

Dorman 946-088

Dorman 946-088 Rear Drive Shaft Instruction Manual

Model: 946-088 | Brand: Dorman

1. PRODUCT OVERVIEW

The Dorman 946-088 Rear Drive Shaft is a direct replacement component designed to match original equipment dimensions for dependable fit and performance. This complete drive shaft assembly is manufactured with 100% new components, eliminating the need for core charges or return hassles. It arrives pre-balanced for quick and simple installation.

This drive shaft is compatible with select Chevrolet and GMC models, including:

- Chevrolet Express 3500: 2003, 2004, 2005, 2006, 2007, 2008, 2009
- Chevrolet Express 4500: 2009
- GMC Savana 3500: 2003, 2004, 2005, 2006, 2007, 2008, 2009
- GMC Savana 4500: 2009

Key features include:

- **Direct Replacement:** Engineered to match original equipment for reliable fit and function.
- **100% New Components:** Constructed entirely from new parts, ensuring no core charge or return complications.
- **Pre-Balanced:** Arrives balanced and ready for immediate installation.
- **Serviceable Construction:** Features non-staked universal joints for easier future maintenance.



Figure 1: Dorman 946-088 Rear Drive Shaft, a complete assembly.

2. WHAT'S IN THE BOX

Your Dorman 946-088 Rear Drive Shaft package includes:

- 1 Driveshaft Assembly

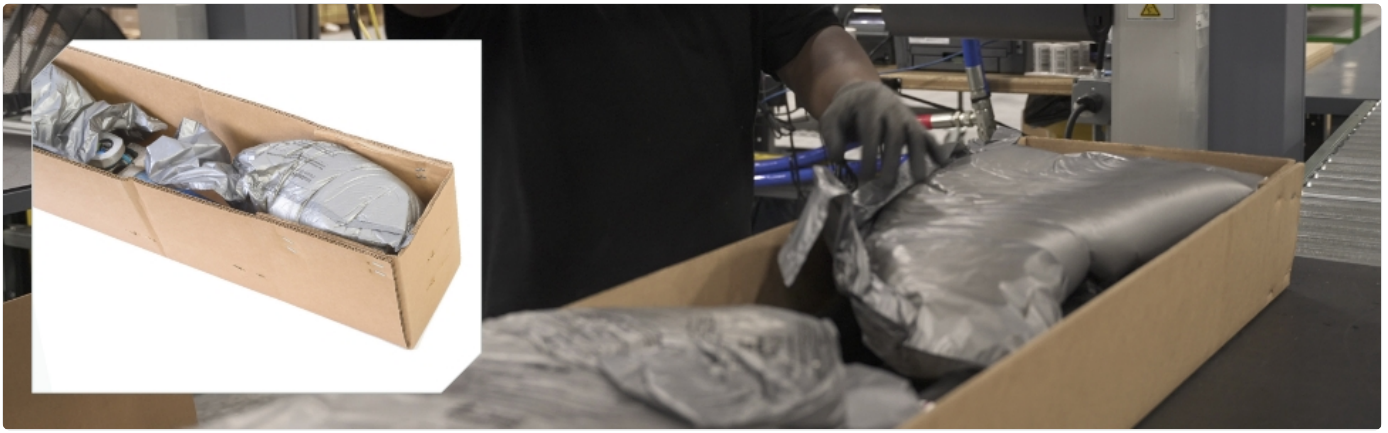


Figure 2: Example of drive shaft packaging, designed to protect the product during transit.

3. INSTALLATION GUIDE

This drive shaft is designed for direct replacement and comes pre-balanced to facilitate a straightforward installation process. Always consult a professional service manual for your specific vehicle model for detailed, step-by-step instructions and safety precautions.

General Installation Steps (Consult Vehicle-Specific Manual):

1. **Vehicle Preparation:** Safely lift and support the vehicle on a level surface using appropriate jack stands or a lift. Ensure the vehicle is stable.
2. **Remove Old Driveshaft:** Carefully unbolt and remove the existing drive shaft from the transmission/transfer case and the differential. Note the orientation of the old shaft for proper installation of the new one.
3. **Inspect Components:** Before installing the new Dorman drive shaft, inspect surrounding components such as universal joints, transmission/transfer case output shaft, and differential input flange for wear or damage.
4. **Install New Driveshaft:** Align the new Dorman 946-088 drive shaft with the transmission/transfer case and differential. Ensure proper spline engagement and bolt alignment. The multi-piece design is pre-balanced and keyed to perfectly match up, remaining balanced during installation.
5. **Secure Fasteners:** Torque all bolts to the manufacturer's specified values. Refer to your vehicle's service manual for correct torque specifications.
6. **Lower Vehicle:** Carefully lower the vehicle.
7. **Test Drive:** Perform a test drive to ensure proper operation and check for any unusual noises or vibrations.



Figure 3: A multi-piece drive shaft design, which is pre-balanced and keyed for easy installation.

4. OPERATING PRINCIPLES

The Dorman 946-088 Rear Drive Shaft is a critical component of your vehicle's drivetrain, responsible for transmitting torque from the transmission or transfer case to the differential, which then powers the rear wheels. Its design ensures smooth power delivery and minimizes vibrations during vehicle operation.

The universal joints (U-joints) within the drive shaft allow for changes in angle between the transmission and differential as the vehicle's suspension moves. The constant velocity (CV) joints, if present in your specific drive shaft configuration, provide a smooth transfer of power even at varying angles and speeds.



Figure 4: Close-up view of a universal joint on the Dorman drive shaft, designed for durability and serviceability.

5. MAINTENANCE

Regular inspection of your drive shaft is recommended to ensure optimal performance and longevity. Pay attention to any unusual noises, vibrations, or signs of wear.

Key Maintenance Points:

- **Universal Joints (U-joints):** The Dorman 946-088 features non-staked universal joints, which are designed for future serviceability. This means they can be replaced if worn, unlike some original equipment designs where the entire shaft might need replacement. Inspect U-joints for looseness, rust, or signs of grease leakage.
- **Constant Velocity (CV) Boots:** If your drive shaft includes CV joints, regularly check the rubber boots for cracks, tears, or punctures. Damaged boots can lead to grease loss and contamination, causing premature CV joint failure.
- **Balance Weights:** Ensure that any balance weights attached to the drive shaft are secure and not missing. Missing or loose weights can cause vibrations.
- **Mounting Hardware:** Periodically check that all mounting bolts are tight and secure.

If any issues are detected, it is recommended to have the drive shaft inspected and serviced by a qualified technician.



Figure 5: The serviceable design of Dorman U-joints allows for easier maintenance and replacement.

6. TROUBLESHOOTING

While the Dorman 946-088 drive shaft is designed for reliable performance, certain symptoms may indicate an issue with the drive shaft or related drivetrain components.

Common Symptoms and Potential Causes:

- **Vibration:**
 - *Cause:* Unbalanced drive shaft, worn U-joints, worn CV joints, loose mounting hardware.
 - *Action:* Inspect for loose weights, worn joints, and secure mounting. Professional diagnosis is recommended.
- **Clunking or Clanking Noise:**
 - *Cause:* Worn U-joints, excessive play in splines, loose mounting bolts.
 - *Action:* Check for play in U-joints and splines. Ensure all bolts are torqued correctly.
- **Squeaking or Chirping Noise:**
 - *Cause:* Dry or worn U-joints (lack of lubrication).
 - *Action:* Inspect U-joints for lubrication and wear.
- **Difficulty Shifting (especially with manual transmission):**
 - *Cause:* Bent or damaged drive shaft, severe U-joint wear.
 - *Action:* This indicates a serious issue; immediate professional inspection is required.

If you experience any of these symptoms, it is crucial to have your vehicle inspected by a qualified mechanic to prevent further damage to the drivetrain.

7. SPECIFICATIONS

Attribute	Value
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Manufacturer	Dorman Products
Brand	Dorman
Model	Dorman 946-088
Item Weight	57 pounds
Product Dimensions	75 x 13 x 7 inches
Item Model Number	946-088
Exterior	Ready To Paint If Needed
Manufacturer Part Number	946-088
OEM Part Number	15120402; 15249719
Hollander Number	431-05637
ASIN	B078SYDJK2
Date First Available	January 5, 2018



Figure 6: Detail of the drive shaft spline, ensuring precise fitment.

8. WARRANTY INFORMATION

Dorman backs its drive shafts with a **limited lifetime warranty**. This warranty covers defects in materials and workmanship under normal use and service. For specific terms, conditions, and claim procedures, please refer to the official Dorman warranty documentation or contact Dorman customer support.

Additionally, purchases from Amazon.com typically include a 30-day easy returns policy.

9. CUSTOMER SUPPORT

For further assistance, technical support, or warranty claims regarding your Dorman 946-088 Rear Drive Shaft, please contact Dorman customer support directly.

You can also visit the official Dorman Store for more product information and resources:

[Visit the Dorman Store on Amazon](#)

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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.

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Anonymous

Email

you@example.com

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