

## JL/JT 2.5 Ton – Flip - Tie Rod and Drag Link Installation Instructions:

PLEASE read all instructions before starting.

Note: All parts that begin with TR belong to the Tie Rod Assembly all DL part numbers belong to the Drag Link Assembly. Except for Flips.

- 1. Before removing your OEM tie rod and drag link assemblies, measure from zerk to zerk fitting on each, and write these measurements down for later.
- 2. Drag link assembly, locate tube and ends and follow the instructions as you did with the tie rod end assembly. You will use TR181 on the Passenger side and DL111 on the Driver's side for the Flip.
- 3. Before removing the OEM tie rod and drag link assemblies, measure center to center of the end studs and write these measurements down for later
- 4. This will require that you drill the knuckle with 7/8" drill bit, make sure to make the hole straight, insert tapered sleeve then install the drag link.
- 5. Locate the left and right tie rod ends and adjusting rod. The left TR End has notches on 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.
- 6. Tie Rod Tube, locate the lefthand side of the tie rod tube, 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 rod ends with anti-seize all the way up the threads). Start to thread in the tie rod end, ensuring the correct thread direction. Thread until it reaches the jam nut.
- 7. Continue with the righthand side of the tie rod and repeat the above instructions.
- 8. Remove OEM tie rod and drag link assemblies.

**CONTINUED ON REVERSE SIDE** 

- 9. Install drag link first with 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 before turning the tube until lined up.
- 10.Install the tie rod assembly, torque castle nuts to 63-67 ft. lbs. rotate the tube to the previous measurements you wrote down. Leave jam nuts loose and use tape measure to set tow to factory specs. (Note: There is an antiflop 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)).
- 11. At this point we highly recommend engaging a professional to get the alignment set.
- 12.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.
- 13. Set and adjust steering stabilizer, be sure that it has equal travel at full lock both directions.
- 14. 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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