Mevotech MS25560

Mevotech Supreme Ball Joint (MS25560) Instruction Manual

For Jeep Cherokee Models 2014-2018

1. Product Overview

The Mevotech Supreme Ball Joint (MS25560) is an automotive replacement part designed for the lower suspension of Jeep Cherokee models manufactured between 2014 and 2018. This component is engineered for durability and ease of installation, featuring patented sintered bearings for superior toughness and a larger sphere design for optimized performance. It includes a 90-degree SAE grease fitting for simple servicing and a custom-designed adapter ring to facilitate accurate press fitting.



Image 1.1: Mevotech Supreme Ball Joint (MS25560) - General View.



Image 1.2: Two Mevotech Supreme Ball Joints, highlighting their robust construction.

2. Installation Guide

Proper installation is crucial for the performance and longevity of the ball joint. It is recommended that this procedure be performed by a qualified automotive technician. Always refer to your vehicle's service manual for specific torque specifications and safety procedures.

2.1 Safety Precautions

- Always wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Ensure the vehicle is securely supported on jack stands on a level surface before beginning any work.
- Disconnect the vehicle's battery if necessary.

2.2 Pre-Installation Steps

1. Lift the vehicle and remove the wheel.
2. Remove the brake caliper, rotor, and any other components obstructing access to the ball joint.
3. Separate the steering knuckle from the control arm. In many Jeep Cherokee applications, removing the entire steering knuckle from the vehicle may be necessary to facilitate proper ball joint removal and installation.
4. Clean the knuckle bore thoroughly to remove any rust, dirt, or debris. The bore must be clean for a proper press fit.

2.3 Ball Joint Removal and Installation

The Mevotech Supreme Ball Joint is designed for easier installation with a custom adapter ring. A specialized ball joint press kit is required for this procedure.



Image 2.1: Included components: ball joint, custom adapter ring, castle nut, cotter pin, and 90-degree SAE grease fitting.

1. Using a suitable ball joint press kit, remove the old ball joint from the steering knuckle.
2. Position the new Mevotech Supreme Ball Joint into the knuckle bore. Ensure the custom-designed adapter ring is correctly placed with your press kit to facilitate a straight and accurate press fit.
3. Carefully press the new ball joint into the knuckle. Apply steady, even pressure. Monitor the ball joint's alignment during pressing to prevent it from seating crookedly. If it begins to go in at an angle, stop, realign, and continue pressing.
4. Once the ball joint is fully seated, install the retaining snap ring into its groove on the knuckle.
5. **Grease Fitting Installation:** The ball joint comes with a 90-degree SAE grease fitting. It is critical to index the ball joint to ensure the grease fitting points in an accessible direction before final seating. In some applications, the 90-degree fitting may interfere with the knuckle body. If this occurs, consider installing the fitting before fully seating the ball joint, or use a straight 1/4"-28 grease fitting if space is limited. Some users have reported needing to grind a small amount of aluminum from the knuckle for clearance.
6. Reassemble all removed components, ensuring all fasteners are torqued to the manufacturer's specifications.

Video 2.2: Mevotech Supreme Ball Joints - Long Lasting Performance. This video provides an overview of the features and benefits, which may include visual cues for installation and design advantages.

3. Operation and Function

A ball joint is a spherical bearing that connects the control arms to the steering knuckle, allowing for pivotal movement between the two components. This movement is essential for steering and suspension articulation, enabling the wheels to turn and the suspension to absorb road irregularities while maintaining proper wheel alignment.
The Mevotech Supreme Ball Joint is designed with several enhancements for optimal operation:

- **Sintered Metal Bearings:** These patented bearings provide superior toughness and wear resistance, contributing to longer-lasting performance compared to traditional polymer designs.
- **Larger Sphere Design:** An application-specific ball stud system with a larger sphere optimizes the load distribution and movement, enhancing durability and responsiveness.
- **Multi-Lip Boot:** Designed to keep water and debris out, protecting the internal components from contamination and extending the life of the ball joint.
- **Anti-Corrosion Protection:** Specialized coatings and materials resist rust and corrosion, particularly important in harsh operating environments.



Video 3.1: How Sintered Metal Bearings Beat Polymer Hands Down. This video explains the advantages of sintered metal bearings used in Mevotech ball joints, contributing to their operational superiority.

4. Maintenance

Regular maintenance, specifically greasing, is essential for maximizing the lifespan and performance of your Mevotech Supreme Ball Joint.

4.1 Greasing Procedure

1. Locate the 90-degree SAE grease fitting on the ball joint.
2. Clean the grease fitting to prevent contaminants from entering the joint.
3. Attach a grease gun filled with a high-quality, lithium-based chassis grease (NLGI #2 recommended) to the fitting.
4. Pump grease into the fitting until the boot begins to swell slightly. Do not over-grease, as this can damage the boot.
5. Wipe off any excess grease.

Frequency: It is recommended to grease the ball joints at every oil change or during routine vehicle inspections, or as specified by your vehicle's service manual for greasable suspension components.

5. Troubleshooting

This section addresses common issues that may arise during or after the installation of the Mevotech Supreme Ball Joint.

Issue	Possible Cause	Solution
Ball joint not pressing in straight.	Improper alignment of press tool; dirty knuckle bore.	Ensure the custom adapter ring is correctly positioned. Clean the knuckle bore thoroughly. Apply steady, even pressure and realign if necessary during pressing.
Grease fitting interferes with knuckle.	Limited clearance in the knuckle design for the 90-degree fitting.	Install the grease fitting before fully seating the ball joint. Alternatively, use a straight 1/4"-28 grease fitting. Minor grinding of the knuckle may be required for clearance.
Ball joint works loose from knuckle.	Retaining snap ring not properly seated; improper press fit; worn knuckle bore.	Verify the retaining snap ring is fully seated in its groove. Ensure the ball joint was pressed in with adequate force and the knuckle bore was clean. If the knuckle bore is worn, it may need replacement.

Issue	Possible Cause	Solution
Premature wear or noise after installation.	Lack of lubrication; improper installation; defective part.	Ensure the ball joint is regularly greased. Re-check installation for proper seating and torque. If issues persist, contact Mevotech customer support.

6. Specifications

Feature	Detail
Brand	Mevotech
Model Number	MS25560
Item Weight	1.3 pounds
Product Dimensions	5.85 x 3.35 x 2.45 inches
Manufacturer Part Number	MS25560
Position	Center (Lower)
Compatibility	Jeep Cherokee 2014-2018
Bearing Type	Patented Sintered Metal
Grease Fitting	90-degree SAE (Serviceable)

7. Warranty Information

Mevotech products are backed by a manufacturer's warranty. For specific details regarding the warranty period, coverage, and claims process for the MS25560 ball joint, please refer to the official Mevotech website or contact their customer service directly. Keep your proof of purchase for any warranty claims.

8. Customer Support

If you have any questions regarding the installation, operation, maintenance, or troubleshooting of your Mevotech Supreme Ball Joint (MS25560), please contact Mevotech customer support. You can typically find their contact information (phone, email, or support portal) on their official website.
Mevotech Official Website: www.mevotech.com