

# INSTALLATION INSTRUCTIONS

### Product: HD Tie Rod Part Number: JKSTR300

Applications: Grand Cherokee WJ, 1999-04

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## Welcome

CONGRATULATIONS on purchasing a new HD Tie Rod from JKS Manufacturing. We are committed to providing you with the best products available and your satisfaction is our first priority.

PLEASE READ these Installation Instructions carefully, and save them for future reference, as they contain important installation and maintenance information.

# Important

COMPATIBLE WITH factory tie rod ends. If original tie rod ends are worn or damaged, order new parts from Jeep dealer or local auto parts store as PN 52088869AA (left thread) and PN 52088870AA (right thread).

**REFER TO FACTORY SERVICE MANUAL for** *information and procedures not covered in these instructions.* 

## **Tools Required**

- O Metric/Standard Socket Wrench Set
- O Torque Wrench
- O 3/4", 1-1/8" & 1-1/2" Open End Wrenches
- O Needle Nose Pliers \*
- O Tie Rod End Remover
- O Tape Measure
- Factory Service Manual (recommended)

\* Asterisk denotes tools that are not required for some applications. Thoroughly read instructions first to determine which tools will be required for your application.

# Installation

#### □ 1. REMOVE ORIGINAL TIE ROD

- Remove the cotter pins and nuts from the steering knuckles.
- Using a tie rod end removal tool, loosen the ball studs and remove the original tie rod.
  *HINT:* Use special factory tie rod puller tool PN C-3894-A (Miller Special Tools, 800-801-5420) or equivalent to remove tie rod ends.
  Failure to use the proper tool could damage the ball stud and seal.
- **O** Measure the overall length of original tie rod.
- If the original tie rod ends are going to be re-used, loosen the end clamp bolts and unthread the tie rod ends from the tube.

#### **2. INSTALL HD TIE ROD**

- Thread a Jam Nut on to each tie rod end. HINT: LH Jam Nuts are easily distinguished from RH Jam Nuts by "tick marks" on circumference of hex points.
- Install the tie rod ends into Tube of HD Tie Rod.
- Adjust tie rod ends evenly until overall length of HD Tie Rod matches the length of the original.
- Using 1-1/8" and 1-1/2" wrenches, tighten Jam Nuts firmly against the Tube of HD Tie Rod.
- Install HD Tie Rod onto steering knuckles.
- Install original ball stud nuts and tighten to 35 ft-lbs. using a torque wrench. *HINT:* If slot in nut does not line up with cotter pin hole, tighten until it is aligned. Do NOT loosen the nut to align cotter pin hole.
- O Install new cotter pins.

#### **3. POST INSTALL INSTRUCTIONS**

A professional steering alignment must be performed following installation of HD Tie Rod to ensure vehicle meets proper alignment specifications.

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