

765Wa-C801

63585 Water Pump, Billet Alum, Fits 289/302/351w

INSTRUCTION MANUAL

Product Overview

The 63585 Billet Aluminum Water Pump is engineered for high-performance applications, specifically designed to fit 289/302/351w engines. This pump features a re-profiled and pocketed pump plate to significantly reduce unnecessary weight, contributing to an average overall pump height reduction of 3/4 inch and up to 2 lbs weight savings. It is built with a high-quality motor, including windings, balancing, long-life brushes, shaft, and sealed ball bearings, ensuring superior water circulation under actual operating conditions compared to standard pumps.

Designed for straightforward installation, it mounts directly to the stock water pump location and includes all necessary mounting hardware and gaskets. The pump is compatible with both 12 and 16 volt systems and is designed to prevent high-temperature leaks. Its clear anodized 6061-T6 billet aluminum housing, pump plate, and motor cap, along with a powder-coated outer case, ensure years of dependable operation.

Features

- Re-profiled and pocketed pump plate for weight reduction.
- Shortened overall pump height by 3/4 inch.
- Up to 2 lbs average weight reduction per pump.
- High-quality motor with windings, balancing, long-life brushes, shaft, and sealed ball bearings for efficient water flow.
- Direct mounting to stock water pump location.
- Includes mounting hardware and gasket for simple installation.
- Optimized for maximum circulation and improved efficiency, especially at idle.
- Compatible with 12 and 16 volt electrical systems.
- Engineered to prevent high-temperature leaks.
- Machined with a new -16AN port for easier installation of hose adapters, eliminating the need for tape or pipe sealants.
- Accommodates lower radiator hose from either driver or passenger side installations.
- Constructed from clear anodized 6061-T6 billet aluminum for housing, pump plate, and motor cap.
- Powder-coated outer case for enhanced durability.
- Low current draw of 8-10 amps with 12V, aiding battery charge retention during racing without an alternator.

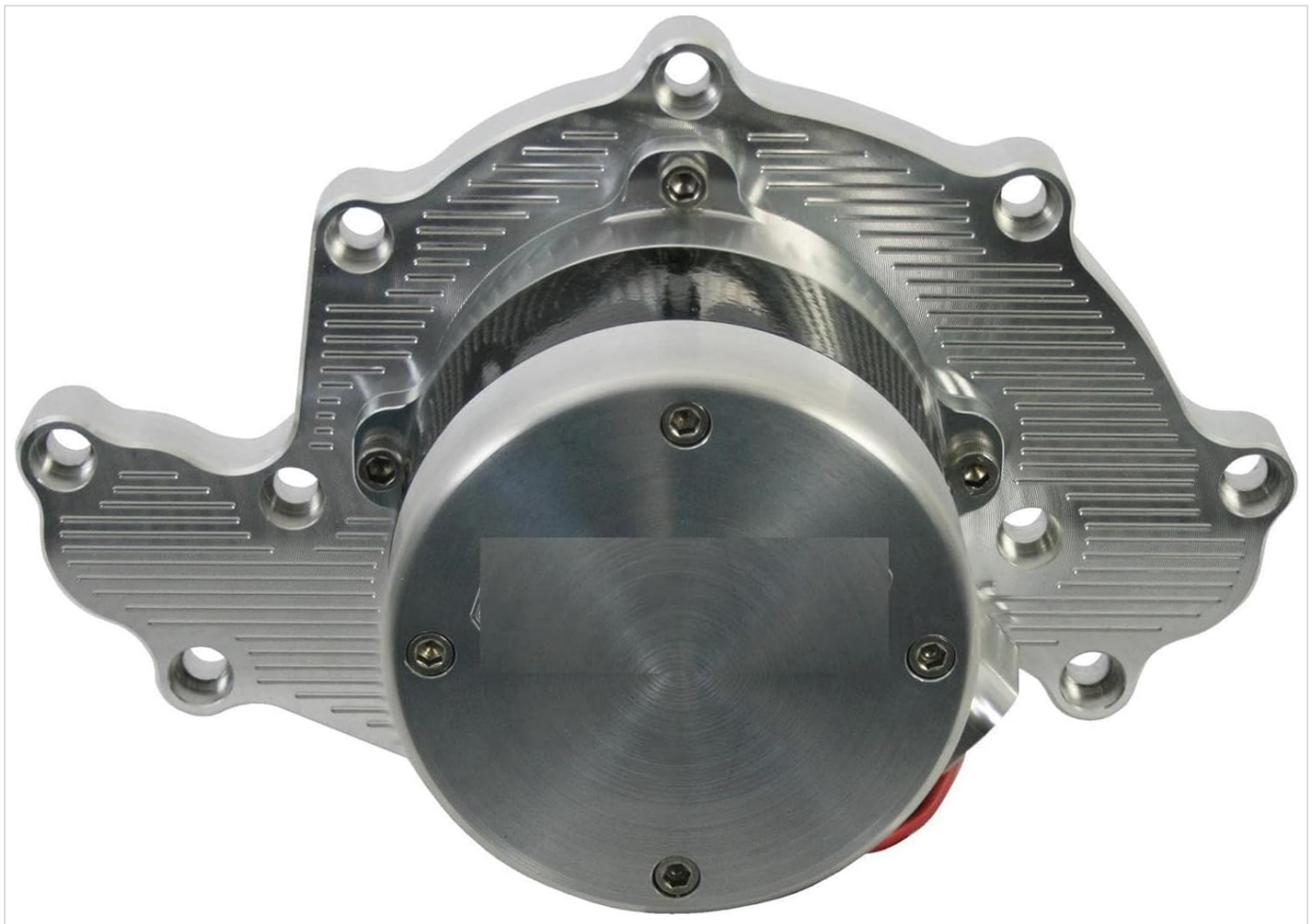
Specifications

Manufacturer	FastRepair
Brand	Generic
Manufacturer Part Number	765Wa-C801
ASIN	B0F7LVMS4L
Date First Available	May 6, 2025
Compatibility	289/302/351w Engines
Material	6061-T6 Billet Aluminum (housing, pump plate, motor cap)
Voltage Compatibility	12V and 16V systems
Current Draw (12V)	8-10 Amps (typical system)

Setup and Installation

The 63585 Billet Aluminum Water Pump is designed for direct replacement and simplified installation.

- Preparation:** Ensure the engine is cool and the cooling system is drained. Refer to your vehicle's service manual for specific coolant draining procedures.
- Removal of Old Pump:** Carefully remove the existing water pump, noting the orientation and any associated components. Clean the mounting surface thoroughly to ensure a proper seal.
- Mounting:** Position the new 63585 water pump onto the stock water pump location. Use the included mounting hardware and gasket. Ensure the gasket is properly seated to prevent leaks. Tighten fasteners according to manufacturer's torque specifications for your engine.
- Hose Connections:** Connect the lower radiator hose. This pump is designed to accommodate the hose from either the driver or passenger side, offering installation flexibility. Utilize the new -16AN port for easier installation of compatible hose adapters; tape or pipe sealants are not required for this connection.
- Electrical Connections:** Connect the pump to your vehicle's 12V or 16V electrical system. Ensure all electrical connections are secure and properly insulated.
- Refill Cooling System:** Refill the cooling system with the appropriate coolant mixture as specified by your vehicle manufacturer. Bleed any air from the system according to your vehicle's service manual.
- Initial Check:** After installation, start the engine and check for any leaks around the pump and hose connections. Monitor coolant levels and engine temperature during initial operation.



This image displays the 63585 Billet Aluminum Water Pump, showcasing its machined aluminum housing and mounting points. The pump features a clear anodized 6061-T6 billet aluminum pump housing, pump plate, and motor cap, designed for durability and efficient water circulation.

Operating Instructions

Once properly installed and the cooling system is filled, the 63585 Billet Aluminum Water Pump operates automatically as part of your vehicle's cooling system.

- **System Compatibility:** This pump is designed to integrate seamlessly with both 12-volt and 16-volt automotive electrical systems.
- **Efficient Circulation:** The pump's design ensures maximum coolant circulation, improving cooling efficiency under all driving conditions, particularly during extended idling periods.
- **Low Current Draw:** With a typical current draw of 8-10 amps at 12V, the pump minimizes electrical load, which can help maintain battery charge, especially beneficial in racing applications where an alternator might not be used.
- **Leak Prevention:** The pump is engineered with features to prevent high-temperature leaks, contributing to a reliable and maintenance-free operation.

Regularly monitor your vehicle's temperature gauge to ensure the cooling system is functioning within normal operating parameters.

Maintenance

While the 63585 Billet Aluminum Water Pump is designed for durability and long-term performance, routine checks of your vehicle's cooling system are recommended to ensure optimal operation.

- **Coolant Level:** Periodically check the coolant level in your vehicle's reservoir and radiator. Top up with the appropriate

coolant mixture as needed.

- **Leak Inspection:** Visually inspect the water pump and all hose connections for any signs of coolant leaks. Although the pump is designed to prevent high-temperature leaks, external factors can sometimes lead to issues. Address any leaks promptly.
- **Hose and Clamp Condition:** Check the condition of all radiator hoses and hose clamps connected to the water pump. Replace any hoses that show signs of cracking, swelling, or deterioration, and ensure clamps are secure.
- **Electrical Connections:** Ensure all electrical connections to the pump are clean, tight, and free from corrosion.
- **System Flush:** Follow your vehicle manufacturer's recommendations for cooling system flushes and coolant replacement intervals.

Note: For any significant maintenance or repair, it is recommended to consult a qualified automotive technician.

Troubleshooting

If you experience issues with your cooling system after installing the 63585 Billet Aluminum Water Pump, consider the following common troubleshooting steps:

- **Engine Overheating:**
 - Check coolant level.
 - Inspect for air pockets in the cooling system; bleed as necessary.
 - Verify proper electrical connection to the pump.
 - Ensure radiator and condenser are free of obstructions.
 - Check thermostat operation.
- **Coolant Leaks:**
 - Inspect all hose connections for tightness and integrity.
 - Check the water pump mounting surface for proper gasket seal.
 - Examine the pump housing for any visible cracks or damage.
- **Unusual Noise from Pump:**
 - Ensure the pump is securely mounted and not vibrating against other components.
 - Check for proper coolant level, as low coolant can cause cavitation noise.
 - If noise persists, it may indicate an internal issue with the pump, requiring professional inspection.
- **No Pump Operation:**
 - Verify power supply to the pump (12V or 16V).
 - Check electrical wiring for breaks or loose connections.
 - Inspect relevant fuses or relays in the vehicle's electrical system.

If troubleshooting steps do not resolve the issue, contact customer support or a certified mechanic.

Warranty Information

This product is covered by a manufacturer's warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary. Please retain your proof of purchase for warranty claims. For detailed warranty information, please refer to the documentation provided with your purchase or contact the manufacturer directly.

Customer Support

For technical assistance, installation questions, or warranty inquiries regarding your 63585 Billet Aluminum Water Pump, please contact the manufacturer or your point of purchase.

Manufacturer: FastRepair

(Contact information such as phone number or email may be available on the manufacturer's official website or product packaging.)