SouthMarine 01-09-1028B

SouthMarine Water Pump Impeller User Manual

Model: 01-09-1028B

Product Overview

This manual provides essential information for the installation, operation, and maintenance of your SouthMarine Water Pump Impeller. This impeller is a critical component designed for various marine engine water pumps, ensuring efficient cooling and water circulation.
It is engineered to replace several OEM part numbers, including Jabsco 17937-0001-P, Johnson 09-1028B, Yanmar 127640-42200, Mercury 807189A1, Mercruiser 47-8013326-01, Sherwood 18200, and Volvo 801277, 877061-2, 825941, among others.

Setup and Installation

Proper installation of the water pump impeller is crucial for optimal performance and longevity. Always refer to your engine's specific service manual for detailed instructions regarding water pump disassembly and reassembly.

Before Installation:

- Ensure the engine is turned off and cooled down.
- Close all seacocks to prevent water ingress.
- Have appropriate tools ready, including a new gasket and impeller lubricant (often supplied with the impeller kit).
- Inspect the water pump housing for any damage, corrosion, or debris. Clean thoroughly if necessary.

Installation Steps (General Guidance):

1. Remove the old impeller. Note the direction of the impeller blades.
2. Clean the impeller housing and cover plate thoroughly.
3. Apply a thin layer of impeller lubricant (glycerin or silicone grease) to the inside of the pump housing and to the new impeller blades.
4. Install the new impeller, ensuring the blades are bent in the correct direction for rotation. This is critical for proper water flow.
5. Place a new gasket on the cover plate.
6. Reinstall the cover plate and tighten screws evenly to prevent warping.
7. Open seacocks and check for leaks after installation.



Figure 1: Front view of the SouthMarine Water Pump Impeller, showing the spline drive and flexible blades.

Operating Principles

The water pump impeller is a key component in your engine's cooling system. As the engine operates, the impeller rotates within the pump housing, drawing in raw water (from the sea, lake, or river) and pushing it through the engine's cooling passages. This continuous flow of water dissipates heat, maintaining the engine's optimal operating temperature.
The flexible neoprene blades of the impeller are designed to create a vacuum that pulls water in and then force it out under pressure. The integrity of these blades is essential for efficient water circulation.



Figure 2: Top view of the impeller, highlighting the brass hub and the arrangement of the 10 blades.

Maintenance

Impellers are wear items and require periodic inspection and replacement to prevent engine overheating and potential damage. The frequency of replacement depends on engine usage, water quality, and operating conditions.

Inspection:

- Regularly check the water pump's output. A reduced flow or higher-than-normal engine temperature can indicate an impeller issue.
- During routine engine maintenance, remove the water pump cover and visually inspect the impeller blades. Look for cracks, tears, missing pieces, or signs of hardening.
- Check the brass hub for corrosion or wear.

Replacement:

It is recommended to replace the impeller annually or every 200-300 operating hours, whichever comes first, even if it appears to be in good condition. This proactive approach helps prevent unexpected failures.
Always replace the impeller with a new one if any damage is observed. Refer to the "Setup and Installation" section for general replacement steps.



Figure 3: Side view of the impeller, showing the depth of the blades.

Troubleshooting

If you experience issues with your engine's cooling system, the impeller is often a primary suspect. Here are common problems and their potential causes related to the impeller:

Problem	Possible Cause (Impeller Related)	Solution

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Engine Overheating	Worn, cracked, or missing impeller blades; impeller slipping on shaft.	Inspect and replace impeller. Ensure proper installation and shaft engagement.
Reduced Water Discharge from Exhaust	Damaged impeller; clogged water intake or pump housing.	Inspect and replace impeller. Check and clear water intake and pump housing.
Unusual Noise from Water Pump	Impeller rubbing against housing due to improper installation or damaged blades.	Re-inspect impeller installation. Replace if blades are damaged.

If troubleshooting steps do not resolve the issue, consult a qualified marine mechanic.

Specifications

The SouthMarine Water Pump Impeller is manufactured to precise specifications to ensure compatibility and reliable performance.

Drive Type: Spline Drive (12)

Number of Blades: 10

Hub Material: Brass

Impeller Material: Neoprene

Diameter: 65mm (2.56 inches)

Depth: 50mm (1.98 inches)

Shaft Diameter: 16mm (5/8 inches)

Item Weight: Approximately 5.6 ounces

Product Dimensions: 7.48 x 5.12 x 1.97 inches

Model Number: 01-09-1028B

Replaces Part Numbers:

- Jabsco: 17937-0001-P, 17937-0001
- Johnson: 09-1028B
- Yanmar: 127640-42200
- Mercury: 807189A1
- Mercruiser: 47-8013326-01
- Sherwood: 18200
- Volvo: 801277, 877061-2, 825941
- Perkins: 0460024, 24880031
- CAT: 7C-3286
- Oberdorfer: 7441
- Caterpillar: 7C3286
- Ancor: 50009
- CEF: 500114
- Aifo: 8112772
- Veyus: 301

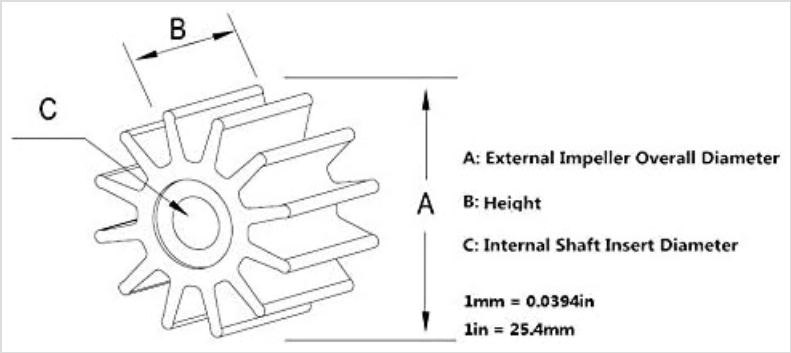


Figure 4: Dimensional diagram of the impeller, illustrating external diameter (A), height (B), and internal shaft insert diameter (C).

Warranty and Support

For specific warranty information regarding your SouthMarine Water Pump Impeller, please refer to the terms and conditions provided at the time of purchase or contact the seller directly. Warranty coverage typically addresses manufacturing defects.

If you have questions about compatibility, installation, or require technical assistance, please contact the manufacturer or the authorized seller, Marine Parts Manufacturer, through the platform where the product was purchased. Providing your engine serial number may assist in resolving compatibility queries.

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Question

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Details

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Submit question