

## Dorman 600-470

# Dorman 600-470 Transfer Case Motor Instruction Manual

Official Manual for Dorman 600-470 Transfer Case Motor

## INTRODUCTION

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The Dorman 600-470 Transfer Case Motor is a direct replacement component designed to restore proper shifting functionality to your vehicle's transfer case. This motor is engineered to fit and perform like the original equipment, featuring a factory-style electrical connector and a weathertight seal for enhanced durability and corrosion prevention. It is a new, not remanufactured, part ensuring reliable performance.

This manual provides essential information regarding the product's overview, installation considerations, operation, maintenance, and specifications.

## PRODUCT OVERVIEW

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### Key Features:

- **Direct Replacement:** This transfer case motor is designed to fit and perform identically to the original motor in specific vehicle applications.
- **Durable Construction:** Manufactured with a factory-style electrical connector and a weathertight seal to effectively prevent corrosion and ensure longevity.
- **100% New:** This transfer case motor is a completely new unit, not a remanufactured part, offering superior reliability.
- **Quality Assured:** The application for specific vehicles has undergone validation testing to guarantee high quality and performance.
- **Vehicle Compatibility:** Compatible with Toyota 4Runner (2003-2009) and Toyota Sequoia (2004-2007). Always verify fitment for your exact vehicle.

### What's in the Box:

- 1 x Dorman 600-470 Transfer Case Motor

## Product Images:



Front view of the Dorman 600-470 Transfer Case Motor, showing the main body and output shafts.



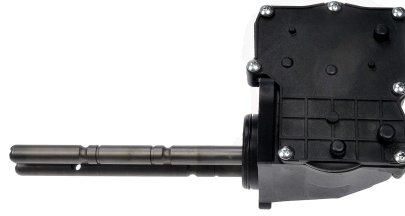
Side view of the Dorman 600-470 Transfer Case Motor, highlighting the mounting points and shaft.



Top view of the Dorman 600-470 Transfer Case Motor, showing the electrical connector and housing.



Angled view of the Dorman 600-470 Transfer Case Motor, providing a comprehensive look at its structure.



Bottom view of the Dorman 600-470 Transfer Case Motor, showing the base and mounting points.

## SETUP AND INSTALLATION

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Installation of a transfer case motor requires specialized automotive knowledge and tools. It is highly recommended that this procedure be performed by a certified professional mechanic or an experienced individual with a thorough understanding of vehicle transmission and drive train systems.

### General Considerations:

- Ensure the vehicle is safely lifted and supported on jack stands or a lift.
- Disconnect the vehicle's battery before beginning any electrical work.
- Refer to your vehicle's specific service manual for detailed, step-by-step instructions for removing the old transfer case motor and installing the new Dorman 600-470 unit. This manual will provide critical information regarding torque specifications, wiring diagrams, and specific procedures for your vehicle model.
- Confirm the correct fitment for your vehicle model (Toyota 4Runner 2003-2009, Toyota Sequoia 2004-2007) before attempting installation.
- Ensure all electrical connections are secure and the weathertight seal is properly seated to prevent future corrosion.

**Disclaimer:** *Improper installation can lead to vehicle damage or personal injury. Dorman is not responsible for damages resulting from incorrect installation.*

## OPERATING INSTRUCTIONS

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The Dorman 600-470 Transfer Case Motor operates automatically as part of your vehicle's four-wheel drive (4WD) system. Once correctly installed, the motor will engage and disengage the transfer case as commanded by the vehicle's onboard computer or the driver's selection (e.g., shifting between 2WD, 4WD High, and 4WD Low).

### Normal Operation:

- When the driver selects a 4WD mode, the vehicle's control module sends a signal to the transfer case motor.
- The motor then actuates the internal mechanisms of the transfer case to shift into the desired drive mode.
- Listen for smooth engagement and disengagement of the 4WD system. Any unusual noises or hesitation may indicate an issue.

Refer to your vehicle's owner's manual for specific instructions on how to properly engage and disengage your vehicle's 4WD system.

## MAINTENANCE

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The Dorman 600-470 Transfer Case Motor is designed for long-term, maintenance-free operation once installed. However, regular vehicle maintenance practices can help ensure the longevity of all automotive components, including the transfer case motor.

### Recommendations:

- **Regular Vehicle Inspections:** During routine vehicle service, have a mechanic inspect the transfer case area for any signs of fluid leaks, loose connections, or physical damage to the motor or its wiring.

- **Check Electrical Connections:** Periodically ensure that the electrical connector to the transfer case motor remains clean, dry, and securely attached. The weathertight seal helps protect against environmental elements, but visual inspection is always beneficial.
- **Transfer Case Fluid:** While the motor itself does not require fluid changes, ensuring your transfer case fluid is at the correct level and in good condition is crucial for the overall health of the transfer case system. Refer to your vehicle's service schedule for transfer case fluid maintenance.

## TROUBLESHOOTING

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If you experience issues with your vehicle's 4WD system after installing the Dorman 600-470 Transfer Case Motor, consider the following common troubleshooting steps. Due to the complexity of automotive electrical and mechanical systems, professional diagnosis is often required.

### Common Symptoms and Potential Causes:

- **Transfer Case Not Shifting (No Engagement/Disengagement):**
  - *Check Electrical Connection:* Ensure the motor's electrical connector is fully seated and free of corrosion.
  - *Blown Fuse:* Inspect the relevant fuse for the transfer case system in your vehicle's fuse box. Refer to your vehicle's manual for fuse locations.
  - *Vehicle Control Module (VCM) Issue:* The VCM may not be sending the correct signals to the motor. This requires diagnostic scanning.
  - *Internal Transfer Case Mechanical Issue:* The problem might not be the motor itself but an internal mechanical failure within the transfer case.
- **Unusual Noises During Shifting:**
  - *Low Transfer Case Fluid:* Check the fluid level and condition in the transfer case.
  - *Internal Wear:* Could indicate wear in the transfer case gears or bearings, not directly related to the motor.
- **Check Engine Light / 4WD Warning Light:**
  - *Diagnostic Trouble Codes (DTCs):* Use an OBD-II scanner to retrieve any stored diagnostic codes. These codes can pinpoint the exact nature of the fault.
  - *Wiring Harness Damage:* Inspect the wiring leading to the transfer case motor for any cuts, pinches, or corrosion.

If these basic checks do not resolve the issue, it is strongly advised to consult a qualified automotive technician. They possess the necessary diagnostic equipment and expertise to accurately identify and repair complex automotive problems.

## SPECIFICATIONS

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Specification	Detail
<b>Brand</b>	Dorman
<b>Model Name</b>	Dorman 600-470: 4WD Transfer Case Motor Assembly
<b>Item Model Number</b>	600-470
<b>Manufacturer Part Number</b>	600-470
<b>OEM Part Number(s)</b>	Rebuild and Return; 36410-35092; 3641035093

Specification	Detail
Item Weight	4.91 pounds (2.23 kg)
Product Dimensions (L x W x H)	13.66 x 7.28 x 7.87 inches (34.7 x 18.5 x 20 cm)
UPC	019495547976
Exterior Finish	Machined

## WARRANTY INFORMATION

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Specific warranty details for the Dorman 600-470 Transfer Case Motor are typically provided at the point of purchase or can be obtained directly from Dorman Products. Warranty coverage may vary based on the retailer and region.

For comprehensive warranty information, please:

- Refer to the documentation included with your product.
- Contact the retailer from whom you purchased the product.
- Visit the official Dorman Products website for their general warranty policies.

## SUPPORT AND CONTACT INFORMATION

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For further assistance, technical support, or inquiries regarding the Dorman 600-470 Transfer Case Motor, please contact Dorman Products directly.

- **Dorman Products Official Website:** [www.dormanproducts.com](http://www.dormanproducts.com)
- **Customer Service:** Refer to the Dorman website for current contact methods, including phone numbers and email support.

When contacting support, please have your product model number (600-470) and any relevant vehicle information readily available.

