

Champion Z799

Champion Ring Set Instruction Manual

Model: Z799

PRODUCT OVERVIEW

This document provides essential information for the Champion Ring Set, complete, designed for 10/15 Pumps. This set includes critical components for maintaining the performance and efficiency of compatible pump models. It is intended for use by qualified technicians or individuals with appropriate mechanical knowledge.

PRODUCT CONTENTS

The Champion Ring Set typically includes the following components:

- Piston Ring
- Ring Expander
- Rail Ring
- Expander Ring



Figure 1: Components of the Champion Ring Set. This image displays a collection of various circular rings, including solid black rings and two gold-colored, coiled expander rings, which are part of the complete ring set for pump maintenance.

COMPATIBILITY

This ring set is compatible with a range of Champion and Gardner Denver pumps. Verify your pump's model number against the lists below to ensure compatibility.

Compatible Grainger Item Numbers:

4XA59 thru 4XA62, 4XA67, 4XA68, 1WD46, 1WD48, 1WD54, 1WD55, 1WD57, 1WD58, 1WD61, 1WD63 thru 1WD65, 13G706 thru 13G709, 1WD21, 1WD50, 1WD52, 1WD67, 1WD68, 1WD70, 1WD71, 1WD72, 1WD73, 1WD74, 1WD75, 1WD76, 1WD78, 1WD22, 4XA63, 1WD80, 4XA64, 1WD82, 4XA65, 1WD84, 4XA66, 1WD86, 1WD23, WWBER5-1, WWBER5-2, WWBER7F-1, WWBER7F-2, WWHER5-1, WWHER5-2, WWHER7F, WWHER7F-1

Compatible Manufacturer Model Numbers:

RV15A, RV30A, PL15A, RP15

SETUP AND INSTALLATION

Installation of piston rings requires specialized knowledge and tools. It is highly recommended that installation be performed by a qualified technician or professional. Improper installation can lead to pump damage or reduced performance.

General Guidelines:

1. **Safety First:** Always disconnect power to the pump and relieve any pressure before beginning work. Wear appropriate personal protective equipment (PPE).
2. **Consult Pump Manual:** Refer to your specific pump's service manual for detailed, model-specific installation instructions, torque specifications, and clearances.
3. **Cleanliness:** Ensure all components and work areas are meticulously clean to prevent contamination.
4. **Proper Orientation:** Piston rings often have specific top/bottom orientations. Install them correctly as per the pump manufacturer's guidelines.
5. **Lubrication:** Lightly lubricate new rings and piston grooves with clean pump oil before installation.
6. **Careful Handling:** Avoid bending or twisting rings excessively during installation, as this can cause damage.

OPERATING CONSIDERATIONS

Once installed, the ring set functions as an integral part of your pump's piston assembly. Proper operation relies on the correct installation and the overall health of the pump system.

- **Break-in Period:** Some pump manufacturers recommend a break-in period after ring replacement. Consult your pump's manual for specific recommendations.
- **System Monitoring:** Monitor pump performance after ring replacement. Look for consistent pressure, flow, and absence of unusual noises or leaks.
- **Fluid Quality:** Ensure the pump operates with clean, appropriate fluids as specified by the pump manufacturer to prevent premature wear of the rings and other components.

MAINTENANCE

Regular maintenance is crucial for extending the lifespan of your pump and its components, including the piston rings.

- **Inspection:** During routine pump servicing, inspect the piston rings for signs of wear, scoring, or breakage.
- **Replacement Intervals:** Piston rings are wear items. Their lifespan depends on operating conditions, fluid quality, and pump usage. Consult your pump's service manual for recommended replacement intervals.
- **Preventative Measures:** Adhere to recommended oil change schedules and filter replacements to minimize abrasive wear on the rings.

TROUBLESHOOTING

Worn or damaged piston rings can manifest in several ways, indicating a need for inspection and potential replacement.

Common Symptoms of Worn Rings:

- Reduced pump efficiency or output pressure.
- Increased oil consumption (if applicable to pump type).
- Excessive blow-by or air leakage past the piston.
- Unusual noises from the pump's piston area.

If you experience any of these symptoms, it is advisable to have the pump inspected by a qualified technician to diagnose the issue and determine if ring replacement is necessary.

SPECIFICATIONS

Attribute	Detail
Item Model Number	Z799
Manufacturer	CHAMPION
Package Dimensions	21 x 18 x 18 inches; 4.01 Pounds
ASIN	B00VUBRUJC
First Available Date	April 9, 2015

WARRANTY AND SUPPORT

For specific warranty information regarding the Champion Ring Set, please refer to the documentation provided with your purchase or contact the seller directly. Warranty terms can vary based on region and retailer.

For technical support or further inquiries, please contact Champion customer service or visit their official website. You may find additional resources and contact information via the [Champion Store on Amazon](#).