

Annovi Reverberi AR550190

Annovi Reverberi AR550190 Buna Accumulator Diaphragm Instruction Manual

For AR30, AR40, AR70, AR115, and AR135 Diaphragm Pumps

1. INTRODUCTION

This instruction manual provides essential information for the proper installation, function, and maintenance of the Annovi Reverberi AR550190 Buna Accumulator Diaphragm. This component is designed as a replacement part for specific Annovi Reverberi diaphragm pumps, ensuring optimal performance and longevity of your equipment. Please read this manual thoroughly before attempting any installation or maintenance procedures.

2. SAFETY INFORMATION

Always prioritize safety when working with pump systems. Failure to follow these safety guidelines may result in personal injury or damage to equipment.

- **Depressurize System:** Before beginning any work, ensure the pump system is completely depressurized and all power sources are disconnected.
- **Wear Protective Gear:** Use appropriate personal protective equipment (PPE), including safety glasses and gloves.
- **Consult Pump Manual:** Refer to the specific instruction manual for your Annovi Reverberi pump model for detailed safety procedures and disassembly/assembly instructions.
- **Professional Installation:** If you are unsure about any step, seek assistance from a qualified technician.
- **Material Compatibility:** The AR550190 diaphragm is made of Buna. Ensure this material is compatible with the fluids being pumped.

3. PRODUCT OVERVIEW

The Annovi Reverberi AR550190 is a Buna accumulator diaphragm designed to maintain consistent pressure and absorb pulsations within compatible diaphragm pump systems. It is a critical component for the smooth and efficient operation of your pump.



Image: Three Annovi Reverberi AR550190 Buna Accumulator Diaphragms. These diaphragms are essential for maintaining pressure stability in compatible pump systems.

3.1. Compatible Pump Models

This AR550190 Buna Accumulator Diaphragm is compatible with the following Annovi Reverberi Diaphragm Pumps:

- AR30-SP, AR30-GR3/4-GCI, AR30-SP/A3/4
- AR40-SP, AR40-GR3/4-GCI, AR40-SP/A3/4
- AR70BP-SP, AR70BP-C, AR70BP-GR3/4
- AR115BP-SP, AR115BP-C, AR115SS, AR115BP-GR3/4
- AR135BP-C, AR135BP-SP, AR135BP-GR3/4, AR135BP-GR1

4. INSTALLATION (SETUP)

Follow these general steps for replacing the accumulator diaphragm. Always refer to your specific pump's service manual for detailed instructions and diagrams.

1. Prepare the Pump:

- Turn off the pump and disconnect it from all power sources.
- Close all inlet and outlet valves to isolate the pump.
- Depressurize the system completely. This may involve opening a drain valve or running the pump briefly with the outlet open until pressure drops to zero.

2. **Access the Accumulator:** Locate the accumulator on your pump. It is typically a spherical or cylindrical component attached to the pump head.

3. **Remove the Accumulator Cover:** Carefully unbolt or unscrew the accumulator cover. Be prepared for any residual fluid to escape.

4. **Remove the Old Diaphragm:** Gently remove the old diaphragm from its housing. Inspect the housing for any debris or damage and clean as necessary.

5. **Install the New Diaphragm:** Place the new Annovi Reverberi AR550190 Buna Accumulator Diaphragm into the housing, ensuring it is seated correctly and without creases or folds.

6. **Reassemble the Accumulator:** Replace the accumulator cover and securely fasten all bolts or screws. Tighten fasteners according to the torque specifications in your pump's manual, if available, to ensure a proper seal.

7. Repressurize and Test:

- Slowly open the inlet and outlet valves.
- Reconnect power and start the pump.
- Monitor the system for any leaks around the accumulator and observe pump pressure for stability.

- Adjust accumulator pre-charge pressure if necessary, following your pump's manual.

5. OPERATION CONSIDERATIONS

After successful installation, the accumulator diaphragm works automatically to dampen pressure fluctuations. Ensure the pump operates within its specified pressure range. Any unusual noises, pressure drops, or leaks should be investigated immediately.

6. MAINTENANCE

Regular inspection of the accumulator diaphragm and its housing is recommended to ensure continued optimal performance of your pump system.

- **Visual Inspection:** Periodically check the accumulator for any signs of external leaks or damage to the housing.
- **Diaphragm Condition:** If the pump exhibits erratic pressure or excessive pulsation, the diaphragm may need inspection or replacement. Refer to the pump's manual for recommended service intervals.
- **Accumulator Pre-charge:** The air pre-charge pressure in the accumulator should be checked and adjusted as per the pump manufacturer's specifications. This typically requires a specialized gauge.

7. TROUBLESHOOTING

If you experience issues after installing the new diaphragm, consider the following common troubleshooting steps:

Problem	Possible Cause	Solution
Pump Pulsation / Erratic Pressure	Incorrect accumulator pre-charge pressure.	Check and adjust accumulator pre-charge pressure according to pump specifications.
	Diaphragm not seated correctly.	Depressurize, disassemble, and re-seat the diaphragm.
Leaks around Accumulator	Improperly tightened accumulator cover.	Ensure cover bolts are tightened to specified torque.
	Damaged O-ring or gasket (if applicable).	Replace O-ring or gasket.
	Diaphragm damage (unlikely if new).	Inspect diaphragm for manufacturing defects.

If problems persist, consult your pump's specific service manual or contact a qualified service technician.

8. SPECIFICATIONS

- **Part Number:** AR550190
- **Material:** Buna
- **Color:** Black
- **Approximate Dimensions:** 4 x 4 x 2 inches

- **Approximate Item Weight:** 2 pounds (for a pack of 2)
- **Compatibility:** Annovi Reverberi AR30, AR40, AR70, AR115, AR135 Diaphragm Pumps

9. WARRANTY AND SUPPORT

For warranty information regarding the Annovi Reverberi AR550190 Buna Accumulator Diaphragm, please refer to the terms provided by your original point of purchase or the official Annovi Reverberi documentation. For technical support or further assistance, contact the authorized distributor or manufacturer directly.