

## Manuals+

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

manuals.plus /

- › [Delphi](#) /
- › [Delphi TA2202 Tie Rod End Instruction Manual](#)

## Delphi TA2202

# Delphi TA2202 Tie Rod End Instruction Manual

Model: TA2202

## INTRODUCTION

---

The Delphi TA2202 Tie Rod End is an automotive component designed to meet the performance and longevity standards of original equipment (OE) parts. It is engineered with extensive dimensional and material analysis to ensure optimal compatibility and performance. This part is rigorously tested to withstand extreme temperatures, from below -40°C to over 120°C, and undergoes 720 hours of salt spray testing for corrosion protection. Delphi's century of OE experience is integrated into the design and manufacturing of this aftermarket part.

## WHAT'S IN THE BOX

---

- Steering Tie Rod End (1 unit)

## PRODUCT OVERVIEW

---



*Image: Delphi TA2202 Tie Rod End. This image displays the tie rod end, featuring its threaded shaft, ball joint, and a castellated nut with a cotter pin for secure fastening. The component is designed for steering system applications.*

The Delphi TA2202 Tie Rod End is a critical component of a vehicle's steering and suspension system. It connects the steering rack or steering arm to the steering knuckle, allowing the wheels to turn in response to steering input. The design includes a ball joint for flexible movement and a threaded shaft for attachment to other steering components. A cotter pin is provided for securing the castellated nut, preventing loosening during operation.

## **INSTALLATION GUIDELINES (SETUP)**

**Disclaimer:** Installation of automotive components should be performed by qualified personnel using appropriate tools and safety procedures. Refer to your vehicle's specific service manual for detailed instructions and torque specifications.

- 1. Safety First:** Park the vehicle on a level surface, engage the parking brake, and use wheel chocks. Lift the vehicle safely using a jack and secure it with jack stands. Remove the wheel to access the steering and suspension components.
- 2. Preparation:** Loosen the jam nut on the tie rod assembly. Mark the position of the old tie rod end relative to the tie rod to ensure proper alignment during reassembly. Count the number of turns required to remove the old tie rod end from the tie rod.
- 3. Removal of Old Component:** Remove the cotter pin and castellated nut securing the old tie rod end to the steering knuckle. Use a tie rod end puller or fork to separate the tie rod end from the steering knuckle. Unscrew the old tie rod end from the tie rod.

4. **Installation of New Component:** Thread the new Delphi TA2202 Tie Rod End onto the tie rod, turning it the same number of turns counted during removal of the old part. Ensure the jam nut is in place. Insert the tapered stud of the new tie rod end into the steering knuckle.
5. **Securing the Component:** Install the castellated nut onto the tie rod end stud and tighten it to the vehicle manufacturer's specified torque. Insert a new cotter pin through the nut and stud, bending its ends to secure it.
6. **Final Steps:** Tighten the jam nut against the tie rod end. Reinstall the wheel and lower the vehicle. It is highly recommended to have a professional wheel alignment performed immediately after replacing tie rod ends to ensure correct steering geometry and tire wear.

## FUNCTION AND PERFORMANCE (OPERATING)

---

The Delphi TA2202 Tie Rod End facilitates the transfer of steering input from the steering rack to the wheels, enabling precise control of the vehicle's direction. Its robust construction, utilizing steel and aluminum materials, ensures durability and consistent performance under various driving conditions. The design allows for the necessary articulation of the steering knuckle while maintaining a secure connection, contributing to stable handling and responsive steering.

## MAINTENANCE

---

Tie rod ends are generally designed to be maintenance-free components. However, regular inspection during routine vehicle servicing is recommended to ensure their continued integrity and performance.

- **Visual Inspection:** Periodically inspect the rubber boot covering the ball joint for cracks, tears, or signs of grease leakage. A damaged boot can allow contaminants to enter the joint, leading to premature wear.
- **Play Check:** With the vehicle safely lifted, grasp the wheel at the 3 and 9 o'clock positions and attempt to move it horizontally. Excessive play or clunking sounds may indicate a worn tie rod end.
- **Cleaning:** Keep the area around the tie rod end clean to prevent accumulation of dirt and debris, which can accelerate wear on the boot.

If any signs of wear or damage are observed, it is crucial to replace the tie rod end promptly to maintain vehicle safety and steering performance.

## TROUBLESHOOTING COMMON ISSUES

---

Issues related to tie rod ends often manifest as steering or suspension problems. If you experience any of the following, inspect your tie rod ends:

- **Loose Steering:** Excessive play in the steering wheel, requiring more effort to keep the vehicle straight.
- **Uneven Tire Wear:** Particularly on the inner or outer edges of the tires, which can be a symptom of improper alignment due to worn steering components.
- **Clunking or Popping Noises:** Sounds coming from the front suspension, especially when turning or going over bumps.
- **Steering Wheel Vibration:** Vibrations felt through the steering wheel, which may worsen at higher speeds.
- **Vehicle Pulling:** The vehicle consistently pulls to one side, even on a flat road.

If these symptoms are present, a professional diagnosis is recommended to confirm if the tie rod end is the cause and to ensure proper repair.

## SPECIFICATIONS

---

Attribute	Value
Brand	Delphi
Model Number	TA2202
Product Type	AUTO PART
Material	Steel, Aluminum
Item Weight	13.4 ounces (0.838 lb)
Product Dimensions	4.1 x 3.3 x 2.9 inches
Manufacturer Part Number	TA2202
UPC	689604277775
Global Trade Identification Number	00689604277775
OEM Part Numbers	A0AZ-3A131-A, A9MY-3A131A, B4AZ-3A130-A, B6SZ-3A130-A, C0AZ-3A131-A, C1UZ-3A131-A, ES416L

## WARRANTY INFORMATION

Specific warranty terms for the Delphi TA2202 Tie Rod End are provided by the manufacturer, Delphi. Please refer to the official Delphi website or contact their customer service for detailed warranty coverage, duration, and claim procedures. Retain your proof of purchase for any warranty claims.

## CUSTOMER SUPPORT

For technical assistance, product inquiries, or support regarding the Delphi TA2202 Tie Rod End, please contact Delphi customer service directly. You may find contact information on the official Delphi website or through the retailer from whom the product was purchased.

**Delphi Official Website:** [www.delphi.com](http://www.delphi.com)