

Pentair C105-92PS

Pentair C105-92PS Impeller Replacement Manual

For Sta-Rite Inground Pool and Spa Pumps

1. INTRODUCTION

This manual provides essential instructions for the safe and effective replacement of the Pentair C105-92PS Impeller in compatible Sta-Rite inground pool and spa pumps. The C105-92PS impeller is a critical component designed to ensure optimal water flow and pump performance. Proper installation is crucial for the longevity and efficiency of your pool or spa pump system.

2. SAFETY INFORMATION

- **Always disconnect power:** Before performing any service or maintenance on your pool or spa pump, ensure the main power supply to the pump is turned off at the circuit breaker. Failure to do so can result in serious injury or death.
- **Wear appropriate safety gear:** Use safety glasses and gloves to protect against potential hazards.
- **Consult a professional:** If you are unsure about any step or encounter difficulties, contact a qualified pool technician.
- **Handle with care:** Impellers can have sharp edges. Handle the new and old impeller carefully.

3. PRODUCT OVERVIEW

The Pentair C105-92PS Impeller is a genuine replacement part for specific Sta-Rite inground pool and spa pump models. It is engineered to restore the pump's original hydraulic performance.

Compatibility:

- Fits Pentair Sta-Rite Max-E-Glas full rate and up-rate series pool and spa inground pump models: PE5C-180L, PE6C-120L, PE52C-180L, PEA5D-180L, PEA6D-120L.
- Fits Pentair Sta-Rite Dura-Glas full rate and up-rate series pool and spa inground pump models: P2R5C-180L, P2RA5D-180L.



Figure 1: Angled view of the Pentair C105-92PS Impeller. This image shows the overall shape and design of the impeller, highlighting its central hub and vanes.



Figure 2: Side view of the Pentair C105-92PS Impeller. This perspective illustrates the depth and profile of the impeller, including the shaft connection point.

4. INSTALLATION (IMPELLER REPLACEMENT)

Follow these steps carefully to replace the impeller:

1. **Disconnect Power:** Turn off all electrical power to the pump at the main circuit breaker. Verify power is off using a voltage tester.
2. **Drain Pump:** Close any valves leading to and from the pump. Remove the drain plugs from the pump housing to drain all water.

3. **Remove Pump Housing:** Disconnect the plumbing connections to the pump. Carefully unbolt and separate the pump housing (wet end) from the motor assembly.
4. **Access Impeller:** Once the pump housing is removed, the diffuser and then the impeller will be accessible. The diffuser is typically held in place by screws or clips. Remove it.
5. **Remove Old Impeller:** Hold the motor shaft stationary (often by inserting a wrench into the slot at the rear of the motor shaft or using a shaft wrench). Unscrew the impeller counter-clockwise from the motor shaft. Note any washers or spacers for reassembly.
6. **Inspect and Clean:** Inspect the motor shaft and seal plate for any damage or debris. Clean all mating surfaces thoroughly. Consider replacing the shaft seal and gaskets at this time for optimal performance and to prevent leaks.
7. **Install New Impeller:** Carefully thread the new Pentair C105-92PS Impeller onto the motor shaft clockwise until it is hand-tight. Ensure it seats properly. Do not overtighten.
8. **Reassemble:** Reinstall the diffuser, ensuring it aligns correctly with the pump housing. Reattach the pump housing to the motor assembly, ensuring all gaskets are properly seated and bolts are tightened evenly. Reconnect plumbing.
9. **Prime the Pump:** Open the valves to the pump. Remove the pump lid and fill the pump basket with water until the water level is above the suction inlet. Replace the lid securely.
10. **Restore Power:** Turn on the main power supply to the pump at the circuit breaker. The pump should start and begin circulating water. Monitor for any leaks.

5. OPERATING

Once the Pentair C105-92PS Impeller is correctly installed, the pump will operate as designed, circulating water through your pool or spa system. Ensure the pump is properly primed before each operation to prevent damage.

6. MAINTENANCE

- **Regular Inspection:** Periodically inspect the pump for unusual noises, vibrations, or reduced water flow, which could indicate impeller issues.
- **Clean Pump Basket:** Regularly clean the pump's strainer basket to prevent debris from reaching the impeller and causing damage or reduced performance.
- **Check for Leaks:** Monitor the pump for any water leaks, especially around the shaft seal area, which may indicate a worn seal.

7. TROUBLESHOOTING

- **Reduced Water Flow:** If water flow is significantly reduced after impeller replacement, check for proper priming, air leaks in the suction line, or obstructions in the impeller or plumbing.
- **Pump Not Priming:** Ensure the pump housing is full of water and all air has been bled from the system. Check for air leaks at plumbing connections or the pump lid O-ring.
- **Unusual Noise/Vibration:** This could indicate debris caught in the impeller, a loose impeller, or a worn motor bearing. Disconnect power and inspect the impeller for obstructions.
- **Water Leaks:** Leaks around the pump shaft usually indicate a faulty shaft seal. Leaks from the pump housing may be due to improperly seated gaskets or loose bolts.

8. SPECIFICATIONS

Model Number	C105-92PS
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Product Dimensions	4.75 x 4.75 x 2 inches
Item Weight	5.8 ounces
Manufacturer	Pentair

9. WARRANTY INFORMATION

This Pentair product is covered by the manufacturer's standard warranty. For specific details regarding warranty coverage, terms, and conditions, please refer to the documentation provided with your original pump or visit the official Pentair website. Keep your purchase receipt as proof of purchase.

10. SUPPORT

For technical assistance, troubleshooting, or further information regarding the Pentair C105-92PS Impeller or compatible Sta-Rite pumps, please contact Pentair Customer Service or consult a certified pool and spa professional. Always provide the model number of your pump and the impeller (C105-92PS) when seeking support.

Pentair Official Website: www.pentair.com