



401 South Grand Ave., Santa Ana, CA 92705
Tel: 714.550.6070 Fax: 714.550.9661 www.twobros.com



2009 Yamaha R1

V.A.L.E.™ Full Exhaust System with Dual M-2 Exhaust Canisters
Part # 005-2380106V / 005-2380107V / 005-2380108V / -2380606V / -2380607V / -2380608V



Parts List

Qty.	Description	Part Number
1	M-2 Muffler Canister (Left Side)	Varies
1	M-2 Muffler Canister (Right Side)	Varies
1	Header Kit	005-23801HK / 23806HK
1	HARDWARE KIT	005-238-3C
4	X-Ring (half)	005-7-2-3
2	R1 Heat Shield Plug	005-238-8
8	6x14mm Socket Head Cap Screw	005-SH614
8	6mm Split Washer	005-WL6
9	65mm Spring	005-S65
1	6x8mm Button Head Cap Screw	005-BH608
3	6x10mm Button Head Cap Screw	005-BH610
1	R1 FS Bracket	005-23801-B
2	Hose Clamp	005-27-10024
1	Permatex Ultra Black Gasket Maker	031-P22072
1	5mm Long Handle Ball End Hex Key	005-9-18610
1	T20 Torx Screw Hex Key	005-9-15820
1	TBR Sticker Kit	015-10212

IMPORTANT - PLEASE READ CAREFULLY

We recommend that this performance part be installed by a qualified motorcycle technician. If you have any doubts as to your ability to install this performance part, please consult with your local motorcycle dealer. Read all instructions first before starting installation. Make sure the motorcycle and exhaust system are completely cool before starting the installation. Also, make sure the bike is secure on a centerstand or ideally a service lift during installation. Be sure to save all stock components for possible use later.

Installation Instructions

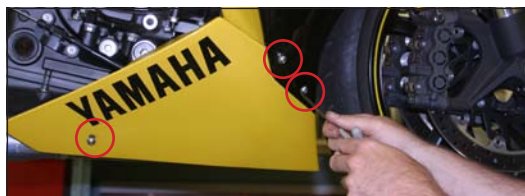
1. Make sure the bike is completely cool before starting the installation. Make sure the bike is secure on a centerstand or ideally a service lift.
2. Remove main seat assembly by removing the two allen head bolts at the rear of the seat.
3. Remove passenger seat assembly.
4. Remove mid-pipe heat shield covers.



5. Remove rear cowling by sliding rearward with bolts removed.



6. Remove joint clamps and muffler mounting bolts to remove OEM muffler assembly.
7. Remove OEM heat shield from each OEM muffler assembly.
8. Remove clip nut from OEM muffler.
9. Remove lower fairing.



10. Remove O2 sensor from header.



11. Remove foot peg assembly (brake light wires can stay attached).



12. Remove main Cat mounting bolt. Remove catalyst joint clamp. Remove catalyst.



13. Remove header mounting bolt and header nuts.



14. Remove OEM header assembly.

Installation Instructions

15. Install headers 1-4 using the OEM copper gaskets and header nuts. Leave loose for now.



16. Install merge collectors using a small amount of high temp silicone on all slip-fit joints.



17. Install heat shield bracket to TBR mid-pipe using the supplied 6x8mm button head cap screw.



18. Install OEM heat shield to TBR mid-pipe section using all OEM hardware. Install mid-pipe section using OEM bolt and bracket to secure in place. Leave loose for now. (You will need to remove sleeve from rubber grommet and replace with the shoulder end facing the bolt)



19. Attach TBR slip-on tubes to TBR muffler using the 2 piece X-Ring and socket head cap screws with lock washers that are provided. Leave loose for now.



20. Attach left and right slip tubes to motorcycle using the OEM muffler mount bolts.



21. Install supplied springs to all slip-fit joints.



22. Check all exhaust tubes making sure there is clearance of minimum .25" from all plastics and other motorcycle parts. Make adjustments if necessary.

23. Tighten header flange nuts.

24. Tighten mid section mounting bolts.

25. Check alignment at rear of motorcycle and if adjustment is correct tighten the X-Ring 6x14mm socket head cap screws and barrel clamps to secure in position.

26. Attach the OEM heat shield to the TBR slip tube using the OEM clip nut and provided hose clamp.



27. Re-install heat shield cover and right side foot peg assembly.

28. Insert supplied TBR plugs in the rubber lined holes on OEM heat shield cover.



29. Re-install OEM O2 sensor.
*You may need to re-route wire from under fuel tank to keep sensor wire from being pulled too tight.

30. Double check your work to ensure everything is tight and properly installed.

31. Re-install lower fairing and rear cowling. Be sure to check all hoses and bodywork for clearance and make adjustments if needed.

32. Before you run the bike, clean off all fingerprints and dirt, as any oily residue will etch the metal and become somewhat permanent when the system gets hot. Run the bike and enjoy. It is normal for some white smoke to appear the first time you start the bike. This is packing/manufacturing oil from inside the pipe burning off. Check for gaps or leaks. If you find a leak, a little high temperature silicon sealant should fix it. After 50 to 100 miles, recheck all fasteners for tightness.



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Care & Cleaning / Warranty

Care & Cleaning

Keep system free of dirt and moisture. Store in a cool, dry place. For cleaning use a mild spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

Stainless Header System: Polished stainless steel pipes will turn a light golden hue after a few heat cycles, this is a normal characteristic of high quality stainless steel.

Carbon Fiber Mufflers: Always make sure the fiberglass packing inside is in good condition and not burned out, as exhaust heat inside an empty canister will deteriorate the Carbon Fiber sleeve. TBR sells repack kits (TBR part # 005-10038) that include new rivets and repack material as well as a drill bit (#30), making it easy to do yourself. Also, NEVER dyno test your bike with carbon fiber mufflers installed - the intense heat and lack of cooling air can quickly cause the CF material to burn. Two Brothers Racing does not provide a warranty for burned carbon fiber.

Aluminum Mufflers: Use an aluminum or mag wheel polish such as Mother's to restore the bright finish to factory spec.

Repack all road canisters every 3,000 miles. Part #005-10038

Two Brothers Racing products are intended for closed course competition purposes only, and therefore are sold "as is" without warranty. Two Brothers Racing specifically disclaims any warranties of merchantability or fitness for a particular purpose and disclaims all responsibility for consequential and incidental damages or any other losses arising from the use of these products or parts.

005-2380106V



Qty.	Description	Part Number
1	M-2 Muffler Canister (Left) Aluminum	005-238-206L
1	M-2 Muffler Canister (Right) Aluminum	005-238-206R
1	Header Kit	005-23801HK
1	HARDWARE KIT	005-238-3C
4	X-Ring (half)	005-7-2-3
2	R1 Heat Shield Plug	005-238-8
8	6x14mm Socket Head Cap Screw	005-SH614
8	6mm Split Washer	005-WL6
9	65mm Spring	005-S65
1	6x8mm Button Head Cap Screw	005-BH608
3	6x10mm Button Head Cap Screw	005-BH610
1	R1 FS Bracket	005-23801-B
2	Hose Clamp	005-27-10024
1	Permatex Ultra Black Gasket Maker	031-P22072
1	5mm Long Handle Ball End Hex Key	005-9-18610
1	T20 Torx Screw Hex Key	005-9-15820
1	TBR Sticker Kit	015-10212

005-2380107V



Qty.	Description	Part Number
1	M-2 Muffler Canister (Left) Carbon Fiber	005-238-207L
1	M-2 Muffler Canister (Right) Carbon Fiber	005-238-207R
1	Header Kit	005-23801HK
1	HARDWARE KIT	005-238-3C
4	X-Ring (half)	005-7-2-3
2	R1 Heat Shield Plug	005-238-8
8	6x14mm Socket Head Cap Screw	005-SH614
8	6mm Split Washer	005-WL6
9	65mm Spring	005-S65
1	6x8mm Button Head Cap Screw	005-BH608
3	6x10mm Button Head Cap Screw	005-BH610
1	R1 FS Bracket	005-23801-B
2	Hose Clamp	005-27-10024
1	Permatex Ultra Black Gasket Maker	031-P22072
1	5mm Long Handle Ball End Hex Key	005-9-18610
1	T20 Torx Screw Hex Key	005-9-15820
1	TBR Sticker Kit	015-10212

005-2380108V



Qty.	Description	Part Number
1	M-2 Muffler Canister (Left) Titanium	005-238-208L
1	M-2 Muffler Canister (Right) Titanium	005-238-208R
1	Header Kit	005-23801HK
1	HARDWARE KIT	005-238-3C
4	X-Ring (half)	005-7-2-3
2	R1 Heat Shield Plug	005-238-8
8	6x14mm Socket Head Cap Screw	005-SH614
8	6mm Split Washer	005-WL6
9	65mm Spring	005-S65
1	6x8mm Button Head Cap Screw	005-BH608
3	6x10mm Button Head Cap Screw	005-BH610
1	R1 FS Bracket	005-23801-B
2	Hose Clamp	005-27-10024
1	Permatex Ultra Black Gasket Maker	031-P22072
1	5mm Long Handle Ball End Hex Key	005-9-18610
1	T20 Torx Screw Hex Key	005-9-15820
1	TBR Sticker Kit	015-10212