

**JEEP WRANGLER JK STEERING KNUCKLES**

Reid Racing's high-steer Jeep Wrangler JK (2007-present) knuckles are designed as heavy duty stock replacement knuckles. Primary improvements include raised steering linkage (1.5 inches for the tie rod, 3 inches for the drag link), dual steering stops, and increased strength overall. Installation is simplified by allowing the OEM unit bearings, brakes, U-joints, and stub shafts to be reused. Aftermarket upgrade parts such as axle shafts and steering linkage that work with the stock knuckles should in most cases be fully compatible with the Reid Racing knuckles. A 3 inch track bar bracket (included with most lift kits) is recommended to minimize bump steer. The reversed drag link taper requires a "flipped" drag link, available from many 4x4 parts companies, but please note the warning below.

## INSTALLATION

- Follow the basic steps in a factory instruction manual for disassembly and reassembly of the front axle. Clean and inspect all the original parts, replacing any damaged or worn components.
- Install the ball joints, tightening the upper ball joint first. If the lower ball joint is tightened first, the upper ball joint stud will just spin and will not tighten properly.
- Check the clearance at the tie rod and drag link behind each wheel; any interference will occur at full steering lock. Most aftermarket wheels with a backspacing of 5 inches or less will clear any tie rod/drag link combination. Stock 17 inch wheels with 6 inches backspacing will clear some tie rod/drag link combos and not others. If clearance is an issue, wheel spacers should solve the clearance problem.
- Check clearance between the tie rod/steering damper and the diff cover and adjust the bracket if necessary.
- Check that the end of the drag link stud clears the top of the tie rod with 1/8 to 1/4 inch of clearance.
- Torque all fasteners according to the original specifications as per a factory service manual. Retorque after 200 miles and/or the first off-road trip.

## WARNING

**THE REID RACING, INC. JK STEERING KNUCKLES USE STANDARD JEEP JK SIZE TIE ROD ENDS FOR THE DRAG LINK AND TIE ROD. IT IS ABSOLUTELY CRITICAL ON REID RACING KNUCKLES THAT ALL TIE ROD ENDS (PARTICULARLY ON THE DRAG LINK) ARE THE CORRECT SIZE. THE STUD NUT MUST BOTTOM OUT ON THE STEERING ARM AND NOT ON THE THREADS SO THAT THE STUD IS WEDGED SECURELY INTO THE STEERING ARM WHEN THE NUT IS TIGHTENED. USING A TIE ROD END OF THE WRONG SIZE IS LIKELY TO RESULT IN IMPROPER SEATING OF THE TIE ROD END INTO THE KNUCKLE STEERING ARM OR A COTTER PIN THAT DOES NOT SECURE THE CASTLE NUT. EITHER INSTANCE WILL ALLOW THE TIE ROD END STUD TO BECOME LOOSE, RESULTING IN SLOPPY STEERING OR, IF LEFT UNCORRECTED LONG ENOUGH, POSSIBLE LOSS OF STEERING.**

## STEERING STOPS

The steering stops on Reid Racing knuckles are "cast in" to prevent the common bending of the stock style adjustable bolts. The stops are intentionally cast long so adjustments can be made by grinding the tips of the stops to fit. If you are going to grind the steering stops to increase steering angle, set the toe-in first because the toe-in setting changes the stop settings. After the knuckles are installed and the toe in is set, cycle the steering back and forth grinding small amounts of the stop until the desired degree of steering is set; the front and rear steering stops must be adjusted simultaneously and equally. Make sure to check for u-joint binding and yoke to yoke interference at full lock in both directions; if binding or contact occurs, axle breakage will happen. If a stock style adjustable steering stop is desired, the cast in stop can be cut off at the knuckle then drilled and tapped for a 3/8" bolt.

## WARRANTY

All "Off Road Products" sold by Reid Racing, Inc. are intended to be used for "off road" and "off highway" use only, and are NOT designed, manufactured or approved for use on any public road or highway. Due to the intended use of the products offered, all "Off Road Products" are sold without any warranties of fitness for purpose or use, merchantability, or any other kind, either expressed or implied, whether written or oral, by Reid Racing, Inc., or its past, present or future officers, directors, principals, agents, employees, legal representatives, trustees, parents, associates, affiliates, subsidiaries, division, partners, heirs, executors, administrators, purchasers, predecessors, or successors. The buyer of these "Off Road Products" bears and assumes the entire risk of loss or injury as to the fitness for purpose or use, merchantability, durability and performance of these "Off Road Products" and assumes the entire cost of any necessary maintenance, service or repair. Reid Racing, Inc. will not be liable for any subsequent, resulting or consequential damages, expenses, losses or injuries arising from or out of the use, misuse, or improper installation of any "Off Road Product".