

3-3-2023 REV.D

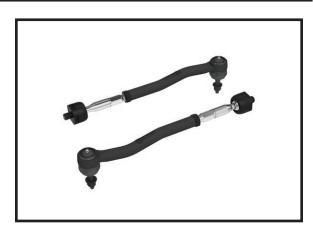


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| PART # | DESCRIPTION |
|--------|--------------------------|
| 45212 | 21-UP BRONCO TIE ROD KIT |

| COMPONENTS INCLUDED | | |
|---|--|--|
| (1) 144037 BRONCO HD TIE ROD ASSEMBLY PASS | (1) 144038 BRONCO HD TIE ROD ASSEMBLY DRVR | |
| HARDWARE INCLUDED | | |
| (1) 605968 VIBRATITE BLUE 2ML BULLET | | |
| TOOLS REQUIRED | | |
| JACK JACK STANDS TORQUE WRENCH ADJUSTABLE WRENCH DIAGONAL CUTTERS | SLIP JOINT PLIERS 8MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET WRENCH | |
| TECH NOTES | | |

1. WILL NOT WORK WITH ANY AFTERMARKET TIE ROD STIFFENER CLAMPS OR BRACKETS.



WARNING!

- ** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!
- ** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.
- ** ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.

INSTALLATION

2. WILL NOT WORK ON BRONCO RAPTOR.

3. ESTIMATED INSTALL TIME: 1 HOUR

- 1. Place vehicle in park on a level surface. Engage parking brake. Lift front of vehicle and place jack stands under the manufacturer recommended locations. Remove the front tires. NEVER WORK UNDER AN UNSUPPORTED VEHICLE.
- 2. Start by removing the outer tie rod taper from the knuckle using a 21mm and 8mm. [FIGURE 1]



FIG.1

3. You may need to separate the two parts using a ball joint separator or strike a hammer against the outer edge of the knuckle. [FIGURE 2]



FIG.2

4. Next, you will need to grab the slip joint pliers or equivalent and remove the hose clamp from the outer edge of the tie rod boot. Slide he clamp down and away from the boot. Now, slide the boot down. [FIGURE 3 & 4]



FIG.3



FIG.4

5. Slide under the vehicle now and cut away the factory clamp that holds the boot onto the steering rack using the diagonal cutters. [FIGURE 5]



FIG.5

6. Slide the boot off and down so you can access the inner joint with the adjustable wrench and remove the joint. The threads are normal, lefty loosey. [FIGURE 6]





7. Grab the new ICON tie rod assembly, and apply the blue thread locker onto the inner joint threads. Thread the joint into the steering rack and tighten. [FIGURE 7 & 8]

NOTE: The tie rods are stamped L & R on the bottom side, near the taper. L is the passenger side and R is the driver side.





FIG.8

8. With the inner joint tightened. Slip the boot over the top of the steering rack and install the supplied clamp (Clamp may be different than pictured). Install the outer clamp with the boot in the groove of the tie rod. [FIGURE 9]



FIG.9

9. Install the outer tie rod end into the factory knuckle and tighten with the supplied nylock nut. Torque to 50 ft-lbs. The nut requires a 18mm and 8mm for the taper stud. [FIGURE 10]



FIG.10

- **10.** Install the grease zerks and a couple pumps of high quality moly based grease to the outer joint. The inner joint (inside the boot) is a sealed unit.
- 11. Repeat process on passenger side
- 12. Get vehicle professionally aligned.

Congratulations, you now have the best tie rod kit installed on your Bronco!



VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE. RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.

ICON VEHICLE DYNAMICS LIMITED LIFETIME WARRANTY

ICON Vehicle Dynamics warrants to the original retail purchaser who owns the vehicle on which the product was originally installed. ICON Vehicle Dynamics does not warrant the product for finish, alterations, modifications and/or installation contrary to ICON Vehicle Dynamics instructions. ICON Vehicle Dynamics products are not designed, nor are they intended to be installed on vehicles used in race applications, for racing purposes or for similar activities. (A "race" is defined as any contest between two or more vehicles, or a contest of one or more vehicles against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America and Canada.

ICON Vehicle Dynamics' obligation under this warranty is limited to the repair or replacement, at ICON Vehicle Dynamics' discretion, of the defective product. Any and all costs of removal, installation or re-installation, freight charges and incidental or consequential damages are expressly excluded from this warranty. Items that are subject to wear are not considered defective when worn and are not covered.

ICON Vehicle Dynamics components must be installed as a complete kit as shown in our current application guide. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty.

This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been improperly installed, modified or customized subject to accident, negligence, abuse or misuse.



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