



FAT BOY 4 COMPLETE EXHAUST SYSTEM

MODEL: 2006 Yamaha 700 Raptor with Electronic Fuel Injection

1. Remove complete stock exhaust system. Retain (4) stock head nuts and (2) muffler mount bolts
2. Before starting your Fat Boy 4 installation. You must make sure that the cylinder head exhaust gaskets are intact and in good condition (usually they stay in the cylinder head). Under normal conditions it is OK to reuse them. If they are missing or in need of replacement they may be purchased from your Yamaha Dealer Part # 3YF-14613-01-00.
DO NOT RUN MACHINE WITHOUT EXHAUST GASKETS.
Improperly sealing exhaust gaskets will decrease performance and can also cause engine to pop and back fire, especially when engine is decelerating.
3. Install the left (#1) header first. Left header has diagonal bend and tubing is welded in center, left header is also longer than the right header. Install stock header nuts and finger tighten.
4. Install the right (#2) header. The right header is a 1-piece tube that is shorter than the left header.
5. Install mid-pipe (has I.D. tag on it) onto left and right headers that are already mounted on machine. Before installing apply a fine coat of Hi-Temp silicone in the (2) small tubes on the front side of mid-pipe. *(This is necessary to ensure a proper seal between the head pipes and the mid section. If the silicone is applied properly it will not be noticeable after you installation is complete. The thin coat of silicone also helps ease disassembly.)*
6. Install muffler and tail pipe assembly (tail pipe is bolted to the Fat Boy 4 muffler). Before installing tail pipe on to mid-pipe apply a fine coat of Hi-Temp silicone to the inside of the tail pipe. The rear end of mid-pipe will slide into the tail pipe. *(This is necessary to ensure a proper seal between the tail pipe and the mid section.)* Install bolt in front muffler mount first, then install bolt in rear muffler mount. After both bolts are installed, tighten both evenly. Make sure to install barrel clamp into place at tail pipe and mid-pipe joint. Do not fully tighten.
7. Check exhaust system front to back. Tighten headers, mid-pipe/tail pipe clamp and make sure muffler bolts are secure.
8. Install the stock OEM pipe guard from the stock tail pipe (close to muffler) onto the FB4 tail pipe. Use the OEM bolts. *Bolt holes on guard may need to slotted slightly.*



- 9 **AIR FUEL MIXTURE MUST BE ADJUSTED. MIXTURE WILL BE TOO LEAN IF MACHINE IS RUN UNCORRECTED, RESULTING IN POSSIBLE ENGINE DAMAGE.** This machine is fuel injected, there is no carburetor.

DRI Recommends installing a VORTEX INTERCEPTOR (sold separately). Vortex has taken the approach to offer an affordable yet highly sophisticated and robust product that provides a simple fix for a complex problem. As a small yet powerful plug in module the VORTEX EFI INTERCEPTOR taps into the fuel injector drive circuit from the standard ECU whilst monitoring the Throttle Position Sensor (TPS) then remaps the injector pulses thus allowing the fuel flow to better match the increased air flow created by the addition of air box and pipe modifications. This is done over all throttle positions and RPM. The pre-programmed fuel map is developed by Vortex Performance and is intended to work with the Fat boy 4 aftermarket exhaust and Pro Flow (K&N) Air Cleaner Kit combination. The Vortex Interceptor includes three rotary switches, which represent 0-33%, 34-66% and 67-100% Throttle Openings. Each switch allows the user to richen or lean the pre programmed Vortex Fuel Map by up to +/- 8% in 2% increments per click. The microprocessor controlled Interceptor re calculates the fuel maps and controls the fuel injector in accordance with the Vortex Fuel Map as well as the position of the switches.

The Vortex Interceptor is sold separately by DRI or as part of a DRI Stage 1 Bolt-On Kit. Interceptor comes with complete installation instructions plus they are posted on the DRI website in the TECH CENTER.

Call DRI or see DRI website for additional details.

- 10 Additional Performance and Jetting Recommendations;

For the best performance using your NEW Fat Boy 4 it is recommended to use a Pro Flow Air Cleaner Flange system with a K&N filter. The kits are made by Pro Design and are sold through Duncan Racing. The K&N filter makes the best power.

It is recommended to run air box with the lid removed.

Be careful not to run machine too lean-engine damage may result from a lean condition. To rich power will be lost, engine will run flat and or blubber.

Air/Fuel ratio tuning Notes:

Colder temperature requires richer settings.

Higher elevations cause engine to be low on compression and generally require leaner settings.

Air box lid on requires leaner settings than with lid off.

For more information contact:

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(619) 258-6306

Check our Website for additional Raptor Performance items.

www.duncanracing.com