

Instruction Manual

P/N 30-1225 High Flow In Tank Fuel Pump Polaris RZR XP Turbo



Before You Begin

Read and understand these instructions completely before starting. Make sure all of the tools, hardware and installation parts are available and organized.

This pump fits the following applications:

Model	Year
RZR XP 4 Turbo EPS	2016
RZR XP Turbo EPS	2016
RZR XP 4 Turbo EPS	2017
RZR XP Turbo EPS	2017
RZR XP 4 Turbo EPS	2018
RZR XP 4 Turbo EPS DYNAMIX Edition	2018
RZR XP 4 Turbo EPS Fox Edition	2018
RZR XP Turbo EPS	2018
RZR XP Turbo EPS DYNAMIX Edition	2018
RZR XP Turbo EPS Fox Edition	2018
RZR XP Turbo S	2018

It also replaces the pump used in Polaris Replacement Module 2206261

Kit Contents

- AEM All fuel compatible high flow fuel pump
- AEM Pump Pre Filter
- 2 Hose clamps
- 1 2.5" (63.5mm) fuel injection hose

Tools Required

- Large flat blade screw driver and small rubber mallet (optionally Polaris service tool PU-50326 and a 1/2" ratchet can be used)
- Torque wrench with the capability to reach 70 ft./lbs if using Polaris tool PU-50326.
- Small flat blade screw driver
- Razor Blade
- Safety glasses
- Flashlight
- Dielectric Grease (optional)



Polaris Tool PU-50326

Safety Precautions



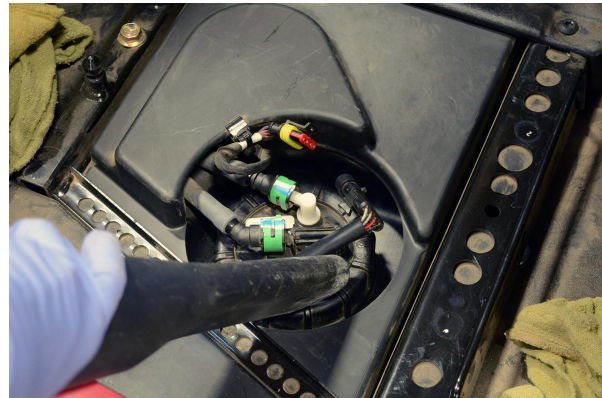
- Have a fully charged gasoline compatible fire extinguisher nearby and accessible
- Work in a well ventilated area
- Make sure the vehicle wheels are chocked and the transmission is in park
- Have a pair of gasoline compatible gloves for handling the fuel pump
- Disconnect the negative (-) side of the battery, located below the left rear seat
- Depressurize the fuel system by letting the vehicle sit for at least an hour after running so the fuel pressure dissipates
- Ensure that any static electricity that may have built up on your clothes has been dissipated by touching the engine (only if cool) or a bare metal part of the frame

Removal Instructions

1. Remove the passenger seat to access the fuel pump. Remove the access cover by lifting up on the tab.



2. With a brush and damp shop towel or a shop vacuum, clean the top of the tank where the fuel pump nut ring is located. Failure to do so may result in debris entering the tank causing premature failure of the AEM High Flow Fuel Pump.



3. If the Polaris tool is unavailable, make a mark on the nut ring and tank so that it can be tightened back to its original position. There is an arrowhead on the ring; this is a good reference to use.



4. Slide a shop towel below the 2 fuel lines on the fuel pump module. Place another shop towel over the lines to prevent any splash back in case fuel pressure has not fully released. Make a note of where each line is so they do not get mixed up when replacing the module.



5. To release the lines, slide the clips out and pull off the lines. Disconnect the fuel pump electrical harness.



6. If the Polaris tool PU-50326 is to be used in the removal of the pump assembly, follow the instructions included with the tool to remove the large plastic nut ring that secures the pump assembly into the fuel tank.



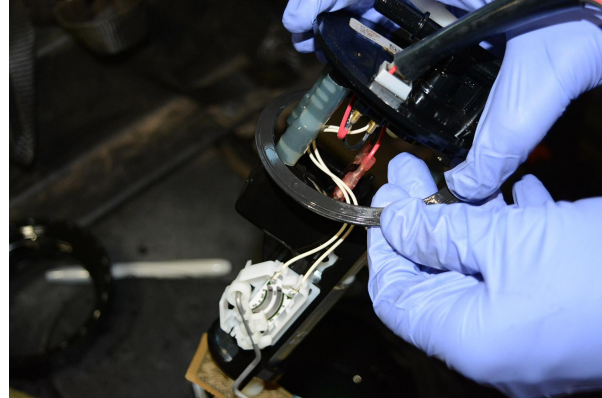
7. Use a large screwdriver and mallet to unscrew the ring. The ring is removed by turning it counterclockwise. Once the nut ring is removed, recheck the area around the ring to ensure there is no debris that can fall into the fuel tank.



8. Carefully lift the pump assembly. Be careful not to bend the float arm. Tilt the pump assembly as you lift it from the tank so it does not get bent. Transfer the pump to a couple of shop towels on a clean working surface.



9. Be sure to remove and clean the rubber gasket that is between the nut ring and the tank spigot. The gasket will be used in the re-installation of the AEM pump. If the gasket is damaged or not pliable then replace it with Polaris PN: 5413451.



10. Using a flashlight, inspect the inside of the fuel tank for debris. Clean the fuel tank if there is any sign of debris in the tank. Failure to do so may result in premature pump failure.



AEM High Flow Fuel Pump Installation

1. While working with the pump module be careful not to distort the lever arm for the float assembly.



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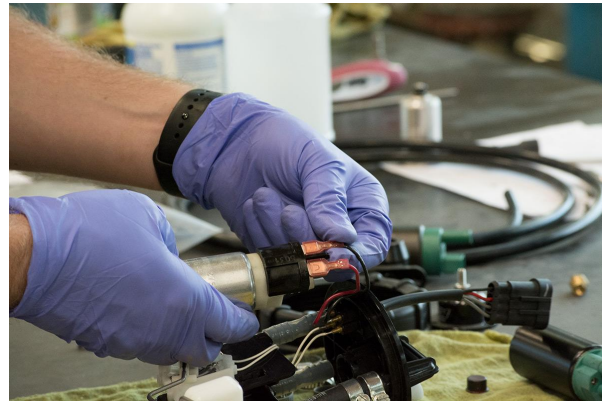
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- Using a razor blade carefully cut the nylon fuel hose lengthwise along the two locations.



- Disconnect the 2 electrical terminals from the pump. Note the size of each terminal is different so they cannot be installed onto the AEM pump incorrectly.



- Remove the pre filter by prying on the plastic attachment ring that is part of the filter.



- Remove the OEM pump from the assembly by spreading the two plastic rails on each side of the pump to release the barb. It is easier to roll the pump out of the holder than to pull it straight out. While the pump is removed from the plastic holder the fuel line should also come out. Make sure the fuel hose is completely removed.

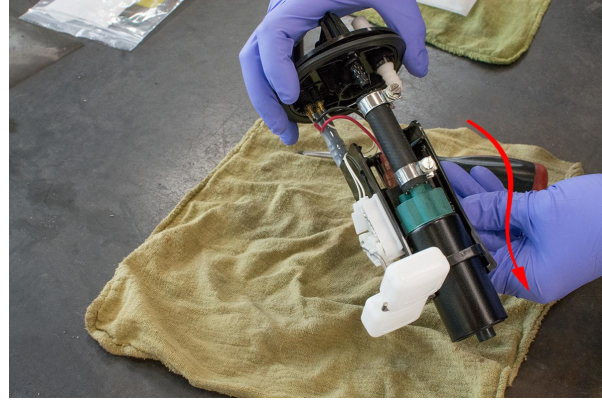


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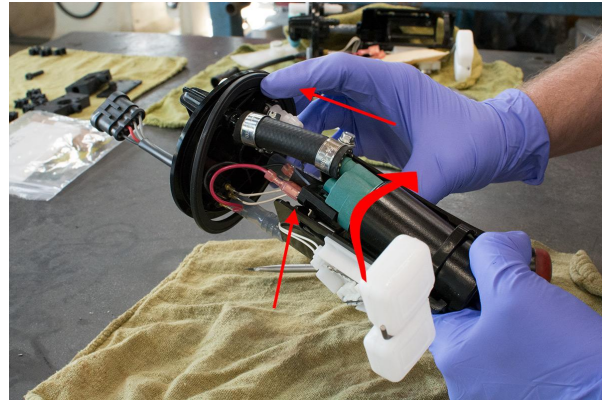
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6. Install the 2.5" fuel hose onto the AEM pump along with the two hose clamps. The hose clamps must be oriented as shown otherwise installation into the tank will be difficult. Slide the pump into the plastic holder with the bottom of the pump protruding from the bottom of the holder. This accomplished by spreading the base of the holder open so the pump can slide through it.



7. Slide the AEM pump/hose onto the fuel discharge nipple exposed upon removal of the OEM pump. Rotate the pump slightly to engage one side of the two plastic bars on the holder and snap the pump into place.



8. Position the hose clamps into place and tighten them. Make sure the clamps are positioned as shown. Do NOT over tighten the clamps.



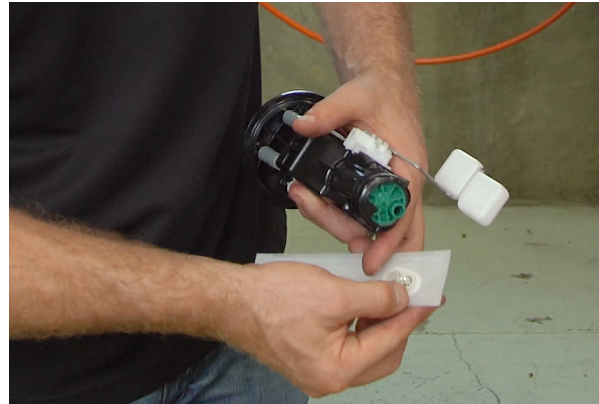
9. Attach the two electrical terminals on to the AEM pump.



10. Finished assembly without pre-filter installed



10. Install the supplied pre-filter to the inlet of the fuel pump, making sure that the washer is secured to the nipple above the inlet to ensure that the pre-filter will not come off inside the fuel tank.

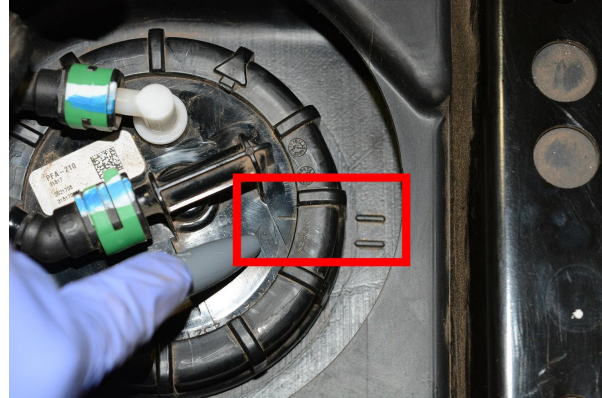


Reinstall Pump in Tank

1. Install the gasket back onto the tank spigot. The gasket goes between the fuel pump module flange and the tank spigot top.



2. Carefully lower the pump module into the tank. Be careful not to bend the float arm. After the pump module is in the tank make sure the orientation mark on the module is between the two orientation marks on the tank. **WARNING;** Failure to observe these marks will lead to inaccurate fuel level reading and possibly damage to the sending unit.



3. Push down on the fuel pump module flange ensuring the flange is centered over the tank opening and the orientation marks are aligned. While maintaining downward pressure, thread the nut ring back onto the spigot. Use care to ensure the threads does not cross thread. It helps to apply some grease to the threads for this procedure. If using the Polaris installation tool torque the nut to 70 ft. /lbs. If using the screwdriver/mallet method tighten the ring until the marks made prior to removal are aligned. Finally, re-verify the alignment of the arrow and orientation marks noted in step 2 above.



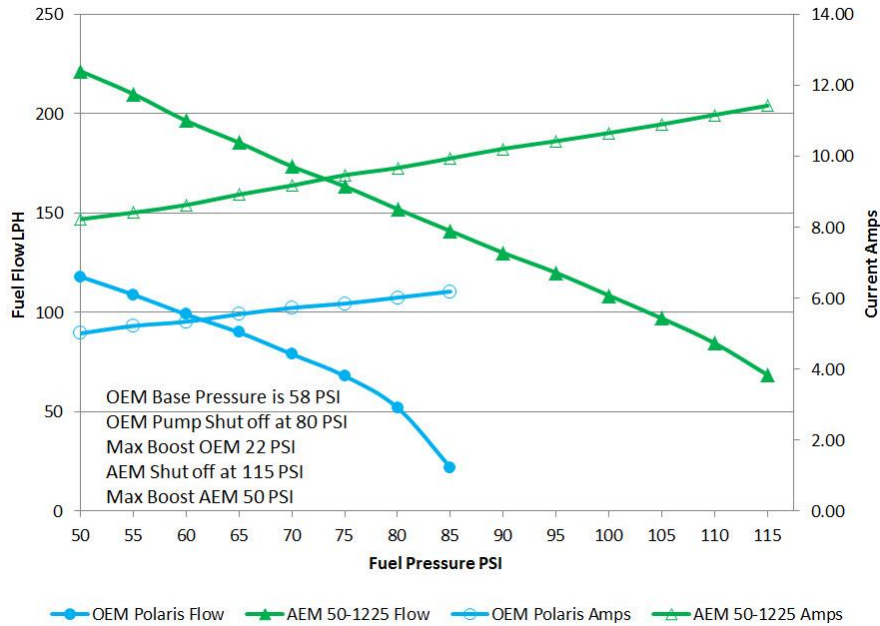
4. Verify that the fuel line connections are free of debris and clean. Connect the fuel supply and return lines to the pump module. Slide the lines all the way onto the nipple and slide the locking clips back into place. Connect the electrical connector. This is a good time to add a little dielectric grease to the terminals to prevent corrosion. Verify the connector lock snaps into place.



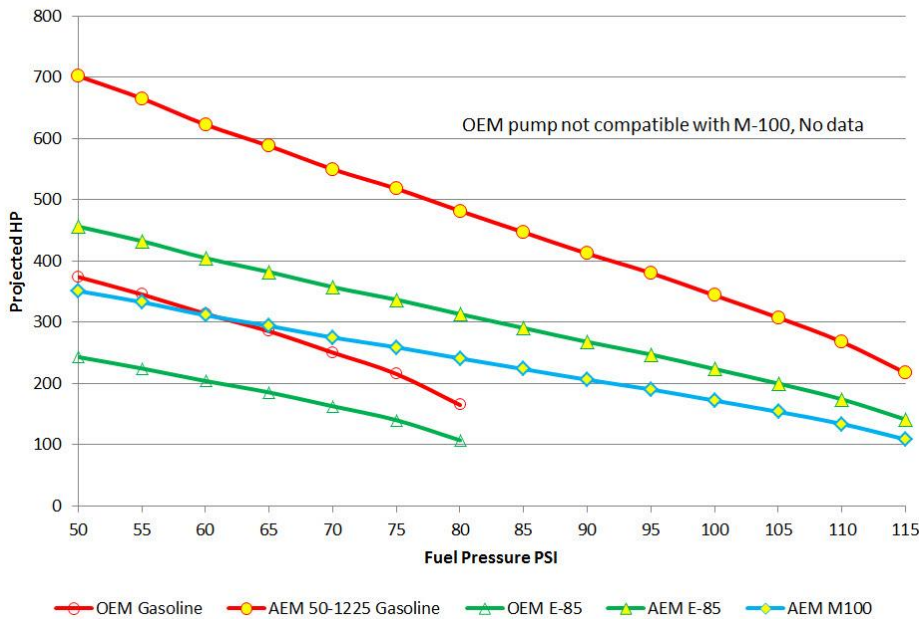
5. Test the fuel pump by turning on the key and listening for the pump to activate. Cycle the key several times to prime the system. Check for leaks. If there is any seeping or leaking of fuel do not proceed until the source of leak has been corrected.
6. Install the access cover and the passenger seat.

Pump Performance Data

AEM 50-1225 Pump Data



Power Potential Gasoline, E-85 & M-100



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Warranty Statement

Advanced Engine Management Inc. warrants to the consumer that all AEM Electronics products will be free from defects in material and workmanship for a period of twelve months from date of the original purchase. Products that fail within this 12-month warranty period will be repaired or replaced when determined by AEM that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of the AEM part. In no event shall this warranty exceed the original purchase price of the AEM part nor shall AEM be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product. Warranty claims to AEM must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12-month warranty period. Improper use or installation, accident, abuse, unauthorized repairs or alterations voids this warranty. AEM disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by AEM. Warranty returns will only be accepted by AEM when accompanied by a valid Return Merchandise Authorization (RMA) number. Product must be received by AEM within 30 days of the date the RMA is issued. Please note that before AEM can issue an RMA for any electronic product, it is first necessary for the installer or end user to contact the tech line at 1-800-423-0046 to discuss the problem. Most issues can be resolved over the phone. Under no circumstances should a system be returned or a RMA requested before the above process transpires. AEM will not be responsible for electronic products that are installed incorrectly, installed in a non-approved application, misused, or tampered with. In the case of the AEM Fuel Pump, incorrect polarity (+&- wires crossed) will not be warranted. Proper fuel filtration before and after the fuel pump are essential to fuel pump life. Any pump returned with contamination will not be warranted. Any AEM electronics product can be returned for repair if it is out of the warranty period. There is a minimum charge of \$50.00 for inspection and diagnosis of AEM electronic parts. Parts used in the repair of AEM electronic components will be extra. AEM will provide an estimate of repairs and receive written or electronic authorization before repairs are made to the product. Need additional help? Contact the AEM Performance Electronics tech department at 1-800-423-0046 or email them at tech@aempower.com.