



401 South Grand Ave., Santa Ana, CA 92705
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2004-07 Yamaha RHINO 660

V.A.L.E.™ Complete DUAL Exhaust System with M-7 Canisters
Part # 005-1520106D



Parts List

Qty.	Description	Part Number
1	Left Muffler Canister M-7	005-152-206ML
1	Right Muffler Canister M-7	005-152-206MR
1	Left Header	005-15201H-L
1	Right Header	005-15201H-R
4	Heavy Duty Muffler Clamp	005-2C4
1	HARDWARE KIT	005-152-4
2	Header Collar	005-152-17-2
2	Steel Header Flange	005-152-15S-2
2	X-Lite Retaining Ring	005-7-2-2
2	80mm Spring	005-S-80
2	Billet Bolt-on Muffler Mount (Front)	005-152-21
2	Billet Bolt-on Muffler Mount (Back w/ notches)	005-152-21B
4	Billet Bolt-on Muffler Mount "U" Brackets	005-152-21U
8	8x40mm Socket Head Cap Screws	005-SH840
12	M8 Split High Collar Lock Washers	005-WL8
8	M6 Split High Collar Washers	005-WL6
4	8x1.25mm Pitch Metal Locking Flange Nuts	005-FNL8
4	8mm Large Flat Washers	005-W08
4	8x20mm Socket Head Cap Screws	005-SH820
2	Spark Arrester Screen (Installed)	005-106S
8	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.

Installation Instructions

1. 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 heat shield from the top of the motor.
3. Remove the stock headpipe and remove the mounting bolts hardware and brackets holding the stock muffler.
4. You will need to twist and rotate the stock muffler assembly in order to remove it from the chassis.
5. Slide the flange over the header tube with the part number edge going on first. Then slide the collar over the end of the exhaust tube that will connect to the cylinder head.

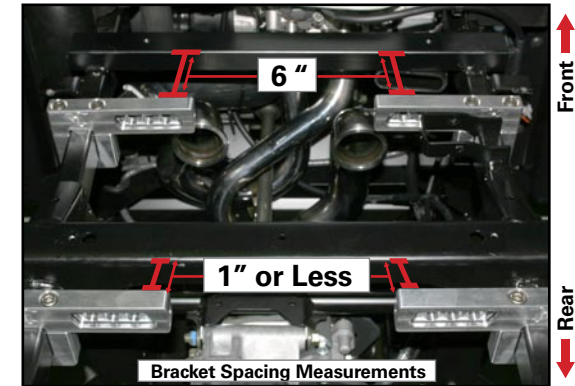
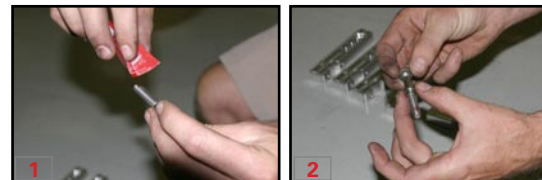


6. Install the new TBR head pipes making sure that the OEM sealing gasket is between header collar and cylinder head. Use the supplied 8mm lock nuts to secure header flange to cylinder head. Leave loose for now.

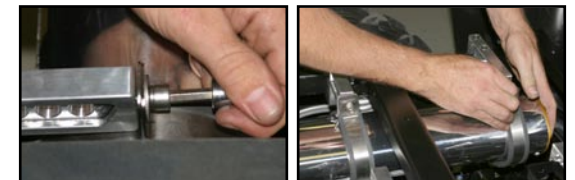
IMPORTANT: The driver's side header system has less bend when compared to the passenger side. Both exhaust will go under the drive shaft. Install the passenger side first. The driver's side goes in front of the passenger side.



7. Install mounting brackets to frame as shown. The rear brackets have a notch for bed hydrolic shock clearance and the rear base have a groove for shock tower clearance. Use threadlock and lock washers on all hardware. Make sure brackets are level with each other. 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.



8. Slide rubber clamp liner inside the 4 muffler clamps.
9. Carefully slide rubber lined clamps over the muffler and loosely secure to mounting brackets. Use threadlock, lock washers and large OD washers. Leave loose for now.



NOTE: Instructions continued on Page 2...



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Installation Instructions

10. Attach header tubes to mufflers using supplied 6x16mm socket head screws and lock washers using threadlocker and loosely secure both mufflers.



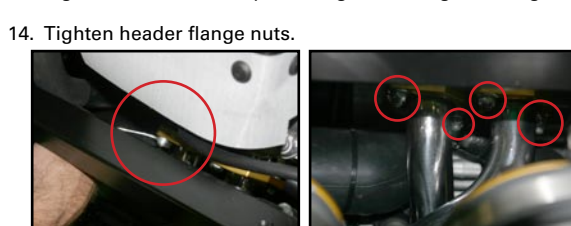
11. Align mufflers from rear of the vehicle.



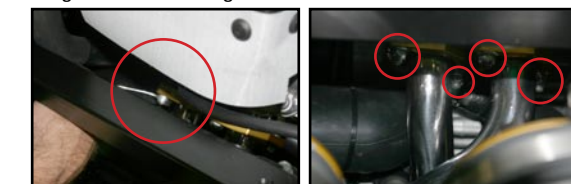
12. Tighten the 4 6x16mm socket head screws that attach the muffler to the header joint on both mufflers.



13. Tighten the muffler clamps, making sure the alignment is good.



14. Tighten header flange nuts.



15. Install one spring per side on each header at flange.



16. Re-install heatshield.



17. Check wires and cables to make sure they are clear from header tubes.



18. Re-install the bed and hydrolic shock. Check to make sure that the shocks clear the brackets.

19. 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 arrester 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.

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.