



FAT BOY 4 COMPLETE EXHAUST SYSTEM

MODEL: 2006 Suzuki LT-R450 with Electronic Fuel Injection

1. Remove complete stock exhaust system. Retain (2) 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 gasket is 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 Suzuki Dealer Part # 14181-35G00. **DO NOT RUN MACHINE WITHOUT EXHAUST GASKETS.**
Improperly sealing exhaust gasket will decrease performance and can also cause engine to pop and back fire, especially when engine is decelerating.
3. Install the header first. Install stock header nuts and finger tighten.
4. Install muffler and tail pipe assembly (tail pipe is bolted to the Fat Boy 4 muffler). Before installing tail pipe on to head pipe apply a fine coat of Hi-Temp silicone to the inside of the tail pipe. The rear end of head pipe will slide into the tail pipe. *(This is necessary to ensure a proper seal between the tail pipe and head pipe section.)* Install bolt in front muffler mount first, then install bolt in rear muffler mount. **When installing the (2) muffler bolts make sure to install the enclosed 16.0 mm aluminum spacers between sub-frame mounting tabs and mounts on Fat Boy 4 muffler.** After both bolts are installed, tighten both evenly.
5. Check exhaust system front to back. Tighten header nuts and make sure muffler bolts are secure.
6. **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 EFI INTERCEPTOR that will adjust/correct the air/fuel mixture to it's proper ratio for the addition of your hi performance exhaust and air cleaner kit..

NOTE: A plug in device (Cherry Bomb or similar device) only switches the LT R450's ECU over to the 2nd alternative map. The 2nd map was preprogrammed in the ECU at the factory. This map richens the air fuel mixture slightly and increases the rev limit.

**This 2nd map is designed for machines with very minimal modifications; air box lid off and the baffle out of the stock muffler. This 2nd air/fuel map is not rich enough for more advanced modifications; complete performance exhaust and Pro Flow air cleaner Kit. A Vortex Interceptor (or comparable device) will be required.*



Additional Information regarding Vortex Interceptor; 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.

7 Additional Performance and Tuning 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.

DRI Bolt-On Kit: Include Fat Boy 4 Exhaust, Vortex EFI Interceptor, Pro Flow Air Cleaner Kit.

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:

Duncan Racing International, Inc.
10734 Kenney Street Suite A
Santee, CA 92071
USA

(619) 258-6306

Check our Website for additional LT-R450 Performance items.

www.duncanracing.com