

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

2004-07 Yamaha **RHINO 660**

V.A.L.E.™ Slip-On Exhaust System with M-7 Canister Part # 005-1520406V



Parts	

Qty.	Description	Part Number
1	Muffler Canister M-7	005-152-206M
1	SlipTube	005-15201S
2	Heavy Duty Muffler Clamp	005-2C4
1	HARDWARE KIT	005-152-3
1	Billet Bolt-on Muffler Mount (Front)	005-152-21
1	Billet Bolt-on Muffler Mount (Back)	005-152-21B
2	Billet Bolt-on Muffler Mount "U" Bracket	005-152-21U
1	Barrel Clamp 58mm	005-27-58MSH
4	8x40mm Socket Head Cap Screws	005-SH840
6	M8 Split High Collar Lock Washers	005-WL8
4	M6 Split High Collar Washers	005-WL6
2	8mm Large Flat Washers	005-WO8
2	8x20mm Socket Head Cap Screws	005-SH820
2	Spark Arrester Screen (Installed)	005-106S
4	6x14mm Socket Head Cap Screws	005-SH614
1	5mm Long Handle Ball End Hex Key	005-9-18610
1	Permatex High Strength Threadlock	031-P09179
2	TBR Logo Decal 4"	015-10208-A

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.

Warranty

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.

Installation Instructions

- Make sure the ATV is completely cool before starting the installation. Make sure the ATV is secure and the wheels are chocked to prevent rolling during installation.
- 2. Remove the bed from the rear section of the Rhino. First remove the pins in the hinges, unhook the hydraulic shocks, then disconnect the electronics. Remove the aluminum pan from the top of the exhaust.













Remove the stock headpipe. This step will make it much easier to remove the stock muffler.







Remove the mounting bolts for stock muffler and S-bend.





5. You will need to twist and rotate the stock muffler assembly in order to remove it from the chassis.









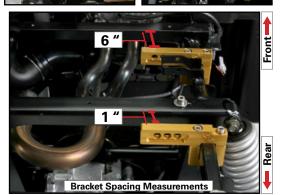
- Reinstall the stock headpipe and tighten.
- 7. Install mounting brackets to frame as shown. The rear bracket has tta notch for bed hydrolic shock clearance. Use threadlock and lock washers on all hardware. Because of the differences with every Rhino, this bracket may fit tighter on some frame rails due to paint and/or heat from production welds and twisting. This is normal.











NOTE: Instructions continued on Page 2...



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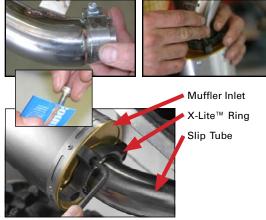
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Installation Instructions

 Next, slide the supplied barrel clamp over the s-bend tube. Apply a small amount of threadlock to the 6x16mm screws and loosely attach the V.A.L.E.™ ring to the TBR muffler as shown. Do not tighten yet.



V.A.L.E.™ Assembly Detail

Slide the supplied muffler clamp over the muffler and loosely attach the muffler to the muffler mounts as shown. Be sure to remount the stock mounting plate as shown in the photo.



- 10. Make sure the muffler is properly aligned. Once you are satisfied with the alignment, securely tighten the 4 6x16mm V.A.L.E.™ screws, the muffler mounting bolts, and finally the barrel clamp.
- Re-install the heatshield, the bed and hydrolic shock. Check to make sure that the shocks clear the brackets.
- 12. 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 1 to 2 hours of riding recheck all fasteners for tightness.





Maintenance

- Check your hardware every 10 hours of operation, including the bolts on the muffler assembly.
- Packing should be replaced every 15 hours of operation.
- Quiet inserts are also available. P1 Powertip (005-P1), P1-R Powertip (005-P5) and P4 Powertip (005-P4)
- In order to maintain optimal performance, it is recommended that this spark arrestor be cleaned after every 30 hours of use. (Our U.S. Forestry Service approved Spark Arrester is included with all M-7 V.A.L.E. stainless/aluminum exhaust systems. These tips prevent broadcasting sparks with no appreciable loss of horsepower. Additionally this tip prevents the introduction of foreign matter into the exhaust system.)

Care & Cleaning

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Keep system free of dirt and moisture. Store in a cool, dry place. Make sure vehicle is completely cool before maintenance.

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. Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

Polished Aluminum Canisters: Use an aluminum or mag wheel polish to restore the bright finish to factory spec.

Repack all road canisters every 3,000 miles. Part #005-10038 Repack all offroad canisters after every 10 hours of use. Part #005-10038MX

NEVER dyno test your bike with carbon fiber or titanium canisters installed - the intense heat and lack of cooling air can quickly burn through the canister material. Two Brothers Racing does not provide a warranty for burned canisters.