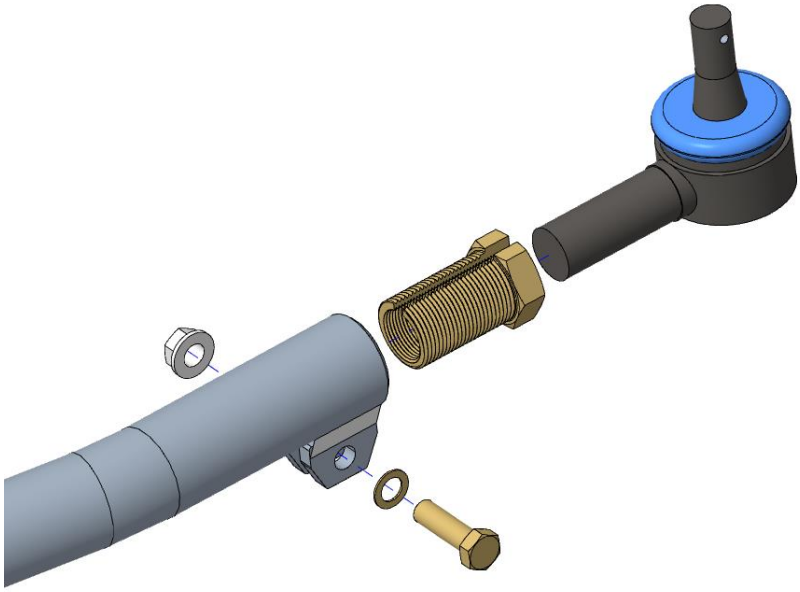
IRON ROCK OFF ROAD

1-877-919-JEEP www.ironrockoffroad.com

JK Chromoly HD Tie Rod Instructions

Parts Checklist:

- ❑ Double Adjuster 95137 (1)
- ❑ HD Tie Rod 80192 (1)
- ❑ HD Tie Rod End 95155 (2)
- ❑ ***#186 - Clamping Hardware 13312 (1)***
  - ❑ 3/8-16 X 1-1/4 Hex bolt gr8 (2)
  - ❑ 3/8-16 Nylock flange nut gr8 (2)
  - ❑ 3/8 Mil spec washer (2)



Before you begin:

- ❑ ***Ensure that all parts are present and in good condition using shipping checklist. ***
- ❑ Read and understand all installation instructions.
- ❑ Tools required:
  - ❑ Sockets, wrenches, ratchet
  - ❑ Anti-seize
  - ❑ Grease gun w/ multi-purpose grease
  - ❑ Torque wrench

Installation:

1. Measure center to center on existing tie rod.
2. Remove factory tie rod.
3. Apply anti-seize to all threads.
4. Install double adjuster all the way into large threaded end of the tie rod. *Reverse threads*
5. Thread both tie rod ends fully into tie rod.
6. Install 3/8”x 1-1/4” bolt with thin washer into clamping tabs. Secure with nylock nut. Do not tighten at this time.
7. Install tie rod onto Jeep. *Tip: position cotter pin hole in tie rod end so it is easy to install cotter pins later.
8. Install castle nuts onto tie rod ends. Do not tighten at this time.
9. Using an adjustable wrench spin double adjuster until the tie rod length matches your original length.
   **If more than 1/2 inch of threads are exposed on double adjuster end disconnect passenger side and unthread the tie rod end 1/4 inch. **
10. Position the tie rod ends so they are in the middle of their travel and the tie rod is horizontal. Torque the clamping bolts to 50 lb-ft.
11. Torque tie rod end castle nuts to 50 lb-ft. then align the castle nut with the cotter pin hole. Install cotter pins.

Alignment Procedure:

12. **A professional alignment is recommended and will result in the safest handling and minimized tire wear.** As a temporary solution, with careful measurements you can set your toe-in fairly accurately using a tape measure.
13. Make sure the vehicle is on a level surface and the front tires are raised slightly off the ground with jack stands under the axle and the vehicles weight on the suspension.
14. Make a mark anywhere on the tread area of each front tire. The marks do not have to be in the same spot on each tire. This method ensures that your measurements are accurate regardless of rim and tire runout, even bent rims or untrue tires will not affect the measurement.
15. Measure from one mark to the other making sure your measurement is parallel to the axle housing and your marks are facing exactly forward. This is your front measurement.
16. Rotate tires so the marks are facing exactly backward. Measure from one mark to the other making sure your measurement is parallel to the front axle housing. This is your rear measurement.

    For 29-32” tire diameter (measured): adjust your tie rod until the front measurement is 1/16” less than your rear measurement.

    For 33-36” tire diameter (measured): adjust your tie rod until the front measurement is 1/8” less than your rear measurement.
17. Re-check your measurements.
18. Lower your vehicle from the jack stands.
19. Double check to ensure that all fasteners are tight.
20. Re-torque all fasteners frequently.

Final Safety Warning:

* Re-torque all fasteners after 100 miles, and frequently inspect all safety critical steering components. It is the responsibility of the installer to ensure all fasteners are properly tightened after installation and to ensure the owner knows his/her ongoing responsibility. It is the responsibility of the owner of the vehicle to be sure all safety critical components are inspected frequently, especially after off road or other demanding use.