

TIE ROD END INSTALLATION TIPS

MOOG® Tie Rods

Getting the Job Done Right

A key part of a car's suspension system, tie rods are susceptible to premature failure if they aren't installed correctly. Read on to learn a couple of important tips for installing MOOG® tie rod ends.

Center the Stud in the Socket



When installing a tie rod end, it is important to keep the stud centered in the socket. The steering linkage naturally wants to twist as the vehicle is driven down the road, moving the stud side-to-side in the socket. During installation, the stud starts out all the way to one side and as the linkage twists, it loosens the stud in the socket. Results of this can include excess play, clunking noise and premature failure. By keeping the stud centered in the socket, you can prolong the life of the tie rod end.

Torque the Nut to Manufacturer Specifications

Many modern suspension systems use aluminum steering knuckles, resulting in a steel stud being tightened into an aluminum knuckle. When installing the tie rod end nut into the knuckle, it is important to torque the nut to manufacturer specs and avoid overtightening the nut.

If the nut is overtightened, it will deform the knuckle. As the knuckle deforms, it can cause vibrations which can

damage the socket bearing, wearing it out over time. To avoid problems, be sure to torque the tie rod end nut to manufacturer specifications.

The Advantages of MOOG Tie Rod Ends



Featuring problem-solving innovations for long life and increased durability, MOOG takes pride in being called The Problem Solver. These advancements lead to long-lasting tie rod ends that are designed, tested and manufactured for easy installation and perfect fit right out of the box. Application-specific features include:

- **Heat Treated Stud**
Ball studs are heat treated to match or exceed OE requirements to inhibit premature failure and improve fatigue strength.
- **Cover Plate**
Pressed-in cover plate seals out debris and minimizes looseness, reducing bearing wear and promoting longer life.
- **Greasable Design**
Greasable socket reduces corrosion and wear by allowing new lubricant to flush contaminants.
- **Gusher Bearing**
Problem Solver® gusher bearing metal-to-metal design provides strength and allows grease to flow through bearing surface for reduced friction and long life.
- **Preloaded Belleville Washer**
A preloaded Belleville washer helps eliminate spring bind and shattering during shock load.

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