

Dorman 520-466

Dorman 520-466 Front Passenger Side Lower Suspension Control Arm and Ball Joint Assembly

Instruction Manual

1. PRODUCT OVERVIEW

The Dorman 520-466 is a direct replacement front passenger side lower suspension control arm and ball joint assembly. This component is crucial for maintaining proper vehicle handling, ride comfort, and safety. It is designed to directly replace the original equipment on specific Chevrolet and Suzuki vehicle applications, ensuring a smooth ride, directional stability, and predictable dynamics.



Figure 1: Dorman 520-466 Front Passenger Side Lower Suspension Control Arm and Ball Joint Assembly. This image displays the complete assembly, highlighting its robust construction and integrated ball joint.

Key Features:

- **Trustworthy Replacement:** Directly replaces the original assembly on specific vehicle applications.
- **Complete Repair:** Includes pre-installed ball joint and bushings, simplifying installation.
- **Quality Engineering:** Underwent industry-leading testing for a smooth, stable, and safe ride.
- **Durable Design:** Features additional coatings for long-lasting rust and corrosion resistance.
- **Ensured Fit:** Compatible with select Chevrolet Tracker (1999-2008), Suzuki Grand Vitara (1999-2005), Suzuki Vitara (1999-2004), and Suzuki XL-7 (2002-2006) models.

2. INSTALLATION CONSIDERATIONS

Installation of suspension components requires specialized tools and knowledge. It is highly recommended that this assembly be installed by a qualified automotive technician. Always refer to your vehicle's specific service manual for detailed installation procedures, torque specifications, and safety precautions.



Figure 2: An example of a control arm installed within a vehicle's suspension system. Proper installation is critical for vehicle safety and performance.

Ensure the vehicle is properly supported on a lift or jack stands. Disconnect the battery before beginning work. Follow all manufacturer guidelines for removing the old component and installing the new Dorman 520-466 assembly. Pay close attention to torque specifications for all fasteners to prevent loosening or damage.

Video 1: Dorman Chassis and Suspension Parts - Durable Replacements and Upgrades. This video provides an overview of Dorman's commitment to quality and durability in its chassis and suspension components, emphasizing the importance of selecting reliable parts for vehicle safety and performance.

3. OPERATING PRINCIPLES

The control arm and ball joint assembly is a fundamental part of your vehicle's suspension system. It connects the wheel hub to the vehicle frame, allowing for vertical movement of the wheel while maintaining proper alignment. The ball joint acts as a pivot, enabling steering and suspension articulation. A properly functioning control arm and ball joint ensure:

- **Precise Steering Response:** Direct and accurate control over the vehicle's direction.
- **Vehicle Stability:** Keeps the wheels properly aligned with the road surface, especially during turns and over uneven terrain.
- **Ride Comfort:** Absorbs road shocks and vibrations, contributing to a smoother ride.
- **Tire Longevity:** Maintains correct wheel alignment, preventing premature and uneven tire wear.

4. MAINTENANCE AND INSPECTION

Regular inspection of your vehicle's suspension components, including the control arm and ball joint assembly, is essential for safety and performance. It is recommended to have these components inspected during routine vehicle maintenance, such as oil changes or tire rotations.

Inspection Points:

- **Ball Joint Boots:** Check for tears, cracks, or leaks in the rubber boots, which protect the ball joint from contaminants.
- **Bushings:** Inspect rubber bushings for cracks, deterioration, or excessive play.
- **Control Arm:** Look for any signs of bending, cracking, or corrosion on the control arm itself.
- **Fasteners:** Ensure all bolts and nuts are securely tightened to specification.

Any signs of wear or damage should prompt immediate professional inspection and replacement to prevent further issues or safety hazards.

5. TROUBLESHOOTING COMMON ISSUES

If you experience any of the following symptoms, your Dorman 520-466 control arm and ball joint assembly, or other suspension components, may require inspection and potential replacement:

- **Clunking or Popping Noises:** Often heard when going over bumps or turning, indicating loose or worn ball joints or bushings.
- **Uneven Tire Wear:** Can be a sign of improper wheel alignment due to worn suspension components.
- **Loose or Wandering Steering:** The vehicle may feel difficult to keep in a straight line, or the steering wheel may have excessive play.
- **Vibrations:** Unexplained vibrations felt through the steering wheel or floorboards.
- **Vehicle Pulling to One Side:** Consistent deviation from a straight path without steering input.

If any of these symptoms are present, consult a qualified technician for diagnosis and repair. Ignoring these signs can lead to unsafe driving conditions and more extensive damage.

6. PRODUCT SPECIFICATIONS

Specification	Value
Brand	Dorman
Model	520-466
Fit Type	Universal Fit
Auto Part Position	Rear
Color	Black
Material	Iron
Orientation	Passengers Side
Item Weight	18.2 pounds
Product Dimensions	22.4 x 4.6 x 17.9 inches
UPC	019495221043

7. QUALITY ASSURANCE AND TESTING

Dorman is committed to delivering high-quality, reliable suspension components. Our products undergo rigorous testing and material analysis to ensure they meet or exceed original equipment (OE) standards and provide optimal safety and performance.



Figure 3: A close-up view of a suspension component, illustrating the detailed examination and testing processes Dorman employs to ensure product integrity.

Our engineering labs utilize advanced equipment to simulate real-world conditions and evaluate component durability, strength, and material composition. This includes impact testing to assess resistance to sudden loads and tensile testing to verify material strength. We analyze the chemical makeup of metals and the integrity of rubber components to ensure they withstand the demands of vehicle operation and contribute to overall safety.

Video 2: See the Dorman Control Arm and Chassis Quality Difference. This video details Dorman's extensive testing protocols for control arms and other chassis components, demonstrating their commitment to safety and performance through rigorous material and impact analyses.

8. WARRANTY AND SUPPORT

Dorman stands behind the quality of its products. For specific warranty information regarding the Dorman 520-466 Front Passenger Side Lower Suspension Control Arm and Ball Joint Assembly, please refer to the product packaging or the official Dorman website.

Should you have any questions regarding installation, troubleshooting, or product specifications, the Dorman Technical Support team is always available to assist you. Contact information can be found on the Dorman website or product documentation.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Email

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details.](#)

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question