

Dorman 601-392

Dorman 601-392 Radiator Shutter Assembly Instruction Manual

Model: 601-392

1. INTRODUCTION

This manual provides comprehensive instructions for the Dorman 601-392 Radiator Shutter Assembly. This component is engineered to precisely match the fit and function of the original equipment active grille shutter system in specific Ford vehicles, ensuring restoration of proper functionality and vehicle performance.

2. PRODUCT OVERVIEW

The Dorman 601-392 is an active grille shutter and motor assembly. Its primary function is to automatically control airflow through the radiator, which helps optimize engine temperature, improve aerodynamic efficiency, and contribute to fuel economy.

- Integrated motor for active shutter control.
- Features a factory-style electrical connector for direct, plug-and-play installation.
- Constructed from durable materials for reliable and long-lasting performance.



Figure 2.1: Front view of the Dorman 601-392 Radiator Shutter Assembly, showing the main housing and internal louvers.



Figure 2.2: Top-down view of the Dorman 601-392 Radiator Shutter Assembly, highlighting the structural components.



Figure 2.3: Rear view of the Dorman 601-392 Radiator Shutter Assembly, showing the mounting points and overall shape.

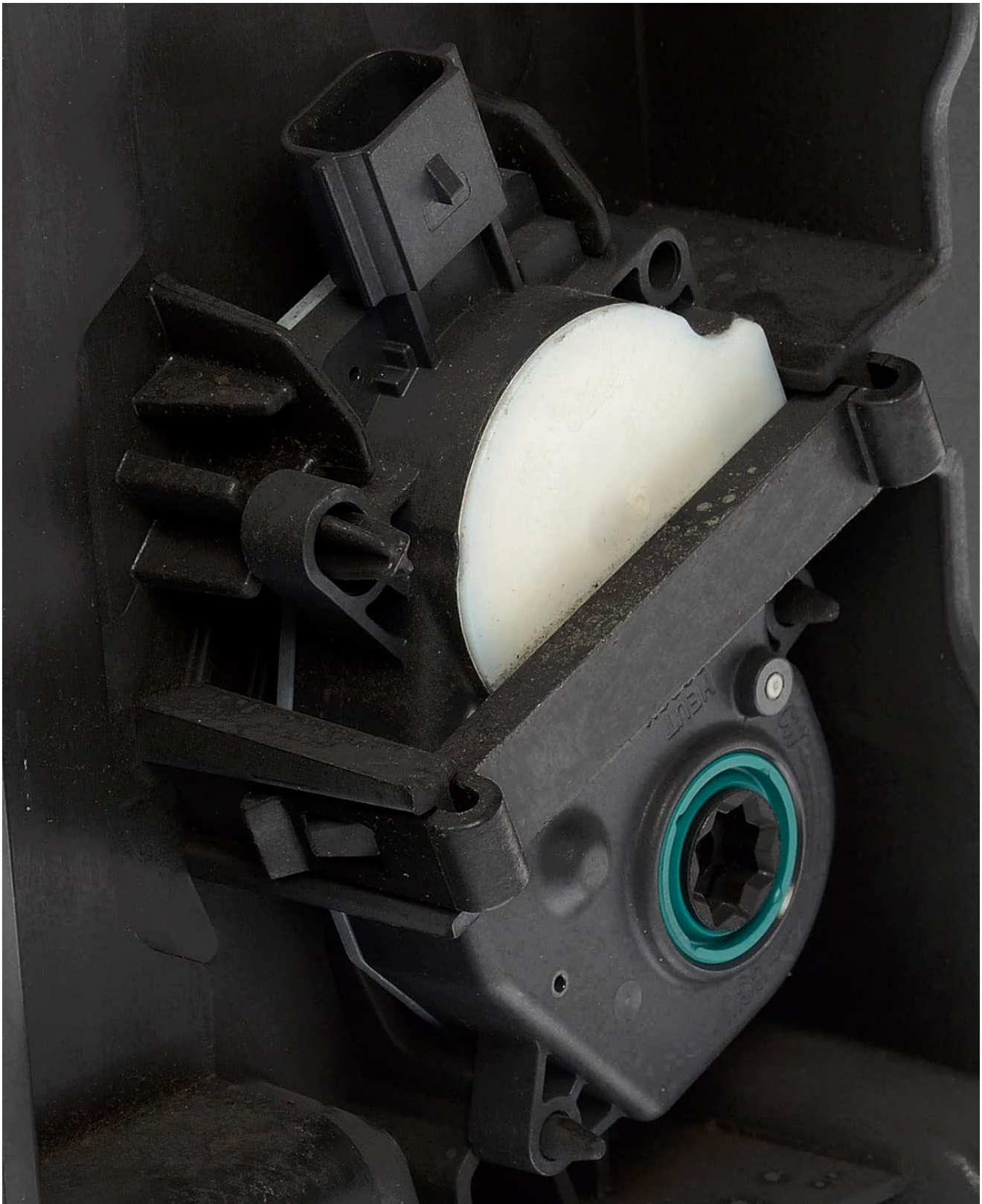


Figure 2.4: A detailed view of the electric motor and gear mechanism responsible for operating the radiator shutters.

3. VEHICLE COMPATIBILITY

This Dorman 601-392 Radiator Shutter Assembly is compatible with the following vehicles:

- **Ford F-150:** 2018, 2019, 2020
- **Ford Lobo:** 2018, 2019, 2020

To ensure precise fitment for your vehicle, it is recommended to verify your vehicle's make, model, and year using the manufacturer's fitment tools or consult a qualified automotive technician.

4. INSTALLATION INSTRUCTIONS

This assembly is designed for a direct, plug-and-play installation, matching the original equipment. While designed for ease of installation, professional installation is recommended to ensure correct fitment and operation.

1. **Safety First:** Ensure the vehicle is turned off, cooled down, and properly secured on a lift or jack stands. Disconnect the battery's negative terminal to prevent electrical hazards.
2. **Access:** Depending on the specific vehicle model, it may be necessary to remove the front bumper cover, grille, or other components to gain access to the existing radiator shutter assembly. Refer to your vehicle's service manual for detailed removal procedures.
3. **Disconnect:** Locate and carefully disconnect the electrical connector from the old radiator shutter assembly.
4. **Remove Old Assembly:** Unbolt or unclip the old radiator shutter assembly from its mounting points. Carefully remove it from the vehicle.
5. **Install New Assembly:** Position the Dorman 601-392 Radiator Shutter Assembly into place, ensuring all mounting points align correctly. Secure it with the original fasteners.
6. **Connect Electrical:** Connect the factory-style electrical connector to the new assembly. Ensure a secure and firm connection.
7. **Reassemble:** Reinstall any components that were removed to gain access (e.g., bumper cover, grille).
8. **Final Steps:** Reconnect the vehicle's battery. Start the vehicle and check for proper operation of the active grille shutter system. Observe for any unusual noises or warning lights.



Figure 4.1: Close-up view of the electrical connectors, demonstrating the factory-style connection for the shutter assembly.



Figure 4.2: A mechanic is shown installing the radiator shutter assembly into the front of a vehicle, illustrating the placement during

5. OPERATION OF THE ACTIVE GRILLE SHUTTER SYSTEM

The active grille shutter system automatically adjusts the angle of the shutters to control airflow through the radiator. This system operates based on various factors, including engine temperature, vehicle speed, and air conditioning demand, to maintain optimal engine performance and efficiency.

- **Closed Position:** At higher speeds or when the engine is cold, the shutters may close to improve aerodynamics, reduce drag, and help the engine reach optimal operating temperature more quickly.
- **Open Position:** When the engine requires more cooling, such as during heavy loads, high ambient temperatures, or low speeds, the shutters will open to allow maximum airflow to the radiator.

The system is controlled by the vehicle's engine control unit (ECU) and requires no manual intervention from the driver.

6. MAINTENANCE

The Dorman 601-392 Radiator Shutter Assembly is designed for long-term, maintenance-free operation. However, periodic visual inspection is recommended as part of routine vehicle maintenance.

- **Visual Inspection:** During routine vehicle maintenance, visually inspect the shutters for any signs of damage, obstruction, or accumulated debris.
- **Cleaning:** If debris (such as leaves, insects, or road grime) accumulates on the shutters, carefully remove it to ensure smooth operation. Avoid using high-pressure water directly on the motor or electrical connections.
- **Electrical Connections:** Ensure the electrical connector remains securely attached and free from corrosion.

Do not attempt to manually force the shutters open or closed, as this may damage the internal motor or linkage mechanisms.

7. TROUBLESHOOTING COMMON ISSUES

If you experience issues with your active grille shutter system, consider the following diagnostic steps:

- **Shutter Malfunction:** If the shutters appear stuck, do not move, or exhibit erratic movement, first check the electrical connection for security and any signs of corrosion. A diagnostic scan tool may be required to check for specific fault codes related to the active grille shutter system or its motor.
- **Warning Light:** If a "Check Engine" or similar warning light illuminates on your dashboard, it could indicate a fault within the shutter system. Consult a qualified technician for accurate diagnosis and repair.
- **Unusual Noises:** Any grinding, clicking, or other unusual noises emanating from the shutter assembly may indicate mechanical interference, a damaged component, or a failing motor.

For complex issues or if you are unable to resolve the problem, it is advisable to seek assistance from a certified automotive technician.

8. SPECIFICATIONS

Feature	Detail
Part Number	601-392

Feature	Detail
Brand	Dorman
Item Weight	5.73 pounds
Product Dimensions	31.68 x 15.31 x 11.37 inches
OEM Part Number	JL3Z8475B
Exterior Finish	Ready To Paint If Needed
Installation Type	Plug & Play

Note: Specifications are subject to change without notice.

9. WARRANTY AND SUPPORT

For detailed warranty information regarding your Dorman 601-392 Radiator Shutter Assembly, please refer to the official Dorman product warranty documentation provided with your purchase. This documentation outlines the terms, conditions, and duration of the warranty.

For technical support, installation assistance, or any further inquiries, please contact Dorman customer service directly or consult a professional automotive technician.

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

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