

## SKF 41287

# SKF 41287 LDS & Small Bore Seal User Manual

Model: 41287 | Brand: SKF

## 1. INTRODUCTION

The SKF 41287 LDS & Small Bore Seal is a precision-engineered component designed for effective sealing in various industrial and automotive applications. This manual outlines the necessary procedures for its proper handling, installation, operation, and maintenance to ensure optimal performance and extended service life.



Figure 1: SKF 41287 LDS & Small Bore Seal. This image shows the circular seal with a green outer ring and a black inner lip, designed for effective sealing.

## 2. PRODUCT OVERVIEW

The SKF 41287 is a specific type of lip seal, characterized by its R Lip Code and CRWH1 Style. It is designed for applications requiring precise sealing around a rotating shaft within a bore. Its dimensions are critical for proper fit and function: 4.125 inches shaft diameter, 5.751 inches bore diameter, and 0.438 inches width.

### **What's in the Box:**

- 1 x SKF 41287 LDS & Small Bore Seal



Figure 2: An individual holding an SKF product box, representative of the packaging for SKF components.

### 3. SETUP AND INSTALLATION

Proper installation is crucial for the longevity and effectiveness of the seal. Follow these general guidelines:

1. **Preparation:** Ensure the shaft and bore surfaces are clean, free of burrs, scratches, or any contaminants. Lubricate the seal lip and the shaft with the system's operating fluid or a compatible lubricant before installation.
2. **Alignment:** Carefully align the seal with the bore. Avoid cocking the seal during insertion.
3. **Installation Tool:** Use a proper seal installation tool that applies even pressure around the seal's outer diameter. Avoid using sharp objects or hammers directly on the seal, as this can damage the seal or distort its shape.
4. **Seating:** Press the seal firmly and evenly until it is fully seated in the bore. Ensure the lip is facing the correct direction relative to the fluid being sealed.
5. **Inspection:** After installation, visually inspect the seal for any signs of damage, crimping, or improper seating.

### 4. OPERATING PRINCIPLES

The SKF 41287 LDS & Small Bore Seal functions by creating a dynamic seal between a rotating shaft and a stationary housing. The flexible lip of the seal maintains continuous contact with the shaft surface, preventing the leakage of fluid or the ingress of contaminants. The specific lip design (R Lip Code, CRWH1 Style) is optimized for particular operating conditions, including pressure, temperature, and shaft speed, to ensure reliable sealing performance.

### 5. MAINTENANCE

Seals are wear components and require periodic inspection and replacement. Regular maintenance helps prevent unexpected failures and system downtime.

- **Regular Inspection:** Periodically inspect the area around the seal for any signs of leakage, which may indicate seal wear or damage.
- **Environmental Factors:** Ensure the operating environment is free from excessive dust, debris, or

abrasive particles that can accelerate seal wear.

- **Fluid Compatibility:** Verify that the operating fluid is compatible with the seal material to prevent degradation.
- **Replacement:** Replace the seal at recommended service intervals or immediately if any signs of damage or leakage are observed. Always use a new seal for replacement; do not reuse old seals.

## 6. TROUBLESHOOTING

Common issues related to seals and their potential causes:

- **Leakage:**
  - *Cause:* Improper installation, damaged seal lip, worn seal, shaft surface damage, excessive pressure, incorrect lubricant.
  - *Solution:* Reinstall correctly, replace seal, repair shaft, check system pressure, use correct lubricant.
- **Premature Wear:**
  - *Cause:* Abrasive contaminants, high temperature, chemical incompatibility, excessive shaft runout, insufficient lubrication.
  - *Solution:* Improve filtration, manage temperature, verify fluid compatibility, check shaft alignment, ensure adequate lubrication.
- **Seal Extrusion:**
  - *Cause:* Excessive pressure, incorrect gland design, wrong seal material.
  - *Solution:* Reduce pressure, modify gland, select appropriate seal material.

## 7. SPECIFICATIONS

Attribute	Value
Manufacturer	SKF
Brand	SKF
Model	SKF
Item Weight	2.4 ounces
Package Dimensions	6.7 x 6.7 x 0.8 inches
Item Model Number	41287
Exterior	Machined
Manufacturer Part Number	41287
Shaft Diameter	4.125 inches
Bore Diameter	5.751 inches
Width	0.438 inches

## 8. WARRANTY INFORMATION




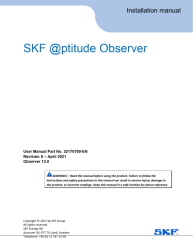
SKF products are manufactured to high-quality standards. Specific warranty terms and conditions are typically provided with your purchase documentation. Please refer to the warranty statement included with your product or contact SKF customer service for detailed information regarding warranty coverage.



## 9. SUPPORT

For technical assistance, product inquiries, or support, please contact SKF customer service. You can find contact information on the official SKF website or through your authorized SKF distributor. For more information about SKF products, visit the [SKF Store on Amazon](#).

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### Related Documents - 41287

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