# TECHNICAL INFORMATION

# FAT BOY 4 MUFFLER REPACKING TIPS 4-STROKE

All Models

SPECIAL NOTE: When working on your Fat Boy 4 exhaust be sure that the exhaust system and engine have cooled down. Working on the exhaust when HOT, can and will result in a possible injury.

**REPACKING SCHEDULE:** For proper exhaust performance and to keep noise level consistent it is recommended to repack your Fat Boy 4 exhaust every 20 hours of usage. Under extreme riding conditions packing could need replacement in as short as 10 hours.

The repacking used in your Fat Boy 4 exhaust is a perishable item. (Similar to the oil in your engine). It is designed to suppress the exhaust note of your engine while maintaining proper exhaust function and maximum performance.

Failure to repack and maintain your exhaust system can and will result in engine power loss and excessive db noise levels. Running your fat Boy 4 equipped ATV with burnt, worn or low packing will also cause damage to your Fat Boy 4. Core, body and front and rear end caps. This unnecessary damage can and will effect your manufactures limited warranty.

Unnecessary damage incurred to Fat Boy 4 due to use with failed packing will **NOT** be covered under *Limited Lifetime Warranty* 

**BASIC FB4 REPACKING TIPS:** It is recommended to repack your Fat Boy 4 muffler when it is removed from the machine. \*see diagram on page 4 for improved clarity

• It is best to unbolt muffler from chassis and remove at tail pipe slip-fit joint. Once muffler is removed it is easiest to unbolt the muffler from the tail section. The muffler is attached with 3 or 4 (depending on model) with 6mm x 20mm s/s allen bolts. Use a good quality allen wrench and reuse of these bolts should be OK. If the screws are not in good condition once removed, replace with new (use exactly the same bolts). \*NOTE: When repacking is finished and muffler is reinstalled onto tail pipe it is mandatory that the muffler screws be secured with LOCTITE 242 Blue thread lock. They should be torqued to 10 ft lbs.

You will also want to check that the o-ring used between the tail pipe and the muffler is in good condition. If it is not ripped, torn, broken or damaged in any way it is reusable. If in doubt it is best to replace it with a new o-ring.

- Next you will want to remove the (4) s/s 6x12mm allen screws that secure the rear end cap into the muffler. The screws are located on the top, bottom and both sides of the back of the muffler. Again check screws, if good reuse, if not replace.
- To remove the rear end cap (it is engraved Fat Boy 4) your best option will be to use a *Fat Boy 4 Repacking Tool*. Once screws are removed it is easiest and most efficient to use a FB4 Repack Tool (FB4 tool attaches to end cap and uses knocker to remove). If FB4 Repack tool is not available a rubber or plastic mallet can be used (DO NOT USE STEEL HAMMER) to tap all around the end cap until it slides away from muffler body.
- Remove perforated muffler core and old packing as one unit. Slide it out. Once out remove core from packing. Clean with a scotch brite pad or soft wire wheel. Inspect closely for any cracks or other damage. Replace if necessary.

- Clean out inside of muffler. Use rag to wipe out or scotch-brite. Also clean rear end cap, Make sure side of the end cap where it touches muffler body is clean so that it can slide back into body without obstruction.
- Reassembly-Slide core into center of new packing roll.

NOTE: Sharp edge on muffler core can catch on packing roll as core is slide through packing it is advisable to wrap a piece of duct tape around the end of the core before attempting to

Slide core through packing. After core has been slide through packing remove duct tape and discard.

- \*\* A plastic cone (from a shop vac) or plastic water bottle with bottom cut off will also work. You can call DR for more details
- Slide packing/core assembly into muffler body. Make sure that the core slides into the slot in the front side if muffler.
  - NOTE: When core is installed properly the backside of core will be flush with rear end of muffler body. Also when you look through core there will be no obstructions.
- Reinstall rear end cap. Blue 242 Loctite on the (4) 6x12 screws that secure the end cap into the muffler body is recommended.
- Install muffler back on to tail pipe. Make sure to use o-ring and to loctite the screws.
- Reinstall muffler and tail pipe assembly onto headers.
  - \* Make sure to seal the slip fit joint with a thin coat of Hi-Temp silicon.

**REFURBISHMENT:** DRI offers, at a nominal fee a refurbishment for all model FB4 mufflers. Internals are rebuilt and muffler exterior is rebrushed.

\*Header and Tail sections can also be refurbished-call for details

\*\* Parts MUST BE shipped to DRI for this service. Customer responsible for all shipping costs.

**WASHING YOUR ATV:** Water must be kept out of FB4 Muffler when you are washing your ATV. If packing gets wet and water/moisture sit inside muffler assembly, packing, core, etc will be damaged. Plug muffler exit when washing, then start machine and run until up to operating temperature. See DR TECH Document on ATV WASHING for more information.

**NR3 FB4 PACKING KITS**: For FB4's being used in the most extreme racing applications like Dakar Rally, Baja 1000 etc DRI offers a special packing kit. These special NR3 Packing kits include customized sleeve for FB4 core and packing to match. Call DRI for additional details.

**HOUR METER**: It is recommended to install and hour meter on your machine. This device can come in very handy keeping track of packing life, valve adjustments, oil changes, top end service, etc. A number of manufactures offer them for under \$ 50.00. Installation is simple

**FAT BOY REPLACEMENT PARTS:** DRI stocks all the replacement parts for Fat Boy 4's. Call DRI or see website for details.

**PACKING/CORE LENGTH**: How to determine which FB4 packing and or core size I need:

**PACKING Length**: Measure muffler body overall length (not including front and rear end cap). Subtract 1.5", packing size required.

Example: Muffler Length 12.5" -1.5" = 11". 11" packing required.

**CORE Length**: Measure muffler body overall length (not including front and rear end cap). Core length required is same as muffler body length (not including front and rear end cap). Example: Muffler Length 12.5" = 12.5" packing required

**WARRANTY CARD:** All new Fat Boy 4 exhaust systems are issued with a warranty card. The card must be filled out and returned to DRI by original purchaser. Failure to return warranty card will void any and all warranties.

Warranty only applies to original purchaser. Fay Boy 4 exhausts purchased used or from EBay for exampled are not covered by DRI FB4 warranty.

#### **REPLACEMENT PARTS:**

#### **TOOLS**

FB4-TOOL Repacking Tool (call for information/availability)

#### FB4 MUFFLER REBUILD KITS

Includes: Packing, Core, Screws, O-Rings

FB4-MK950 Rebuild Kit (9.5)

FB4-MK110 Rebuild Kit (11.0)

FB4-MK135 Rebuild Kit (13.5)

FB4-MK165 Rebuild Kit (16.50)

#### **PACKING**

FB4-RP950 Repacking (9.5)

FB4-RP110 Repacking (11.0)

FB4-RP135 Repacking (13.5)

FB4-RP165 Repacking (16.50)

#### **CORES**

FB4-OC110 Muffler Core- (11)

FB4-OC125 Muffler Core- (12.5)

FB4-OC150 Muffler Core- (15)

FB4-OC180 Muffler Core- (18)

#### **END CAPS**

FB4-4A020 End Cap; (2.0") Vertical

FB4-4AH20 End Cap; (2.0") Horizontal (LTR-Outlaw)

# **TURNDOWN**

FB4-4A250 Turndown Fitting CNC/Welded w/O-Ring (optional bolt-on)

#### **SCREWS**

FB4-85-012 Screw; 6mm x 12 S.S. (End Cap Profile) FB4-85-512 Screw; 5mm x 12, S.S. (Attach Turndown)

FB4-85-620 Screw; 6 x 20 (Muffler to Tail)

FB4-85-6512-K Pack of 12 (4 of each size)

### O-RINGS

FB4-80-33 O-Ring; Muffler -Tail (3-Bolt) FB4-80-36 O-Ring; Muffler -Tail (4-Bolt)

FB4-80-37 O-Ring; Turn Down

# **FAT BOY 4 MUFFLER**

