

Sloan A-1041-A

Sloan Royal A-1041-A Water Closet Diaphragm Assembly 1.6 GPF Instruction Manual

Model: A-1041-A (Part No. 3301122)

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1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of the Sloan Royal A-1041-A Water Closet Diaphragm Assembly 1.6 GPF. This assembly is designed as a replacement part for Sloan Royal Flushometers, ensuring proper water usage and efficient flushing.

The A-1041-A diaphragm assembly features a PERMEX Synthetic rubber diaphragm and a Dual-Filtered Fixed Bypass, engineered to deliver precise flushing volumes for 1.6 gallons per flush (GPF) water closets.

2. SAFETY INFORMATION

Always observe basic safety precautions when working with plumbing systems. Failure to do so may result in personal injury or property damage.

- Turn off the main water supply before beginning any installation or repair work.
- Wear appropriate personal protective equipment, such as safety glasses and gloves.
- Ensure all connections are secure to prevent leaks.
- If you are unsure about any step, consult a qualified plumber.

3. PRODUCT OVERVIEW

The Sloan Royal A-1041-A Water Closet Diaphragm Assembly is a critical component within a Royal Flushometer, regulating water flow for each flush cycle. It consists of a durable PERMEX synthetic rubber diaphragm and a dual-filtered fixed bypass for consistent performance.



Figure 1: Top view of the Sloan Royal A-1041-A Water Closet Diaphragm Assembly. This image shows the green PERMEX diaphragm and the overall structure of the assembly from above.



Figure 2: Bottom view of the Sloan Royal A-1041-A Water Closet Diaphragm Assembly. This image provides a view of the underside of the assembly, highlighting its internal components and bypass mechanism.

Royal[®]

The first of its kind. The best in its class.



Figure 3: Exploded view of a typical Sloan Royal Flushometer. The diaphragm assembly is clearly visible as a key internal component, located beneath the cover and above the main valve body. This illustration helps in understanding its placement within the flushometer.

3.1 Compatibility

This diaphragm assembly is specifically designed for use with Sloan Royal Flushometers. It is a 1.6 GPF (Gallons Per Flush) model for water closets. Always verify the GPF rating of your existing flushometer to ensure proper compatibility and function. Other Royal water closet diaphragm replacements are available in 1.28 GPF and 3.5 GPF, and urinal models in 0.125 GPF, 0.5 GPF, 1.0 GPF, and 1.5 GPF.

4. INSTALLATION INSTRUCTIONS

These instructions outline the general procedure for replacing a diaphragm assembly in a Sloan Royal Flushometer. Specific flushometer models may have minor variations.

1. **Turn off Water Supply:** Locate the control stop on the flushometer (typically on the right side, as shown in Figure 3) and turn it clockwise with a screwdriver until the water supply is completely shut off. Flush the fixture to relieve any remaining pressure.
2. **Remove Flushometer Cover:** Unscrew the top cover of the flushometer. This may require a spud wrench or similar tool.
3. **Remove Old Diaphragm Assembly:** Carefully lift out the old diaphragm assembly from the flushometer body. Inspect the inside of the flushometer for any debris or mineral buildup and clean if necessary.
4. **Install New Diaphragm Assembly:** Place the new Sloan Royal A-1041-A diaphragm assembly into the flushometer body, ensuring it is seated correctly. The green PERMEX diaphragm should face upwards.
5. **Replace Flushometer Cover:** Screw the top cover back onto the flushometer body. Hand-tighten first, then use a wrench to secure it, but do not overtighten.
6. **Restore Water Supply:** Slowly open the control stop by turning it counter-clockwise. Listen for water filling the flushometer.
7. **Test Flush:** Once the water supply is fully restored, test the flushometer several times to ensure proper operation and check for any leaks.

5. OPERATION

The Sloan Royal A-1041-A diaphragm assembly operates automatically within the Royal Flushometer. When the flush handle is activated, it momentarily releases pressure above the diaphragm, allowing water to flow through the flushometer and into the water closet. Once the handle is released, pressure equalizes, and the diaphragm reseats, stopping the water flow after the predetermined 1.6 GPF volume has been delivered.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Sloan Royal Flushometer and its diaphragm assembly.

- **Periodic Inspection:** Periodically inspect the flushometer for signs of leaks or inconsistent flushing.
- **Cleaning:** If water quality is poor, mineral deposits can accumulate. Disassemble the flushometer (following installation steps 1-3) and gently clean the diaphragm assembly and flushometer body with a soft brush and mild soap. Avoid harsh chemicals.
- **Genuine Parts:** To extend the life and ensure the highest performance of your Sloan products, always use Sloan Genuine Parts for replacements. The A-1041-A is a genuine Sloan part designed and tested to Sloan specifications.

Your browser does not support the video tag.

Video: Sloan Genuine Parts. This video highlights the importance of using authentic Sloan replacement parts for optimal performance and longevity of your Sloan plumbing fixtures.

7. TROUBLESHOOTING

This section addresses common issues related to flushometer diaphragm assemblies.

Problem	Possible Cause	Solution
Continuous Water Flow / Leakage	Worn or damaged diaphragm assembly; debris under diaphragm.	Replace diaphragm assembly (A-1041-A); clean flushometer body and diaphragm seating area.
Insufficient Flush Volume	Clogged bypass in diaphragm; low water pressure; incorrect GPF diaphragm.	Clean or replace diaphragm assembly; check water supply pressure; ensure correct 1.6 GPF diaphragm is installed.
Flushometer Does Not Flush	Control stop closed; handle assembly issue; severely clogged diaphragm.	Open control stop; inspect/repair handle assembly; replace diaphragm assembly.

8. SPECIFICATIONS

Feature	Detail
Model Number	A-1041-A
Part Number	3301122
Brand	Sloan
Flush Volume	1.6 GPF (Gallons Per Flush)
Application	Water Closet Flushometers
Diaphragm Material	PERMEX Synthetic Rubber
Bypass Type	Dual-Filtered Fixed Bypass
Item Dimensions (L x W x H)	3.3 x 3.3 x 2.8 inches
Item Weight	1.6 ounces
UPC	671254258020

9. WARRANTY & SUPPORT

For detailed warranty information and technical support, please refer to the official Sloan website or contact Sloan customer service directly. Using genuine Sloan parts, such as the A-1041-A diaphragm assembly, helps maintain product warranty and ensures optimal performance.

Manufacturer: Sloan Valve Co.

Website: www.sloan.com (Note: This is a placeholder link, please refer to the manufacturer's official documentation for the exact support contact information.)