# Engine Removal/Installation

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CAUTION

Always keep the oil tank breather tube free of obstruction, and make sure it does not get pinched, cramped, bent sharply, or melted by the exhaust pipe. If the breather is obstructed, engine oil flow to the oil pump will be hindered and serious engine damage will occur.

To avoid serious engine damage, air in the oil pump line must be removed by bleeding.

T1: 49 N-m (5.0 kg-m, 36 ft-lb)
Engine Removal/Installation

Removal

- Remove the following.
  - Seat
  - Fairings
  - Side Covers
  - Fuel Tank
  - Clutch Cable (see Engine Right Side chapter)
  - Shift Pedal (see Crankshaft/Transmission chapter)
  - Engine Sprocket (see Final Drive chapter)
  - Radiator (see Cooling System chapter)
  - Muffler (see Engine Top End chapter)
  - Carburetor (see Fuel System chapter)
  - Spark Plugs
  - Exhaust Valve Operating Unit (see Engine Top End chapter)
  - Oil Pump Cable (see Engine Lubrication System chapter)

- Disconnect all cables and wires off the engine (see Parts Location in the Electrical System chapter).
- Using a jack, slightly lift up the engine. Then remove the engine mounting bolts.
- Remove the engine.

Installation

- Tighten the engine mounting bolts to the specified torque (see General Information chapter).
- Route all wires and cables correctly (see General Information chapter).
- Apply non-permanent locking agent to the threads of the side stand bracket mounting bolts.
- Visually inspect the clip on the rear axle nut, and replace it if necessary.
- Tighten the following parts to the specified torque (see General Information chapter).
  - Engine Sprocket Mounting Bolts
  - Rear Axle Nut
  - Side Stand Bracket Mounting Bolts

- Check and adjust following items after installation.
  - Drive Chain Slack (see Final Drive chapter)
  - Exhaust Valve Operation (see Electrical System chapter)
  - Oil Pump and Throttle Cable Synchronization (see Engine Lubrication chapter)
  - Coolant Level (see Cooling System chapter)

**WARNING**

- Do not attempt to drive the motorcycle until a full brake lever or pedal is obtained by pumping the brake lever or pedal until the pads are against the disc. The brake will not function on the first application of the lever or pedal if this is not done.