

## SERVICE INFORMATION

### GENERAL

- A hoist or equivalent is required to support the motorcycle when removing and installing the engine.
- A floor jack or other adjustable support is required to support and maneuver the engine.
- Do not use the oil filter and oil cooler as a jacking point.
- When using the lock nut wrench for the adjusting bolt lock nut, use a deflecting beam type torque wrench 20 inches long. The lock nut wrench increases the torque wrench's leverage, so the torque wrench reading will be less than the torque actually applied to the lock nut. The specification given is the actual torque applied to the lock nut, not the reading on the torque wrench. Do not overtighten the lock nut. The specification later in the text gives both actual and indicated.
- The following components can be serviced with the engine installed in the frame.
  - Alternator (page 11-4)
  - Clutch (page 10-7)
  - Camshaft (page 9-8)
  - Gearshift linkage (page 10-22)
  - Oil cooler (page 5-12)
  - Oil pump (page 5-8)
  - Water pump (page 7-15)
- The following components require engine removal for service.
  - Cylinder head (page 9-13)
  - Crankshaft (page 13-5)
  - Piston/cylinder (page 13-13)
  - Shift fork/shift drum/Transmission (page 12-7)
- When installing the engine, be sure to tighten the engine mounting fasteners to the specified torque in the specified sequence. If you mistake the torque or sequence, loosen all mounting fasteners, then tighten them again to the specified torque in the correct sequence.

### SERVICE DATA

ITEM		SPECIFICATIONS
Engine dry weight		58.3 kg (128.5 lbs)
Engine oil capacity	After disassembly	3.5 liter (3.7 US qt, 3.1 Imp qt)
Coolant capacity	Radiator and engine	3.2 liter (3.4 US qt, 2.8 Imp qt)

### TORQUE VALUES

Front engine hanger bolt (left side)	54 N·m (5.5 kgf·m, 40 lb·ft)	
Front engine hanger nut (right side)	54 N·m (5.5 kgf·m, 40 lb·ft)	
Front engine hanger pinch bolt	27 N·m (2.7 kgf·m, 20 lbf·ft)	
Rear engine hanger adjusting bolt	9.8 N·m (1.0 kgf·m, 7 lbf·ft)	
Rear engine hanger lock nut	54 N·m (5.5 kgf·m, 40 lb·ft)	
Rear engine hanger nut	59 N·m (6.0 kgf·m, 43 lbf·ft)	
Lower engine hanger pinch bolt	27 N·m (2.7 kgf·m, 20 lbf·ft)	
Lower engine hanger nut	59 N·m (6.0 kgf·m, 43 lbf·ft)	
Swingarm pivot pinch bolt	27 N·m (2.7 kgf·m, 20 lbf·ft)	
Swingarm pivot nut	93 N·m (9.5 kgf·m, 69 lbf·ft)	
Drive sprocket special bolt	54 N·m (5.5 kgf·m, 40 lb·ft)	
Starter motor terminal nut	12 N·m (1.2 kgf·m, 9 lbf·ft)	
Side stand bracket socket bolt	39 N·m (4.0 kgf·m, 33 lbf·ft)	ALOC bolt
Oil pressure switch wire terminal screw	2.0 N·m (0.2 kgf·m, 1.4 lbf·ft)	