

AEROMOTIVE Part # 24305 Radiator Water Pump INSTALLATION INSTRUCTIONS

This product is not legal for sale or use on emission-controlled vehicles except when used as a direct replacement part matching OEM specification.

WARNING!



Always be aware of flammable situations. Drilling and grinding can be potential ignition sources. Extinguish all open flames, prohibit smoking, and eliminate all sources of ignition in the area of the vehicle and workspace before proceeding with the installation. Ensure you are working in a well-ventilated area with an approved fire extinguisher nearby.

WARNING!



Mechanical and hydraulic lifting devices can tip over or lower accidentally due to incorrect maneuvering or technical errors. A falling object can cause injury and/or loss of life to yourself and/or others. When working under the vehicle, always use stands, and ensure that the ground or floor is stable and level. Never crawl under a vehicle which is only supported by a jack.

WARNING!



The coolant system is under pressure. Do not open the coolant system until the pressure has been relieved. Refer to the appropriate vehicle service manual for the procedure and precautions for relieving the coolant system pressure.

CAUTION!



When installing this product always wear safety glasses and other appropriate safety apparel. A drilling operation will cause flying metal chips. Flying metal chips can cause eye injury.

Parts Included:

1ea Water pump assembly	4ea 10-24 x 1 3/8" 18-8SS SHCS
1ea Weld-in pump mount	

Recommended Tools / Supplies Needed:

5/32" hex key	Medium duty thread locking compound
1 ½" hole saw	Silicone lubricant (such as Parker's Super O-Lube)
Welder	AN-20 ORB outlet fitting (sold separately)

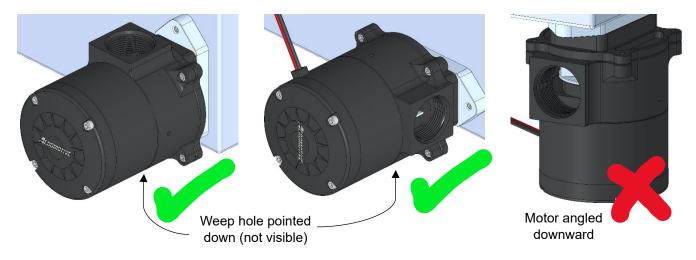
Installation:

The following steps are typical of most installations:

- Once the engine has been allowed to cool, relieve the coolant system of pressure, and disconnect the negative battery cable.
- 2. Find a good location on the radiator to mount the pump. The pump mount is generally welded where the outlet or lower hose connection is on the radiator. Make sure the location will keep the pump clear of road obstructions or debris. Make sure to mount the water pump below the water level in the radiator.

Note: Failure to mount the pump lower than the water level in the radiator will cause the pump to run dry, resulting in extreme pump wear!

3. The pump can be mounted in most orientations but **SHOULD NOT** be mounted with the motor angled downward. It is also recommended that one of the weep holes in the pump housing is pointed generally downward. Mounting with the motor downward or not pointing the weep holes downward may result in premature bearing failure.



<u>Note: If you have previously installed a Meziere WP361 radiator mounted pump</u>, this new Aeromotive pump can also be mounted onto the existing radiator pump mount using the new hardware without any welding.

- 4. Once a suitable location is found, cut a 1 ½" hole in the radiator where the pump inlet will be positioned. **BE SURE TO CLEAN UP ANY DEBRIS IN THE RADIATOR AND FLUSH IT TO ENSURE ALLL DEBRIS HAS BEEN REMOVED!**
- 5. Center the hole in the pump mount over the hole cut into the radiator. Weld the entire perimeter of the mount so that the flat side is facing out for the pump to bolt to it and the side with the cut-outs is against the radiator. Check the welds for leaks.
- 6. Remove the four screws around the OD of the pump to separate the casing and set aside for re-use. **Do not** remove the screws holding the motor.

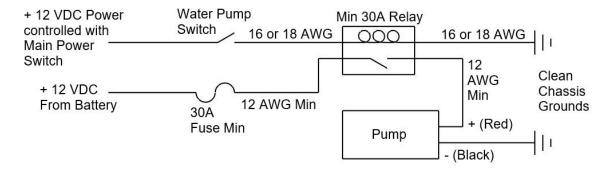
Note: If the o-ring that was assembled into the groove on the radiator side of the inlet cover has been damaged, replace it now.

- 7. Place the pump inlet cover against the welded mount on the radiator and bolt into place using the four 10-24 screws included with the pump. It may be helpful to use thread locking compound.
- 8. Carefully reattach the pump housing to the inlet cover making sure the o-ring does not get pinched. *DO NOT APPLY ANY LUBRICANTS TO THE O-RING.* Secure with the four screws that were removed during step 4. It may be helpful to use thread locking compound.
- 9. The pump outlet accepts a standard AN-20 ORB fitting to allow for multiple options. The pump can specifically be paired with the Aeromotive 34702 90-degree fitting to allow adjustable outlet orientation and will also accept a standard AN-20 ORB fitting. Install the outlet fitting being sure to use only silicone lubricant on the fitting o-ring. Connect the pump outlet using rubber hoses for barbed connection or braided hoses with AN fittings. Some available adapter fitting part numbers to connect the pump are listed following:

24702 AN-20 ORB 90-degree outlet fitting 15769 AN-20 ORB to 1 3/4 in Slip Hose 15774 AN-20 ORB to AN-20 Flare 15770 AN-20 ORB to 1 ½ in Slip Hose 15775 AN-20 ORB to AN-16 Flare

Note: Be sure to route all electrical wires clear of any moving suspension or drivetrain components and any exhaust components! Protect wires from abrasion and road obstructions or debris.

10. Make sure you use stranded, insulated copper wire, in the sizes shown, with matching crimp-type connectors for all connections. Attach wires as shown in the following diagram.



- 11. Fill the cooling system and replace the fill cap. ENSURE THE RADIATOR HAS BEEN FULLY CLEANED OF ALL DEBRIS BEFORE FILLING.
- 12. Reconnect the negative battery cable. Turn the ignition (and water pump switch as applicable) to ON **without starting the engine** to ensure the pump has been wired correctly and is running.

Note: DO NOT run the pump dry for more than a few seconds to avoid damaging the seal.

13. If the pump will not flow, it may not be primed. Ensure that the pump has been filled completely with water.

Note: The pump has been checked at the factory before shipping to ensure it runs in the correct direction (clockwise looking "down" at top of the motor). However, the pump will function with the wires reversed, though less efficiently. If incorrect rotation is suspected, this can be confirmed by looking (**CAREFULLY!**) through the inlet or outlet at the impeller as it is allowed to come to a stop.

14. After running the pump for a few seconds, turn it off and top off the coolant. Replace the fill cap again.

Contact Us

RGA NUMBER REQUIRED FOR ALL RETURNS TO AEROMOTIVE.

To obtain an RGA number, please call (913) 647–7300 and ask for the Returns and Repairs department or complete the online form under the "Rebuilds" section at www.aeromotiveinc.com.

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General Email: <u>info@aeromotiveinc.com</u>
Tech Email: <u>tech@aeromotiveinc.com</u>

The Aeromotive Tech Lines are open Monday through Friday from 9:30AM to 5:00PM Central Standard Time.



WARNING: This product can expose you to chemicals, including chromium, which is known to the State of California to cause cancer or birth defects or other reproductive harm. For more information, visit: www.p65Warnings.ca.gov

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This Aeromotive Product, with proof of purchase dated on or after January 1, 2003, is warranted to be free from defects in materials and workmanship for a period of one year from the original date of purchase. No warranty claim will be valid without authentic, dated proof of purchase.

This warranty is to the original retail purchaser and none other and is available directly from Aeromotive and not through any point of distribution or purchase.

If a defect is suspected, the retail purchaser must contact Aeromotive directly to discuss the problem, possible solutions and obtain a Return Goods Authorization (RGA), if deemed necessary by the company. Please call 913-647-7300 and dial option 3 for the technical service dept. All returns must be shipped freight pre-paid to the company and with valid RGA before they will be processed.

Aeromotive will examine any product returned with the proper authorization to determine if the failure resulted from a defect or from abuse, improper installation, misapplication or alteration. Aeromotive will then, at it's sole discretion, return, repair or replace the product.

If any Aeromotive product is determined defective, buyer's exclusive remedy is limited in value to the sale price of the good. In no event shall Aeromotive be liable for incidental or consequential damages.

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