

Monroe 902978

Monroe Strut-Mate 902978 Suspension Strut Mount Installation and Maintenance Manual

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Monroe Strut-Mate 902978 Suspension Strut Mount. Designed to reduce noise and vibration, this component complements the ride control characteristics of Monroe struts. Adherence to these instructions will help ensure optimal performance and longevity of your vehicle's suspension system.

2. SAFETY INFORMATION

Automotive suspension work can be hazardous. Always observe the following safety precautions:

- **Professional Installation Recommended:** Due to the complexity and safety-critical nature of suspension components, professional installation by a qualified technician is highly recommended.
- **Wear Personal Protective Equipment (PPE):** Always wear safety glasses, gloves, and appropriate footwear when working on vehicles.
- **Use Proper Tools:** Ensure all tools are in good condition and are suitable for the task.
- **Secure Vehicle:** Always lift and support the vehicle using appropriate jack stands on a level, stable surface. Never rely solely on a jack.
- **Consult Vehicle Service Manual:** Refer to your vehicle's specific service manual for detailed procedures, torque specifications, and additional safety warnings.
- **Spring Compression:** Strut springs are under extreme compression and can cause serious injury if not handled correctly. Use a proper spring compressor tool.

3. PRODUCT OVERVIEW

The Monroe Strut-Mate 902978 is a suspension strut mount designed to provide a secure and stable connection between the strut and the vehicle chassis. It plays a crucial role in reducing noise and vibration, contributing to overall ride comfort and handling.



Figure 3.1: Individual components of the Monroe Strut-Mate 902978 Suspension Strut Mount kit. This includes a washer, a cup, an upper bushing, and a lower bushing, designed for direct replacement.

Key Features:

- **Perfect Pairing:** Engineered to match the ride control characteristics of Monroe struts, ensuring a complete and integrated suspension upgrade.
- **Noise and Vibration Reduction:** Utilizes advanced elastomer technology for enhanced metal-to-rubber bonding, effectively minimizing noise, vibration, and memory steer.
- **OE Replacement:** Designed as a direct fit for replacing original equipment (OE) strut mounts in most Monroe strut applications.
- **Rigorous Testing:** Undergoes extensive fit-checking and ride-testing to ensure high quality and reliable performance.
- **Easy Installation:** Includes premium-quality replacement components such as SAE-grade nuts and bolts, upper and lower spring isolators, OE-style bearings and mount, upper spring seat, and front bearing plate for straightforward installation.

Components Included:

- Bushing
- Parts Pack(s)
- Washer

4. INSTALLATION

The following steps provide a general guide for installing the Monroe Strut-Mate 902978 Suspension Strut Mount. Always refer to your vehicle's specific service manual for detailed instructions and torque specifications.

Professional installation is strongly recommended.

EASY TO INSTALL

Includes premium-quality replacement components where applicable - SAE-grade nuts and bolts, upper and lower spring isolators, OE-style bearings and mount, upper spring seat and front bearing plate that install easily



Figure 4.1: A mechanic performing suspension work, demonstrating the environment for strut mount installation.

1. **Prepare Vehicle:** Park the vehicle on a level surface, engage the parking brake, and block the wheels. Loosen the lug nuts on the wheel corresponding to the strut being replaced.
2. **Lift and Support:** Safely lift the vehicle using a hydraulic jack and support it securely with jack stands. Remove the wheel.
3. **Access Strut Assembly:** Locate the strut assembly. This may involve removing brake lines, ABS sensor wires, and sway bar links from the strut.
4. **Remove Lower Strut Bolts:** Unbolt the lower portion of the strut from the steering knuckle or control arm.
5. **Remove Upper Strut Mount Nuts:** Access the upper strut mount nuts, typically located under the hood or in the trunk. Loosen and remove these nuts.
6. **Remove Strut Assembly:** Carefully remove the entire strut assembly from the vehicle.
7. **Disassemble Strut:** Using a proper spring compressor tool, compress the coil spring. Once compressed, remove the top nut from the strut shaft, allowing the old strut mount, spring seat, and spring to be separated. **Exercise extreme caution during this step.**
8. **Install New Strut Mount:** Place the new Monroe Strut-Mate 902978 strut mount onto the strut shaft, ensuring

all components (bushings, washers) are correctly oriented as per the vehicle's service manual.

9. **Reassemble Strut:** Reassemble the strut components, ensuring the spring is correctly seated. Tighten the top nut to the manufacturer's specified torque.
10. **Install Strut Assembly:** Reinstall the complete strut assembly into the vehicle, starting with the upper mount nuts (hand-tighten initially).
11. **Secure Lower Strut:** Reattach the lower strut bolts to the steering knuckle or control arm. Tighten all bolts and nuts to the vehicle manufacturer's specified torque.
12. **Reconnect Components:** Reconnect any brake lines, ABS sensor wires, and sway bar links that were detached.
13. **Final Checks:** Double-check all fasteners for proper torque. Reinstall the wheel and lower the vehicle.
14. **Alignment:** After replacing suspension components, a wheel alignment is highly recommended to ensure proper vehicle handling and tire wear.



Figure 4.2: Detail of a wrench being used to tighten a suspension nut during installation.



Figure 4.3: A strut assembly being carefully positioned for installation into the vehicle's wheel well.

5. OPERATION

The Monroe Strut-Mate 902978 Suspension Strut Mount functions as a critical interface between the vehicle's strut and its chassis. Once installed, it works continuously to:

- **Support the Strut:** Provides structural support for the top of the strut assembly, bearing the weight of the vehicle.
- **Isolate Noise and Vibration:** Its elastomer components absorb road shock and vibrations, preventing them from transferring into the vehicle's cabin, thereby enhancing ride comfort.
- **Facilitate Steering:** Allows the strut to pivot smoothly during steering maneuvers, contributing to responsive and precise handling.
- **Maintain Alignment:** Helps maintain proper suspension geometry, which is essential for tire wear and vehicle

stability.



Figure 5.1: An animated diagram illustrating the dynamic movement of a vehicle's suspension system, where the strut mount plays a key role in stability and comfort.

REDUCES NOISE AND VIBRATION

Features advanced elastomer technology for enhanced metal-to-rubber bonding that reduces noise, vibration and memory steer for improved performance

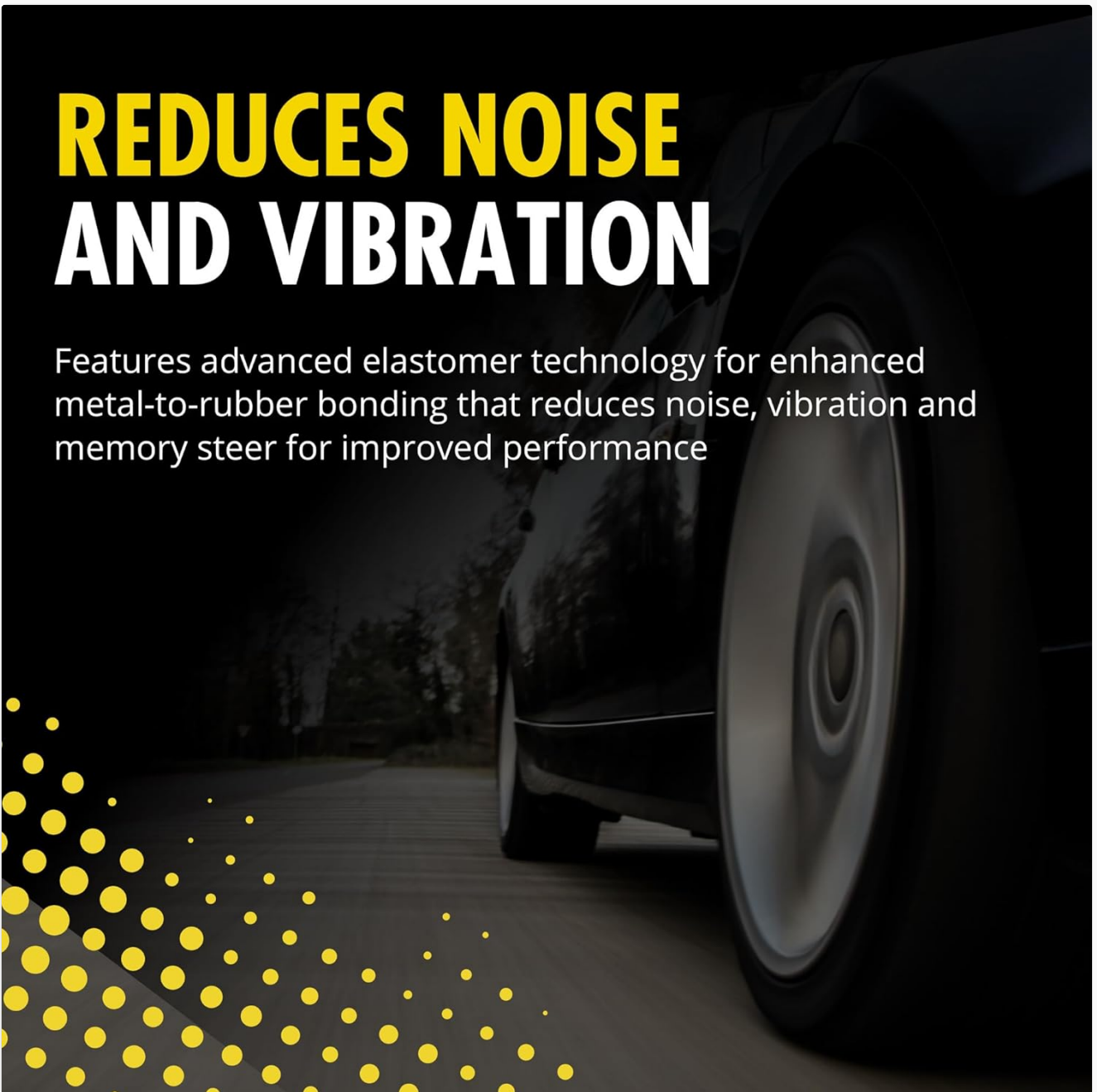


Figure 5.2: The Strut-Mate mount contributes to a smoother ride by reducing noise and vibration from road imperfections.

6. MAINTENANCE

Strut mounts are wear items and should be inspected periodically. While the Monroe Strut-Mate 902978 is designed for durability, regular checks can help identify issues before they become severe.

- **Regular Inspection:** During routine vehicle maintenance (e.g., tire rotations, oil changes), visually inspect the strut mounts for signs of wear, cracking, or deterioration of the rubber components.
- **Listen for Noises:** Pay attention to any new clunking, popping, or creaking noises coming from the suspension, especially when going over bumps or turning. These can indicate a worn strut mount.
- **Check for Play:** With the vehicle safely supported, check for excessive play in the strut shaft where it connects to the mount.
- **Replace in Pairs:** It is generally recommended to replace strut mounts in pairs (both front or both rear) to maintain balanced suspension performance.
- **Replace with Struts:** Always replace the strut mount when replacing the struts themselves, as the mount is a critical component of the strut assembly and often wears out concurrently.



Figure 6.1: A visual comparison showing a new strut mount next to a worn one, highlighting typical signs of deterioration.

7. TROUBLESHOOTING

If you experience any of the following symptoms after installation or during normal operation, a strut mount issue may be present. Consult a qualified technician for diagnosis and repair.

- **Clunking or Popping Noises:** Often heard when going over bumps, turning, or during sudden stops/starts. This can indicate a loose or worn strut mount.
- **Excessive Vibration:** Vibrations felt through the steering wheel or floorboards, especially at certain speeds, could be related to a failing strut mount.
- **Poor Steering Response:** Loose or worn strut mounts can lead to vague steering, difficulty returning the steering wheel to center, or a general feeling of looseness in the front end.
- **Uneven Tire Wear:** While many factors contribute to uneven tire wear, a compromised strut mount can affect alignment and suspension geometry, leading to premature or irregular tire wear.
- **Visible Damage:** Cracks in the rubber, corrosion on metal components, or separation of the mount from the chassis are clear indicators of a problem.

8. SPECIFICATIONS

Attribute	Value
Brand	Monroe
Model Number	902978
Auto Part Position	Upper
Material	Metal-to-rubber

Attribute	Value
Item Weight	6.4 ounces
Product Dimensions	4.2 x 4.6 x 2.8 inches
UPC	048598519788
Manufacturer	Tenneco (Rancho/Monroe)

9. WARRANTY AND SUPPORT

For specific warranty information regarding your Monroe Strut-Mate 902978 Suspension Strut Mount, please refer to the documentation included with your purchase or visit the official Monroe website. Monroe products are backed by a commitment to quality and performance.

For technical support, installation assistance, or to inquire about warranty claims, please contact Monroe customer service through their official channels. Always provide your product model number (902978) and purchase details when seeking support.

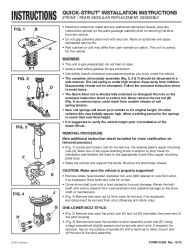

Monroe Official Website: www.monroe.com


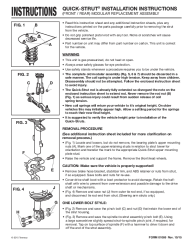
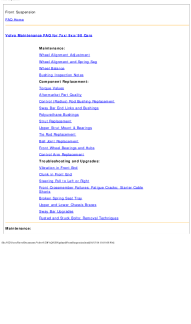



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This manual is for informational purposes only. Always consult a qualified professional for vehicle maintenance and repairs.

Related Documents - 902978

	<p>Monroe Quick-Strut Installation Instructions</p> <p>Comprehensive installation guide for Monroe Quick-Strut modular replacement assemblies, covering removal and installation procedures for various vehicle strut configurations.</p>
	<p>Monroe Shock Absorber and Strut Catalogue 2024-2025</p> <p>Comprehensive 2024-2025 Monroe catalogue featuring shock absorbers, struts, and mounting/protection kits for a wide range of passenger and commercial vehicles. Find part numbers and application details.</p>

	<p>Monroe 2019 Master Catalogue - Shock Absorbers & Suspension Parts</p> <p>Explore the comprehensive Monroe 2019 Master Catalogue featuring a wide range of shock absorbers and suspension components for numerous vehicle makes and models. Find part numbers and technical information.</p>
	<p>Monroe Quick-Strut Installation Instructions</p> <p>Comprehensive installation guide for Monroe Quick-Strut modular replacement assemblies, covering removal and installation procedures for various vehicle strut configurations.</p>
	<p>Volvo 7xx/9xx Front Suspension Maintenance Guide: Alignment, Bushings, Struts, and More</p> <p>Comprehensive guide to Volvo 7xx, 9xx, 740, 744T, 745T, 940, and 960 front suspension maintenance, covering wheel alignment, bushing replacement, strut installation, tie rod and ball joint service, troubleshooting, and more.</p>
	<p>Monroe Shock Absorber and Strut Catalogue 2024-2025</p> <p>Comprehensive 2024-2025 Monroe catalogue featuring shock absorbers, struts, and mounting/protection kits for a wide range of passenger and commercial vehicles. Find part numbers and application details.</p>