

Monroe 66653

Monroe Magnum 66653 Suspension Shock Absorber User Manual

INTRODUCTION

This manual provides essential information for the proper installation, understanding of operating principles, and maintenance of your Monroe Magnum 66653 Suspension Shock Absorber. Adhering to these guidelines will help ensure optimal performance and longevity of the product.

PRODUCT OVERVIEW AND KEY FEATURES

The Monroe Magnum 66653 is a high-performance suspension shock absorber designed for demanding applications. Its construction incorporates several advanced features to enhance vehicle control and durability:

- **Robust Hydraulic Lock-Out:** Designed to prevent over-extension of the suspension and piston top-out, which helps protect the seal assembly in most applications.
- **PTFE Coated Bearing:** Reduces friction between the rod and rod guide during operation, contributing to improved durability in most applications.
- **Tenneco Shouldered Bushings:** Utilizes shouldered and bonded bushing designs with sleeves to prevent bushing walkout, enhancing overall quality and durability in most applications.
- **Nitrogen Gas-Charged:** Improves ride quality and handling by reducing aeration, which helps maintain consistent tire-to-road contact in most applications.
- **Loop Welding Technique:** Employs a resistance weld with an additional 360-degree weld, providing up to 13,100 lbs. (6,395 kg) tensile strength for maximum durability where required.
- **Reserve Tube:** Features a 2-inch (50.8 mm) or 2-1/4-inch (57.2 mm) reserve tube, allowing for more fluid volume and more consistent performance when required.
- **Bore Size:** A 1-3/8-inch (35 mm) bore, larger than many standard shocks, provides more efficient and consistent control in most applications.
- **Pressure Tube:** Constructed with a .05-inch pressure tube capable of withstanding pressures up to

9,000 PSI.

- **10-Stage Valving:** Reacts to a wide range of driving conditions, providing adaptable performance in most applications.



An image showing the yellow Monroe Magnum 66653 shock absorber along with its accompanying nut, washers, and bushings for installation.

WHAT'S IN THE BOX

Upon unpacking your Monroe Magnum 66653 Shock Absorber, you should find the following components:

- Monroe Magnum 66653 Shock Absorber unit
- Dust Shield
- Parts Pack(s) (typically includes necessary nuts, washers, and bushings for installation)

INSTALLATION GUIDELINES

Proper installation is crucial for the performance and safety of your vehicle. It is highly recommended that installation be performed by a qualified automotive technician using appropriate tools and safety equipment. Refer to your vehicle's service manual for specific instructions and torque specifications.

General Steps (Consult Vehicle-Specific Manual for Details):

1. **Safety First:** Ensure the vehicle is securely lifted and supported on jack stands. Disconnect the battery if working near electrical components.
2. **Remove Old Shock:** Carefully remove the old shock absorber, noting the orientation of all components.
3. **Prepare New Shock:** Extend and compress the new shock absorber a few times to prime it (if applicable for gas-charged shocks).
4. **Install Components:** Install the dust shield and any bushings, washers, and nuts from the parts pack onto the new shock absorber as per your vehicle's specifications.
5. **Mount Shock:** Secure the new shock absorber to the vehicle's mounting points. Ensure all fasteners are tightened to the manufacturer's specified torque.
6. **Final Checks:** Double-check all connections and ensure no components are interfering with moving parts.

Important Note: Some customer feedback indicates that care should be taken when attaching brake lines to mounting tabs, as excessive force or improper tools can damage spot welds. Always use appropriate tools and methods.

OPERATING PRINCIPLES

The Monroe Magnum 66653 shock absorber is designed to control unwanted spring motion, providing a smoother ride and improved vehicle handling. It operates by converting kinetic energy from suspension movement into heat, which is then dissipated. The nitrogen gas charge helps prevent fluid aeration,

ensuring consistent damping performance even under strenuous conditions. The 10-stage valving system allows the shock to adapt to varying road surfaces and driving styles, providing optimal control across a wide range of conditions.

MAINTENANCE

Shock absorbers are generally maintenance-free components. However, regular inspection is recommended as part of your vehicle's routine maintenance schedule.

- **Visual Inspection:** Periodically check for signs of fluid leaks, bent or damaged rods, worn bushings, or loose mounting hardware.
- **Performance Check:** Pay attention to changes in ride quality, excessive bouncing, or unusual noises from the suspension. These can indicate a worn or failing shock absorber.
- **Cleaning:** Keep the shock absorber free from excessive dirt and debris, especially around the rod and seal area, to prevent premature wear.

If any issues are detected, it is advisable to have the shock absorbers inspected by a qualified technician.

TROUBLESHOOTING

If you experience issues with your vehicle's suspension after installing or using the Monroe Magnum 66653 shock absorbers, consider the following:

- **Excessive Bouncing or Poor Ride Quality:** This could indicate a worn shock absorber or improper installation. Check for leaks or damage.
- **Unusual Noises (Clunking, Squeaking):** May be caused by loose mounting hardware, worn bushings, or interference with other suspension components. Re-check torque specifications and component clearances.
- **Uneven Tire Wear:** While not solely a shock absorber issue, worn shocks can contribute to uneven tire wear. Ensure proper alignment and tire pressure.
- **Fluid Leaks:** Any visible fluid leaking from the shock absorber indicates a seal failure and requires replacement.

For persistent issues, consult a professional automotive technician.

SPECIFICATIONS

Attribute	Value
Model Number	66653
Brand	Monroe
Item Weight	2.2 pounds
Product Dimensions	23.2 x 4.5 x 2.7 inches
Manufacturer Part Number	66653
Position	Lower

Attribute	Value
Date First Available	June 1, 2006

WARRANTY AND SUPPORT

The Monroe Magnum 66653 Suspension Shock Absorber comes with Monroe's **90-day Risk Free Ride Offer** and a **Limited Commercial Warranty**. For detailed information regarding warranty terms, conditions, and to initiate a claim, please refer to the official Monroe website or contact Monroe customer support directly. Keep your purchase receipt as proof of purchase.

For further assistance or technical inquiries, please visit the official Monroe website or contact their customer service department.