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Isuzu 8-97542-180-1

Isuzu Genuine 6.6L Vacuum Pump Pulley User Manual

1. PRODUCT OVERVIEW

This manual provides essential information for the Isuzu Genuine 6.6L Vacuum Pump Pulley, Part# 8-97542-180-1 (also known as GM Part#97542180). This component is a direct OEM replacement designed for precise fitment and reliable performance in compatible vehicles. It is manufactured to high standards to ensure durability and proper function within your vehicle's vacuum system.

The pulley is a critical part of the vacuum pump assembly, which is vital for various vehicle operations, including brake assist. Using genuine Isuzu parts helps maintain the integrity and performance of your vehicle.



An angled view of the black Isuzu Genuine 6.6L Vacuum Pump Pulley, showing its central bore and three weight-reduction holes.

2. COMPATIBILITY

This vacuum pump pulley is specifically designed for the following vehicle models and engine types:

- **Isuzu NRR, NQR, NPR, NPR-HD** models from **2022 to 2026**.
- **Chevy 4500/5500 LCF** vehicles from **2022 to 2026**.
- All compatible vehicles must be equipped with **6.6L Gasoline Engines (L8T)**.
- This pulley is compatible with **New Style Vacuum Pumps**.

Always verify the part number (8-97542-180-1 or 97542180) against your vehicle's existing part or service manual to ensure correct fitment.

Isuzu Vacuum Pump Pulley

Compatible Models

- **ISUZU NPR/NPR HD**
- **ISUZU NRR**
- **Years 2022-2026 Gas 6.6L Engine L96**
- **Chevy 4500/5500 LCF with L96 Motor**
- **Compatible with New Style Vacuum Pumps**



A graphic illustrating the compatibility of the Isuzu Vacuum Pump Pulley with various models including ISUZU NPR/NPR HD, ISUZU NRR, 2022-2026 Gas 6.6L Engine L96, and Chevy 4500/5500 LCF with L96 Motor, compatible with New Style Vacuum Pumps. An image of a truck and the pulley are also shown.

3. INSTALLATION GUIDELINES

Installation of the Isuzu Genuine 6.6L Vacuum Pump Pulley requires specialized tools and technical knowledge. It is strongly recommended that installation be performed by a qualified and certified automotive technician to ensure proper fitment and vehicle safety.

General Installation Advice:

1. **Safety First:** Always ensure the vehicle is safely supported and the engine is off and cooled down before beginning any work. Disconnect the battery to prevent accidental starts.
2. **Consult Service Manual:** Refer to your vehicle's official service manual for detailed, model-specific instructions, torque specifications, and any special tools required for vacuum pump and pulley replacement.
3. **Part Verification:** Before installation, carefully compare the new pulley with the old one and verify the part numbers (8-97542-180-1 or 97542180) to confirm it is the correct replacement.
4. **Cleanliness:** Ensure all mating surfaces are clean and free of debris or old gasket material before installing the new pulley.
5. **Proper Alignment:** Ensure the pulley is correctly aligned with the vacuum pump shaft and any associated belts to prevent premature wear or damage.
6. **Torque Specifications:** Adhere strictly to the torque specifications provided in the service manual for all fasteners to prevent damage or loosening.



A top-down view of the Isuzu Genuine 6.6L Vacuum Pump Pulley, highlighting the central shaft opening and four circular cutouts.

4. OPERATING PRINCIPLES

The vacuum pump pulley is an integral part of the engine's accessory drive system. Its primary function is to transmit rotational power from the engine's crankshaft (via a drive belt) to the vacuum pump. The vacuum pump, in turn, generates vacuum pressure essential for the operation of various vehicle systems, including:

- **Brake Booster:** Provides power assist for the braking system, reducing the effort required to apply the brakes.
- **HVAC Controls:** Operates vacuum-actuated dampers and vents within the heating, ventilation, and air conditioning system.
- **Emission Control Systems:** Powers various valves and actuators in the emission control system.
- **Other Vacuum-Actuated Components:** Depending on the vehicle model, other systems may also rely on vacuum pressure.

A properly functioning pulley ensures consistent and efficient operation of the vacuum pump, which is crucial for vehicle safety and performance.

5. MAINTENANCE

While the vacuum pump pulley itself is a durable component, regular inspection as part of routine vehicle maintenance is recommended to identify potential issues early.

Inspection Points:

- **Visual Inspection:** Check the pulley for any signs of physical damage, cracks, chips, or excessive wear on the grooves where the belt rides.
- **Bearing Noise:** Listen for any unusual noises (e.g., squealing, grinding, rattling) coming from the pulley area when the engine is running. This could indicate a failing bearing.
- **Play/Wobble:** With the engine off and cold, gently try to move the pulley by hand. There should be no excessive play or wobble.
- **Belt Condition:** Inspect the drive belt that connects to the vacuum pump pulley for cracks, fraying, or glazing. Ensure proper belt tension.

If any issues are detected during inspection, it is advisable to have the component assessed by a qualified technician.

6. TROUBLESHOOTING

Problems with the vacuum pump pulley are often indicated by symptoms related to the vacuum pump's operation or unusual noises from the engine bay.

Common Symptoms of a Failing Pulley or Vacuum Pump:

- **Increased Brake Pedal Effort:** A common sign of low vacuum pressure, often due to a failing vacuum pump or issues with its drive mechanism.
- **Unusual Noises:** Squealing, grinding, or rattling sounds from the engine compartment, particularly from the area of the vacuum pump or accessory drive.
- **HVAC System Malfunctions:** Inconsistent or non-responsive HVAC controls that rely on vacuum.
- **Check Engine Light:** While less common for a pulley specifically, a failing vacuum pump could trigger a check engine light related to vacuum system performance.

Troubleshooting Steps:

1. **Listen Carefully:** Try to pinpoint the source of any unusual noises.
2. **Visual Inspection:** As described in the Maintenance section, check the pulley and belt for visible damage or wear.
3. **Professional Diagnosis:** If you suspect a problem with the vacuum pump or its pulley, it is crucial to have the vehicle inspected and diagnosed by a certified mechanic. They can perform vacuum tests and component-specific checks to accurately identify the issue.

7. SPECIFICATIONS

Key specifications for the Isuzu Genuine 6.6L Vacuum Pump Pulley:

Specification	Detail
Manufacturer	Isuzu
Brand	Isuzu
Model	Isuzu
Item Weight	2.2 pounds
Package Dimensions	8 x 8 x 4 inches
Item Model Number	8-97542-180-1
Manufacturer Part Number	8-97542-180-1
OEM Part Number	8-97542-180-1, 97542180
Exterior	OEM Standard

Replacement Part Number

8-97542-180-1

897542180-GM

8-97657-703-0



NOTE:

Please make sure the replacement part number matches the part you are replacing.

A graphic displaying the replacement part numbers for the Isuzu Vacuum Pump Pulley: 8-97542-180-1, 897542180-GM, and 8-97657-703-0. It includes a note to ensure the replacement part number matches the part being replaced, alongside an image of a truck and the pulley.

8. WARRANTY INFORMATION

The Isuzu Genuine 6.6L Vacuum Pump Pulley is backed by a manufacturer's warranty to ensure your peace of mind.

- **Warranty Period:** This product comes with a **1-Year Manufacturer Warranty**.
- **Coverage:** The warranty covers defects in materials and workmanship.
- **Unlimited Mileage:** The warranty is valid for 1 year with unlimited mileage.
- **Genuine Parts Assurance:** Isuzu Genuine Parts are specifically developed for the Isuzu truck product line and are approved for all warranty repairs.

For specific terms and conditions of the warranty, please refer to the official warranty documentation provided with the product or consult an authorized Isuzu dealership.

Isuzu Vacuum Pump Pulley

Advantage



OEM Replacement Part



1-Year Unlimited Mileage Warranty Against Manufacturer Defects



Factory Original Fitment



High-Quality



A graphic highlighting the advantages of the Isuzu Vacuum Pump Pulley: OEM Replacement Part, 1-Year Unlimited Mileage Warranty Against Manufacturer Defects, Factory Original Fitment, and High-Quality. An image of a truck and the pulley are also shown.

9. CUSTOMER SUPPORT

For any questions regarding the Isuzu Genuine 6.6L Vacuum Pump Pulley, including installation, compatibility, or warranty claims, please utilize the following resources:

- **Authorized Isuzu Truck Dealerships:** Isuzu Genuine Parts are supplied only through authorized dealerships. They are your primary resource for technical assistance, genuine parts, and warranty support. You can find your nearest authorized dealership via the official Isuzu Motors website.
- **Vehicle Service Manual:** Always refer to your vehicle's comprehensive service manual for detailed diagrams, troubleshooting guides, and specific repair procedures.
- **Professional Automotive Technicians:** For complex issues or installation, consult a certified automotive technician specializing in Isuzu vehicles.

Please have your vehicle's VIN (Vehicle Identification Number) and the part number (8-97542-180-1 or 97542180) ready when seeking support.

ISUZU

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The official Isuzu Genuine Parts logo, featuring 'ISUZU' in white on a red background, and 'GENUINE PARTS' below it.

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