



**18368, 18369, 18374, 18375, 18668 & 18669
Universal Fuel Pump
Installation Instructions**

IMPORTANT INSTALL REQUIREMENTS:

1. Must have at least a 4.5" diameter flat surface on the fuel tank to install this pump.
2. Minimum vertical install height of 9.75".
3. Pump cannot be mounted horizontal (TOP MOUNT ONLY).
4. Baffling required at the pickup point for pump longevity and performance.

CAUTION:

Installation of this product requires detailed knowledge of automotive systems and repair procedures. We recommend that this installation be carried out by a qualified automotive technician.

Installation of this product requires handling of gasoline. Ensure you are working in a well-ventilated area with an approved fire extinguisher nearby. Extinguish all open flames, prohibit smoking and eliminate all sources of ignition in the area of the vehicle before proceeding with the installation.

When installing this product, wear eye goggles and other safety apparel as needed to protect yourself from debris and sprayed gasoline.

WARNING!

The controllers used on the 183XX products have a fixed polarity. ENSURE THAT THE POLARITY IS CORRECT ON CONNECTION (red wire to battery red wire, black wire to battery black wire)! Reversing the polarity will render the controller inoperable. IMPROPER INSTALLATION WILL VOID ALL WARRANTIES FOR THIS PRODUCT!

- Maximum continuous operating pressure should not exceed 70 psi for 18368/69 and 18668/69 or 90 psi for 18374/75. Life expectancy may be reduced for continuous operation above the ratings.
- For any street driving or continuous use, Aeromotive recommends maintaining at least ½ tank of fuel.
- The enclosed pump uses ORB ports, they are NOT PIPE THREAD and utilize NO THREAD SEALANT. You must install ORB port fittings with o-rings to seal the fitting into the pump.

Aeromotive system components are not legal for sale or use on emission-controlled motor vehicles.

Kit includes:

1ea BLDC A1000 Pump Assy (18368) -OR- 1ea BLDC Eliminator Pump Assy (18369) -OR- 1ea BLDC 3.5 Spur Gear Pump Assy (18374) -OR- 1ea BLDC 5.0 Spur Gear Pump Assy (18375) -OR- 1ea Traditional A1000 Pump Assy (18668) -OR- 1ea Traditional Eliminator Pump Assy (18669)	COMMON 1ea Aeromotive Fuel Filter and Pickup Assembly 1ea 3/4" Pickup Tube 1ea ORB Tube Clamp Fitting 1ea Pump Retaining Ring 1ea Flange Gasket 10ea 10-24 Cap Screws 10ea #10 Nylon Washer 2ea 10-24 Flat Head Screws
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The following steps are typical of most installations:

1. On the top of the fuel tank find a 4.5" diameter flat area for fuel pump location (towards the rear of the tank is the best location). Mark the center of this location so it can be cut out.
2. Use a 3.5" hole saw to cut out the pump hole. Lower the pump into the hole and use a transfer punch to locate the 10 mounting holes. Remove the pump and drill the holes using a .221" drill bit. Drill two more holes for the pump retainer ring 180 degrees apart. Refer to **Figure 1-1** for the placement of these two holes.
3. Now take an 82-degree chamfer tool and chamfer the two holes for the pump retainer ring. Once finished it should look as shown in **Figure 1-1**.

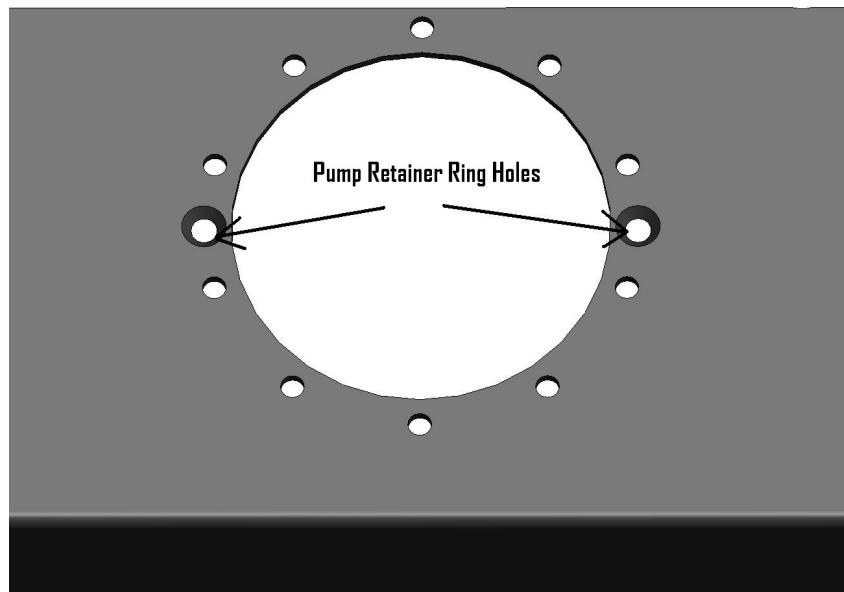


FIGURE 1-1

4. Construct baffling for the filter pick area. This is key for pump performance and longevity. Typical baffling size is 8x8x5 inches. Please see **Figure 1-2** for reference (front wall of sump not shown for clarity).

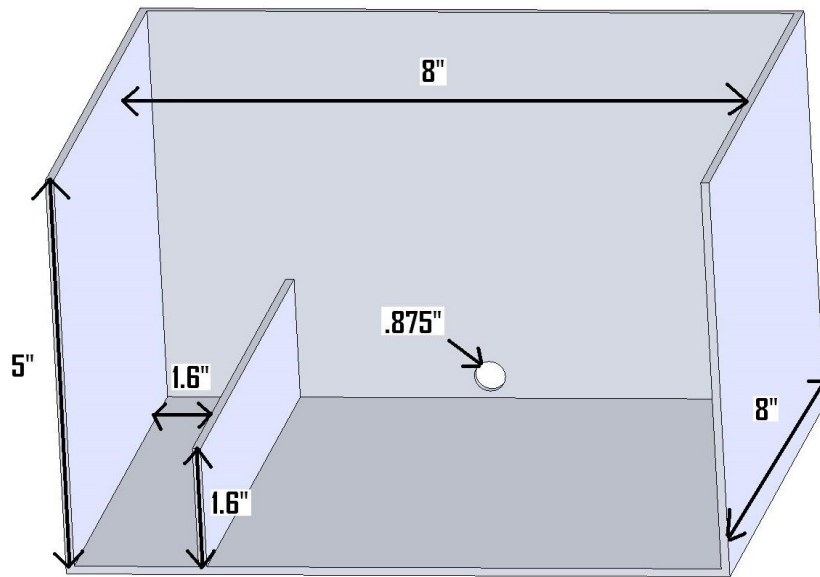


FIGURE 1-2

5. Drill two .875" holes near the bottom of the baffling running from the front to rear of the vehicle. Also construct an 8" x 1.6" x 1.6" wall along the bottom of the baffle box as shown in **Figure 1-2** for the return to feed into as shown in **Figure 1-3** (tank not shown for clarity). This will keep the fuel calm at the pickup point and reduce the chance of cavitation.

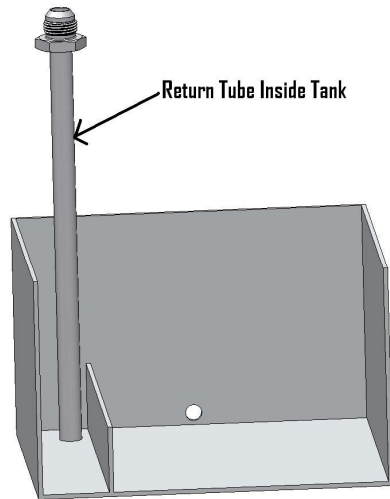


FIGURE 1-3

6. Typical position for the baffle box is below the fuel pump cut out although they can be mounted apart. For this illustration we will use the most common. Position the baffle box below the fuel pump cut out and secure it to the floor of the tank. When finished it should look as shown in **Figure 1-4**.

NOTE: The pump does not need to be mounted directly above the baffle box. It can be mounted anywhere on the top of the tank as long as you can get a tube from the pickup filter assembly to the inlet of the pump.

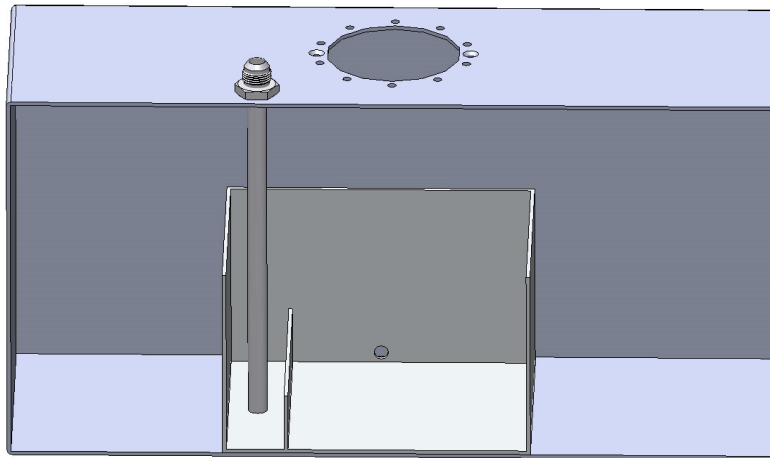


FIGURE 1-4

7. Install the fuel pump retainer ring into the tank and secure it as shown in **Figure 1-5** with the two tapered screws provided using thread sealant on the threads to prevent leaks.

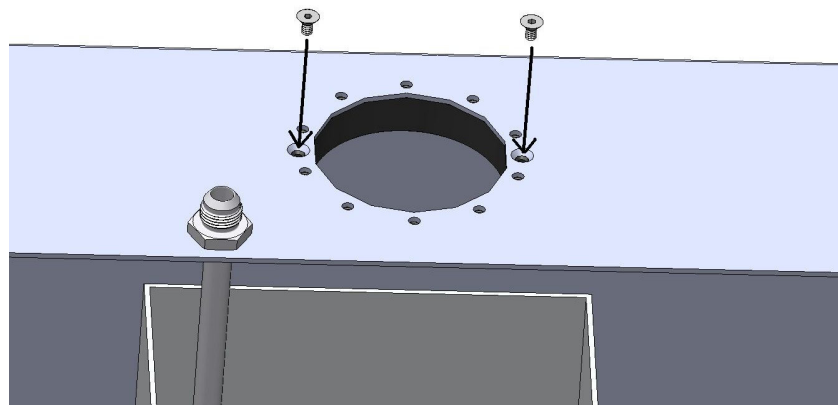


FIGURE 1-5

8. Measure the depth of the tank to determine the pump assembly length requirement. Subtract .125-.250" off of the depth measurement so that the pickup isn't resting on the bottom of the baffle. Cut the supplied tube to the length required for the pump assembly to have the desired length. Deburr the inside of the pipe and chamfer the outside edge so that it doesn't cut the o-rings when the tube is inserted into the clamps (use light grease or oil to aid in assembly). Assemble the pump and filter as shown in **Figure 1-6** (the assembly shown in the figure has the shortest possible configuration of 9.75" length).



FIGURE 1-6

9. Insert the pump with gasket into the tank as shown in **Figure 1-7**.

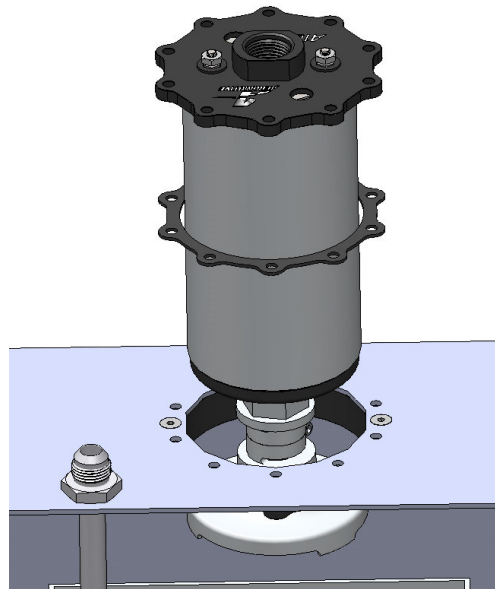


FIGURE 1-7

10. Attach the pump to the tank using the supplied socket head cap screws and washers. Do not over tighten them as it will break or damage the washers. The finished product should look as shown in **Figure 1-8**.

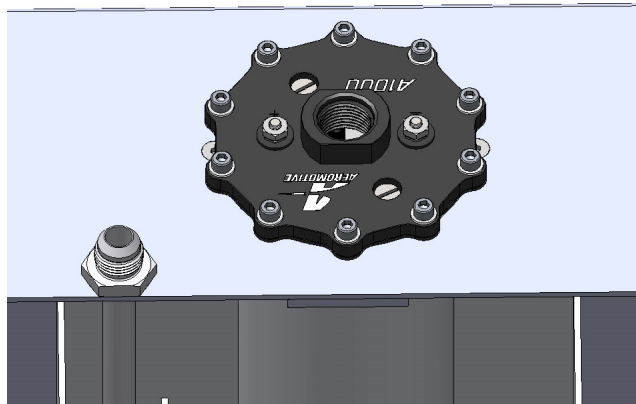
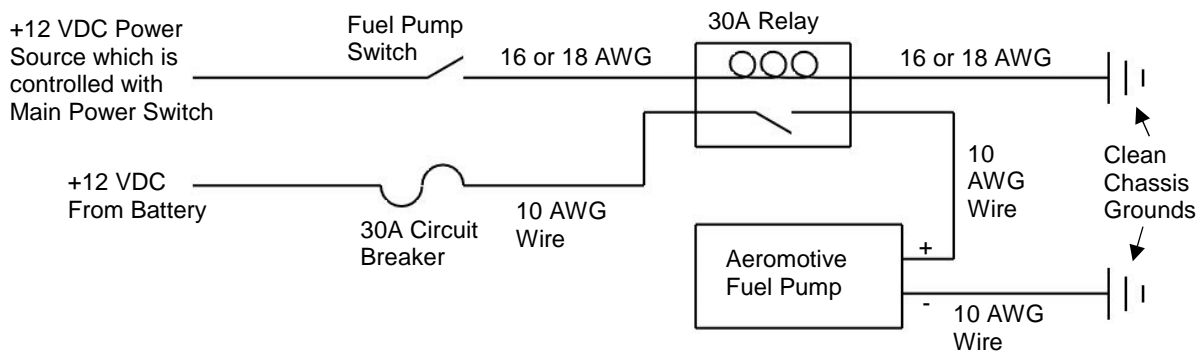


FIGURE 1-8

11. Connect the fuel pump as shown in the following diagram, +12VDC to the red lead, Ground to the black lead. To make installation easier, a kit is available, Aeromotive fuel pump wiring kit, part # 16307. **NOTE: POWER TO THE 183XX PUMPS MUST BE FLAT DC, NOT PULSE WIDTH MODULATED!**

CAUTION: DO NOT REVERSE THE POLARITY-CONNECT AS STATED ABOVE FOR THE 183XX PUMPS. Reversing the polarity will render the controller inoperable and will void all warranties for these products!



Ensure that any spilled fuel and any fuel-soaked shop towels are cleaned up and removed from the vicinity of the vehicle.

CAUTION: If any fuel leaks are detected, immediately turn the fuel pump OFF, remove any spilled fuel and repair the leak(s) before proceeding!



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

AEROMOTIVE, INC. LIMITED WARRANTY

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.

Aeromotive expressly retains the right to make changes and improvements in any product it manufactures and sells at any time. These changes and improvements may be made without notice at any time and without any obligation to change the catalogs or printed materials.

Aeromotive expressly retains the right to discontinue at any time and without notice any Aeromotive product that it manufactures or sells.

This warranty is limited and expressly limits any implied warranty to one year from the date of the original retail purchase on all Aeromotive products.

No person, party or corporate entity other than Aeromotive shall have the right to: determine whether or not this Limited Warranty is applicable to any Aeromotive product, authorize any action whatsoever under the terms and conditions of this Limited Warranty, assume any obligation or liability of any nature whatsoever on behalf of Aeromotive under the terms and conditions of this Limited Warranty.

This Limited Warranty covers only the product itself and not the cost of installation or removal.

This Limited Warranty is in lieu of and expressly excludes any and all other warranties, expressed or implied. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.