



## 2003 Yamaha YZF-R6

# ALUMINUM MUFFLER INSTRUCTIONS

Thank you for purchasing the FMF Powercore S muffler for your **2003 YZF-R6**. We have spent countless hours of design work and testing to insure you receive the highest quality product on the market today.

Your Powercore S muffler has been developed using the latest design, testing and manufacturing technologies. It is manufactured from an extruded oval aluminum canister, uses our hi-flo square core and has a TIG welded CNC bent stainless steel mid pipe. The Powercore S muffler is designed to broaden your existing powerband and give you an all around power increase.

**Check out our website [www.fmfracing.com](http://www.fmfracing.com) for images, dyno charts and tons more info**

*If you have any suggestions send them to [suggestions@fmfracing.com](mailto:suggestions@fmfracing.com)*

**Please read all instructions thoroughly before installation.** Failure to follow all installation instructions completely will void any FMF warranty implied or otherwise. FMF Racing will not be held responsible for problems derived from improper installation and/or improper usage.

Before you begin installing this product, be sure you are wearing **eye protection** and gloves. You should have a complete understanding of how to remove and replace your stock exhaust. If you do not, you should have it installed by a professional mechanic. Keep all OEM parts when removing your stock exhaust, as some parts may be utilized with the FMF exhaust depending on your particular application.

### PARTS SUPPLIED

- |                            |                             |
|----------------------------|-----------------------------|
| (1) Medium Strap Bracket   | (1) 25mm X 6mm Alum. Spacer |
| (1) Rubber Bracket Sleeve  |                             |
| (2) 70mm Exhaust Springs   |                             |
| (1) Stainless T-bolt Clamp |                             |

### TOOLS REQUIRED

- |                 |                       |
|-----------------|-----------------------|
| 11mm Wrench     | Hi-temp Silicon       |
| 12mm Wrench     | Exhaust Spring Puller |
| Contact Cleaner | WD-40®                |

## REMOVAL

*OEM = Original Equipment Manufacturer*

- 1] Loosen the OEM header clamp at the front of the muffler. You may need to remove the lower fairing to gain access.
- 2] While supporting the muffler, loosen and remove the rear OEM muffler bolt & nut using the appropriate wrenches.
- 3] Gently slide the muffler rearward to release it from the header. Spray WD-40® on the joint if it is difficult to remove.
- 4] Make sure the OEM muffler gasket is removed from the header as it will NOT be used with the FMF exhaust. Depending on the condition of the gasket, it may be difficult to remove.

## PRE-INSTALLATION

- 5] Install the rubber sleeve onto the strap bracket so that the rubber is facing inward. Make sure the outer lip is over the bracket edge fully. No rubber should be in the area where the bracket tabs pinch together.
- 6] Use contact cleaner to clean the area in which the exhaust slips over the header.

## INSTALLATION

- 7] Lightly coat the header with a bead of high temp. silicon where the exhaust inlet slips over.
- 8] Loosely install the supplied stainless band clamp onto the FMF mid-pipe.
- 9] Slip the FMF mid-pipe inlet over the header until it is fully seated. (The inlet is the side with the notches)
- 10] Lightly coat the mid-pipe with a bead of high temp. silicon where the muffler inlet slips over.
- 11] With clean hands, gently slip the FMF muffler onto the mid-pipe. The FMF logo should be at 3 o'clock when looking from the rear for proper positioning.
- 12] While supporting the muffler, install the two (2) exhaust springs from the muffler to the mid-pipe using a spring puller tool. (One spring on top, one on bottom)
- 13] Slide the rubber sleeved strap bracket carefully over the muffler and position it to the rear upper mounting point. Be careful not to scratch the canister and make sure the "inside" sticker on the bracket is towards the subframe. The strap bracket goes on the outside of the mount.
- 14] Pinch the strap bracket tabs together and install the supplied aluminum spacer between the mount and strap bracket. Install the OEM nut and bolt but do not fully tighten at this time.
- 15] Slowly tighten all mounting fasteners and clamps to OEM specified torque specs, starting from the front and working back. Make sure the header and muffler are in neutral positions and not binding.
- 16] Inspect the complete exhaust to make sure the exhaust system is not in contact with the frame, swingarm, engine or any cables, hoses or wiring. The exhaust system should only be in contact with the exhaust port and mounting points. Confirm all controls operate in accordance with the manufacturer's specifications.
- 17] If you had to remove the lower fairing, re-install it at this time.

## POST-INSTALLATION

- 18] Before starting the engine, clean the entire exhaust to remove all dirt and oil residue. This will prevent staining of the metal when it heats up. Windex® works great on the muffler canister.
- 19] Start the engine and bring it up to operating temperature. Check for exhaust leaks.
- 20] Let engine cool completely and re-torque all mounting hardware to the manufacturers specifications.
- 21] After 50-75 miles of use, re-torque all mounting hardware.

## MAINTENANCE

To clean your FMF muffler, simply use soap and water when it becomes dirty. Windex® works great on the muffler canister to prevent streaking and uneven discoloration. Let the exhaust system cool before cleaning. Do not spray cold water onto a hot exhaust. Dry completely to prevent streaking.

We recommend re-packing your Powercore S muffler every 10K-15K miles depending on the type of riding you're doing. This will maintain peak performance and keep the sound level from becoming too loud and/or raspy. If the sound level changes significantly or your muffler canister shows signs of discoloration, this is a sign to inspect the packing material and replace if needed. We recommend using our NEW Premier multi-layer packing material.

To re-pack the muffler, remove the four (4) allen screws from the front of the muffler using a 4mm allen wrench. Do not remove the rear endcap. Gently slide out the front end cap from the muffler canister. Be careful not to damage the muffler. Unwrap the packing from the core and discard. Wrap the core with new packing and secure with a strip of masking tape. Before re-installing the inner core assembly, apply a thin layer of hi-temp silicon on the front end cap where the canister slips over. Slip inner core assembly into canister making sure the perforated core fully seats in the rear endcap. Re-install the allen screws until snug or tighten 1/4 turn after the screw makes contact with the canister.

### Disclaimer:

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