

ENGINE REMOVAL AND REPLACEMENT

The following information is offered as a guideline to make removing and replacing your ATV engine from its chassis, as smooth as possible. The attention paid to the following items listed below will have a very big impact on the performance and reliability of your ATV

CLEAN: Before performing any mechanical work on your ATV it is always advisable to wash your machine thoroughly. Make sure to wash from all sides. If possible it is also advisable to run (warm up to operating temperature) your machine for 10-15 minutes after completing the wash job, to help dry all water out of the engine. * For more information on the subject of washing your ATV consult the.

* See DRI TECH DOCUMENT: ATV WASHING.

PLASTIC's: Remove all plastics and fuel tank. Either re-installs all fasteners in the hole they came out of. Or put them in a separate container (small butter dish, cat food can etc.) This is also a good time to make note of any missing fasteners (incorrect bolts, washers, collars etc).
Reorder parts needed while motor is out of chassis.

OIL: Drain oil from engine. If possible drain oil when hot (be careful not to burn yourself). *When the oil is hot more debris is floating in it.* The oil should be drained into a clean empty container.

After draining oil, be sure to make a note of amount of oil that came out of machine and if there was any foreign material (metal shavings, clutch fiber, etc) in it. If unsure save oil for inspection by a professional.

MAKE SURE ALL DRAIN PLUGS HAVE NEW SEALING WASHER ON BOLT WHEN REINSTALLED

Consult your OEM (Original Engine Manufacture) Service Manual for specific instructions pertaining to your specific model machine when refilling.

OIL COOLER/OIL TANK/OIL LINES: All oil lines, tanks and coolers need to be thoroughly cleaned. Dirty deposits build up in these items and contaminate fresh oil, filter and engine parts when not cleaned. Best to use a non flammable parts cleaning solvent.

COOLANT/RADIATOR: Drain coolant (when applicable) from machine. **ENGINE MUST BE COOL BEFORE DRAINING/CHECKING RADIATOR. Before draining coolant it is always advisable to check if system is full at the radiator (Not the over flow bottle), if not full measure amount of fluid it take to fill up.** Drain coolant into clean container. Drain the system at all drains; water pump, cylinder etc. Inspect radiator and hoses, in many cases it would be wise to remove radiator from machine and flush out with hose. Clean inside and outside of radiator hoses, inspect clamps.

Check fins on radiator for damage: damaged (bent) fins will restrict air flow and cause your engine to over heat.

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FAN: Most if not all 4-stroke liquid cooled machines use an electric fan mounted to radiator. It is highly recommended to inspect the fan, the fan mount hardware and electrical connections. Fan motor should be checked regularly-most OEM Service Manuals will give instructions on how to test fan to be sure it is operating properly.

CARBURATOR/THROTTLE BODY: Carefully remove carburetion/throttle body system. Inspect all moving parts for any wear or damage. Starting at the throttle everything should be cleaned, lubricated, and inspected. Before reassembly: Pay close attention to any wear on slide and or throttle cable. Before your engine runs again you will want to have your carburetor thoroughly cleaned. It is recommended that a skilled professional do this. Make sure slide opens and closes all the way- Don't just assume that it does.

*Check before you reinstall carburetor on machine.

** Fuel Injected ATV's use a throttle body similar to a carburetor in looks and fit- Just has a different function. They require cleaning and maintenance similar to carburetors

FUEL TANK: Fuel tank should be cleaned regularly. Drain fuel, remove petcock and flush thoroughly. Most fuel tanks have internal fuel strainer- Clean and inspect. Check fuel line and any inline fuel filters.

AIR BOX: Air box and air boot should be removed from chassis and washed (with air filter removed) inside and out with hot soapy water. Inspect air box for any damage.

Service air cleaner or install new.* See DRI TECH DOCUMENT: Filter Maintenance

EXHAUST: Remove your exhaust system. Check over completely for any cracks. You should plan on repacking your silencer/muffler before reassembly. **Consult the manufacture for specific instructions on repacking your silencer/muffler.**

Check exhaust studs when applicable. Install with new exhaust gasket.

If pipe sealed with o-rings- advisable to replace.

See DRI website for Fat Boy 2 and Fat Boy 4 Repacking instructions

MOTOR MOUNTS: Remove all motor mount bolts and nuts. If you are confident on the exact placement of all nuts and bolts, store in a separate container. If you are uncertain of the exact location, replace nuts and bolts back into the chassis after the engine has been removed. All nuts and bolts should be cleaned before reassembly. Check all for cracks. Inspect all threads.

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CHAIN/SPROCKETS: Remove drive chain. Upon removing chain; Inspect chain, front and rear sprockets, replace any worn items. It is also recommended to inspect anything chain may come into contact with; frame rollers, swing arm sliders, rear skid plate, etc. Replace or repair anything that may cause future damage to your ATV. Addressing a potential problem before it causes a DNF or worse is much cheaper than waiting for a break down.

SWING ARM PIVOT BOLT: Remove swing arm pivot bolt and check bolt, inner collars, needle bearing, seal etc. Clean, service and replace as necessary. Reassemble with quality waterproof grease

REAR CARRIER BEARINGS & SEALS: It is a very good time to check the rear carrier bearings and seals when the engine is out of the chassis and chain is off rear sprocket. The maintenance of the rear carrier (the bearings the rear axle slide through and ride on) bearings is one of the most over looked items on an ATV. Rear carrier bearing failure can be very costly and destroy; axle, bearing housing, sprocket and disc hubs among other items. If there is any doubt (racing or recreational) to the status of the bearings (number of hours) on them-Replace them.

WIRING/ELECTRICAL: Inspect complete wire harness and all connects for wear and damage. Make sure ground wire is secured correctly and free from rust and corrosions.

On battery operated machines check all terminals.

On Fuel Injected machine SPECIAL CARE must be taken to ensure ALL EFI sensors are working correctly.

Make sure battery is put on a maintenance type charger, so it is ready when motor is reinstalled.

Consult OEM Service Manual for specific details regarding your specific make and model machine.