

Dorman 621-601

Dorman 621-601 Engine Cooling Fan Assembly Instruction Manual

MODEL: 621-601

Brand: Dorman

1. PRODUCT OVERVIEW

This Dorman 621-601 Engine Cooling Fan Assembly is engineered to match the fit and performance of the original radiator fan on specific Jeep Wrangler models. It is designed to ensure effective engine cooling and maintain the efficiency of the vehicle's air conditioning system. This assembly has undergone rigorous testing to meet performance standards.



Figure 1: Front view of the Dorman 621-601 Engine Cooling Fan Assembly.

Compatible Vehicles:

- Jeep Wrangler JK: 2018
- Jeep Wrangler: 2012, 2013, 2014, 2015, 2016, 2017

2. SETUP AND INSTALLATION

The Dorman 621-601 Engine Cooling Fan Assembly is designed for direct replacement. Ensure your vehicle is compatible before beginning installation. Professional installation is recommended.

2.1 Visual Inspection

Before installation, carefully inspect the new fan assembly for any shipping damage or manufacturing defects. Verify that all components, including the motor, blades, shroud, and electrical connector, are intact and match the original part.



Figure 2: Rear view of the fan assembly, showing the motor and wiring.

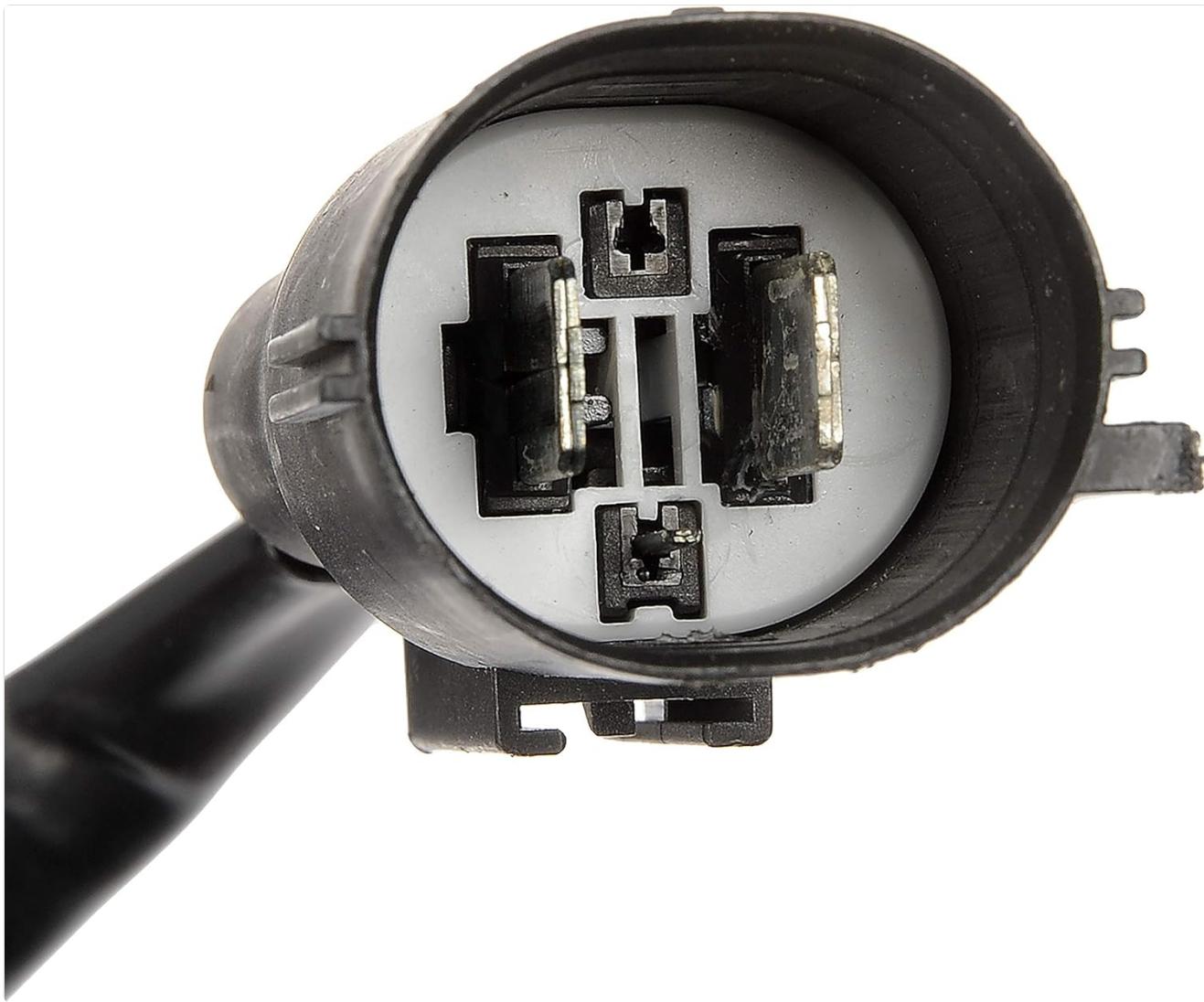


Figure 3: Detail of the 6-pin electrical connector for the fan assembly.

2.2 General Installation Steps (Consult Vehicle Service Manual for Specifics)

1. Ensure the vehicle's engine is cool and the battery is disconnected.
2. Drain the cooling system if necessary.
3. Remove any components obstructing access to the radiator fan assembly (e.g., air intake, upper radiator hose).
4. Disconnect the electrical connector from the old fan assembly.
5. Unbolt and carefully remove the old fan assembly from the radiator shroud.
6. Position the new Dorman 621-601 fan assembly into place, ensuring proper alignment with mounting points.
7. Secure the new fan assembly with the appropriate bolts.
8. Connect the electrical connector to the new fan assembly.
9. Reinstall any removed components.
10. Refill the cooling system with the manufacturer-recommended coolant and bleed any air from the system.
11. Reconnect the battery.

2.3 Installation Visual Aid

Your browser does not support the video tag.

Video 1: A visual demonstration of a Dorman Engine Cooling Radiator Fan Assembly, showcasing its components and design. This video provides a general overview of the product's physical characteristics.

Your browser does not support the video tag.

Video 2: An overview of Dorman Cooling Fan Assemblies, highlighting their design and engineering improvements over original equipment. This video offers insight into the quality and features of Dorman replacement fans.

3. OPERATING INSTRUCTIONS

The Dorman 621-601 Engine Cooling Fan Assembly operates automatically, controlled by your vehicle's engine management system. It activates when the engine coolant temperature reaches a predetermined level or when the air conditioning system is engaged to provide necessary airflow across the radiator and condenser.

- **Engine Cooling:** The fan draws air through the radiator to dissipate heat from the engine coolant, preventing overheating.
- **A/C System Support:** When the air conditioning is on, the fan helps cool the refrigerant in the condenser, ensuring efficient cabin cooling.

No manual intervention is required for the fan's operation under normal driving conditions.

4. MAINTENANCE

Engine cooling fan assemblies are generally low-maintenance components. Regular visual inspections are recommended as part of your vehicle's routine maintenance schedule.

- **Visual Inspection:** Periodically check the fan blades for cracks or damage. Ensure the shroud is intact and securely mounted. Inspect the electrical wiring and connector for any signs of wear, corrosion, or loose connections.
- **Cleanliness:** Keep the fan blades and shroud free from excessive dirt, debris, or obstructions that could impede airflow or cause imbalance.
- **Coolant Levels:** Ensure your vehicle's coolant level is maintained at the manufacturer-recommended level, as proper coolant circulation is essential for the fan's effectiveness.

If any issues are observed, consult a qualified automotive technician.

5. TROUBLESHOOTING

If you suspect an issue with your engine cooling fan assembly, consider the following common symptoms and potential causes:

- **Engine Overheating:** If your engine temperature gauge rises above normal, especially in stop-and-go traffic or at idle, the cooling fan may not be operating correctly. This could indicate a faulty fan motor, relay, fuse, or wiring.
- **Air Conditioning Not Cooling:** If the A/C system is not producing cold air, particularly at low vehicle speeds, the cooling fan might not be engaging to cool the condenser.
- **Unusual Noises:** Grinding, squealing, or excessive rattling noises from the fan area could indicate worn bearings in the fan motor or physical interference with the fan blades.
- **Fan Not Activating:** The fan should activate when the engine reaches operating temperature or when the A/C is on. If it remains off, check fuses, relays, and electrical connections.

For accurate diagnosis and repair, it is recommended to have the vehicle inspected by a certified mechanic.

6. SPECIFICATIONS

Feature	Specification
Brand	Dorman
Model Number	621-601
Power Connector Type	6-Pin
Voltage	12 Volts
Wattage	84.5 watts
Noise Level	4 Decibels
Maximum Rotational Speed	3500 RPM
Item Weight	12.47 pounds
Product Dimensions	27.6 x 5.1 x 22.8 inches
Manufacturer Part Number	621-601
OEM Part Numbers	6010277; 624080; 68143894AB; CF13078; 68143894AA; 68143894AB
UPC	885484607736

7. WHAT'S IN THE BOX

The Dorman 621-601 Engine Cooling Fan Assembly package includes:

- 1 Radiator Fan Assembly

8. WARRANTY AND SUPPORT

Dorman products are manufactured to high-quality standards. For specific warranty information regarding your Dorman 621-601 Engine Cooling Fan Assembly, please refer to the documentation included with your purchase or visit the official Dorman website.

Dorman offers support through their ASE-certified technical support team. Should you encounter any issues with your product or require assistance with installation, their team is available to provide guidance.

For technical assistance, please contact Dorman customer support directly.

© 2025 Dorman Products. All rights reserved.

Related Documents - 621-601

	<p>Dorman 601-037 Steering Column Lock Actuator Programming and Verification Guide</p> <p>Detailed instructions for programming and verifying the Dorman 601-037 Steering Column Lock Actuator, including safety precautions and troubleshooting tips.</p>
	<p>Dorman 635-518 Engine Rear Main Seal Cover Removal and Installation Guide</p> <p>Comprehensive removal and installation instructions for the Dorman 635-518 Engine Rear Main Seal Cover. This guide provides step-by-step procedures, technical tips, and compatibility information for General Motors, Isuzu, Saab, and Workhorse vehicles.</p>
	<p>Dorman Automotive Hardware Catalog: Comprehensive Fasteners and Components</p> <p>Explore the Dorman Automotive Hardware Catalog, featuring a wide range of fasteners, nuts, bolts, springs, and specialized tech trays for automotive repair and maintenance. Find part numbers and applications for efficient inventory and service.</p>
	<p>Dorman 926-959 Oil Filter Housing Kit Installation Instructions</p> <p>Comprehensive installation guide for the Dorman 926-959 Upgraded Aluminum Engine Oil Filter Housing Kit. Includes compatibility information, safety precautions, step-by-step instructions, and technical support contact details.</p>
	<p>Dorman 741-527 Window Regulator Installation and Removal Guide for Jeep Liberty (2002-2006)</p> <p>Comprehensive guide for removing and installing the Dorman 741-527 window regulator on Jeep Liberty models from 2002 to 2006. Includes a list of necessary tools, general maintenance tips, and detailed step-by-step instructions for both removal and installation procedures.</p>
	<p>Dorman 924-790 Ignition Lock Cylinder Installation and Removal Guide</p> <p>Step-by-step instructions for installing and removing the Dorman 924-790 Ignition Lock Cylinder. This guide covers compatible Buick, Cadillac, Chevrolet, GMC, Jeep, Oldsmobile, and Pontiac models, providing detailed procedures, technical tips, and safety precautions.</p>