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Rough Country 10613 Installation Instructions

HD Steering Kit with N3 Stabilizer for Jeep Cherokee & Wrangler

Part number: 10613

trailfortress.com/hd-steering-kit-jeep-cherokee-wrangler-rough-country-10613

Scan for fitment, price and install help

ROUGH COUNTRY SUSPENSION SYSTEMS®

921106040

10604BAG

JEEP TJ/XJ/MJ/ZJ HD Steering

Thank you for choosing Rough Country for all your vehicle needs.

Please read instructions before beginning installation. Check the kit hardware against the kit contents shown below. Be sure you have all needed parts and know where they go.

If question exist, please call us @1-800-222-7023. We will be happy to answer any questions concerning this product.

Check all fasteners for proper torque. Check to ensure for adequate clearance between all components.

Check and retighten wheels at 50 miles and again at 500 miles. Periodically check all hardware for tightness.

KIT CONTENTS:

1– 25" Drag Link
1– 42" Tie Rod Link
1– Upper LH Thread Tie Rod End
1– Lower RH Thread Tie Rod End
1– Passengers Side LH Thread Tie Rod End
1– Drivers Side RH Thread Tie Rod

HARDWARE INCLUDED:

2– Left Hand Jam Nuts
2– Right Hand Jam Nuts
4– Castle Nuts
4– Cotter Pins

TOOLS NEEDED:

15mm wrench and socket
18mm wrench and socket
19mm wrench and socket
1 1/6 wrench
1 1/4 wrench
Side Cutting Pliers
Drill motor
5/8 Drill
7° Reamer
Ratchet
Tape measure



Torque Specs:

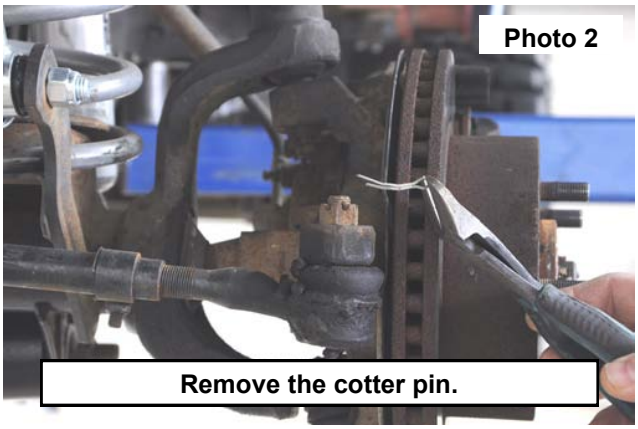
Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16"	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8"	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16"	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2"	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16"	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8"	135ft/lbs	175ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4"	185ft/lbs	280ft/lbs	18MM	170ft/lbs	240ft/lbs

RC ROUGH COUNTRY

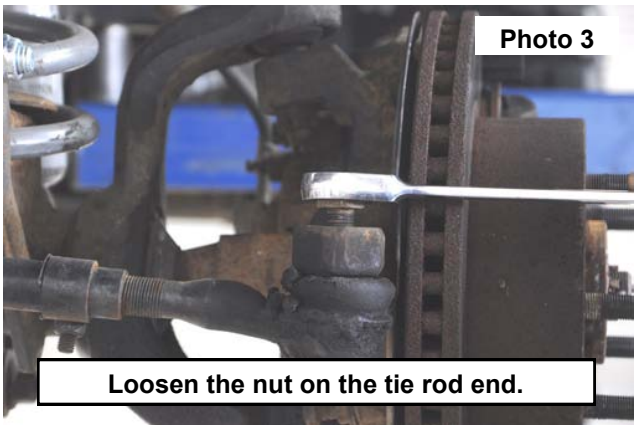
INSTALLATION INSTRUCTONS

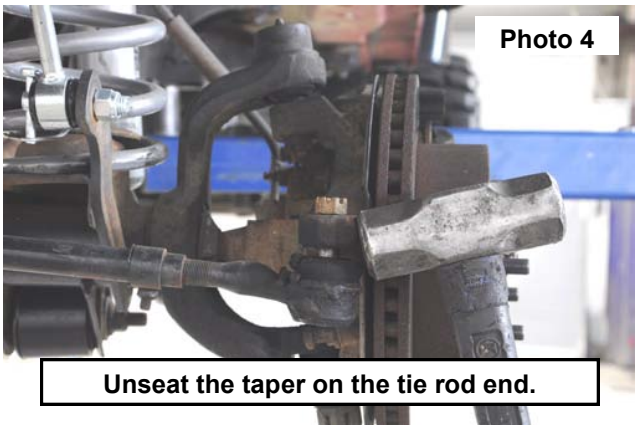
1. Park the vehicle on a level surface and chock the rear wheels.
2. Jack up the front of the vehicle. Place jack stands under the frame rails and lower onto jack stands letting the front suspension hang.
3. Remove the tires and wheels using a 19mm socket.
4. Remove the stabilizer from the axle. Using a 15mm socket and 18mm wrench. **See Photo 1.**
5. Remove the cotter pin from all of the tie rod ends use side cutting plyers. **See Photo 2.**



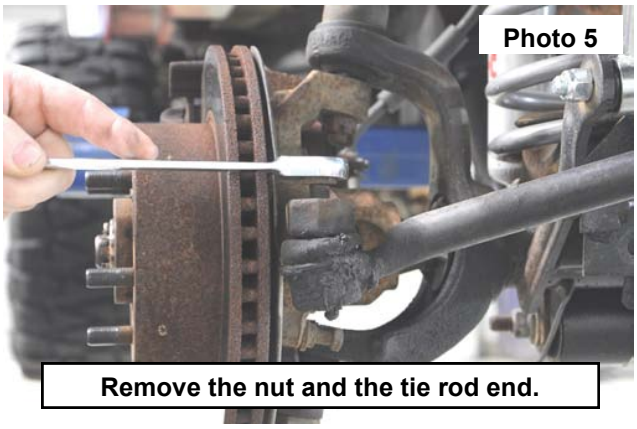


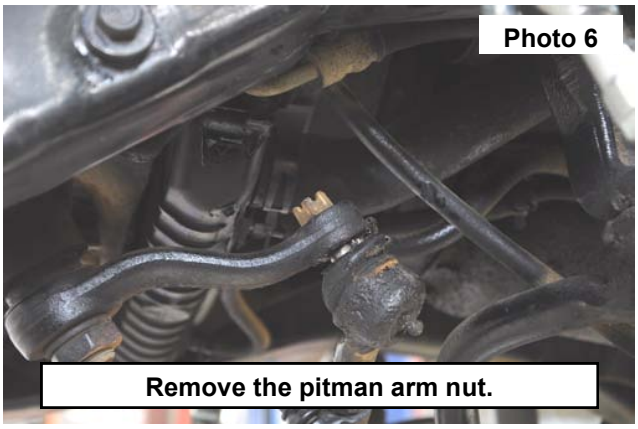
6. Loosen the nut on the tie rod end. Use a 19mm wrench. **See Photo 3.**
7. Unseat the taper on the tie rod end, using a hammer. Remove the nut from the tie rod end and remove from the knuckle.. **See Photo 4.**





8. Repeat steps 5-7 on the opposite side tie rod end, and remove the tie rod from the knuckle. **See Photo 5.**
9. Repeat steps 5-7 to remove the drag link from the pitman arm. **See Photo 6.**





10. Once the steering stabilizer, drivers and passengers side drag link from the knuckle, and tie rod from the pitman arm have been taken loose, remove the steering link from the vehicle. **See Photo 7.** Set this aside, as it will not be re-used.
11. Brace the drivers side knuckle so it will not move, use a drill motor and a 5/8 drill to open up the hole in the knuckle. **See Photo 8.**


Photo 7

Remove OE steering link from the vehicle.

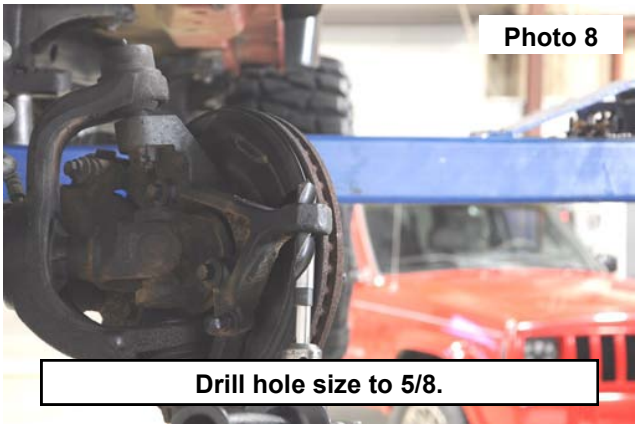


Photo 8

Drill hole size to 5/8.

12. Brace the passengers side knuckle so that it will not move, use a drill motor and a 5/8 drill to open up the hole in the knuckle. **See Photo 9.**
13. It may be easier to remove the pitman arm from the vehicle to drill, use a drill motor and a 5/8 drill to open up the hole in the pitman arm. **See Photo 10.**

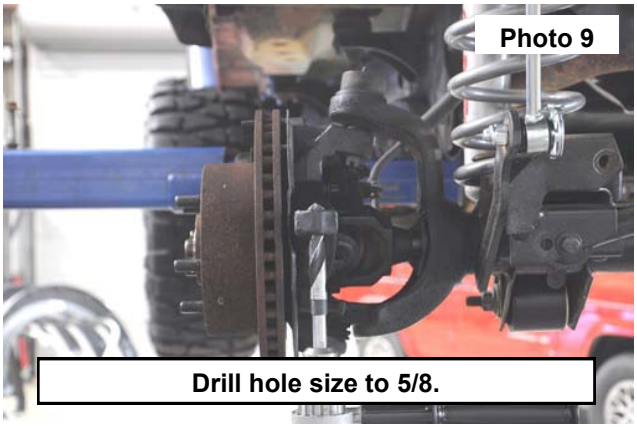


Photo 9

Drill hole size to 5/8.

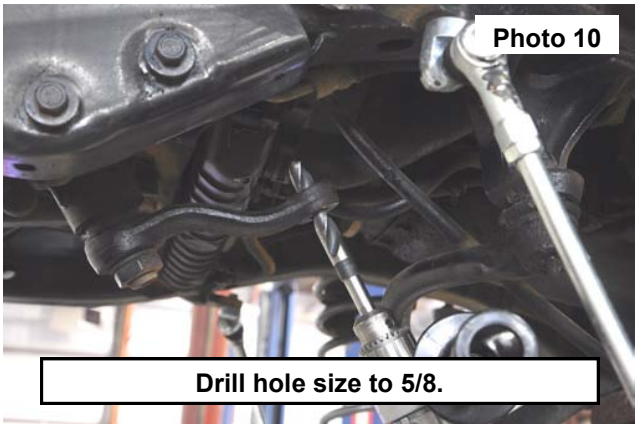


Photo 10

Drill hole size to 5/8.

14. Using the 7° reamer, use a pair of calipers to find 3/4" of an inch, outside diameter for the reaming depth. Mark this depth onto the reamer using masking tape or a permanent marker. **See Photo 11.**
15. Use a lubricant on the reamer when reaming out the bottom of the drilled hole. **NOTE: DO NOT** ream all the way to the mark made onto the reamer, without confirming the ball joint depth for proper fitment of the tie rod end, castle nut and cotter pin. **See Photo 12.**

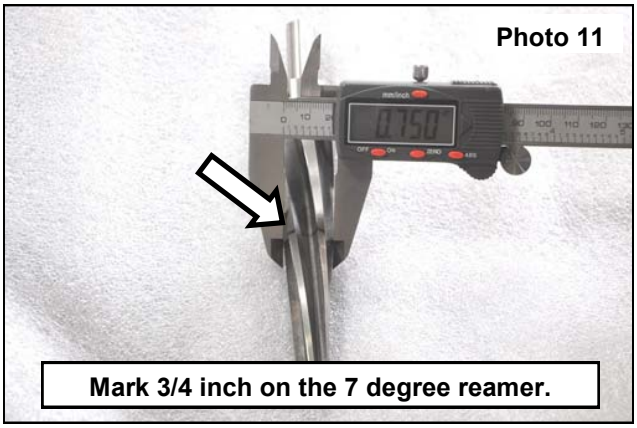


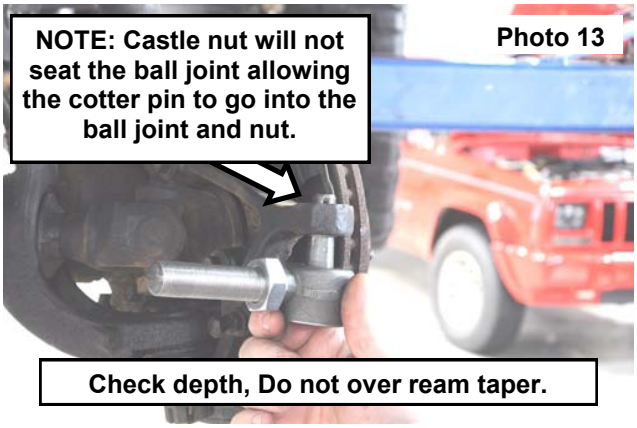
Photo 11

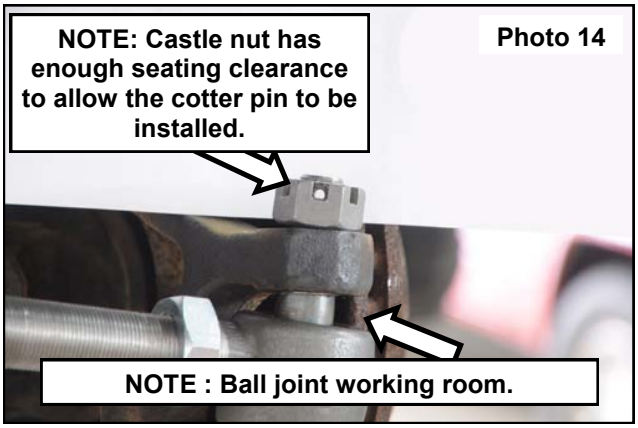
Mark 3/4 inch on the 7 degree reamer.


Photo 12

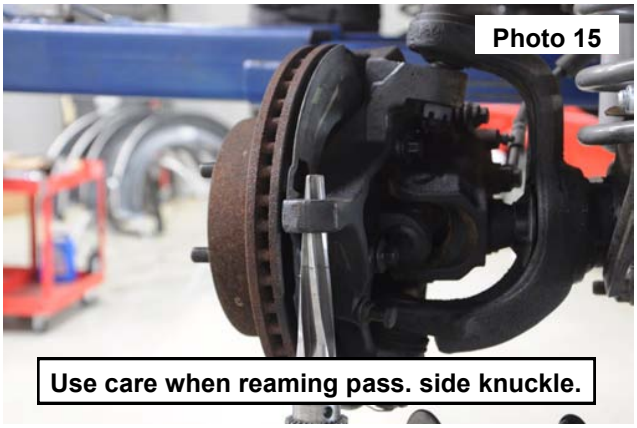
Use care when reaming the knuckle.

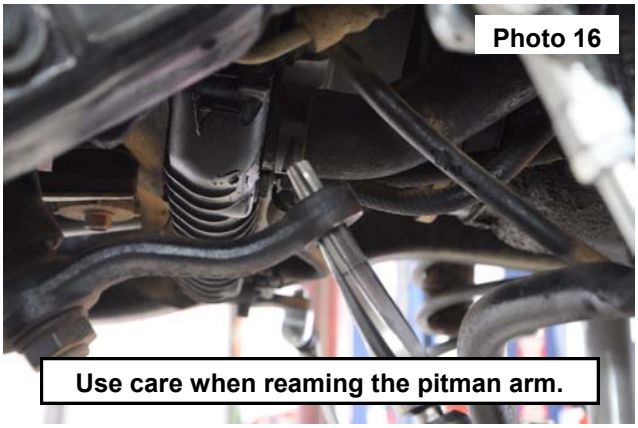
16. Confirming the depth of the ball joint as shown in photo 13. Slowly ream until the castle nut will seat the ball joint allowing the cotter pin to go into the ball joint. **See Photo 13 and 14.**
17. Using care not to over ream the hole will allow the proper ball joint working room in between the knuckle and the ball joint. **See Notes in Photo 14.**



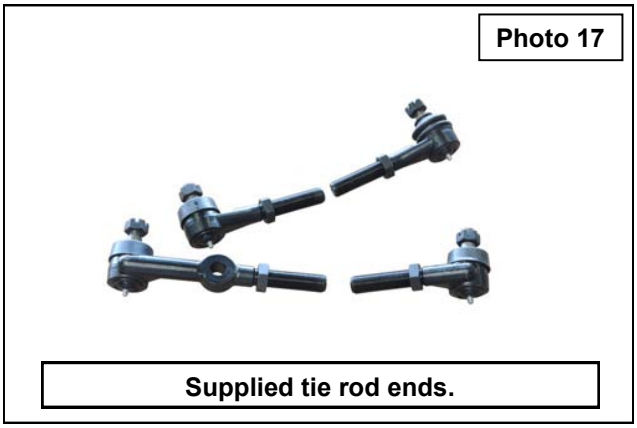


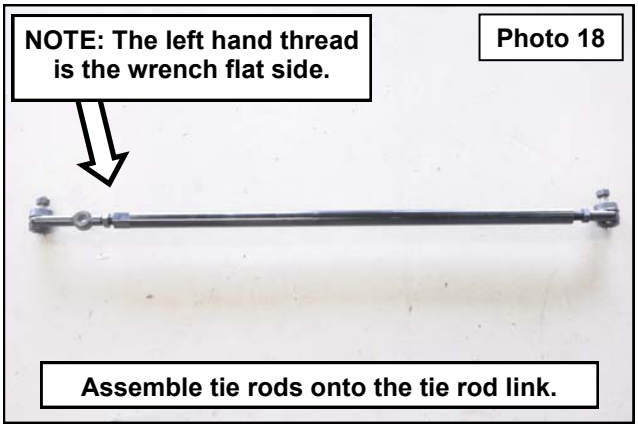
18. Repeat steps 14-17 on the following passengers side knuckle and the pitman arm. Install the pitman arm if it has been removed to perform the steps above. **See Photo 15 and 16.**



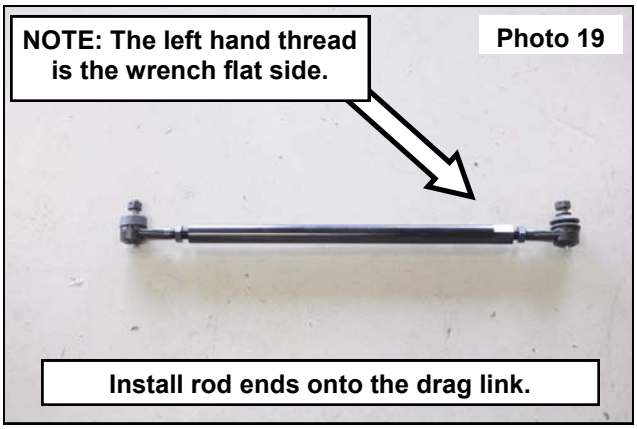


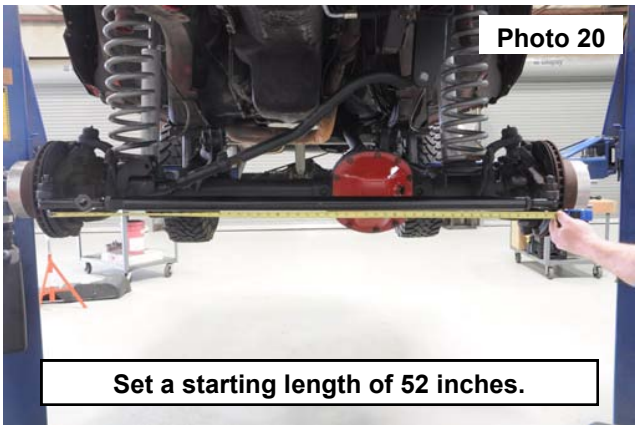
19. Assemble the 4 jam nuts onto the tie rods. **See Photo 17.**
20. Install the offset tie rods into the 42” tie rod link, screw the tie rods all the way in. **NOTE: The passengers side link is left hand thread, it is recognizable by the wrench flat side. See Photo 18.**



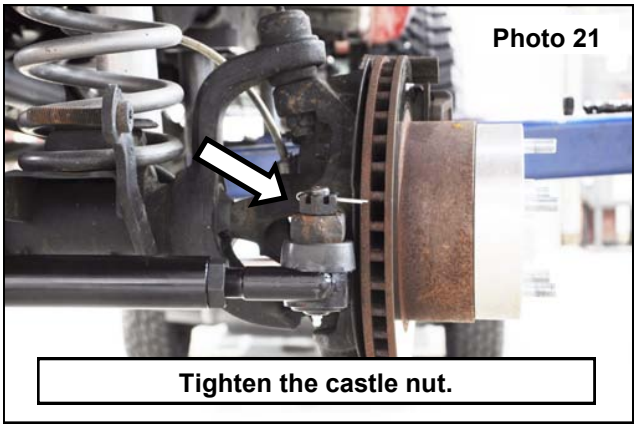


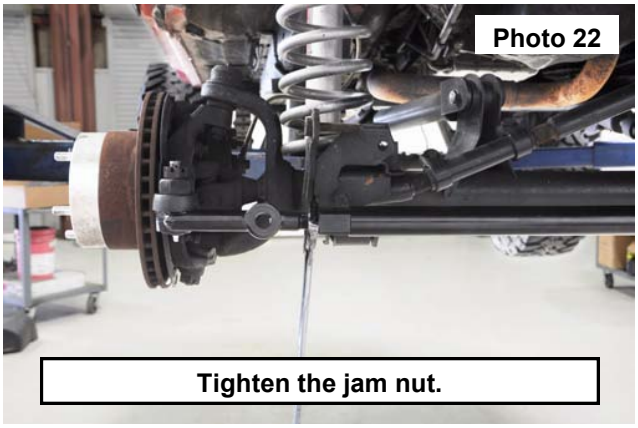
21. Install the 2 joints that are not off set into the 25” drag link, screw the tie rods all the way in. **NOTE: The left hand thread drag link end will be attached to the pitman arm. It is recognizable by the wrench flat side. See Photo 19.**
22. Install the assembled tie rod link onto the vehicle, adjust the tie rod to a starting length of 52 inches, measure from center of both tie rod grease fittings. **See Photo 20.**



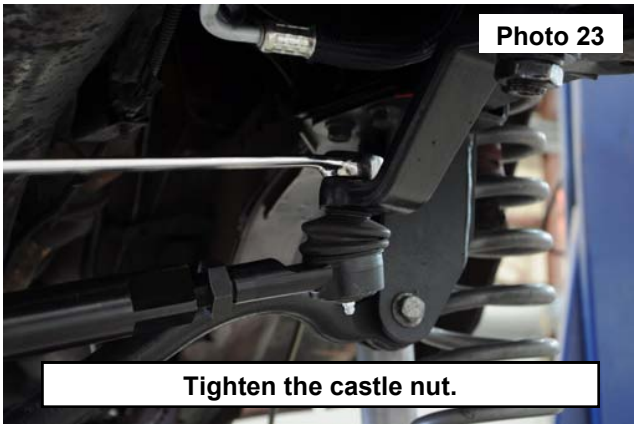


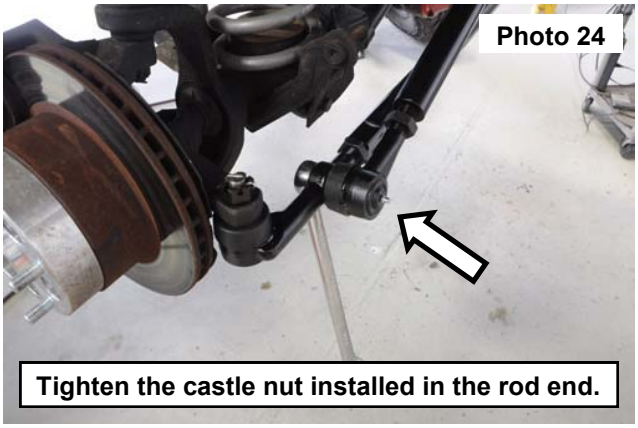
23. Tighten the tie rod castle nuts using 1 1/16 wrench and install the cotter pin on each side. **See Photo 21.**
24. Tighten the jam nuts on each side of the tie rod link, using a 1 1/4 wrench. **See Photo 22.**



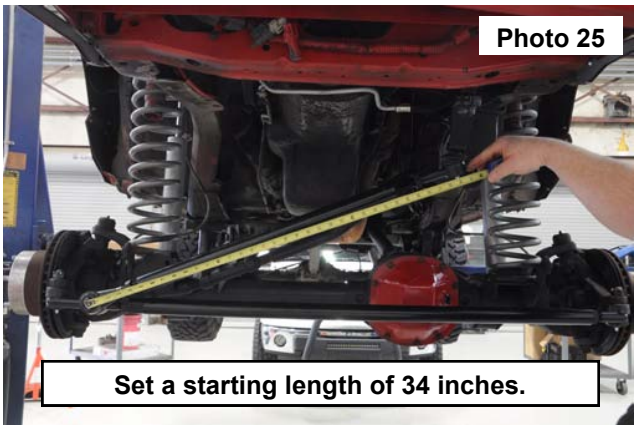


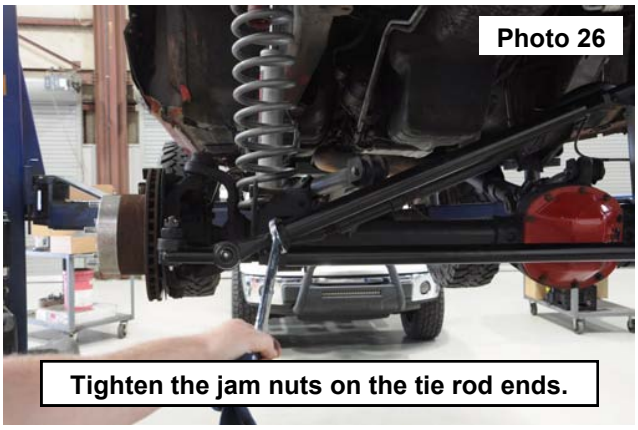
25. Install the left hand thread tie rod end onto the pitman arm, tighten using a 1 1/16 wrench and install the cotter pin. **See Photo 23.**
26. Install the tie rod into the mounting hole on the passengers side tie rod end, tighten using a 1 1/16 wrench and install the cotter pin. **See Photo 24.**



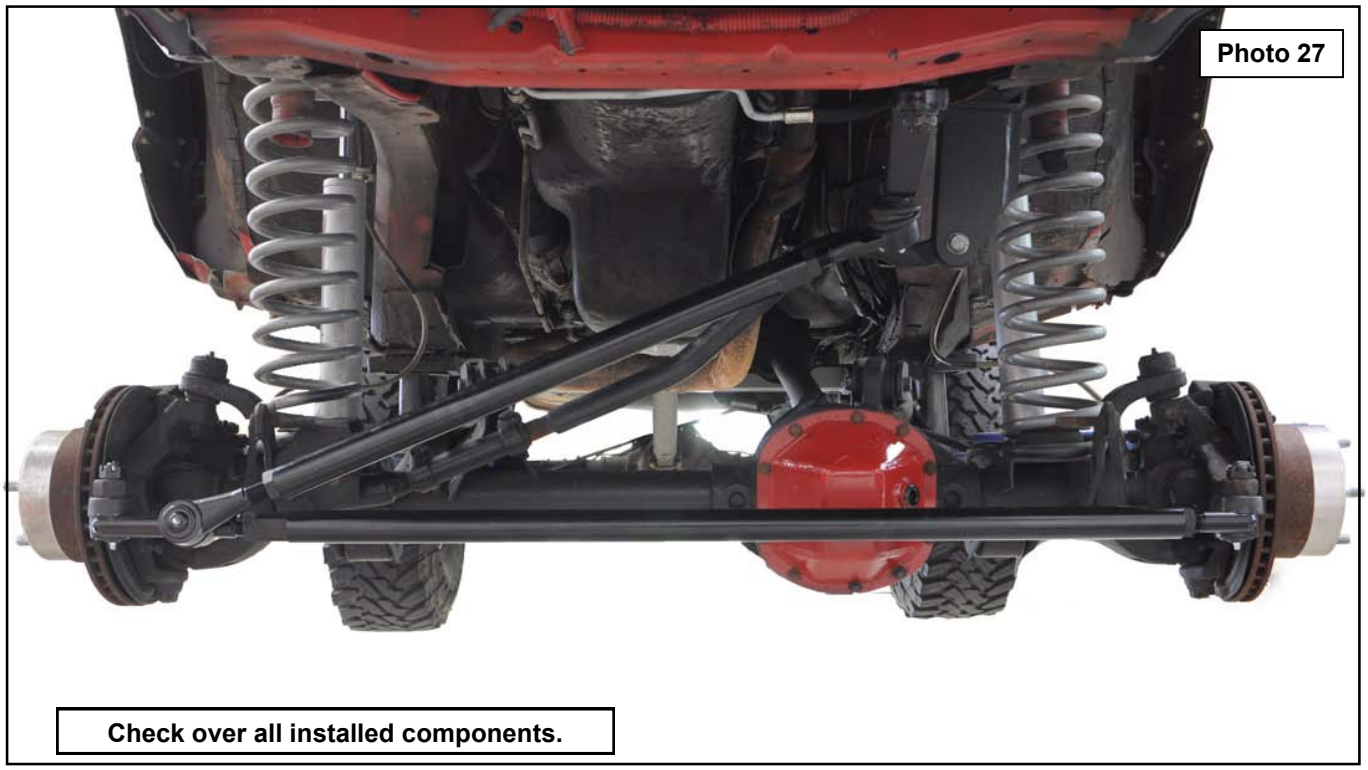


27. Adjust the drag link to a starting length of 34 inches, measure from center of both tie rod grease fittings. **See Photo 25.**
28. Once the starting length has been set tighten the jam nuts to the tie rod link. **See Photo 26.**





29. Check over all of the installed steering components, tightening of all the jam nuts on the rod end links, tightening of all the castle nuts and cotter pins installed and secured. **See Photo 27.**
30. Make sure the tie rod connected to the pitman arm has plenty of working room for compression and droop as the suspension travels up and down and turns right to left.
31. Install the wheels and tires, tighten using a 19mm socket.
32. Lift the vehicle up and remove the jack stands, lower the vehicle onto the ground.
33. **The vehicle will need an alignment once the installation is complete.**



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