

# **5. ENGINE REMOVAL/INSTALLATION**

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## **ENGINE REMOVAL/INSTALLATION**

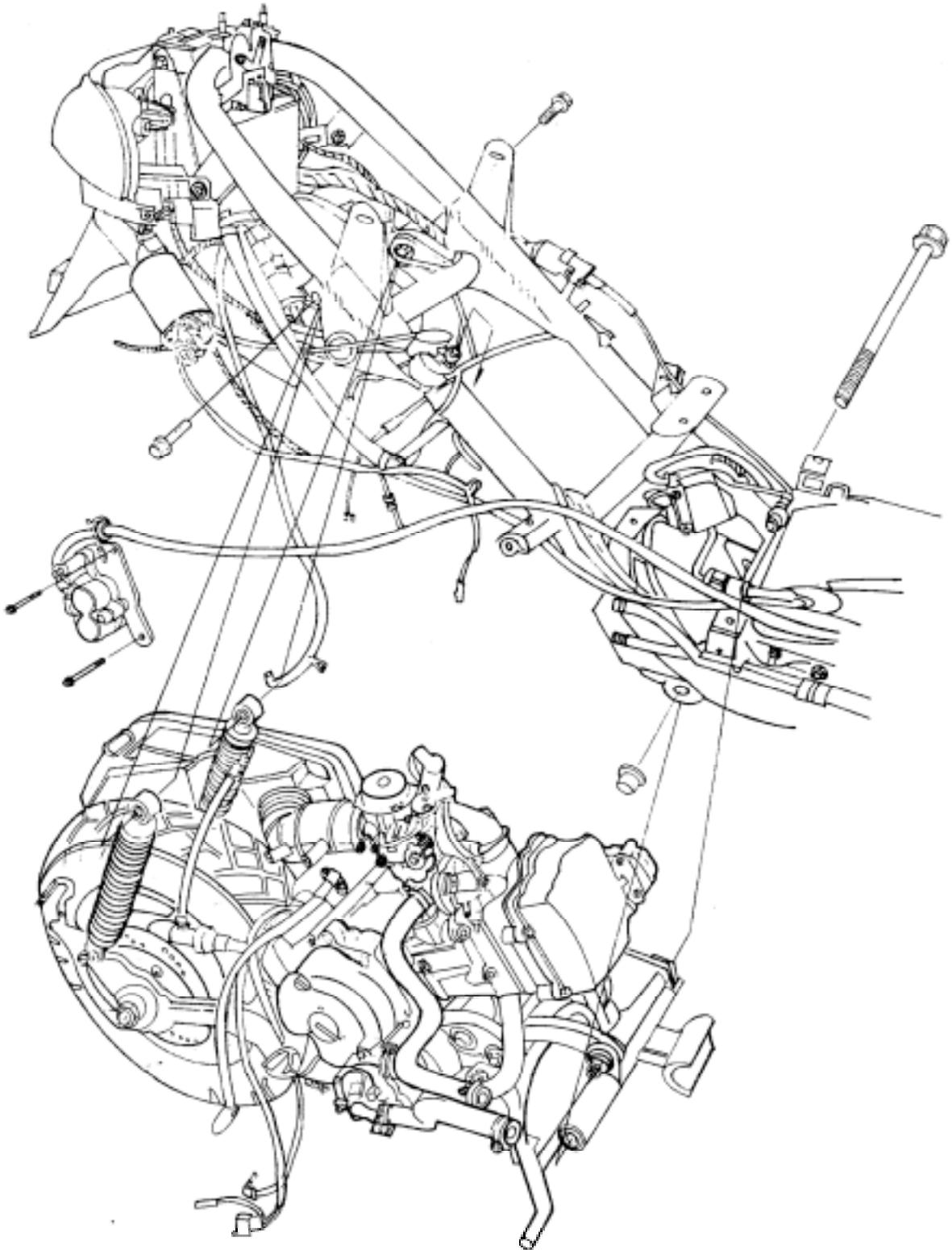
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## 5. ENGINE REMOVAL/INSTALLATION

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### SCHEMATIC DRAWING



## **5. ENGINE REMOVAL/INSTALLATION**

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### **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 dry weight: 30kg

Engine oil capacity: at disassembly: 1.1 liter

Coolant capacity:

Total capacity : 1165cc

Radiator capacity : 825cc

Reserve tank capacity : 340cc

#### **TORQUE VALUES**

Engine mounting bolt 49N-m

Rear shock absorber upper mount bolt 39.2N-m

## 5. ENGINE REMOVAL/INSTALLATION

### ENGINE REMOVAL

Disconnect the battery negative cable.  
 Remove the frame body cover. (⇒2-3)  
 Disconnect the engine negative cable.  
 Disconnect all of the A.C. generator, auto bystarter, spark plug, thermosensor wire couplers and connectors.  
 Disconnect the engine fuel tube.  
 Drain the coolant. (⇒3-9)  
 Disconnect the water hose.

Disconnect the starter motor wire that goes to the starter relay.

Disconnect the fuel tube and vacuum tube that go to the carburetor from the fuel pump.  
 Disconnect the vacuum tube from the air cut-off valve (ACV).  
 Disconnect the throttle cable from the carburetor.

Remove the brake fluid tube bolt of the rear brake caliper.  
 Remove the rear brake caliper bolt and the rear brake caliper.

Wire Connectors



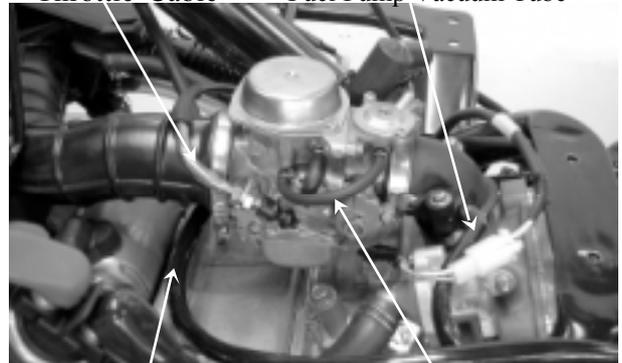
Rear Brake Caliper

Starter Relay



Throttle Cable

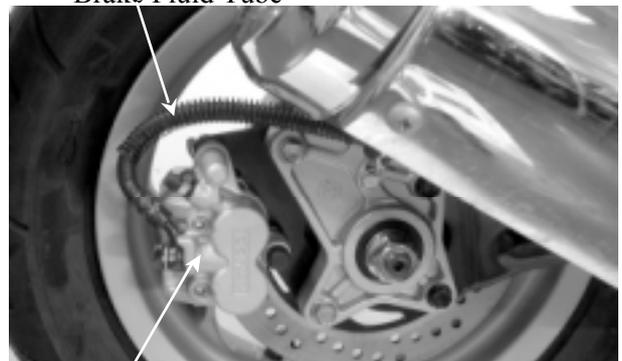
Fuel Pump Vacuum Tube



Fuel Tube

ACV Vacuum Tube

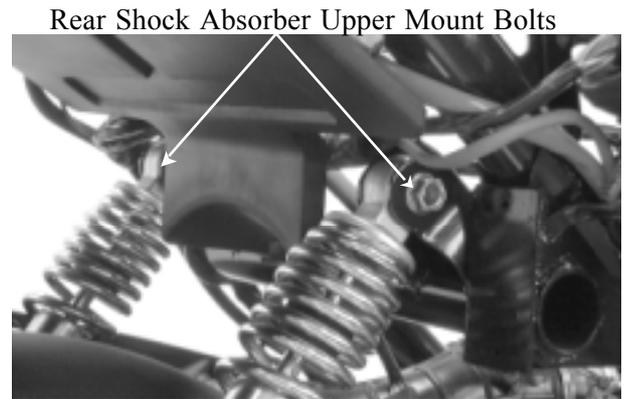
Brake Fluid Tube



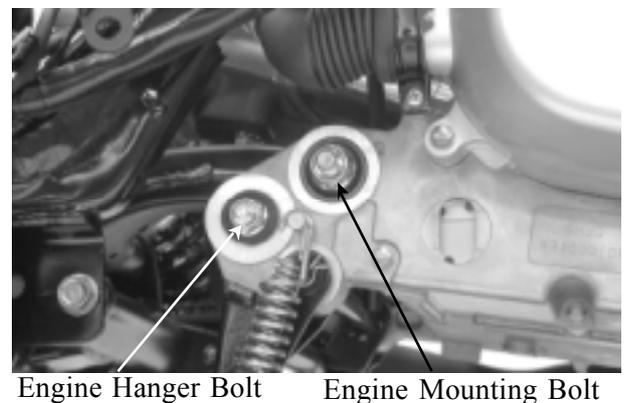
Rear Brake Caliper

## 5. ENGINE REMOVAL/INSTALLATION

Remove the right/left rear shock absorber upper mount bolts.

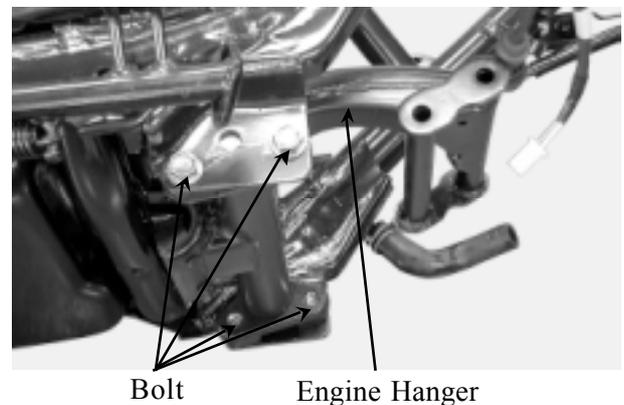


Remove the two engine mounting bolts and pull out the engine with the engine hanger backward.

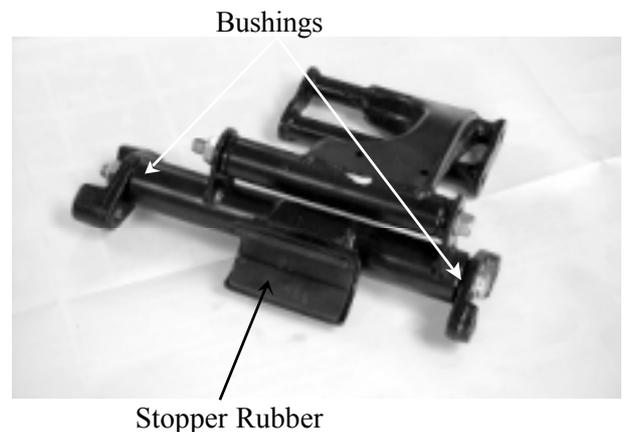


### ENGINE HANGER REMOVAL

Remove the engine hanger bolts to remove the engine hanger.



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



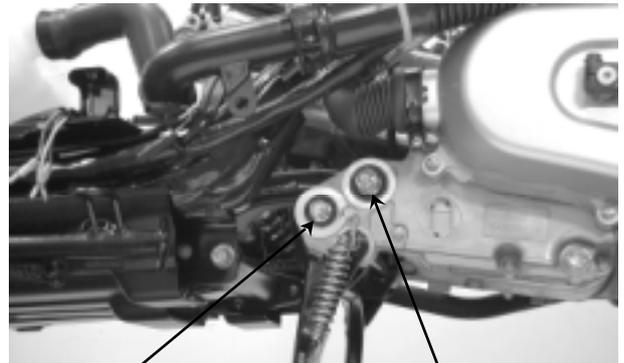
## 5. ENGINE REMOVAL/INSTALLATION

### ENGINE INSTALLATION

Install the engine in the reverse order of removal.

Tighten the engine mounting bolts.

**Torque:** 49N-m



Engine Hanger Bolt

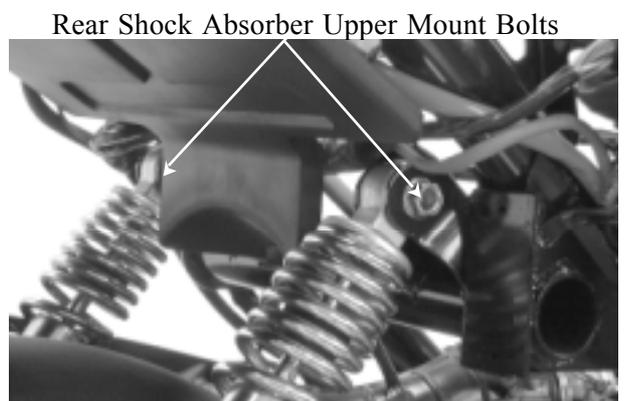
Engine Mounting Bolt

Tighten the rear shock absorber upper mount bolts.

**Torque:** 39.2N-m

After installation, inspect and adjust the following:

- Throttle grip free play (⇒3-3)
- Fill the rear brake reservoir with brake fluid and bleed air from the rear brake.
- Fill the cooling system with coolant and start the engine to bleed air from the system.



Rear Shock Absorber Upper Mount Bolts