

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

VARIABLE AXIS LOCKING EXHAUST

2006-07 **Yamaha R6**

V.A.L.E.™ Complete Exhaust System with M-2 Canister Part # 005-1460106V / 005-1460107V / 005-1460108V



Parts List

Qty.	Description	Part Number
1	R6 (06-07) Muffler Canister M-2	Varies
1	R6 (06-07) Slip-OnTube	005-14601S
1	R6 (06-07) Complete 4-2-1 Header Assy.	005-14601HK
1	Muffler Clamp	Varies
1	HARDWARE KIT	005-146-3C
2	X-Ring (half)	005-7-2-3
1	R6 (06-07) Billet Mounting Bracket	005-146B
1	8x16mm Flange Bolt	005-FB816
1	66mm Barrel Clamp	005-27-66MSH
6	80mm Swivel Hook Spring	005-S80
1	5mm Long Handle Ball end hex key	005-9-18610
4	6x14mm Socket Head Cap Screw	005-SH614
1	Permatex Ultra Black Gasket Maker	031-P22072
4	6mm Split Washer	005-WL6

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

- 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 lower right fairing from the motorcycle.





3. Remove muffler inlet cover from front of muffler to expose exhaust valve cables (noise reduction valve).





 Remove cables from muffler and cable clamp from right side rearset assembly.





5. Remove muffler joint clamp and muffler mounting bolt.





Remove muffler assembly. Also be sure to remove the OEM retaining ring and gasket from the stock slip tube.





7. Remove bracket holding the brake reservoir to the frame.



8. Remove the noise reduction valve servo bracket from the frame.



Remove servo by pulling out from the right side of the motorcycle and disconnect the cables. Disregard cables.



 Remount the servo without the cables. This step is necessary in order to keep an error code from being displayed on the LCD screen.



11. Reinstall the brake reservoir.



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12. Remove the stock header exhaust port nuts (8 nuts total) in order to remove the stock headers.



13. Allow the headpipe assembly to swivel downward.



14. Remove both 8mm allen bolts and the O^2 sensor plug from rear of headpipe assembly, making sure to support it with your hand from underneath.

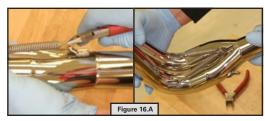


15. Remove the headpipe assembly from the bike.



Installation Instructions

16. Assemble headpipes with collectors before attaching to the exhaust ports. Attach the headers to the collectors using the supplied spring hooks as shown (see Fig. 16.A). It is important that you have the headers and collectors configured as shown below (see Fig. 16.C), with the spring hooks facing toward the inside.





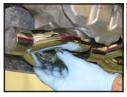


NOTE: The components of the header assembly are individually labeled (see Fig. 16.B) and must be installed together as shown (see Fig. 16.C). Figure 16.C illustrates how the header assembly is configured ("R" and "L" denote the rider's right and left sides).

17. Attach headers to exhaust ports with the stock bolts and nuts, being sure to leave loose enough to still be able to adjust the headers back and forth. Make sure to keep OEM copper gasket between the headpipe and cylinder head.



- Apply a small amount of the black RTV sealant (included) to the inside of the 2-1 collector.
- Slide collector over the two header collectors so that the spring hooks are facing downward. Attach springs to hooks.





 Loosely attach s-bend to muffler using the V.A.L.E. X-Ring and the four 6x14mm socket head cap screws (provided). Use the split lock washers here also.



21. Add the supplied muffler mounting bracket to stock mounting hole. Tighten.



22. Attach muffler and s-bend to muffler mount using the supplied muffler clamp, and attach s-bend to 2-1 collector using the supplied barrel clamp. Once everything is aligned, tighten all hardware (muffler mount, x-ring, barrel clamp and header nuts).



23. Insert stock O² sensor into the provided bung and tighten.



- 24. Double check your work and make sure all hardware is securely tightened.
- 25. 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.

Warranty Information

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.

005-1460106V



Qty.	Description	Part Number
1	R6 (06-07) Muffler Canister M-2	005-146-206
1	R6 (06-07) Slip-On Tube	005-14601S
1	R6 (06-07) Complete 4-2-1 Header Assy.	005-14601HK
1	Muffler Clamp	005-2C
1	HARDWARE KIT	005-146-3C
2	X-Ring (half)	005-7-2-3
1	R6 (06-07) Billet Mounting Bracket	005-146B
1	8x16mm Flange Bolt	005-FB816
1	66mm Barrel Clamp	005-27-66MSH
6	80mm Swivel Hook Spring	005-S80
1	5mm Long Handle Ball end hex key	005-9-18610
4	6x14mm Socket Head Cap Screw	005-SH614
4	6mm Split Washer	005-WL6

005-1460107V



Qty.	Description	Part Number
1	R6 (06-07) Muffler Canister M-2	005-146-207
1	R6 (06-07) Slip-OnTube	005-14601S
1	R6 (06-07) Complete 4-2-1 Header Assy.	005-14601HK
1	Muffler Clamp	005-2C
1	HARDWARE KIT	005-146-3C
2	X-Ring (half)	005-7-2-3
1	R6 (06-07) Billet Mounting Bracket	005-146B
1	8x16mm Flange Bolt	005-FB816
1	66mm Barrel Clamp	005-27-66MSH
6	80mm Swivel Hook Spring	005-S80
1	5mm Long Handle Ball end hex key	005-9-18610
4	6x14mm Socket Head Cap Screw	005-SH614
4	6mm Split Washer	005-WL6

005-1460108V



Qty	. Description	Part Number
1	R6 (06-07) Muffler Canister M-2	005-146-208
1	R6 (06-07) Slip-On Tube	005-14601S
1	R6 (06-07) Complete 4-2-1 Header Assy.	005-14601HK
1	Muffler Clamp	005-2C
1	HARDWARE KIT	005-146-3C
2	X-Ring (half)	005-7-2-3
1	R6 (06-07) Billet Mounting Bracket	005-146B
1	8x16mm Flange Bolt	005-FB816
1	66mm Barrel Clamp	005-27-66MSH
6	80mm Swivel Hook Spring	005-S80
1	5mm Long Handle Ball end hex key	005-9-18610
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