



## Yamaha 1.8L High Flow Fuel Rail Kit

**PART# - RY12040-BFR**

**APPLICATION(S):** Yamaha 1.8L engines

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. ALLOW ENGINE TO COOL COMPLETELY\*\*\***

### Recommended tools

Service Manual

### Part#

N/A

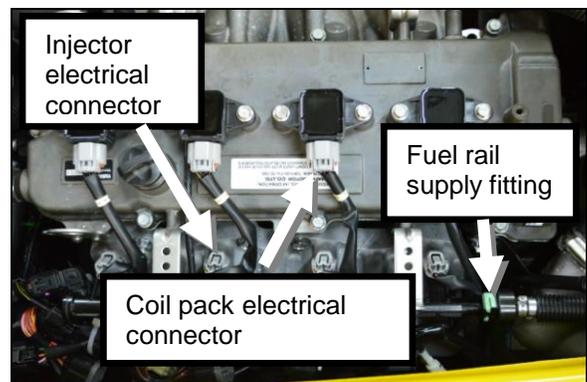
### - INSTALLATION INSTRUCTIONS -

Remove lanyard and disconnect battery cables. **NOTE: Negative (black) first. Positive (red) second.**

Remove fuel filler cap to reduce any pressure inside the fuel tank.

Place a heavy shop rag under fuel rail supply fitting at front of intake manifold. Carefully disconnect fitting.

**NOTE: Fuel system is under pressure.**



Disconnect electrical connectors (4) from fuel injectors.

Disconnect electrical connectors (4) on coil packs.

Remove bolts (3) securing fuel supply rail to intake manifold & discard.

Carefully lift fuel rail up evenly on both ends and remove injectors from intake manifold. Drain excess fuel from fuel supply rail into a container.

Install threaded billet cap on rear of fuel rail. Ensure o-ring is properly seated. **Do not over tighten.**

Install fuel supply line fitting on front of fuel rail. Ensure o-ring is properly seated. **Do not over tighten.**

The RIVA fuel rail can be installed in 2 configurations.

1. Installation with fuel rail block off.



2. Installation with supplied fuel line return fitting.



If installing fuel return line on back of supply rail, use supplied Oetiker clamp to secure return hose to fitting.

Choose your configuration & install fittings.

**Use pipe thread sealant on brass threaded fittings.**

**Important:** The fuel gauge supplied with this kit is for fuel pressure testing purposes only. This is a test gauge and should not be left on the fuel rail.



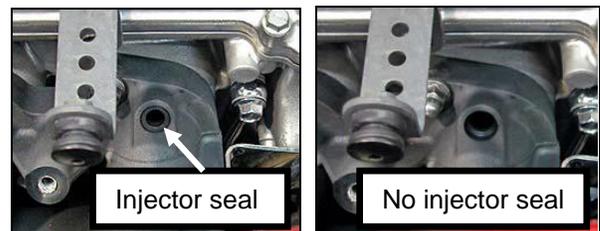
Apply a thin coat of engine oil to the top o-ring on injectors.

Install injectors into fuel rail by slowly turning injector from left to right while pushing in. **Note: Use care not to pinch or damage the injector o-ring.**



Install injectors so electrical connectors face up when fuel rail is reinstalled. **NOTE: Install so that electrical connector is closest to fuel supply rail.**

Depending upon what injectors are being installed, inspect, remove or replace OE injector seals located on the intake manifold.



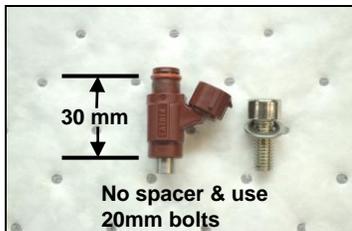
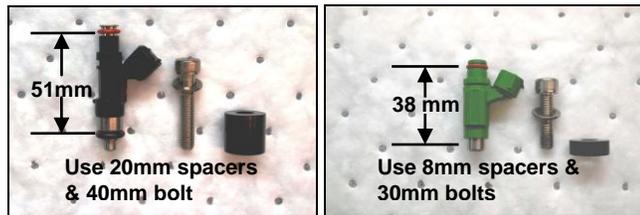
**Note: If OE injector seals are being used, the Yamaha factory service manual states to replace these seals.**

If injectors being used have an o-ring on the bottom, apply a thin coat of engine oil to the o-ring.

Install fuel rail & injectors onto intake manifold.

**Note:** Depending upon what injectors are being used, install the correct size spacer (2) between the fuel rail & intake manifold.

Examples:



Secure fuel rail & spacers to intake manifold with the supplied correct length bolts & washers (2). Spacers are to be installed between manifold & fuel rail.



Apply blue Loctite to threads of each bolt & torque to 9.6 ft. lbs. (13 Nm)

Reconnect fuel rail supply fitting. **Note:** Make sure connector is snapped into place securely.

Reconnect electrical connectors (4) on fuel injectors.

Reconnect electrical connectors (4) on coil packs

Reinstall & tighten fuel fill cap.

Reconnect battery cables. **NOTE: Positive (red) first. Negative (black) second.**

Installation is now complete. Thoroughly inspect engine compartment and bilge for tools, rags, parts, etc. Run craft on stand using flush kit to check for proper operation.

***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@rivamotorsports.com](mailto:tech_support@rivamotorsports.com).

**Limited Warranty**

RIVA Racing Fuel Supply Rail 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.