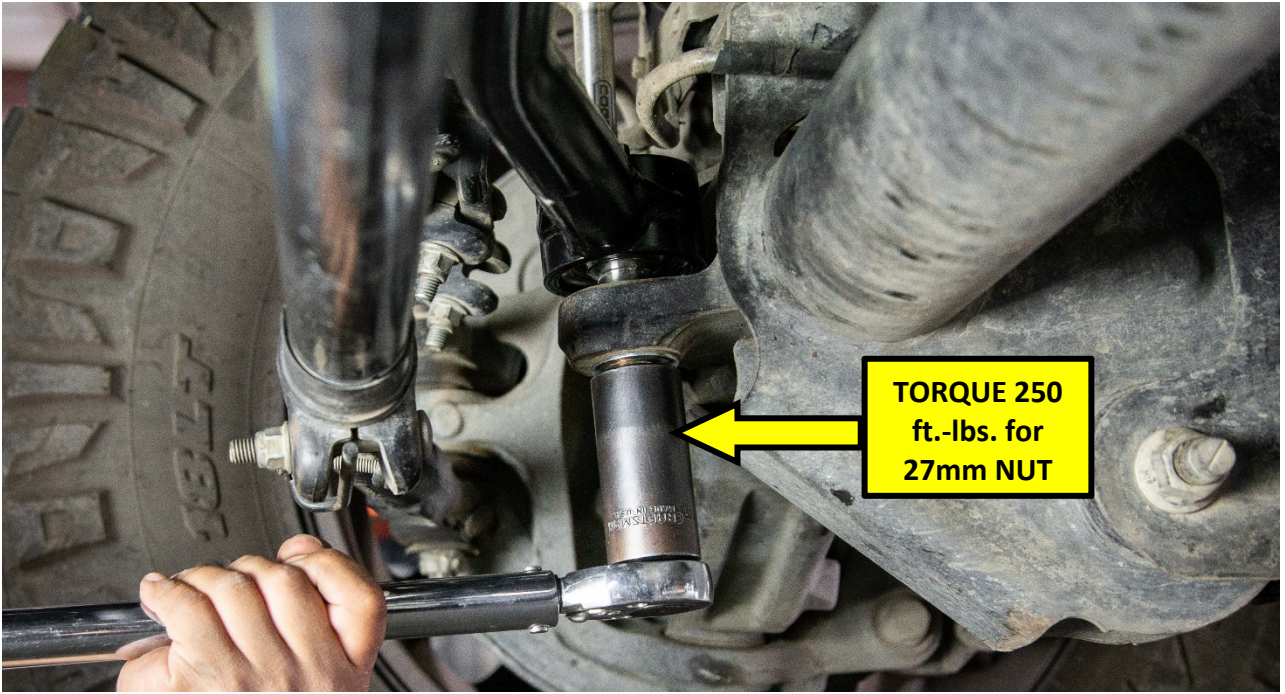
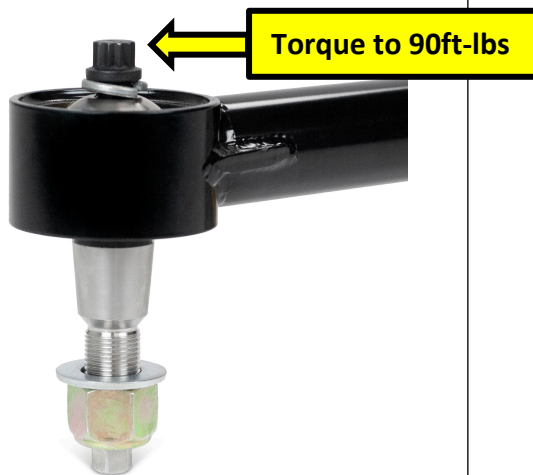


Figure 15: Bolting Track Bar Ball Joint Side



11. Using a torque wrench, torque the 1/2" 12-point taper pin bolt to 90ft.-lbs. See figure 16.

Figure 16: Taper Pin Bolt



12. With the vehicle at ride height, adjust the length of the track bar as shown in figure 17 until the measurement made in step 1 is returned to its original value.
13. Adjuster clamp must be rotated so that split is between 4 and 8 O'clock. See Figure 18. **Caution: Failure to adhere to this step can cause adjuster to contact frame.**

Figure 17: Adjusting Track Bar length to Initial Measurement

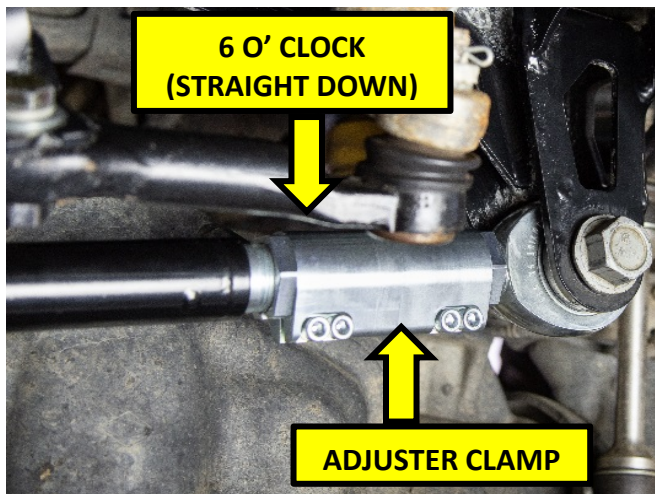
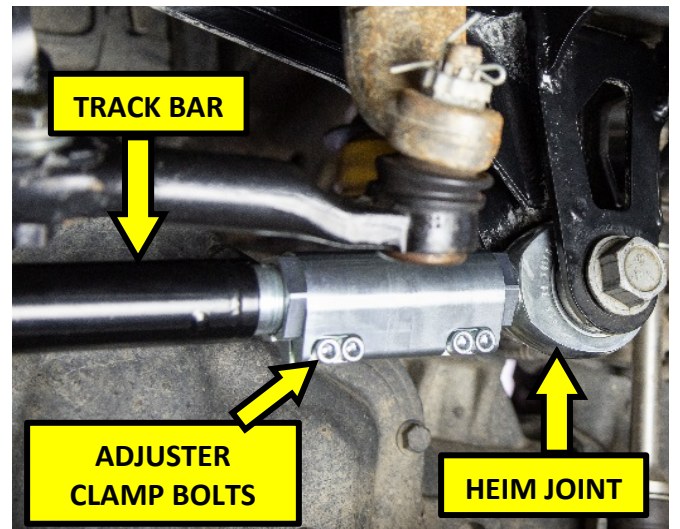
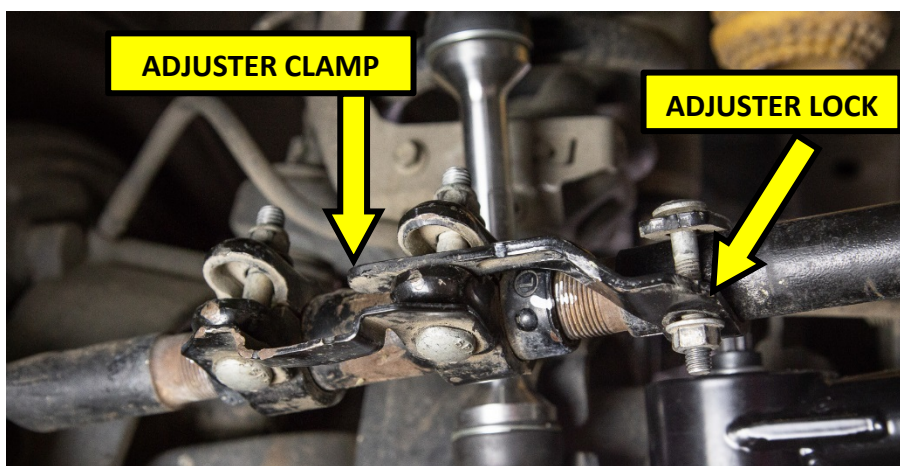


Figure 18: Bolting by Rotating Heim Joint



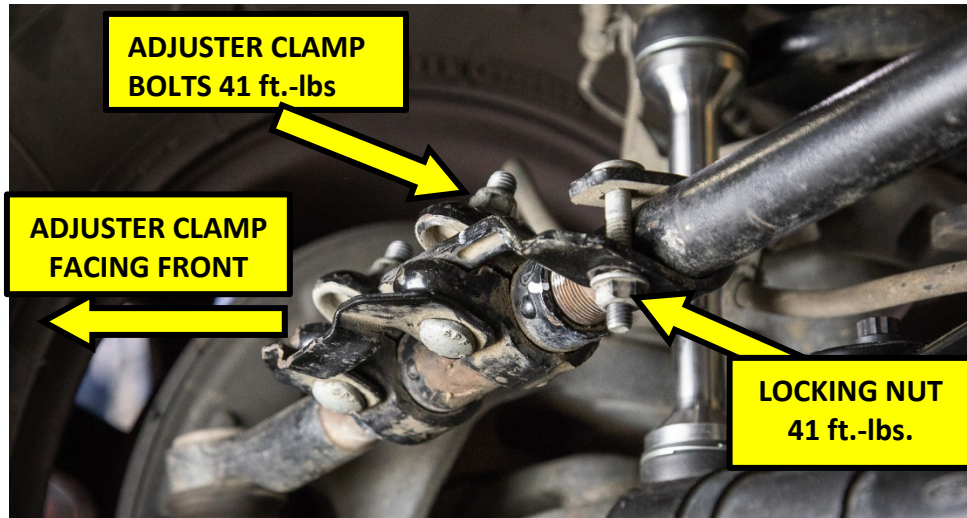
14. Before the clamp bolts are tightened the Heim joint can rotate about the track bar axis. The track bar ball joint should be straight as shipped from the factory. The Heim joint should be centered so that it can rotate slightly forward and backward once clamp bolts are tightened, see figure 14.
15. If steering wheel is straight, tighten 4 clamp bolts to 25 ft.-lbs., check that track bar can rotate back and forth, ensuring Heim joint is not bound up.
16. Make sure the vehicle is in park with the emergency brake activated, then start the engine. Loosen drag link adjuster sleeve. Rotate the drag link adjuster in the appropriate direction to center the steering wheel (Figure 19).

Figure 19: Drag Link Adjustment



17. Make sure the adjuster clamp is facing front of the vehicle. Once the steering wheel is in the proper location, tighten the (2) adjuster clamp bolts to 41 ft.-lbs. Then slide the adjuster lock into position and tighten the (1) locking nut to 41 ft.-lbs. (Figure 20). Although, the steering wheel is now straight, the vehicle may still need a proper professional alignment.

Figure 20: Steering Link Adjustment Secure



18. The final installation of track bar is shown in figures 21 and 22.

Figure 21: Installed Track Bar



Figure 22: Installed Track Bar

