

## Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

- › [MOOG](#) /
- › [MOOG ES800408 Steering Tie Rod End User Manual for Jeep Patriot](#)

## MOOG ES800408

# MOOG ES800408 Steering Tie Rod End User Manual

Model: ES800408 | Brand: MOOG

## 1. PRODUCT OVERVIEW

The MOOG ES800408 Steering Tie Rod End is engineered for reliable performance and ease of installation. It features advanced problem-solving innovations designed to enhance durability and steering precision. This component is crucial for maintaining proper steering control and vehicle stability.



Image 1.1: The MOOG ES800408 Steering Tie Rod End, a critical component for vehicle steering and suspension.

## 2. KEY FEATURES

- **Patented Pressed-in Cover Plate:** Seals out debris and minimizes looseness, contributing to reduced bearing wear and extended life.

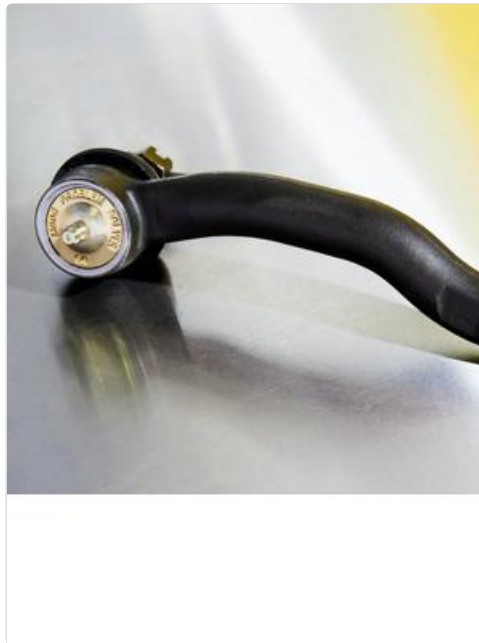


Image 2.1: Close-up of the patented pressed-in cover plate, designed to protect internal components from contaminants.

- **Greaseable Socket:** Allows for the introduction of new lubricant, which helps to flush out debris and inhibit rust and wear.



Image 2.2: Illustration of the greaseable design, enabling easy maintenance and extended component life.

- **Belleville Preload Washer:** Assists in maintaining a tight bearing package as bearings experience wear, absorbing impact and maintaining performance.
- **Problem Solver Gusher Bearing:** Features a metal-to-metal design that provides strength and facilitates grease flow through the bearing surface, reducing friction and extending operational life.



Image 2.3: Detailed view of the slotted Gusher Bearing, designed to deliver consistent lubrication.

- **Heat-Treated Ball Studs:** Ball studs undergo a heat treatment process to meet or exceed original equipment (OE) requirements, preventing premature failure and improving fatigue strength.



Image 2.4: Visual representation of a heat-treated stud, emphasizing its enhanced strength and durability.

- **Precision Tolerances:** Manufactured with precise tolerances to ensure straightforward installation and accurate steering alignment.

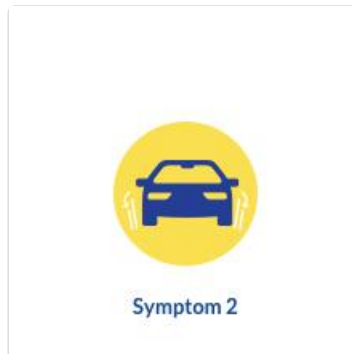


Image 2.5: A mechanic installing a tie rod end, illustrating the ease of installation due to precision engineering.

### 3. COMPATIBILITY

The MOOG ES800408 Steering Tie Rod End is compatible with the following vehicle models:

- 2007-2010 Chrysler Sebring
- 2011-2014 Chrysler 200
- 2008-2014 Dodge Avenger
- 2007-2012 Dodge Caliber
- 2009-2020 Dodge Journey
- 2007-2016 Jeep Compass
- 2017-2017 Jeep Compass
- 2007-2017 Jeep Patriot

*Note: Always verify compatibility using your vehicle's specific year, make, model, engine, and trim information before purchase.*

### 4. WHAT'S IN THE BOX

Each package contains:

- 1 x MOOG ES800408 Steering Tie Rod End

## 5. INSTALLATION (SETUP)

Proper installation is critical for the safe and effective operation of your vehicle's steering system. It is recommended that installation be performed by a qualified mechanic or an individual with appropriate automotive repair experience.

### General Installation Guidelines:

1. **Safety First:** Ensure the vehicle is securely lifted and supported on jack stands. Disconnect the battery if necessary.
2. **Remove Old Component:** Loosen the jam nut on the tie rod end. Remove the cotter pin and castle nut from the tie rod end stud. Use a tie rod end puller or separator to detach the old tie rod end from the steering knuckle.
3. **Measure and Mark:** Before removing the old tie rod end completely, measure the exposed thread length on the inner tie rod. This measurement will help in setting the new tie rod end to a similar length, aiding in initial alignment. Mark the position of the jam nut on the inner tie rod.
4. **Install New Component:** Thread the new MOOG ES800408 tie rod end onto the inner tie rod, matching the previously measured length. Ensure the stud is centered in the socket during installation to prevent premature wear.
5. **Secure Fasteners:** Tighten the castle nut to the manufacturer's specified torque. Insert a new cotter pin to secure the castle nut. Tighten the jam nut against the tie rod end.
6. **Final Alignment:** After installation, a professional wheel alignment is mandatory to ensure correct steering geometry and prevent uneven tire wear.

### Installation Tips Video:

Your browser does not support the video tag.

Video 5.1: This video provides helpful tips for installing MOOG tie rod ends, focusing on proper techniques to ensure longevity and performance.

## 6. MAINTENANCE

Regular maintenance of your MOOG ES800408 Steering Tie Rod End is essential for maximizing its lifespan and ensuring continued safe vehicle operation. The greaseable design allows for periodic lubrication.

### Lubrication Procedure:

1. **Access Grease Fitting:** Locate the grease fitting (zirk) on the tie rod end.
2. **Clean Fitting:** Wipe any dirt or debris from the grease fitting to prevent contamination of the new grease.
3. **Apply Grease:** Attach a grease gun to the fitting and slowly pump in new, compatible chassis grease until the boot begins to swell slightly. Do not overfill, as this can damage the boot.
4. **Inspect Boot:** Ensure the grease boot is intact and free from cracks or tears after lubrication.

### Greaseable Design Video:

Your browser does not support the video tag.

Video 6.1: This video highlights the benefits of MOOG's greaseable design, explaining how it helps maintain lubrication and extend component life.

## 7. TROUBLESHOOTING: SYMPTOMS OF WORN TIE ROD ENDS

Recognizing the symptoms of a worn or failing tie rod end is crucial for timely repair and preventing further damage or safety hazards. If you experience any of the following, have your vehicle inspected by a qualified technician immediately.

### Common Symptoms:

- **Uneven Tire Wear:** Irregular wear patterns on your tires, especially on the inner or outer edges, can indicate alignment issues caused by worn tie rod ends.
- **Loose or Vibrating Steering Wheel:** Excessive play in the steering wheel or vibrations felt through the steering wheel, particularly at higher speeds, may point to worn tie rod ends.
- **Clunking or Popping Noises:** Sounds like clunking, popping, or clicking coming from the front suspension, especially when turning or going over bumps, can be a sign of worn tie rod ends.
- **Vehicle Pulling to One Side:** If your vehicle consistently pulls to the left or right, requiring constant steering correction to drive straight, worn tie rod ends could be a contributing factor.

### Symptoms of Bad Tie Rods Video:

Your browser does not support the video tag.

Video 7.1: This video explains the common symptoms associated with bad tie rod ends, helping vehicle owners identify potential issues.

## 8. SPECIFICATIONS

Attribute	Value
Brand	MOOG
Model	TIE ROD END
Item Model Number	ES800408
Item Weight	1.38 pounds
Product Dimensions	9.8 x 4.6 x 2.7 inches
Manufacturer Part Number	ES800408
OEM Part Number	ES800408
Position	Center

## 9. WARRANTY INFORMATION

MOOG products are backed by a limited warranty against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the official MOOG website or contact MOOG customer support directly. Keep your proof of purchase for warranty claims.

## 10. SUPPORT

For technical assistance, installation questions, or product support, please visit the official MOOG website or contact their customer service department. Professional installation is highly recommended for all steering and suspension components.