

Corteco 01031902B

Corteco 01031902B Oil Seal for Manual Gearbox

Model: 01031902B

INTRODUCTION

This manual provides essential information for the proper installation, function, and maintenance of the Corteco 01031902B Oil Seal. This oil seal is designed for use in manual gearbox applications to prevent lubricant leakage and protect internal components from contaminants. Adherence to these instructions will ensure optimal performance and longevity of the seal.

SETUP AND INSTALLATION

Proper installation is critical for the effective operation of the oil seal. Incorrect installation can lead to premature failure and potential damage to the gearbox.

General Precautions

- Ensure the work area is clean and free of debris.
- Always wear appropriate personal protective equipment (PPE), including gloves and eye protection.
- Refer to the vehicle manufacturer's service manual for specific gearbox disassembly and reassembly procedures.
- Do not reuse old oil seals. Always install a new seal.

Installation Steps

1. **Preparation:** Thoroughly clean the seal housing bore and the shaft surface where the new seal will be installed. Remove any old sealant residue or corrosion. Inspect the shaft for any nicks, burrs, or wear grooves that could damage the new seal.
2. **Lubrication:** Lightly lubricate the inner lip of the new oil seal with clean gearbox oil. This aids in installation and prevents initial dry running.
3. **Positioning:** Carefully position the new Corteco 01031902B oil seal squarely over the shaft and into the housing bore. Ensure the seal is oriented correctly (typically with the spring-loaded lip facing the fluid).
4. **Pressing:** Using a suitable seal installation tool or a socket of appropriate diameter, gently and

evenly press the seal into the bore until it is fully seated. Avoid cocking the seal or damaging its lips. Never use a hammer directly on the seal without a proper installation tool.

5. **Verification:** Once installed, visually inspect the seal to ensure it is flush with the housing and that the sealing lip is not inverted or damaged.



Image: Side view of the Corteco 01031902B Oil Seal, showing its profile and sealing lip. This view helps in understanding the seal's construction and proper orientation during installation.



Image: Top view of the Corteco 01031902B Oil Seal, highlighting the outer diameter and the inner sealing surface. This perspective is useful for verifying the seal's dimensions and integrity before installation.

OPERATING PRINCIPLES

Once correctly installed, the Corteco 01031902B Oil Seal functions by creating a dynamic seal between a

rotating shaft and a stationary housing. The primary sealing lip, often reinforced by a garter spring, maintains constant contact with the shaft surface, preventing the escape of gearbox lubricant. The integrated dust lip provides an additional barrier against external contaminants such as dirt and moisture, protecting the main sealing lip and extending the seal's lifespan.

MAINTENANCE

Oil seals are wear items and do not typically require routine maintenance beyond periodic inspection. Their lifespan is influenced by operating conditions, shaft surface finish, and proper installation.

Inspection

- During any gearbox service, visually inspect the area around the oil seal for signs of leakage.
- Check for excessive dirt or debris accumulation around the dust lip.

Replacement

Replace the oil seal immediately if any signs of leakage are observed. It is also recommended to replace the oil seal whenever the gearbox is disassembled for other repairs, as the seal's integrity may be compromised during removal or reinstallation.

TROUBLESHOOTING

Most issues with oil seals relate to leakage. Understanding potential causes can help in diagnosis.

Common Issues and Solutions

- **Leakage from the seal:**
 - **Cause:** Improper installation (cocked seal, damaged lip), worn seal, damaged shaft surface (grooves, scratches), excessive pressure in the gearbox, incorrect seal size.
 - **Solution:** Remove and inspect the seal and shaft. Replace the seal, ensuring correct installation. Address any shaft damage or gearbox pressure issues.
- **Premature wear of the seal:**
 - **Cause:** Abrasive contaminants, lack of lubrication, excessive heat, shaft runout, improper material compatibility.
 - **Solution:** Ensure proper sealing against contaminants, verify adequate lubrication, check for proper gearbox ventilation, inspect shaft for runout, and confirm seal material (ACM) is suitable for the application.

SPECIFICATIONS

The Corteco 01031902B Oil Seal is manufactured to precise dimensions and material specifications to ensure reliable performance.

- **Outer diameter 1:** 62 mm
- **Inner diameter 1:** 42 mm
- **Height 1:** 8 mm
- **Material:** ACM (Polyacrylate)
- **Dust Cover:** With dust lip

- **OEM Part Numbers:** 0239975447, 0239978747



Image: The Corteco 01031902B Oil Seal shown both in its branded packaging and as a standalone component. This image provides a complete view of the product as received and its physical appearance.

WARRANTY INFORMATION

For specific warranty terms and conditions related to the Corteco 01031902B Oil Seal, please refer to the documentation provided by your point of purchase or contact Corteco directly. Warranty coverage typically addresses manufacturing defects and does not cover damage resulting from improper installation, misuse, or normal wear and tear.

SUPPORT

If you require technical assistance, have questions regarding compatibility, or need further information about the Corteco 01031902B Oil Seal, please contact Corteco customer support or your authorized distributor. When contacting support, please have the product model number (01031902B) and any relevant vehicle information available.

For more information, you may visit the official Corteco website: www.corteco.com