



### **JK 2.5 Ton - Flip - Tie Rod and Drag Link Installation Instructions:**

**Please read all instructions before installing.**

1. Before removing your OEM tie rod and drag link assemblies, measure from zerk fitting to zerk fitting on each, and write these measurements down for later.
2. All parts that begin with TR belong to the tie rod assembly (TR190 and TR191). The parts for the drag link assembly consist of: TR190 on the knuckle side of drag link and DL120 for the pitman arm end of the drag link.
3. Locate the left and right tie rod ends and adjusting rod. The left TR end has notches on the jam nut.
4. Thread jam nuts all the way down the tie rod ends, install Ninja washers on the ends all the way down to the jam nuts.
5. Starting with the tie rod connecting rod, locate the left-hand side of the tie rod connecting rod, it will have a cut line toward the end of the rod, find the left tie rod end, this will have notches in the jam nut. (Please, coat the inside threads of the connecting rod with anti-seize, NOT the tie rod end threads. Getting anti-seize in the area of the jam nuts can decrease the effectiveness of the jam nuts). Start to thread in the tie rod ends, ensuring the correct thread direction. Thread in until it reaches the jam nut.
6. Continue with the right-hand side of the tie rod and repeat the above instructions.
7. Now adjust the ends equally to set the zerk to zerk distance to the same as the OE measurements you took earlier.
8. Drag link assembly, locate drag link connecting rod and ends, follow the instructions as you did with the tie rod assembly.

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9. Remove OEM tie rod and drag link assemblies.
10. Drag link assembly: The flip kit requires you to drill the knuckle from the top down with a 7/8" drill bit to fit the taper sleeve so that you can install it correctly).
11. Once taper sleeve is installed, install the drag link end on the knuckle side then the pitman arm side. Torque the castle nuts 75-82 ft lbs. Leave the jam nuts loose and center the steering wheel by turning the tube until lined up.
12. Install the tie rod assembly, torque castle nuts to 63-67 ft. lbs. Leave jam nuts loose and use tape measure to set tow to factory specs.
13. Tighten all the jam nuts on the tie rods and drag links, torque to 100 Ft. Lbs. (Note: There is an anti-flop bearing in the tie rod ends. This bearing allows for 4 degrees forward and back rotation (flop). When tightening the tie rod jam nuts ensure that you are not tightening against these bearings. To do this: Tighten the passenger side jam nut first, then center the "flop" in the bearing while tightening the driver's side jam nut. When both jam nuts are tight there should be approximately 4 degrees of forward and back rotation (flop)).
14. At this point we highly recommend engaging a professional to get the alignment set.
15. Once alignment is complete bend the flat tabs of the Ninja washers over the hex on the tube and the pointed tabs over the jam nut to secure jam nut.
16. Set and adjust steering stabilizer, be sure that it has equal travel at full lock both directions.
17. Monitor jam nuts regularly for tightness.

If you have any questions or concerns, please don't hesitate to give us a call or email.

Thank you,

Team Apex

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