

5. ENGINE REMOVAL/INSTALLATION



ENGINE REMOVAL/INSTALLATION

SERVICE INFORMATION-----	5-1
ENGINE REMOVAL-----	5-2
ENGINE INSTALLATION-----	5-5
ENGINE HANGER REMOVAL-----	5-4

5. ENGINE REMOVAL/INSTALLATION

SERVICE INFORMATION

GENERAL INSTRUCTIONS

- A floor jack or other adjustable support is required to support and maneuver the engine. Be careful not to damage the motorcycle body, cables and wires during engine removal.
- Use shop towels to protect the motorcycle body during engine removal.
- Drain the coolant before removing the engine.
- After the engine is installed, fill the cooling system with coolant and be sure to bleed air from the water jacket. Start the engine to check for coolant leaks.
- Before removing the engine, the rear brake caliper must be removed first. Be careful not to bend or twist the brake fluid tube.

SPECIFICATIONS

Engine oil capacity: at disassembly: 1.1 liter

TORQUE VALUES

Rear shock absorber upper mount bolt	35~45N-m
Rear shock absorber lower mount bolt	35~45N-m
Rear axle nut	110~130N-m
Engine hanger bolt (frame side)	45~55N-m
Engine hanger bolt (ENG. side)	45~55N-m
Rear caliper holder bolt	29~35N-m
Exhaust muffler pipe nut	18~22N-m
Exhaust muffler bolt	32~38N-m
Rear fork bolt	29~35N-m

5. ENGINE REMOVAL/INSTALLATION

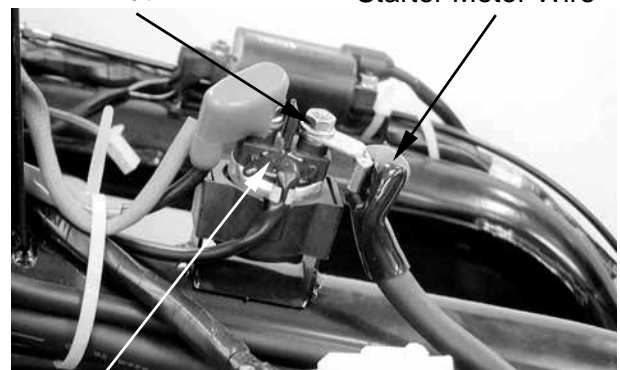
ENGINE REMOVAL

- Drain the coolant. (⇒3-9)
- Remove the met-in box, carrier. (⇒2-6)
- Remove the frame body cover, center cover and rear fender A together. (⇒2-6)
- Remove the exhaust muffler. (⇒2-10)
- Disconnect all of the A.C. generator.



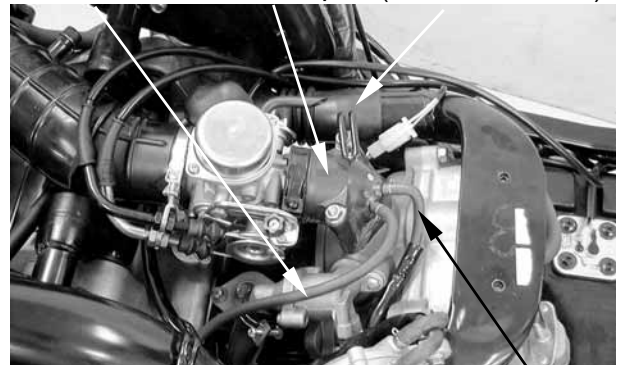
A.C. Generator Wire Connectors
Nut Starter Motor Wire

Remove the nut to disconnect the starter motor wire that goes to the starter relay.



Starter Relay
Secondary Air Vacuum Tube Inlet Pipe Air Inlet Hose (V-belt Chamber)

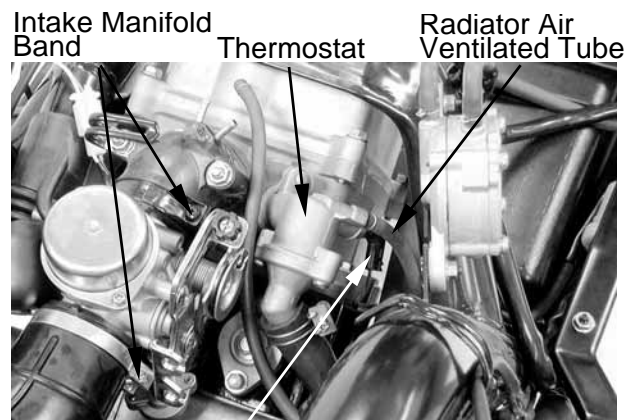
Disconnect the secondary air vacuum tube and fuel pump vacuum tube from inlet pipe. Disconnect the air inlet hose (v-belt chamber) from frame.



Fuel Pump Vacuum Tube

Loosen the intake manifold band (air cleaner tube and inlet pipe).

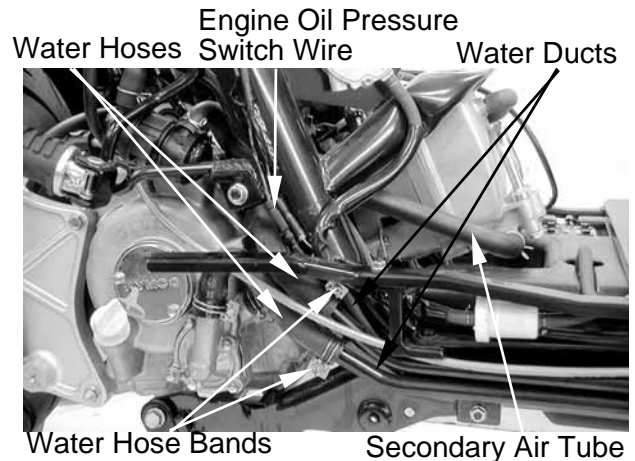
Disconnect the radiator air ventilated tube and thermosensor wire coupler from thermostat.



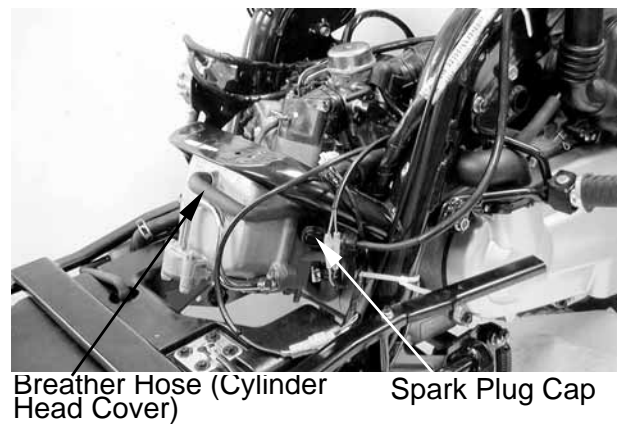
Thermosensor Wire Coupler

5. ENGINE REMOVAL/INSTALLATION

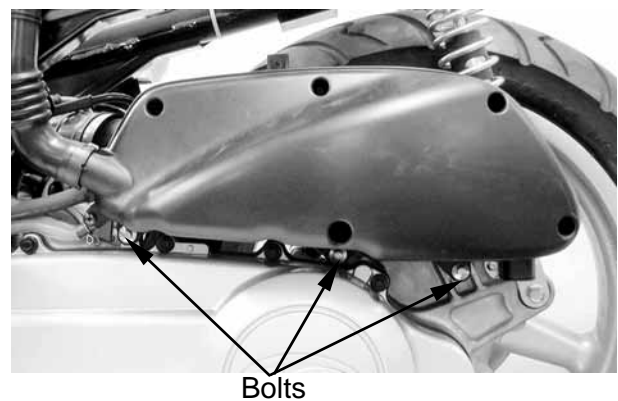
Disconnect the engine oil pressure switch wire.
 Loosen the water hose bands to disconnect water hoses from the water ducts.
 Disconnect the secondary air tube from the secondary air inlet tube.



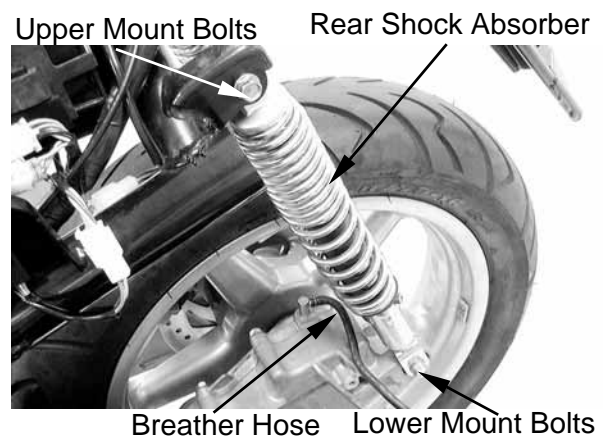
Disconnect the breather hose (air cleaner) from cylinder head cover.
 Disconnect the spark plug cap from cylinder head.



Remove the screw attaching rear fender C.
 Remove the three bolts on the air cleaner.

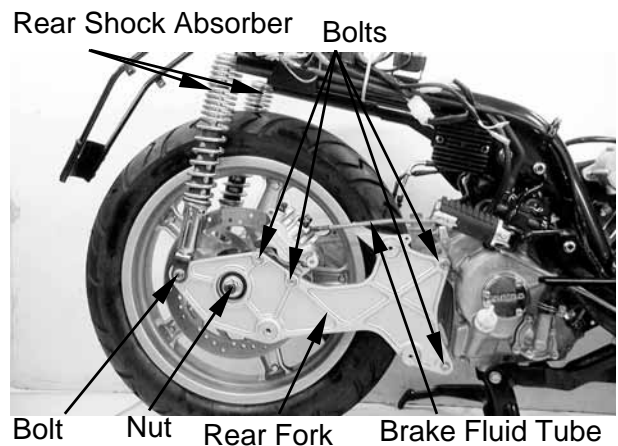


Remove the air cleaner and disconnect breather hose from transmission case cover.
 Remove the right/left rear shock absorber upper mount bolts.
 Remove the left rear shock absorber lower mount bolts.

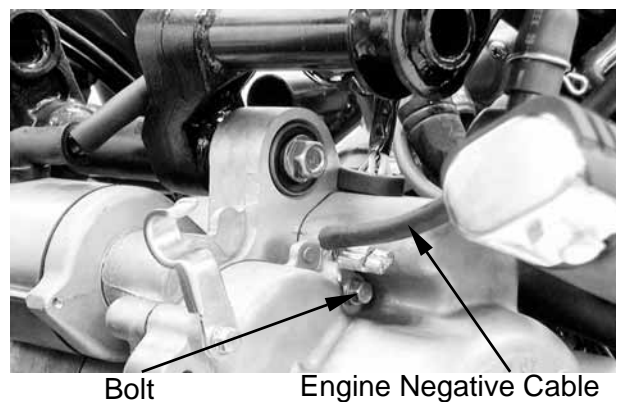


5. ENGINE REMOVAL/INSTALLATION

Remove the left rear shock absorber.
 Remove the right rear shock absorber lower mount bolts.
 Remove the right rear shock absorber.
 Remove the rear wheel nut.
 Disconnect the rear brake fluid tube from the guide.
 Remove the four bolts on the rear fork to remove rear brake caliper and rear fork.



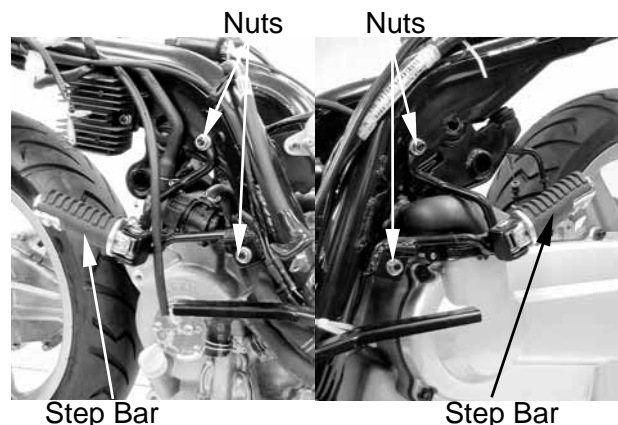
Remove the bolt to disconnect the engine negative cable.



Remove the engine mounting nut.



Remove the two nuts of the right and left step bar.
 Remove the right and left step bar.



5. ENGINE REMOVAL/INSTALLATION

Remove the engine mounting bolt and pull out the engine.

ENGINE INSTALLATION

Reverse the "REMOVAL" procedures.

* Apply grease onto the O-rings, oil seals and bush).



Engine Mounting Bolt

ENGINE HANGER REMOVAL

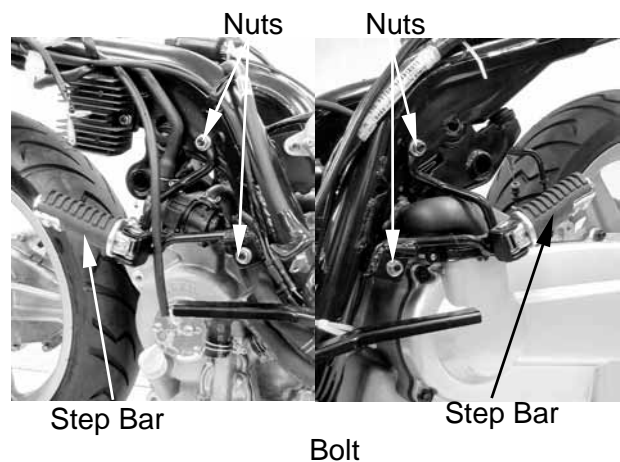
Remove met-in box and carrier. (⇒2-6)

Remove the body cover, center cover and rear fender A together. (⇒2-6)

Remove air cleaner. (⇒5-3)

Remove the two nuts of the right and left step bar.

Remove the right and left step bar.



Step Bar

Bolt

Step Bar

Remove the engine mounting nut and engine hanger bolt (left side).

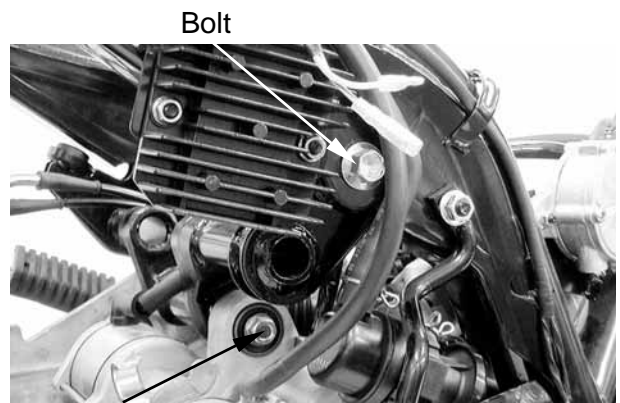


Engine Mounting Nut

Remove the engine mounting bolt and engine hanger bolt (right side).

Remove the starter motor. (⇒18-3)

Remove the engine hanger.



Engine Mounting Bolt

5. ENGINE REMOVAL/INSTALLATION

Inspect the engine hanger bushings and stopper rubber for wear or damage.

INSTALLATION

Reverse the "REMOVAL" procedures.

- *

Apply grease onto the bush.

