



RIVA RACING
PERFORMANCE PRODUCTS & ACCESSORIES

SVHO/SHO Performance Blow Off Valve

PART# - RY17040-BV



Applications: Yamaha SHO and SVHO 1.8L

Approximate Installation Time: 2.5 Hours

Recommended Specialty Tools:

1/8"NPT Tap (1/8" pipe thread)

21/64" drill bit

Required Materials:

blue Loctite

pipe thread sealant

Part #

N/A

N/A

Part #

N/A

N/A

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 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.

***** ALLOW ENGINE TO COOL COMPLETELY BEFORE PERFORMING INSTALLATION *****

***** NO SMOKING *** NO SMOKING *** NO SMOKING *****



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COMPONENT LIST

Yam. 1.8L Blowoff Valve Kit				
Part #RY17040-BV				
	<u>Description</u>	<u>RIVA Part #</u>	<u>Qty. Req.</u>	<u>Comments</u>
A	Blow Off Valve Assy	RY17040-BOV-SSQV	1	Assembled with hose
B	Formed Hose Only, For RY17040	RIV100-5	1	Assembled with valve
	Blowoff Valve Adapter		1	Assembled with hose
	Otoker Clamp (39.6)	16707306	1	Assembled with hose
C	Vacuum Hose with Filter	27042-1	3	
D	Small Zip Ties	TY23MX	6	
E	Plastic Tee		1	See note below
F	1/8 NPT X 1/8 Barb, Brass	220A	1	

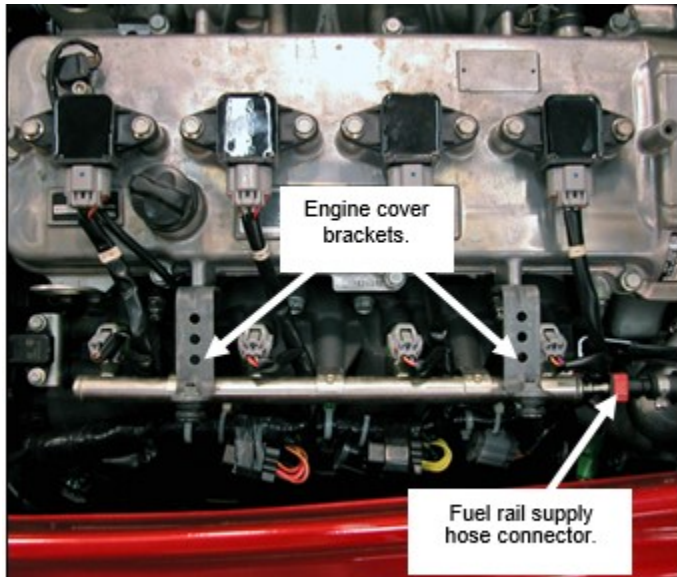
Note: Plastic Tee fitting is provided for use if other vacuum driven accessories (such as RIVA Rising Rate Fuel Pressure Regulator) are already installed on vehicle. If your vehicle is equipped with an accessory that already has a vacuum connection to the intake manifold it is not necessary to install another vacuum fitting into the manifold. Use the supplied plastic Tee to make the connection to the previously fitted vacuum driven accessory. **Do not connect the Blow Off Valve to the vacuum line for the OEM MAP sensor!**

Your kit was inspected and verified before being carefully packaged by our staff. Please check package contents before beginning assembly. If you have a question about missing or damaged items please contact RIVA Technical Support directly at (954) 247-0705 or by e-mail at tech_support@rivamotorsports.com

- INSTALLATION INSTRUCTIONS -

Remove seat. Remove plastic engine cover. Remove brackets (2) on right side of valve cover for plastic engine cover. Disconnect fuel rail supply hose. **Note: Be careful not to spill fuel.** (Figure 1)

Figure 1

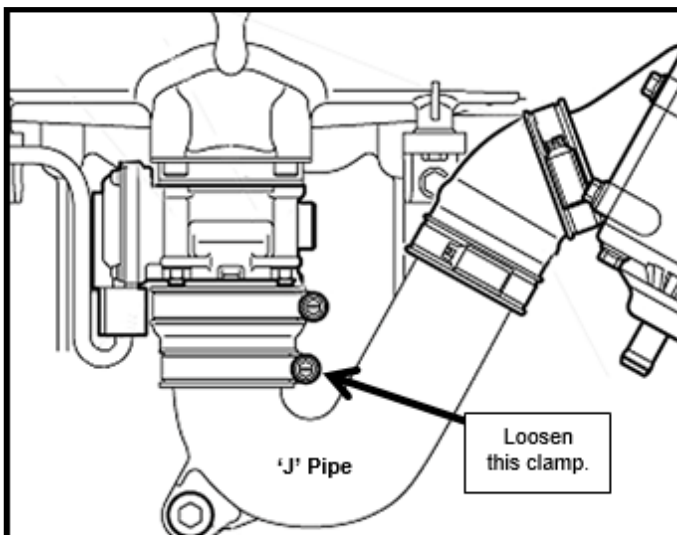


Disconnect spark plug coil and fuel injector electrical connectors.

Remove bolts securing fuel rail to intake manifold. Remove bolt securing oil level gauge tube to front of intake manifold.

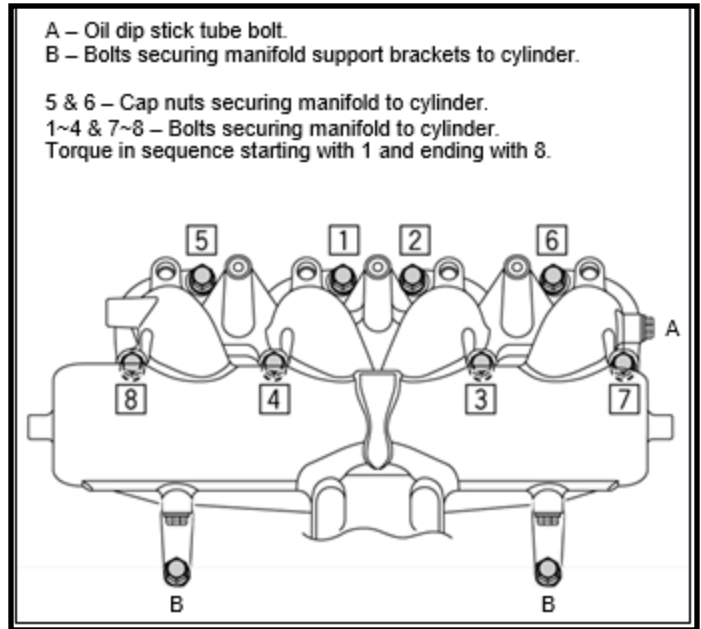
Lift up on fuel rail to remove fuel injectors from intake manifold. Raise front of fuel rail up and move towards back of engine. You will need to disconnect several electrical connectors during this step. Store fuel rail assembly vertically in engine compartment to right of electrical box. Reach down alongside intake manifold to locate coupler connecting throttle body to 'J' pipe. Loosen lower of two hose clamps securing coupler to 'J' pipe. (Figure 2)

Figure 2



Remove bolts and cap nuts securing intake manifold to engine. (Figure 3)

Figure 3



Disconnect map sensor electrical connector at rear of intake manifold.

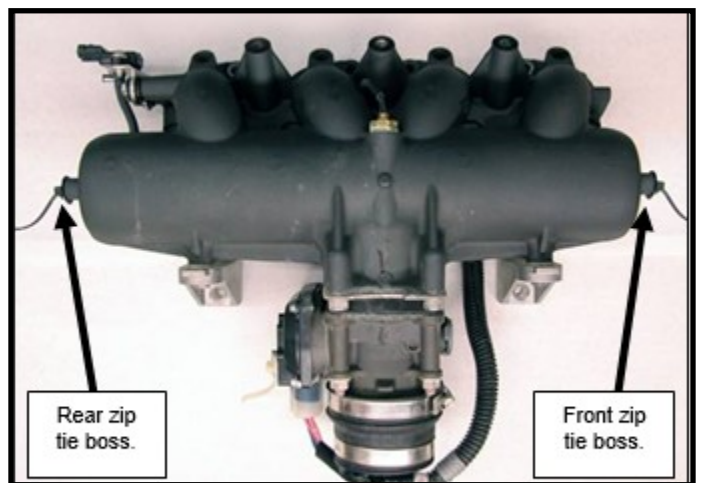
Lift intake manifold up and away to remove from motor. Cover 'J' pipe and cylinder intake openings.

2017 and earlier SHO and SVHO models have an Aluminum intake manifold. 2018 and later models have a plastic intake manifold. In the following section use follow the instructions that apply to your intake manifold type.

2017 and earlier models with aluminum intake manifold:

Remove zip tie clip from boss at rear of intake manifold. (Figure 4)

Figure 4

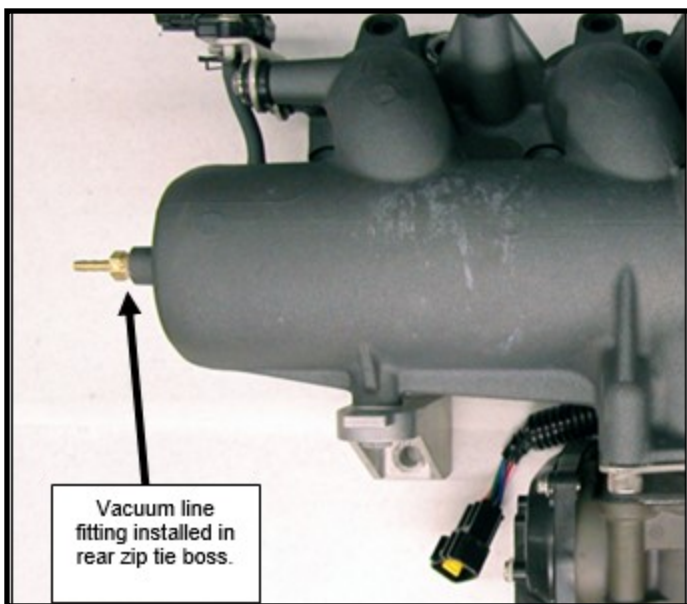


Carefully drill a hole into center of boss and into intake manifold using a 21/64" drill bit. **Note: It is important you use the proper size drill bit.**

- INSTALLATION INSTRUCTIONS -

Tap newly made hole using a 1/8" NPT Tap. **Note: Thoroughly clean intake manifold inside and out.** Install supplied brass vacuum fitting. (Figure 5) **Note: Apply pipe thread sealant to threads. Do not over tighten fitting.**

Figure 5



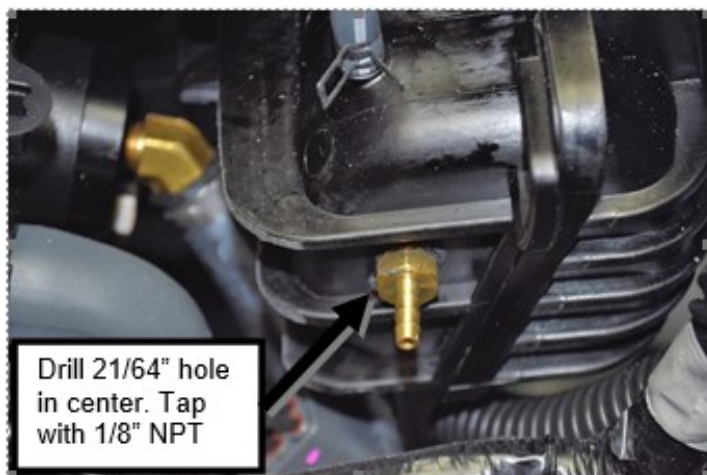
If you plan to one day upgrade your stock intercooler to a RIVA Power Cooler Kit we recommend you completely remove zip tie boss at front of intake manifold prior to replacing intake manifold. (Figure 4)

2018 and later models with plastic intake manifold:

Locate center of finless area below MAP sensor vacuum fitting on rear of intake manifold.

Carefully drill a hole into intake manifold in center of finless area using a 21/64" drill bit. **NOTE: It is important you use the proper size drill bit.** Tap newly made hole using a 1/8" NPT Tap. **Note: Thoroughly clean intake manifold inside and out.** Install supplied brass vacuum fitting. **Note: Apply pipe thread sealant to threads. Do not over tighten fitting.** (Figure 6)

Figure 6



All models:

At front of engine remove stock rubber hose connecting supercharger to intercooler. Retain clamps. Discard hose. (Figure 7)

Figure 7



Thoroughly clean supercharger outlet and intercooler inlet flanges with a non-residual cleaner. Install supplied heavy-duty silicone hose with blow-off valve and secure using stock clamps. **NOTE: Do not over tighten clamps.** (Figure 8)

Figure 8



Install intake manifold. **Tip: Apply generous amount of glass cleaner to outside of 'J' pipe and inside of throttle body coupler.** Secure intake manifold and oil level gauge tube using stock hardware.

- INSTALLATION INSTRUCTIONS -

Reinstall OEM manifold bolts and nuts previously removed. Torque as specified in appropriate Yamaha OEM service manual for model. **NOTE: Apply blue Loc-tite to bolts.** Secure stock clamp at throttle body coupler. **NOTE: Do not over tighten clamp.**

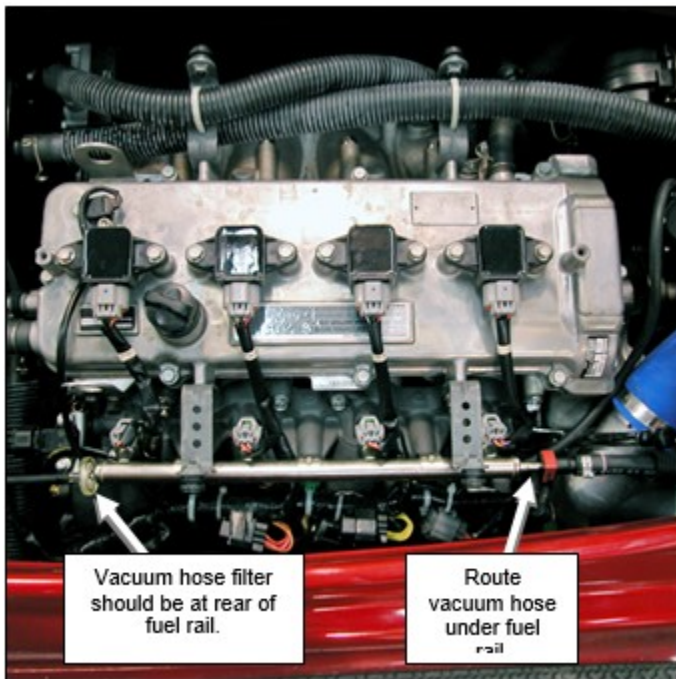
Reconnect map sensor. Replace fuel rail making sure fuel injectors are installed completely into intake manifold. **NOTE: Apply blue Loc-tite to bolts. Do not over tighten bolts.**

Reconnect fuel rail supply hose. **Note:** Be careful not to spill fuel.

Reconnect all electrical connections.

Install supplied vacuum hose. Route hose under fuel rail. Longer end of hose connects to blow-off valve. Shorter end connects to fitting installed at rear of intake manifold. (Figure 9)

Figure 9



Secure vacuum hose to blow-off valve, intake manifold fitting and fuel rail supports using supplied zip ties.

Replace engine cover brackets. **NOTE: Apply blue Loc-tite to bolts. Do not over tighten bolts.**

Replace plastic engine cover.

Check bilge for tools, rags, etc. Start craft and run 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.

Limited Warranty

RIVA Performance Blow-Off Valve 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.