

National 204035

National 204035 Oil Seal Instruction Manual

Model: 204035

1. PRODUCT OVERVIEW

The National 204035 Oil Seal is engineered to provide reliable sealing solutions for various automotive applications. This component is designed to prevent lubricant leakage and protect against contaminants, ensuring optimal performance and longevity of the sealed system. National has a long-standing reputation for delivering advanced sealing technology.

1.1. What's in the Box

- One (1) National 204035 Multi Purpose Seal

2. PRODUCT FEATURES

- **Design Type:** Springless, single-lip configuration for effective sealing.
- **Temperature Range:** Operates efficiently across a broad temperature spectrum, from -40°F to 225°F (-40°C to 107°C).
- **Low Temperature Capability:** Maintains flexibility and sealing integrity in cold conditions.
- **Hydrocarbon Fluid Resistance:** Exhibits low swell when exposed to hydrocarbon fluids, enhancing durability.
- **Reliable Performance:** Engineered for consistent and dependable operation in various repair scenarios.

3. INSTALLATION GUIDELINES

Proper installation is crucial for the optimal performance and longevity of the National 204035 Oil Seal. This section provides general guidelines. Always refer to the specific service manual for your vehicle or equipment for detailed, model-specific instructions.

1. **Preparation:** Ensure the mating surfaces are clean, dry, and free from any burrs, nicks, or contaminants. Inspect the shaft for wear or damage that could compromise the seal.
2. **Lubrication:** Lightly lubricate the seal lip and the shaft with the appropriate lubricant (e.g., engine oil, transmission fluid) compatible with the seal material and application.

3. **Installation Tool:** Use a specialized seal installation tool or a suitable driver to press the seal squarely into its bore. Avoid using sharp objects or excessive force that could damage the seal.
4. **Alignment:** Ensure the seal is installed straight and fully seated in the bore. Uneven installation can lead to premature failure.
5. **Final Inspection:** After installation, visually inspect the seal to confirm it is correctly seated and undamaged.



Figure 1: Front view of the National 204035 Oil Seal. This image shows the circular design with a red outer casing and a black inner sealing lip.

4. OPERATING PRINCIPLES

The National 204035 Oil Seal functions by creating a barrier between two components, typically a rotating shaft and a stationary housing. Its single-lip design maintains contact with the shaft, preventing the escape of lubricants and blocking the ingress of dirt, moisture, and other contaminants into the system. The material composition and design ensure consistent sealing performance under specified temperature and fluid conditions.

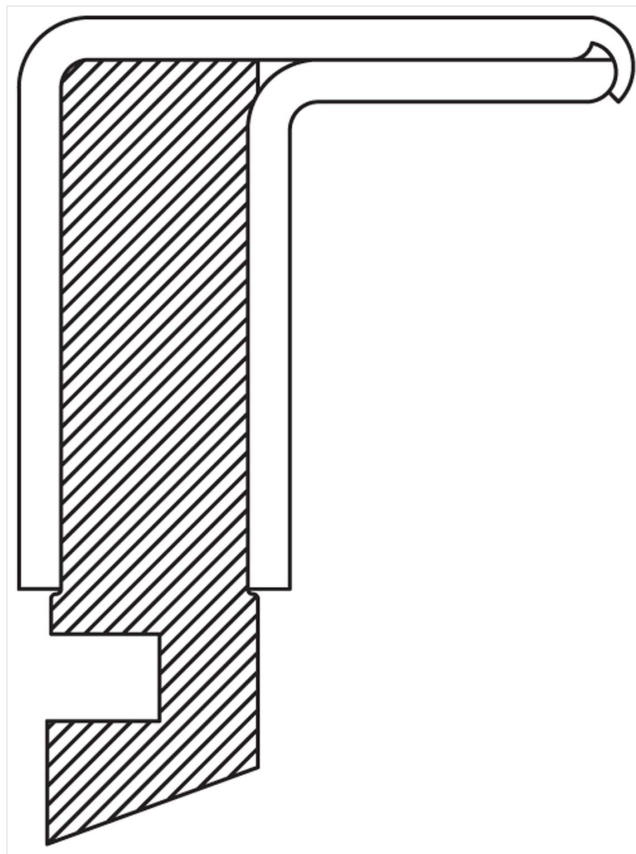


Figure 2: Cross-section diagram illustrating the internal structure and sealing mechanism of a typical oil seal. This diagram highlights the lip design and how it interfaces with a shaft.

5. MAINTENANCE

Oil seals are generally considered maintenance-free components once properly installed. However, regular inspection of the sealed area during routine vehicle or equipment maintenance is recommended. Look for signs of leakage, cracking, or hardening of the seal material. If any issues are observed, the seal should be replaced promptly to prevent further damage to the system.

- **Visual Inspection:** Periodically check for oil leaks around the seal location.
- **Environmental Factors:** Protect the sealed area from extreme temperatures, harsh chemicals, and abrasive materials that could degrade the seal over time.
- **Replacement:** Replace seals as part of preventative maintenance during major overhauls or when signs of wear or failure are detected.

6. TROUBLESHOOTING

If you experience issues after installing the National 204035 Oil Seal, consider the following common troubleshooting steps:

- **Leakage Immediately After Installation:**
 - *Cause:* Improper installation (e.g., seal not seated squarely, damaged during installation).
 - *Solution:* Re-inspect the seal and mating surfaces. If damaged, replace the seal and ensure correct installation procedures are followed.
- **Leakage After Some Operating Time:**
 - *Cause:* Seal wear, shaft wear, or degradation due to environmental factors.
 - *Solution:* Inspect the seal and shaft for wear. Replace the seal if worn. Address any shaft surface imperfections if present.

- **Unusual Noise:**

- *Cause:* Seal lip running dry or improper lubrication.
- *Solution:* Ensure adequate lubrication during installation and operation. Verify the correct lubricant is being used.

7. SPECIFICATIONS

Attribute	Detail
Brand	National
Model Number	204035
Design Type	Springless; single-lip
Temperature Range	-40°F to 225°F / -40°C to 107°C
Vehicle Service Type	Car, Truck
Item Weight	0.01 Ounces
Manufacturer Part Number	204035
UPC	724956068159

8. WARRANTY AND SUPPORT

For specific warranty information regarding the National 204035 Oil Seal, please refer to the official National product documentation or contact National customer support directly. General product support and technical assistance can be obtained through the manufacturer's official channels.

For further assistance, please visit the [National brand page on Amazon](#) or their official website.