

## Yellow Jacket 41133

# Yellow Jacket 41133 Piston O-ring Seal User Manual

MODEL: 41133

### Introduction

This manual provides essential information for the proper installation, operation, and maintenance of the Yellow Jacket 41133 Piston O-ring Seal. This component is designed as a replacement part for the Yellow Jacket titan manifold piston assembly, ensuring a secure and leak-free seal within your system.

### Setup and Installation

The Yellow Jacket 41133 is a piston O-ring seal, primarily used for replacement in Yellow Jacket manifold gauge sets. Proper installation is crucial for preventing leaks and ensuring accurate system readings.

#### Package Contents:

- 1 x Yellow Jacket 41133 Piston O-ring Seal

#### Installation Steps:

1. **Preparation:** Ensure the manifold system is depressurized and any refrigerants are safely recovered.
2. **Disassembly:** Carefully disassemble the manifold's piston assembly to access the old O-ring seal. Refer to your specific manifold's service manual for detailed disassembly instructions.
3. **Inspection:** Clean the piston and the O-ring groove thoroughly. Inspect for any damage or debris that could compromise the new seal.
4. **Lubrication:** Lightly lubricate the new Yellow Jacket 41133 O-ring seal with a compatible refrigerant oil or silicone grease. This aids in installation and helps prevent damage to the O-ring.
5. **Installation:** Carefully seat the new O-ring seal into its designated groove on the piston. Ensure it is not twisted or pinched.
6. **Reassembly:** Reassemble the piston assembly and manifold components, ensuring all parts are correctly aligned and tightened to the manufacturer's specifications.

7. **Leak Check:** After reassembly, perform a thorough leak check using appropriate methods (e.g., nitrogen pressure test, leak detector) to confirm the integrity of the new seal.



Image: The Yellow Jacket 41133 Piston O-ring Seal, a brass component with two black O-rings.

## Operation

Once properly installed, the Yellow Jacket 41133 Piston O-ring Seal functions passively within the manifold's piston assembly. Its primary role is to create a tight seal, preventing refrigerant or vacuum leaks when the manifold valves are operated. A correctly installed O-ring ensures that the manifold maintains pressure or vacuum integrity, allowing for accurate system diagnostics and charging.

The O-ring facilitates smooth movement of the piston while maintaining a seal, which is critical for the precise control of refrigerant flow during HVAC/R service operations.

## Maintenance

Regular maintenance of your manifold gauge set, including the piston O-ring seal, is essential for prolonged performance and accuracy.

### Inspection:

- Periodically inspect the O-ring seal for signs of wear, cracking, flattening, or degradation. This can be done during routine manifold cleaning or when experiencing minor leaks.
- Look for any visible damage or deformation that might compromise the seal's integrity.

### Cleaning:

- Keep the piston and O-ring groove clean and free of debris, dirt, or old lubricant residue.
- Use a clean, lint-free cloth for cleaning. Avoid harsh chemicals that could damage the O-ring material.

### Replacement:

- Replace the O-ring seal immediately if any signs of wear or damage are observed, or if persistent leaks occur despite proper tightening.
- The lifespan of an O-ring can vary depending on usage frequency, type of refrigerants handled, and exposure to extreme temperatures. Proactive replacement can prevent unexpected system failures.

## Troubleshooting

If you experience issues after installing or using the Yellow Jacket 41133 Piston O-ring Seal, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Leakage from manifold valve	O-ring improperly seated or twisted. O-ring damaged during installation. Old O-ring residue or debris in groove. Piston or manifold housing damaged. Insufficient lubrication.	Disassemble, inspect, and re-seat the O-ring. Replace the O-ring if damaged. Clean the O-ring groove thoroughly before installation. Inspect piston and housing for damage; replace manifold if necessary. Apply a thin layer of compatible lubricant to the O-ring.
Difficulty turning valve knob	O-ring not properly lubricated. O-ring is too thick or incorrect size (unlikely for genuine part). Piston or valve stem misalignment.	Disassemble and re-lubricate the O-ring. Ensure correct part number (41133) is used. Check for proper alignment during reassembly.

If problems persist after attempting these solutions, it may indicate an issue with other components of your manifold or require professional assistance.

## Specifications

Attribute	Detail
Model Number	41133
Part Number	41133
Brand	Yellow Jacket
Material	Rubber or Elastomer (O-ring), Brass (Piston)
Included Components	O-ring seal (as part of piston assembly)
Product Dimensions	Approximately 1 x 1 x 1 inches
Item Weight	Approximately 3.2 ounces
Manufacturer	Ritchie
UPC	068680041133, 686800411330

## Warranty and Support

As a replacement part, the Yellow Jacket 41133 Piston O-ring Seal typically falls under the warranty terms of the original manifold gauge set or specific replacement part policies. For detailed warranty information, please refer to the documentation provided with your Yellow Jacket manifold or contact Yellow Jacket customer support directly. For technical assistance, replacement part inquiries, or further support, please visit the official Yellow Jacket website or contact their customer service department. Always ensure you are using genuine Yellow Jacket replacement parts to maintain product integrity and performance.

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This manual is for informational purposes only. Always follow safety guidelines and professional practices when working with HVAC/R equipment.