Fuel Pressure Regulator Kit

PART# - RS12050-RRFPR-08

APPLICATION(S): `08 & Newer 215/230/255/260/300hp Sea-Doo 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 point form and refer to illustrations. Please follow these step-by-step instructions and illustrations carefully.

*** NO SMOKING – ALLOW ENGINE TO COOL COMPLETELY ***

Required tools	Part#
1/4” Drill Bit	N/A
1/2” Drill Bit	N/A
19mm Combo Wrench	N/A
6mm Allen Wrench	N/A
Oetiker Pliers	C-48550347
Start Hex Bit Set	RS35187

Recommended tools	Part#
OEM Service Manual	Please Call

Required settings for RIVA Stage Kits:

Stage Kit	Fuel Pressure Setting
Stage 1	Not Required
Stage 2 (iControl only*)	65psi Static Pressure / **Non**-Rising Rate
Stage 3 (iControl only*)	58psi Static Pressure / **Non**-Rising Rate
Stage 4 (iControl only*)	58psi Static Pressure / **Non**-Rising Rate

*** = Fuel Pressure Regulator Kit not required for standard RIVA Stage Kits in non-iControl models.**

For ***non-rising rate*** fuel pressure install supplied ‘vent fitting’ into side of regulator.

For ***rising rate*** fuel pressure install supplied ‘barbed fitting’ into side of regulator.

NOTE: Static pressure must be set before operating craft. Engine must be running and warmed up when setting and verifying static pressure. See page 6 for setting procedure.

- SECTION 1 INSTALLATION INSTRUCTIONS -

Remove seats. RXP-X 255 & RXP 215 models remove engine cowling (5 bolts).

RXP-X 255/RXP 215 & RXT-X/RXT/GTX-SC NON-iCONTROL MODELS: Remove glove box by unsnapping clips (2) at edge closest to seat.

RXP-X 255/RXP 215

RXT-X/RXT/GTX-SC non-iControl

RXP-X 255/RXP 215 must remove hood cowling clips. Pry away from glove box carefully.

RXP-X 255/RXP 215

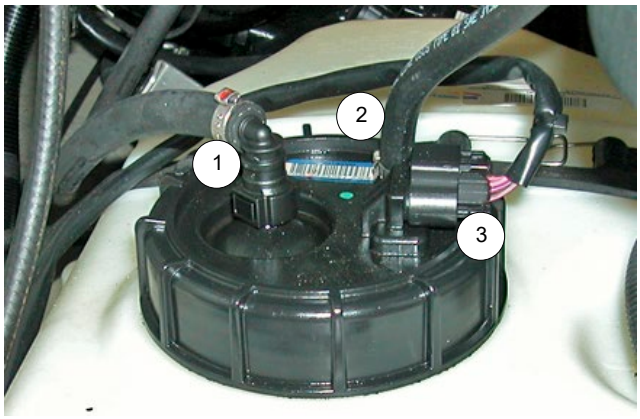
Inside front of craft remove air inlet hoses to gain access to top of fuel tank.

iControl Fixed Deck models: Access fuel tank through front storage compartment.

iControl Suspension Deck models: Remove moving deck. Refer to OEM Service Manual.

ALL MODELS

Disconnect fuel supply hose[1], fuel tank vent hose[2] and fuel pump electrical connector[3].

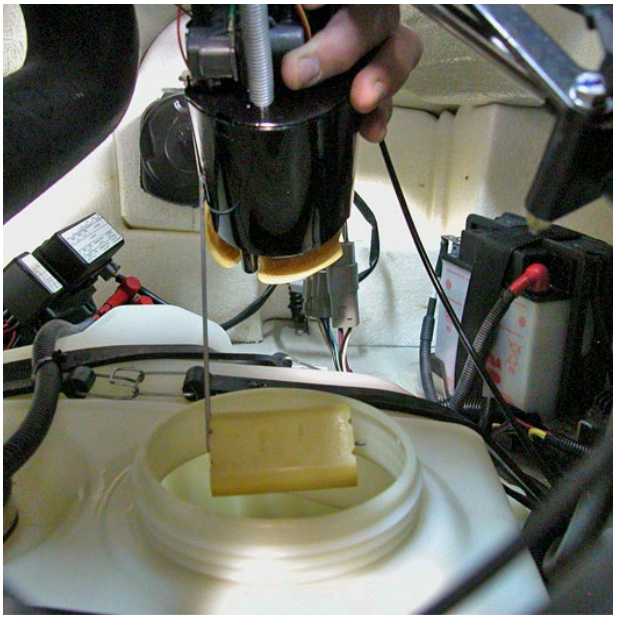


Cover fuel supply hose connector with a shop rag to prevent fuel spill.

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.

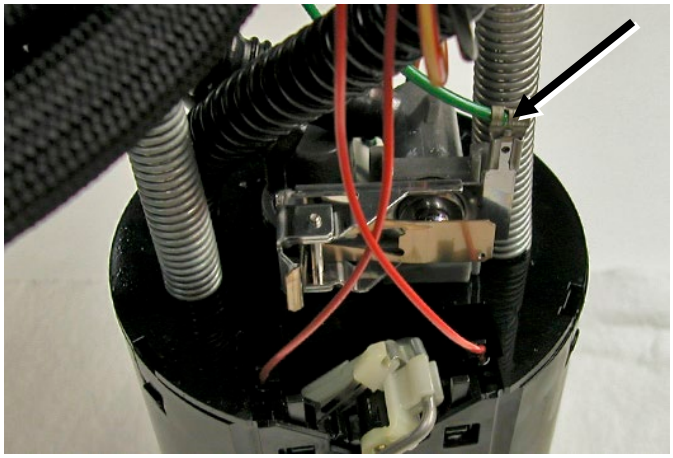
RXP-X 255/RXP 215 & RXT-X/RXT/GTX-SC NON-iCONTROL MODELS: Remove fuel pump assembly through glove box opening.

TIP: Raise fuel level sensor up while removing fuel pump.

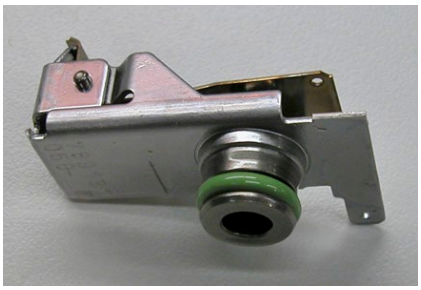
NOTE: Place a shop rag under end of fuel pump to prevent fuel spill.

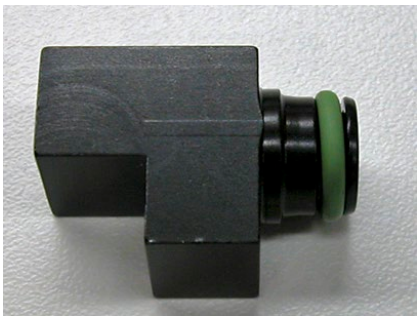
Remove the gray plastic cover over the stock fuel pressure regulator by carefully prying locking tabs (2).

Unclip ground wire (green) from fuel pressure regulator.

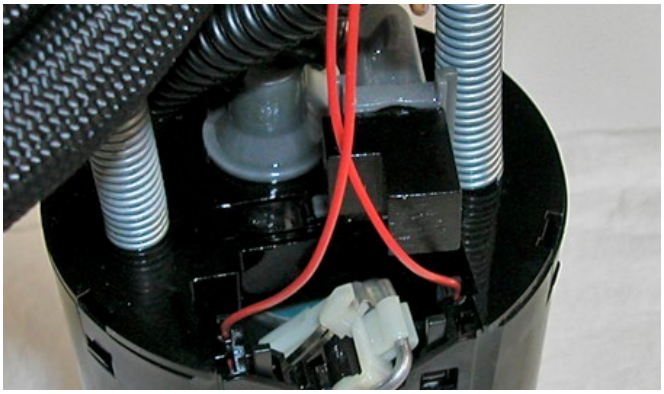


Remove fuel pressure regulator. Transfer o-ring from regulator to supplied billet block-off.



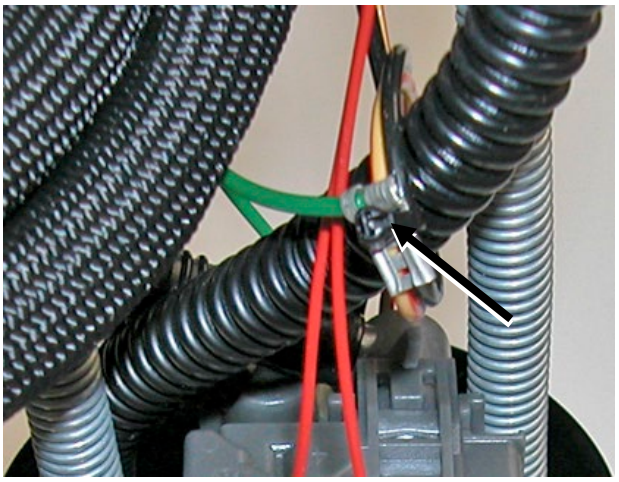


Apply a thin coat of engine oil to o-ring. Install block-off into fuel pump in place of original fuel pressure regulator.

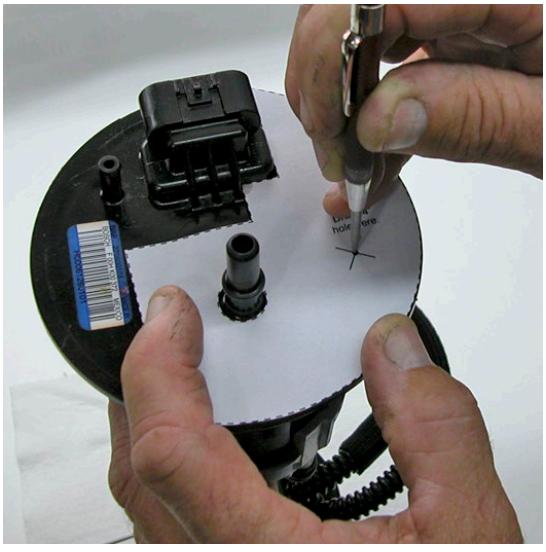


Note direction block-off is facing above.

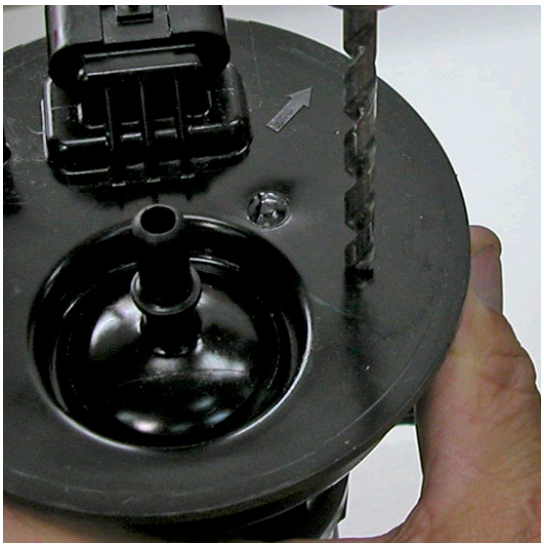
Replace gray plastic cover making sure clips (2) are securely snapped into place. Secure ground wire (green) to fuel pump wires using supplied small zip tie.



Cut out supplied template (see last page) and place on top of fuel pump. Using a sharp punch mark the top.

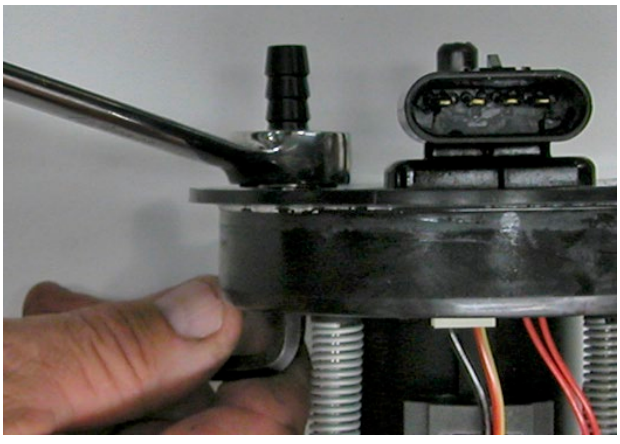


Remove template. Carefully drill a pilot hole using a 1/4" drill bit.



Carefully drill finish hole using a 1/2" drill bit.

Install supplied billet return fitting. Tighten using a 6mm allen wrench and 19mm combo wrench.



Replace fuel pump into fuel tank. Make sure fuel pump seal is properly installed and locking ring is tight. **NOTE: Do not over tighten locking ring.**

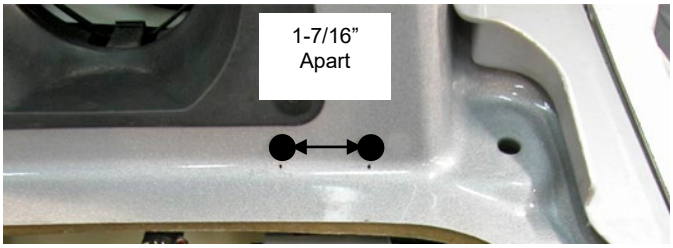
REGULATOR INSTALLATION

Installation location of regulator is dependent upon other modifications performed (EG – Aftermarket Air Intake Kits). The following steps are to serve as a guide for proper spacing of mounting hardware only.

At front of engine compartment opening (seat seal area) pick a location that allows for easy access and adjustment of fuel pressure regulator.

Measure and mark two spots exactly 1-7/16” apart.

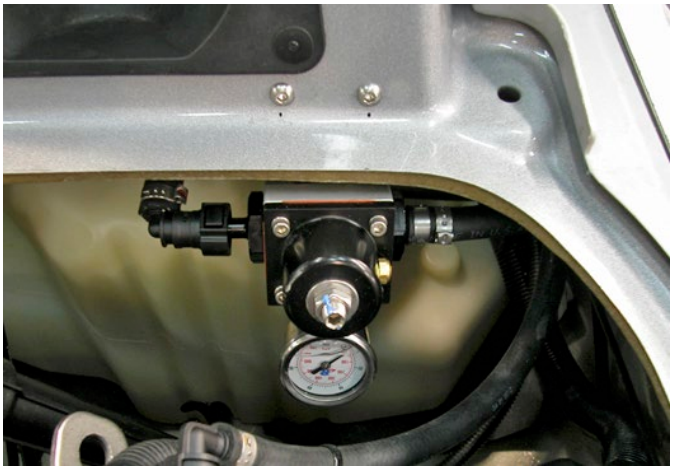
EG – RXP-X 255 non-iControl Model



Drill two (2) 1/4” I.D. holes 1-7/16” apart.

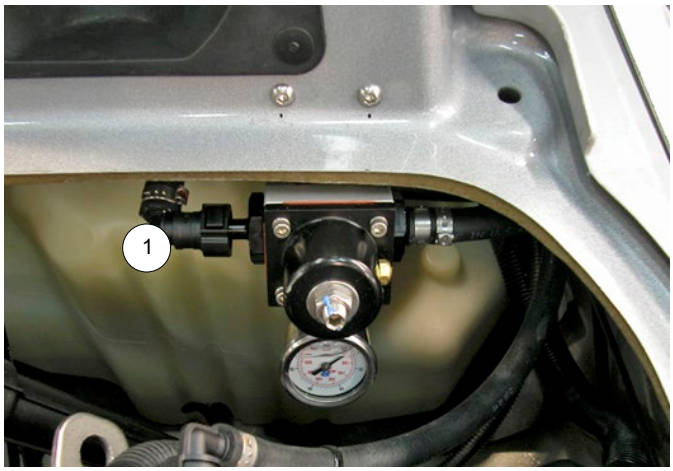
Using supplied hardware (M6 bolts, washers & nuts) mount fuel pressure regulator. **NOTE: Do not over tighten.**

EG – RXP-X 255 non-iControl Model

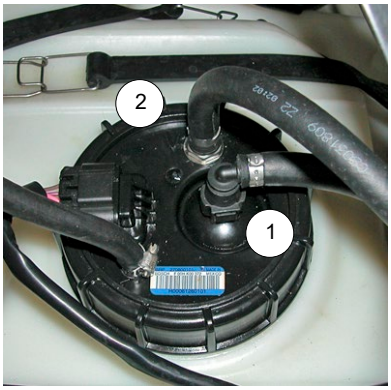


Apply a thin coat of engine oil to the fitting on left side of fuel pressure regulator. Connect the stock fuel hose[1] (from motor) to the fitting making sure it is securely snapped into place.

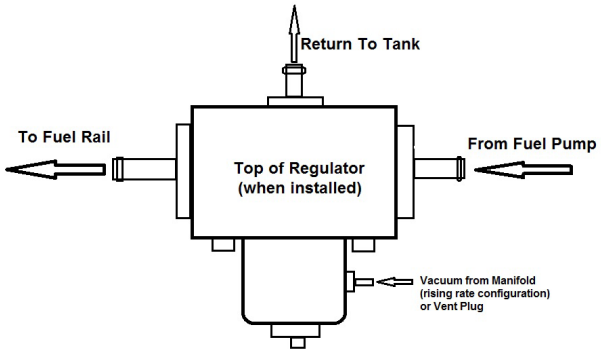
EG – RXP-X 255 non-iControl Model



Apply a thin coat of engine oil to the stock fitting on the fuel tank fuel pump. Connect the fuel pressure regulator supply hose (1) to the fuel pump making sure it is securely snapped into place.



Install the fuel pressure regulator return hose (2) onto the billet return fitting at top of fuel pump. Secure using supplied Oetiker. Attach supplied zip tie holder to hull near fuel pump. Secure return hose to zip tie holder using supplied zip tie.



Secure fuel hoses to steering cable using supplied medium zip tie.

Replace fuel pump vent hose and electrical connector.
NOTE: Do not over tighten clamp.

- SECTION 2 RISING RATE MODIFICATIONS -

Craft NOT equipped with a Blow-off Valve:

Use fitting at front of intake manifold if either of the following were previously installed:

- **300/260/255hp Models:** Intake Manifold Upgrade Kit
- **All Models:** Vacuum Port Adapter Kit
- **215hp Models:** RIVA Power Cooler Kit

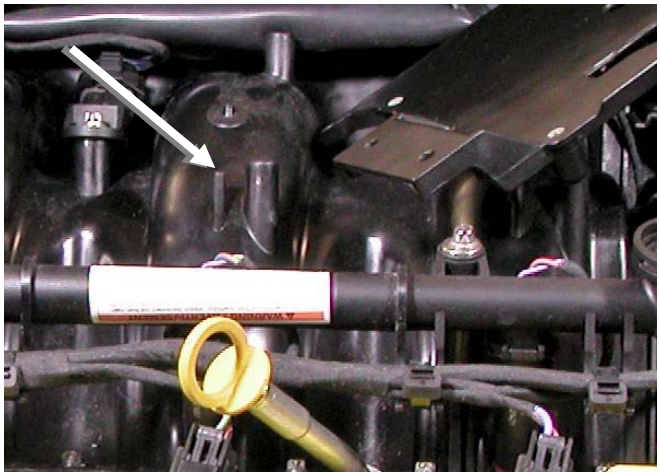
– OR –

Disconnect ECU electrical connectors (2).

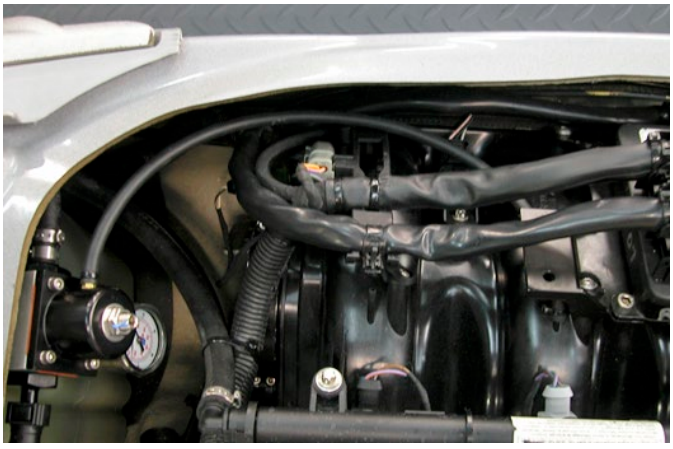
Remove bolts (4) securing ECU to mounting bracket.

Remove bolts (4) securing ECU mounting bracket to intake manifold.

Using supplied 3/32” drill bit **slowly** drill into center of boss on intake manifold that was under right edge of ECU mounting bracket.

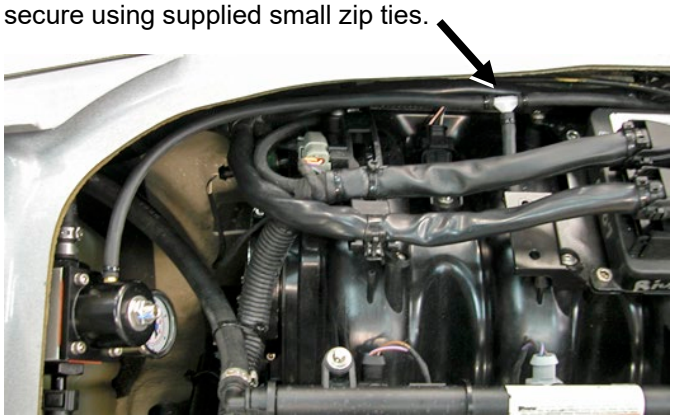


Install one end of supplied vacuum hose onto boss and secure with supplied small zip tie. Route hose forward along wiring harness to fuel pressure regulator. Install open end onto barbed fitting on fuel pressure regulator and secure with supplied small zip tie.



Craft equipped with a Blow-off Valve:

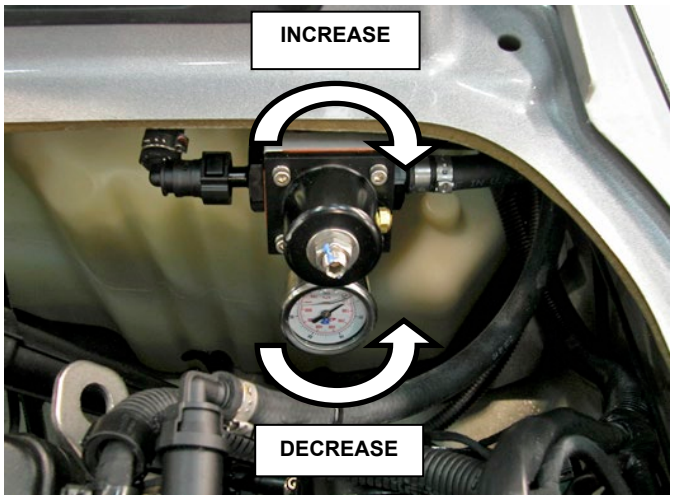
Splice supplied ‘T’ fitting into vacuum line and secure with supplied small zip ties. Connect ‘T’ fitting to fuel pressure regulator using supplied vacuum hose and secure using supplied small zip ties.



- Fuel Pressure Setting Instructions & Guide -

You must set and verify pressure when craft is running. **NOTE: In the Rising Rate configuration pressure is raised at a ratio of 1:1. Fuel pressure increases 1 pound for every 1 pound of boost.**

1. Hook craft up to flush kit.
2. Start craft’s engine and allow to idle.
3. Start water flowing to flush kit.
4. Hold adjustment screw using a 3/16” allen wrench.
5. Loosen jam nut using a 9/16” combo wrench.
6. Increase fuel pressure slowly rotating adjustment screw clockwise. Reduce by slowly rotating counter clockwise.
7. Tighten jam nut.
8. Rev engine up 2~3 times and allow to return to idle. Verify gauge is reading desired pressure.
9. Turn water off.
10. Turn engine off.



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 Fuel Pressure Regulator Kits carry a 6-month 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.

TEMPLATE