



## JK 1 Ton – No Flip Tie Rod and Drag Link

At Apex, customer safety is our top priority, and steering is a CRITICAL safety component.

**\*\*Be sure the installer has read and follows these instructions\*\***

Failure to follow these instructions may result in loss of control of the vehicle, accident, and injury.

Failure to follow install instructions and use correct install tools may also void the warranty.

Install instructions should follow vehicle through entire install process, including alignment, which requires safety-critical torque and process to complete.

### Installation Instructions:

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. Tie rod assembly requires TR117 and TR119 rod ends.
3. Thread jam nuts all the way down the tie rod ends. Install the bent Ninja Washers onto the adjusting sleeve with the bent side facing toward the adjusting sleeve. **(You can use the Belleville washers in place of the bent Ninja washers.)**
4. Starting with the Tie Rod adjusting sleeve, 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 inside threads of the adjusting sleeve 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 end, ensuring the correct thread direction. Thread until it reaches the jam nut.
5. Continue with the righthand side of the tie rod and repeat the above instructions.
6. Drag link assembly, locate adjusting sleeve and ends and follow the instructions as you did with the tie rod end assembly. This will require TR117 and TR120,
7. Remove OEM tie rod and drag link assemblies.
8. Before installing the ends, apply a light layer of grease to the top of the boot. This will create a lubricated surface between the boot and the joint, helping to reduce friction.
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.

- CONTINUED ON REVERSE SIDE

10. Install the tie rod assembly, **torque castle nuts to 63-67 ft/lbs.** rotate the adjusting sleeve to the previous measurements you wrote down. Leave jam nuts loose and use tape measure to set tow to factory specs.
11. Tighten all jam nuts on the tie rods and drag links, **torque to 100 ft/lbs.**
12. At this point we highly recommend engaging a professional to get the alignment set.
13. Now bend the pointed tabs of the Ninja Washer over the jam nut.
14. Set and adjust steering stabilizer, be sure that it has equal travel at full lock both directions.
15. Check jam nuts for tightness at 500 miles and monitor jam nuts regularly every 5000 miles or after oil changes for tightness.

Wrenches needed:

WR101 – 33mm-35mm

WR102 – 34mm/36mm

*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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**\*\* Use either bent Ninja washers or Belleville washers to secure jam nuts (Not both)**