

10. Crankcase/Cylinder/Piston

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Service Information

- The crankcase must be separated to repair the piston or connecting rod.
- Remove the following parts before separating the crankcase.
 - Engine (section 7)
 - Water pump (section 6)
 - Cylinder head (section 8)
 - Clutch and gearshift linkage (section 9)
 - Flywheel (section 15)
 - Pulse generator rotor cover (section 15)
 - Starter motor and starter clutch (section 17)
- Take care not to damage the cylinder walls and pistons.
- Store the piston components in the same order they were installed so they can be reinstalled in the original locations.
- Before assembling the crankcase halves, apply a sealant to their mating surfaces, Wipe off excess sealant thoroughly.
- Mark and store the connecting rod bearings to be sure of their correct locations for necessary. If the connecting rod bearings are improperly installed they will block the oil holes, causing insufficient lubrication and eventual engine seizure.

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Troubleshooting

Rough Idle

- Low cylinder compression

Low Compression

- Worn, stuck or broken piston rings
- Worn or damaged cylinder and piston

Compression Too High

- Excessive carbon build-up on piston top or combustion chamber

Excessive Smoke

- Worn cylinder piston or piston rings
- Improper installation of piston rings
- Scored or scratched piston or cylinder wall

Abnormal Noise (Piston)

- Worn piston pin or piston pin hole
- Worn connecting rod bearings
- Bent connecting rod
- Worn crankshaft main bearings