

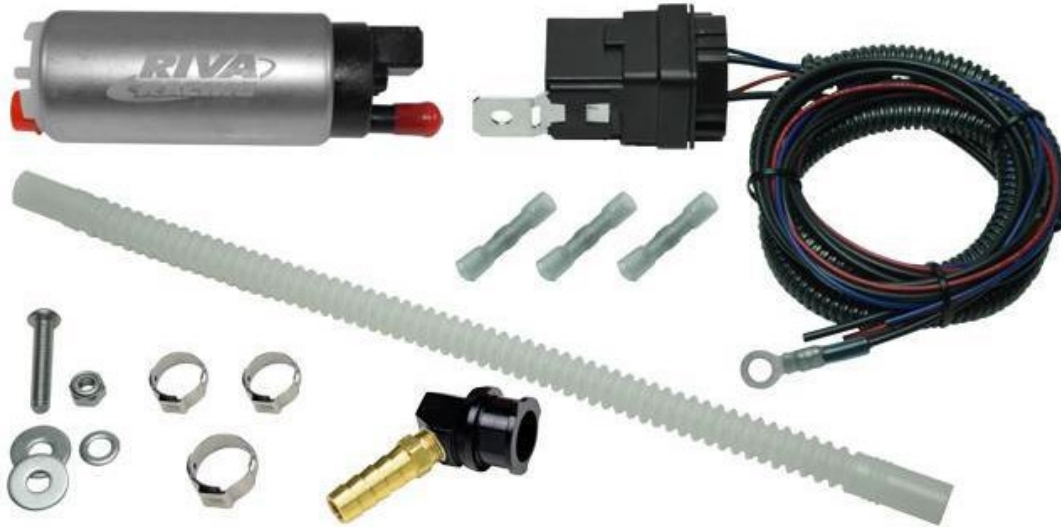


RIVA RACING
PERFORMANCE PRODUCTS & ACCESSORIES

Sea-Doo High Volume Fuel Pump Kit

PART# - RS12050-340FP-08

APPLICATION(S): 2008 & Newer Sea•Doo 4-TEC Models



We strongly recommend the use of a service manual to familiarize yourself with the various components and procedures involved with this installation. Please note that some of the original clamps, hoses and hardware removed in the disassembly process will be used in the installation process. These instructions have been written in step-by-step format and refer to illustrations. Read through instructions entirely before performing installation. Please follow these step-by-step instructions and illustrations carefully.

***** NO SMOKING *** REMOVE SEAT(S) *** WORK IN WELL VENTILATED AREA *****

Required Specialty Tools

Dremmel® or Die Grinder
Oetiker Pliers
Heat Gun
Multi-Purpose Crimp and Strip Tool

Recommended tools

OEM Service Manual

Part#

N/A
C-48550347
N/A
N/A

Part#

Please Call

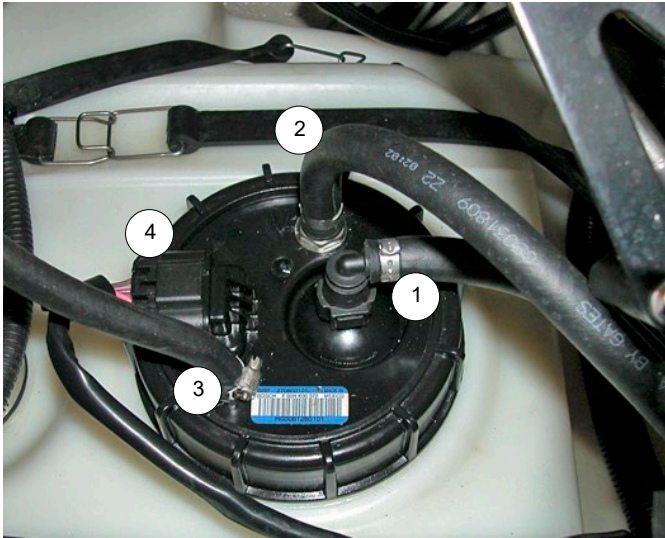
- INSTALLATION INSTRUCTIONS -

Disconnect battery cables. **Black first. Red second.**

REMOVE SEAT(S). S3 & ST3 models open seat.

Access fuel pump module.

Disconnect fuel supply hose¹, fuel tank return hose², fuel tank vent hose³ (if equipped) and fuel pump electrical connector⁴.



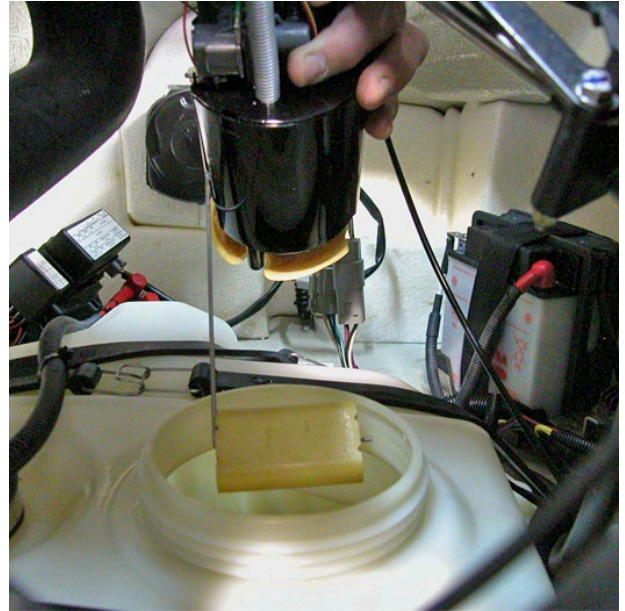
Cover fuel supply hose connector with a shop rag to prevent fuel spill.

Unscrew fuel pump locking collar.



Raise fuel pump out of fuel in tank. **DO NOT REMOVE COMPLETELY.** Tilt forward to drain excess fuel.

Remove fuel pump by lifting and tilting forward. As end of fuel pump clears tank continue tilting to allow fuel level sensor to clear opening.



Place a shop rag over top of fuel pump to prevent fuel spill.

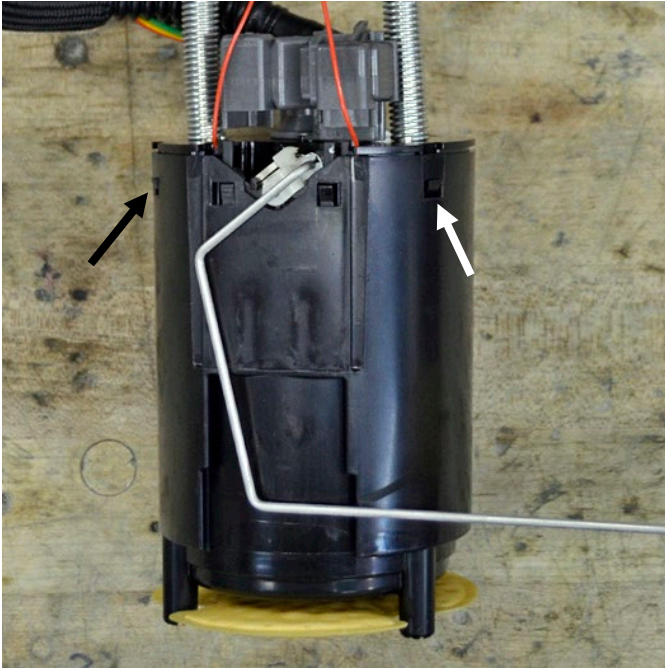
Drain fuel pump module thoroughly. Work in clean and well-ventilated area.

REMOVE STOCK FUEL PUMP

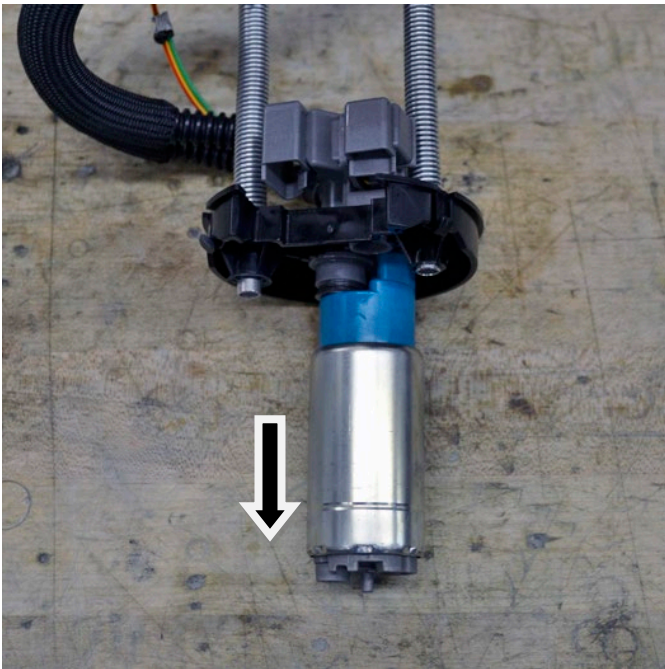
Disconnect electrical connectors (2) from underside of fuel pump module top.



Remove lower section of fuel pump module by **carefully** prying open tabs (3) securing lower section to upper section.



Remove fuel pump (pull down).



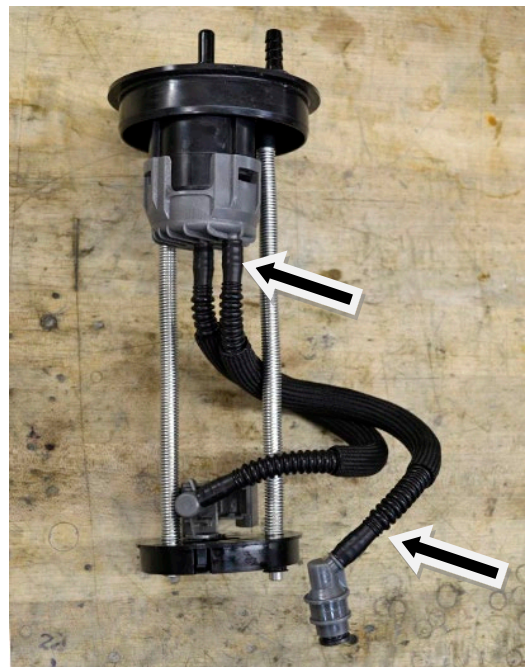
Disconnect electrical wires and set aside. Discard pump.

REMOVE STOCK FUEL SUPPLY HOSE

Remove stock fuel pump fitting from fuel pump module by carefully rotating and sliding out of retainer clip.



Carefully remove fuel supply hose from fitting at underside of fuel pump module. **NOTE:** You will need to slice the hose at the fitting. Take care not to damage fitting.



Transfer rubber grommet from inside of stock fuel pump fitting to inside of supplied billet fuel pump fitting.

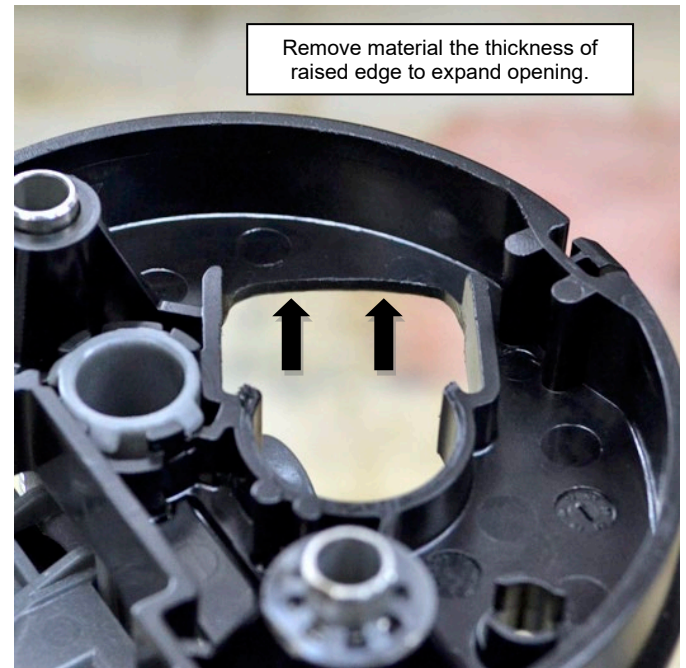
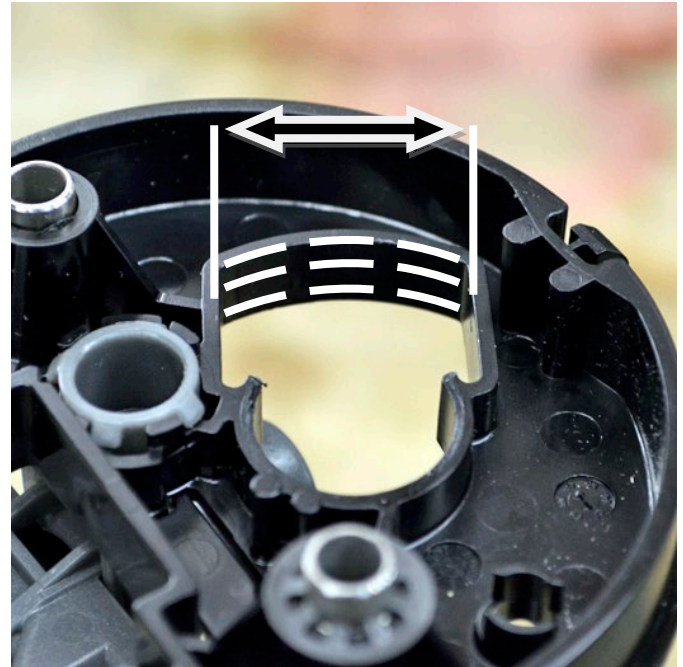
TIP: Apply light coating of engine oil to outside of rubber grommet before installing into billet fitting.



IMPORTANT: Rubber grommet must be installed into billet fitting completely.

MODIFY FUEL PUMP MODULE

Using a Dremmel or porting tool carefully remove raised edge as shown to accommodate supplied Fuel Pump.



WARNING:

DO NOT attempt to remove material using any type of cutting or snipping tool.

INSTALL SUPPLIED FITTING & FUEL HOSE

Install supplied billet fuel pump fitting. **NOTE: Ensure pointed tab on billet fitting is secured between locking posts.**



Install supplied fuel hose between fuel pump fitting and underside of fuel pump module. Secure using supplied Oetikers. **NOTE: Ensure pointed tab on fuel pump fitting is still secured between posts.**

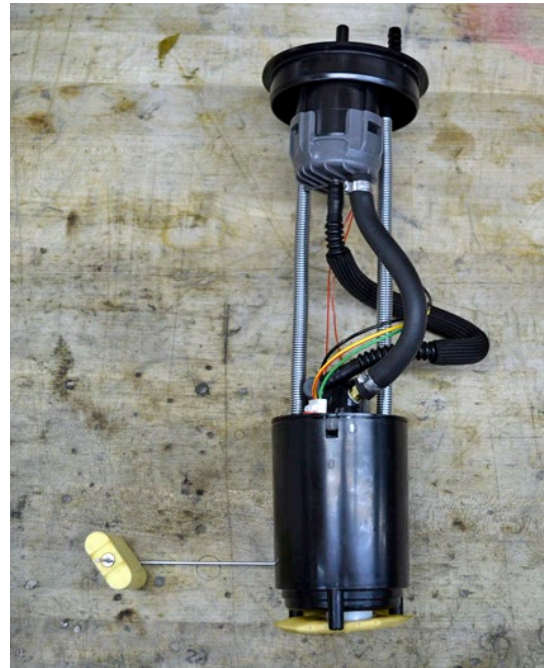


INSTALL SUPPLIED FUEL PUMP

Apply light coat of engine oil onto fitting at top of supplied Fuel Pump. Install into billet fuel pump fitting.

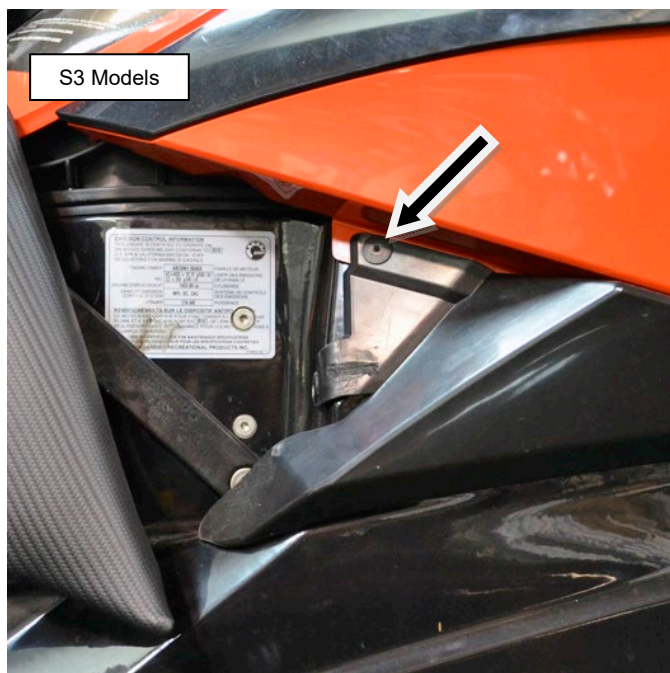
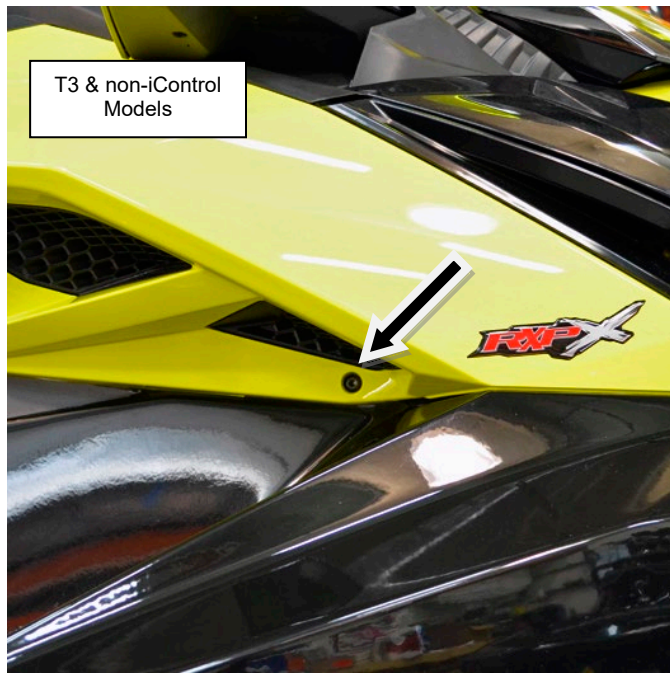
Reconnect electrical wires.

Replace lower section of fuel pump module. **NOTE: Use care when pressing into place. Verify all three clips snap into place securely.**



Replace fuel pump into fuel tank. **NOTE: Make sure fuel pump seal is properly installed. Replace seal if distorted, damaged or otherwise suspicious.**

INSTALL SUPPLIED RELAY MODULE The supplied relay should be installed in a high location and away from direct water spray. The following are examples for 2 & 3 seater iControl models.



Using supplied hardware secure relay to inside of hull so that wires hang downward.

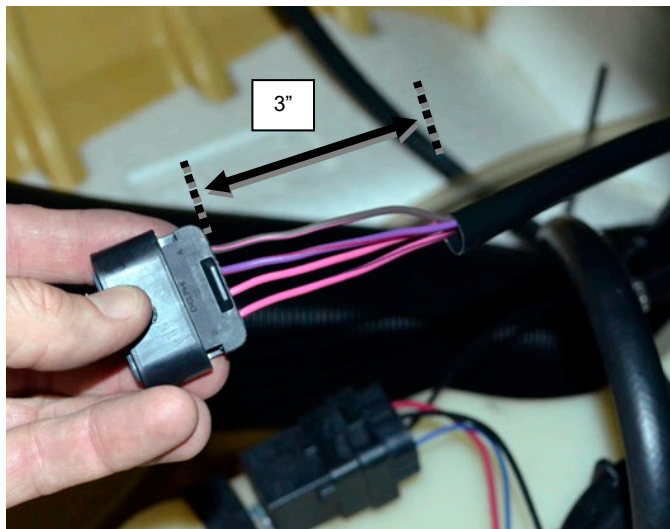


Disconnect fuel pump module electrical connector (if connected).

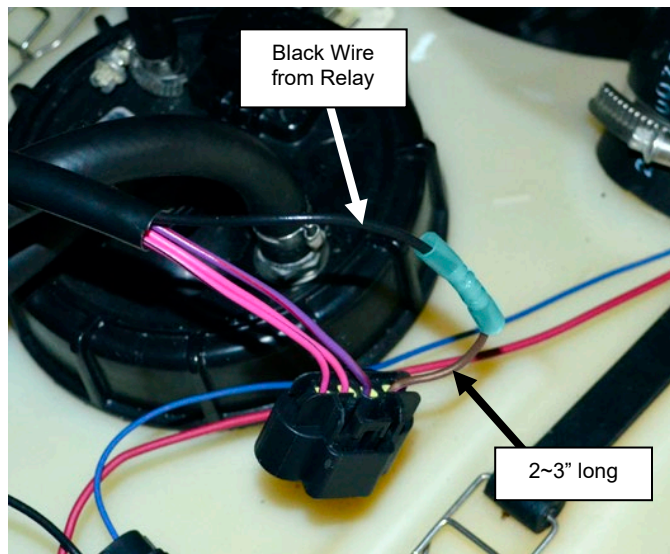
MODIFY FUEL PUMP WIRING

A wiring diagram reference is provided on the last pages of this section.

Measure sheathing on fuel pump electrical connector 3" from end. Carefully trim and discard 3" from end of sheathing. Isolate 'A' wire (brown with pink stripe on models up to 2017 or beige with pink stripe on 2018+ models). **NOTE:** Wires are identified on connector.



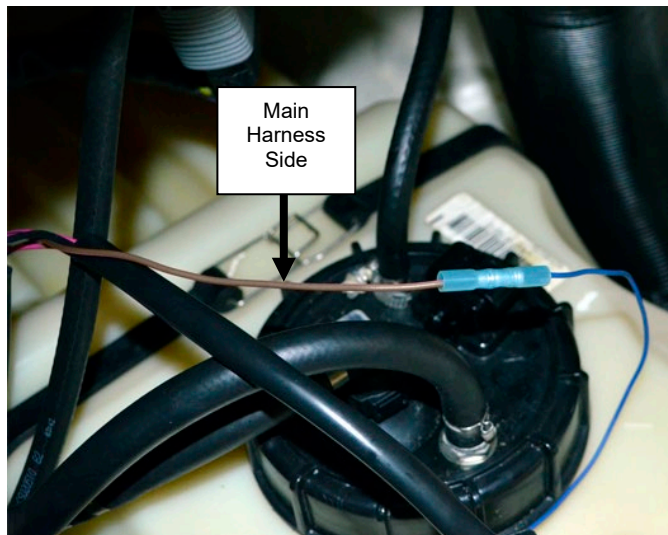
Cut 'A' wire 2~3" from connector. Pull 'A' wire out of sheathing. Feed black wire from relay into sheathing towards electrical connector. Allow for some slack back at split in sheathing. Trim excess black wire at connector.



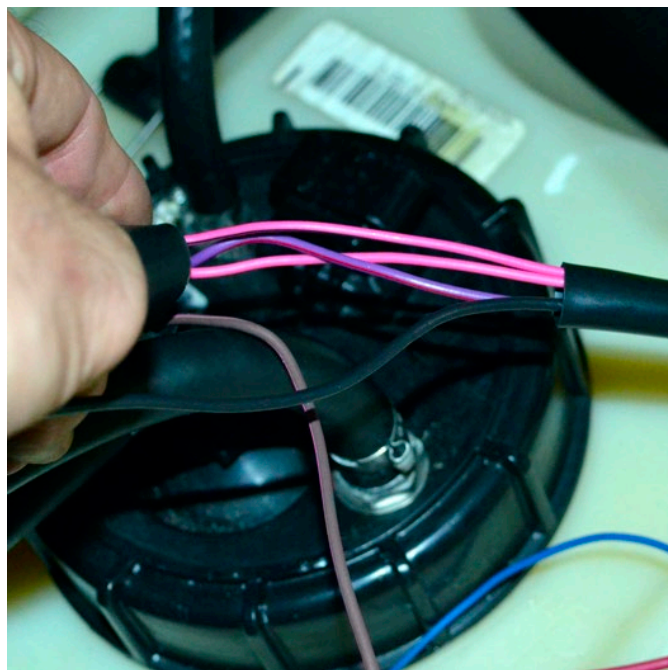
Connect black wire to 'A' wire at electrical connector using supplied heat shrink butt connector. **NOTE: DO NOT USE OPEN FLAME to shrink connector. Use a heat gun. Direct heat away from fuel tank and battery.**

Pull sheathing down over butt connector.

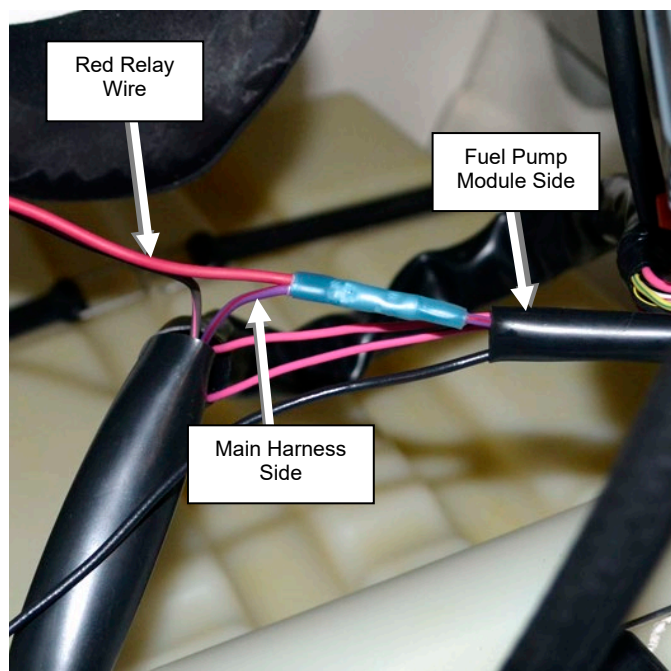
Direct blue wire from relay to open end of 'A' wire (main wiring harness side). Allow for some slack and trim excess blue and 'A' wires. Connect using supplied heat shrink butt connector. **NOTE: DO NOT USE OPEN FLAME to shrink connector. Use a heat gun. Direct heat away from fuel tank.**



At division in main wire harness for fuel pump module connection pull sheathing apart and isolate 'B' wire (purple wire with red stripe on models up to 2017, violet wire with blue stripe on 2018+ models).



Splice (cut) 'B' wire and reconnect using supplied heat shrink butt connector including red wire from relay.
NOTE: DO NOT USE OPEN FLAME to shrink connector. Use a heat gun. Direct heat away from fuel tank.



Route relay ground wire (black with eyelet connector) towards engine and secure to any one of the three grounding points on front of crankcase. **NOTE: Apply blue Loctite to bolt. Do not over tighten bolt.**

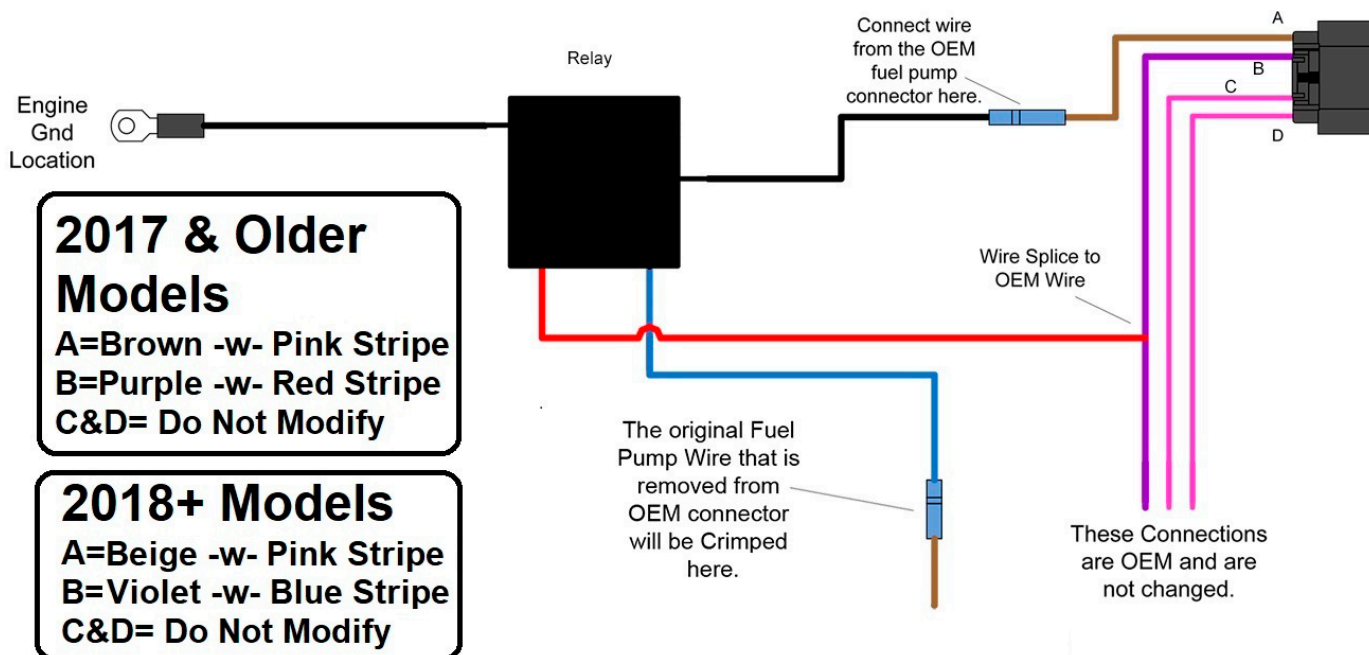
Cover relay wires with supplied sheathing. Secure wires using supplied zip ties and zip tie mounting tabs.

Reconnect fuel pump module connector.

For skis 2017 and previous, replace 10amp Fuel Pump fuse with supplied 15amp fuse. (2018+ models already have a 15 amp fuse installed.)

2011-2017 iControl Models:

30A RELAY		1. 5A 1B CTRL	2. 15A DIAG TOOL	3. 3A START/STOP	4. 3A GPS	5. 30A IBR	6. 30A CHARGE	7. 30A IB	8. 30A BATT.
+12 VOLTS ACCESSORY		+12 VOLTS					+12 VOLTS		
+12 VOLTS ACCESSORY									
9.	10.	11. 3A DEPTH SOUNDER	12. 3A GAUGE OIL + CRP	13. 10A CYL1	14. 10A CYL2	15. 10A CYL3	16. 5A SPARKER SOL.	17. 5A IBR CTRL	18. 10A FUEL PUMP
COMMUNICATION (CAN HI)					COMMUNICATION (CAN LOW)				
+12 VOLTS ACCESSORY			GROUND						



***Remember, the water belongs to everyone.
 Please ride responsibly and respect the environment!***

Technical Support

For answers to questions regarding installation or trouble shooting RIVA Performance Products contact:
 RIVA Technical Support directly at (954) 247-0705 or by e-mail at tech_support@rivaracing.com.

Limited Warranty

RIVA High Volume Fuel Pump Kits carry a 90-day limited warranty to the original purchaser. They are warranted to be free of defects in materials and workmanship under normal use and service. Customer modified components will be void of warranty. This warranty is limited to defects in the primary components only. Finish and/or wear marks in or on primary components are not covered under this warranty.

RIVA Racing's liability is expressly limited to the repair or replacement of the components contained within or associated with this kit. RIVA Racing agrees to repair or at RIVA's option, replace any defective unit without charge, if product is returned to RIVA Racing freight prepaid within the warranty period. Any equipment returned which, in RIVA's opinion, has been subjected to misuse, abuse, overheating or accident shall not be covered by this warranty.

RIVA Racing shall have no liability for special, incidental or consequential damages or injury to persons or property from any cause arising from the sale, installation or use of this product.

No other warranty, express or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose, applies. Various states do not allow for the limitation of incidental or consequential damages and therefore the above exclusion or limitation may not apply to you.

Warranty does not include the expenses related to freight or transportation of parts or compensation for any inconvenience or loss of use while being repaired. A copy of the original invoice and a Return Authorization Number (RA#) must accompany all warranty claims.

Warranted replacement parts will be returned freight collect