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› Dorman TI91140XL Front Inner Steering Tie Rod End Compatible with Select Hummer Models User Manual

Dorman TI91140XL

Dorman TI91140XL Front Inner Steering Tie Rod End User Manual

Brand: Dorman | Model: TI91140XL

1. PRODUCT OVERVIEW

This Dorman TI91140XL Front Inner Steering Tie Rod End is engineered for smooth performance and superior durability. It features a hardened stud, highly polished ball, a maintenance-free polymer bearing, I.C.E. synthetic grease, and premium corrosion resistance. This component is designed to replace the original tie rod end in compatible Hummer H3 (2006-2010) and Hummer H3T (2009-2010) models, restoring factory handling and feel.

Key Features:

- **Extended-life construction:** Built with features to deliver smooth performance and extended durability for demanding drivers.
- **Superior ball stud:** Features a hardened ArmourGrade stud with a highly polished EverSmooth ball.
- **Low-friction bearing:** Utilizes an UltraFlow normalized forged housing with I.C.E. synthetic grease and a low-friction polymer bearing.
- **Premium corrosion resistance:** Equipped with WeatherShield external coating to resist corrosion.
- **Ensured fit:** Designed for direct fitment in specified vehicle applications.



Image 1: The Dorman TI91140XL Front Inner Steering Tie Rod End, showing the main component and accompanying nut.

2. WHAT'S IN THE BOX

The Dorman TI91140XL package includes the following components:

- 1 x Dorman TI91140XL Front Inner Steering Tie Rod
- 1 x Nut



Image 2: An angled view of the Dorman TI91140XL Front Inner Steering Tie Rod End, highlighting its construction and the included nut.

3. SETUP (INSTALLATION)

Installation of the Dorman TI91140XL Front Inner Steering Tie Rod End requires specialized tools and automotive knowledge. It is highly recommended that installation be performed by a qualified automotive technician to ensure proper fitment, alignment, and vehicle safety.

General Installation Guidelines:

1. **Vehicle Preparation:** Safely lift and support the vehicle on jack stands. Remove the wheel to access the steering and suspension components.
2. **Component Removal:** Loosen and remove the retaining nut from the old tie rod end. Use a tie rod end puller or separator tool to detach the old component from the steering knuckle. Note the position and number of turns for removal to aid in initial alignment during reassembly.
3. **New Component Installation:** Thread the new Dorman TI91140XL tie rod end onto the steering rack, matching the approximate length of the removed component. Insert the tapered stud into the

steering knuckle.

4. **Secure Fasteners:** Install the new nut provided with the tie rod end. Torque the nut to the vehicle manufacturer's specifications. Do not overtighten.
5. **Final Steps:** Reinstall the wheel and lower the vehicle. It is crucial to have a professional wheel alignment performed immediately after replacing any steering or suspension components to prevent premature tire wear and ensure proper vehicle handling.

Safety Warning: Improper installation can lead to steering failure, loss of vehicle control, and serious injury or death. Always consult your vehicle's service manual for specific torque specifications and procedures.

4. OPERATING PRINCIPLES

The Front Inner Steering Tie Rod End is a critical component of your vehicle's steering system. It connects the steering rack to the steering knuckle, allowing the wheels to turn in response to steering wheel input. This part facilitates the transfer of steering force from the rack to the wheels, enabling precise control and handling.

A properly functioning tie rod end ensures that the wheels maintain correct alignment and respond accurately to steering commands, contributing to vehicle stability and safety.

5. MAINTENANCE

The Dorman TI91140XL Front Inner Steering Tie Rod End features a maintenance-free polymer bearing and comes pre-greased with I.C.E. synthetic grease, eliminating the need for periodic lubrication. However, regular inspection of the tie rod end and surrounding steering components is recommended as part of routine vehicle maintenance.

Recommended Inspection Points:

- **Boot Condition:** Check the rubber boot for cracks, tears, or signs of grease leakage. A damaged boot can allow contaminants to enter the joint, leading to premature wear.
- **Play in Joint:** With the vehicle safely lifted, check for any excessive play or looseness in the tie rod end by attempting to move the wheel horizontally while holding the tie rod.
- **Corrosion:** Inspect the external coating for signs of significant corrosion, although this product is designed with premium corrosion resistance.
- **Noise:** Listen for any clunking, popping, or rattling noises coming from the front suspension, especially when turning or driving over bumps.

If any issues are detected during inspection, it is advisable to have the component professionally evaluated and replaced if necessary.

6. TROUBLESHOOTING

A failing or worn Front Inner Steering Tie Rod End can manifest several symptoms that indicate a need for inspection and potential replacement. Prompt attention to these signs can prevent further damage to steering components and maintain vehicle safety.

Common Symptoms of a Worn Tie Rod End:

- **Loose or Sloppy Steering:** The steering wheel may feel less responsive, or there might be excessive play when turning.
- **Uneven Tire Wear:** Worn tie rod ends can cause misalignment, leading to feathering or excessive

wear on the inner or outer edges of the tires.

- **Clunking or Popping Noises:** These sounds may be heard from the front suspension, especially when going over bumps, turning, or braking.
- **Steering Wheel Vibration:** A worn tie rod end can contribute to vibrations felt through the steering wheel, particularly at higher speeds.
- **Vehicle Pulling:** The vehicle may pull to one side, requiring constant steering correction to drive straight.

If you experience any of these symptoms, it is recommended to have your vehicle inspected by a certified mechanic. Attempting to drive with a severely worn tie rod end can lead to a complete steering failure.

7. SPECIFICATIONS

Manufacturer	Dorman Products
Brand	Dorman
Model	Dorman TI91140XL
Item Weight	1.72 pounds
Product Dimensions	15 x 2.13 x 1.82 inches
Item Model Number	TI91140XL
Exterior	Ready To Paint If Needed
Manufacturer Part Number	TI91140XL
OEM Part Number(s)	1303026; 45A1375; 46A1375A; 612.69008; ES4661; ES5077; EV800609; JAR243; MS50731; TA5341; 25781473; 25988407
ASIN	B07SNDBYT5
Date First Available	June 4, 2019

8. WARRANTY AND SUPPORT

For specific warranty information regarding the Dorman TI91140XL Front Inner Steering Tie Rod End, please refer to the warranty documentation included with your purchase or visit the official Dorman Products website. Dorman is committed to providing quality automotive replacement parts.

For technical support, installation assistance, or any product-related inquiries, please contact Dorman Products customer service directly. Contact information can typically be found on their official website or product packaging.

You can also visit the [Dorman Store on Amazon](#) for more products and information.

