

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

- › [Autotrol](#) /
- › [Autotrol 1033444 Internal Turbine Wheel for Performa Valves User Manual](#)

Autotrol 1033444

Autotrol 1033444 Internal Turbine Wheel for Performa Valves User Manual

INTRODUCTION

This manual provides essential information for the installation, function, maintenance, and troubleshooting of the Autotrol 1033444 Internal Turbine Wheel, specifically designed for use with Autotrol Performa Valves. Please read these instructions carefully before proceeding with installation or maintenance.

PRODUCT OVERVIEW

The Autotrol 1033444 is a critical internal component of Autotrol Performa Series water softener control valves. This turbine wheel is responsible for measuring water flow, which is essential for accurate regeneration cycles in water softening systems.



Image: Autotrol 1033444 Internal Turbine Wheel. This image shows the compact design of the turbine wheel, featuring its central spindle and multiple blades, ready for installation within a Performa valve.

SETUP AND INSTALLATION

Installation of the Autotrol 1033444 Internal Turbine Wheel requires careful handling and adherence to the following steps. It is recommended that this procedure be performed by a qualified technician or an individual familiar with water softener valve maintenance.

1. **Safety First:** Before beginning, ensure the water supply to the softener is turned off and the system is depressurized. Bypass the water softener if possible.

2. **Access the Valve:** Depending on your specific Performa valve model, you may need to remove the valve cover or other components to gain access to the turbine assembly area. Refer to your specific Performa valve's service manual for detailed disassembly instructions.
3. **Remove Old Turbine:** Carefully locate and remove the existing turbine wheel. Note its orientation for correct installation of the new part.
4. **Inspect Area:** Clean any debris or mineral buildup from the turbine housing area within the valve. Ensure all seals and O-rings are in good condition. Replace if necessary.
5. **Install New Turbine:** Gently insert the new Autotrol 1033444 turbine wheel into its designated position. Ensure it spins freely and is seated correctly. Do not force the component.
6. **Reassemble Valve:** Reassemble the valve components, ensuring all connections are secure and seals are properly seated.
7. **Restore Water Supply:** Slowly open the water supply to the softener and check for leaks. Allow the system to repressurize.
8. **Test Operation:** Initiate a manual regeneration cycle or observe water flow to confirm the turbine is functioning correctly and the valve is operating as expected.

For detailed visual guides, consult the official Autotrol Performa valve service manuals or professional installation resources.

OPERATING PRINCIPLE

The Autotrol 1033444 Internal Turbine Wheel operates on a simple yet effective principle. As water flows through the Performa valve, it passes over the blades of the turbine wheel, causing it to rotate. The speed of this rotation is directly proportional to the rate of water flow. The valve's control board then reads these rotations (often via a magnetic sensor) to accurately measure the volume of water that has passed through the softener. This flow measurement is crucial for determining when the softener needs to regenerate, ensuring efficient and effective water treatment.

This component does not require direct user operation; its function is integral to the automatic operation of the water softener system.

MAINTENANCE

Regular maintenance of your water softener system helps ensure the longevity and proper function of all components, including the turbine wheel. While the turbine wheel itself is a durable part, periodic checks are beneficial.

- **Visual Inspection:** During any routine valve maintenance, visually inspect the turbine wheel for signs of wear, damage, or mineral buildup.
- **Cleaning:** If mineral deposits are observed, carefully clean the turbine wheel and its housing using a soft brush and a mild, non-abrasive cleaner suitable for plastic components. Rinse thoroughly with clean water.
- **Free Movement:** Ensure the turbine wheel spins freely without obstruction. Any resistance could indicate buildup or damage.
- **Replacement:** If the turbine wheel shows significant wear, cracks, or does not spin freely after cleaning, it should be replaced to maintain accurate flow measurement.

TROUBLESHOOTING

Issues related to the turbine wheel typically manifest as inaccurate water usage measurements or incorrect regeneration cycles. If your water softener is exhibiting the following symptoms, the turbine wheel may be a

contributing factor:

- **Excessive or Insufficient Regeneration:** If the softener regenerates too frequently or not often enough, the flow meter (which includes the turbine wheel) might be misreading water usage.
- **Hard Water After Regeneration:** This could indicate that the system is not regenerating based on actual water usage, potentially due to an inaccurate flow reading.
- **Error Codes:** Some advanced control valves may display error codes related to flow meter malfunctions. Consult your valve's specific manual for error code interpretations.

Troubleshooting Steps:

1. **Inspect for Obstructions:** Turn off water, depressurize, and inspect the turbine wheel area for any debris (e.g., sediment, resin beads) that might be impeding its rotation.
2. **Check for Damage:** Visually inspect the turbine wheel for broken blades or cracks. A damaged wheel will not spin correctly.
3. **Verify Free Movement:** Ensure the turbine wheel spins smoothly when gently nudged. If it's stiff or grinds, it may need cleaning or replacement.
4. **Sensor Check:** While the turbine wheel itself is mechanical, its interaction with the flow sensor is electronic. If the turbine appears fine, the issue might lie with the sensor or control board. Consult a professional for further diagnostics.

If troubleshooting steps do not resolve the issue, replacement of the turbine wheel (Autotrol 1033444) is often the next step, or professional service may be required.

SPECIFICATIONS

Specification	Detail
Part Number	1033444
Item Weight	1.92 ounces
Package Dimensions	1.2 x 0.8 x 0.6 inches
Compatibility	Autotrol Performa Valves
Item Package Quantity	1
ASIN	B005XTWC1S
Date First Available	October 21, 2011

WARRANTY AND SUPPORT

For specific warranty information regarding the Autotrol 1033444 Internal Turbine Wheel, please refer to the documentation provided with your original Autotrol Performa valve or contact the authorized Autotrol dealer or the seller from whom this part was purchased. Warranty terms can vary based on purchase location and specific product policies.

For technical support or further assistance, it is recommended to contact Autotrol customer service or a certified water treatment professional.

