

TORQUE VALUES

Crankcase bolt, 10 mm	39 N·m (4.0 kgf·m , 29 lbf·ft)	
9 mm	37 N·m (3.8 kgf·m , 27 lbf·ft)	Apply oil to the threads
8 mm	25 N·m (2.5 kgf·m , 18 lbf·ft)	
7 mm	18 N·m (1.8 kgf·m , 13 lbf·ft)	
6 mm	12 N·m (1.2 kgf·m , 9 lbf·ft)	
Connecting rod nut	41 N·m (4.2 kgf·m , 30 lbf·ft)	Apply oil to the threads
Lower crankcase flange bolt	29 N·m (3.0 kgf·m , 22 lbf·ft)	Apply a locking agent to the threads
Lower crankcase sealing bolt, 20 mm	29 N·m (3.0 kgf·m , 22 lbf·ft)	Apply a locking agent to the threads
8 mm	22 N·m (2.2 kgf·m , 16 lbf·ft)	Apply a locking agent to the threads

TROUBLESHOOTING

Cylinder compression is too low, or engine is hard to start

- Blown cylinder head gasket
- Worn, stuck or broken piston ring
- Worn or damaged cylinder or piston
- Bent valve, or bent and deteriorated valve seat

Cylinder compression is too high, or engine overheats or knocks

- Carbon deposits on the cylinder head and/or piston crown

Piston sounds

- Worn cylinder, piston and/or piston ring
- Worn piston pin hole and piston pin
- Worn connecting rod small end

Excessive smoke

- Worn, stuck or broken piston ring
- Worn valve stem seal

Excessive noise

- Worn connecting rod big end bearing
- Bent connecting rod
- Worn crankshaft main journal bearing
- Worn transmission bearing

Engine vibration

- Excessive crankshaft runout