

Dorman 419-620

Dorman 419-620 Accessory Drive Belt Idler Pulley Instruction Manual

Model: 419-620

1. INTRODUCTION AND OVERVIEW

This manual provides essential information for the Dorman 419-620 Accessory Drive Belt Idler Pulley. This component is designed as a direct replacement for the original equipment pulley on specified vehicles, ensuring proper function and performance. It addresses common issues such as squealing or groaning noises caused by worn idler pulleys, restoring the accessory drive system's integrity.

The Dorman 419-620 idler pulley is engineered to match the fit and function of the original part, offering a reliable solution for vehicle maintenance. It is reverse-engineered from the original design to ensure application-specific compatibility and trustworthy quality.

2. PRODUCT COMPATIBILITY

The Dorman 419-620 Accessory Drive Belt Idler Pulley is compatible with the following Mazda vehicle models and years:

- **Mazda 626:** 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002
- **Mazda Millenia:** 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002
- **Mazda MX-6:** 1993, 1994, 1995, 1996, 1997

To confirm exact fitment for your vehicle, it is recommended to use a vehicle fitment tool or consult your vehicle's service manual.

3. WHAT'S IN THE BOX

The package for the Dorman 419-620 includes:

- One (1) Dorman 419-620 Idler Pulley (Pulley Only)



Image 1: Front view of the Dorman 419-620 Accessory Drive Belt Idler Pulley, showing the smooth black surface and the central bearing.



Image 2: Rear view of the Dorman 419-620 Accessory Drive Belt Idler Pulley, displaying the part number and manufacturing details on the back surface.

4. SETUP AND INSTALLATION

Warning: Automotive repairs can be complex and dangerous. If you are not experienced with vehicle maintenance, it is highly recommended to seek professional assistance for the installation of this part. Always refer to your vehicle's specific service manual for detailed, model-specific instructions and safety precautions.

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

1. **Safety First:** Ensure the vehicle is parked on a level surface, the engine is off and cool, and the parking brake is engaged. Disconnect the negative terminal of the battery.
2. **Access the Belt System:** Locate the accessory drive belt and the idler pulley. You may need to remove other components to gain access.
3. **Relieve Belt Tension:** Use a serpentine belt tool or a wrench to rotate the tensioner pulley and relieve tension on the accessory drive belt. Carefully remove the belt from the idler pulley.
4. **Remove Old Pulley:** Unbolt and remove the old idler pulley. Note the orientation and any washers or spacers.
5. **Install New Pulley:** Position the Dorman 419-620 idler pulley in the correct orientation and secure it with the original bolt and any associated hardware. Tighten to the manufacturer's specified torque.

6. **Reinstall Belt:** Route the accessory drive belt correctly over all pulleys. Use the tensioner tool to create slack and slide the belt back onto the idler pulley. Double-check that the belt is properly seated on all pulleys.
7. **Final Checks:** Reconnect the battery. Start the engine and observe the belt system for proper operation, ensuring there are no unusual noises or wobbles.

5. OPERATING PRINCIPLES

The idler pulley is a crucial component of your vehicle's accessory drive system. Its primary function is to guide the serpentine belt, maintaining proper tension and alignment across various engine accessories such as the alternator, power steering pump, and air conditioning compressor. A properly functioning idler pulley ensures smooth operation of these components and prevents belt slippage or premature wear.

6. MAINTENANCE

Idler pulleys are generally maintenance-free components. However, regular inspection of the accessory drive belt system is recommended as part of your vehicle's routine maintenance schedule. Look for the following:

- **Visual Inspection:** Check the pulley for any signs of damage, cracks, or excessive wear on the surface.
- **Bearing Noise:** Listen for any squealing, grinding, or chirping noises coming from the pulley, especially when the engine is running. This often indicates a failing bearing.
- **Pulley Play:** With the engine off and belt removed, gently try to wiggle the pulley. Excessive play or looseness indicates a worn bearing or mounting.

If any of these issues are observed, replacement of the idler pulley may be necessary.

7. TROUBLESHOOTING

Common issues related to idler pulleys and potential solutions:

- **Squealing or Chirping Noise:** This is often the most common symptom of a failing idler pulley bearing. The noise may increase with engine RPM.
 - **Solution:** Inspect the pulley for play and noise. If confirmed, replace the idler pulley. Also, check the condition of the serpentine belt.
- **Grinding Noise:** A more severe grinding noise indicates a severely worn or seized bearing.
 - **Solution:** Immediate replacement of the idler pulley is recommended to prevent further damage to the belt or other components.
- **Belt Slippage or Instability:** A worn idler pulley can lead to improper belt tension or alignment, causing the belt to slip or appear unstable.
 - **Solution:** Verify the idler pulley is securely mounted and its bearing is in good condition. Ensure the belt is correctly routed and the tensioner is functioning properly.

If troubleshooting does not resolve the issue, consult a qualified automotive technician.

8. SPECIFICATIONS

Brand:	Dorman
--------	--------

Model:	419-620 (Idler Pulley Only)
Item Weight:	8.8 ounces
Product Dimensions:	4.6 x 1.8 x 4.6 inches
Manufacturer Part Number:	419-620
OEM Part Numbers:	36229; 49151; 89166; SK89166; K8051594XA
Exterior:	Machined

9. WARRANTY AND SUPPORT

For information regarding product warranty, returns, or technical support, please contact Dorman Products directly or refer to their official website. Dorman provides support for their products and can assist with specific inquiries.

You can visit the official Dorman store for more information: [Dorman Store on Amazon](#).

10. SAFETY INFORMATION

Always observe the following safety precautions when working on your vehicle:

- Wear appropriate personal protective equipment, including safety glasses and gloves.
- Ensure the vehicle is stable and properly supported before working underneath it.
- Disconnect the battery's negative terminal before performing any electrical work or major component replacement.
- Allow the engine to cool completely before working on engine components to prevent burns.
- Keep hands and clothing clear of moving parts when the engine is running.
- Dispose of old parts and fluids responsibly according to local regulations.

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

Details

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

Submit question

Open the live page

<https://manuals.plus/asin/B004135HBE>

More documents and user manuals: <https://manuals.plus/>