

Troubleshooting Engine Mechanical Problems

Problem	Cause	Solution
Excessive oil consumption (cont.)	<ul style="list-style-type: none"> • Piston ring gaps not properly staggered • Excessive main or connecting rod bearing clearance 	<ul style="list-style-type: none"> • Repair as necessary • Measure bearing clearance, repair as necessary
No oil pressure	<ul style="list-style-type: none"> • Low oil level • Oil pressure gauge, warning lamp or sending unit inaccurate • Oil pump malfunction • Oil pressure relief valve sticking • Oil passages on pressure side of pump obstructed • Oil pickup screen or tube obstructed • Loose oil inlet tube 	<ul style="list-style-type: none"> • Add oil to correct level • Replace oil pressure gauge or warning lamp • Replace oil pump • Remove and inspect oil pressure relief valve assembly • Inspect oil passages for obstruction • Inspect oil pickup for obstruction • Tighten or seal inlet tube
Low oil pressure	<ul style="list-style-type: none"> • Low oil level • Inaccurate gauge, warning lamp or sending unit • Oil excessively thin because of dilution, poor quality, or improper grade • Excessive oil temperature • Oil pressure relief spring weak or sticking • Oil inlet tube and screen assembly has restriction or air leak • Excessive oil pump clearance • Excessive main, rod, or camshaft bearing clearance 	<ul style="list-style-type: none"> • Add oil to correct level • Replace oil pressure gauge or warning lamp • Drain and refill crankcase with recommended oil • Correct cause of overheating engine • Remove and inspect oil pressure relief valve assembly • Remove and inspect oil inlet tube and screen assembly. (Fill inlet tube with lacquer thinner to locate leaks.) • Measure clearances • Measure bearing clearances, repair as necessary
High oil pressure	<ul style="list-style-type: none"> • Improper oil viscosity • Oil pressure gauge or sending unit inaccurate • Oil pressure relief valve sticking closed 	<ul style="list-style-type: none"> • Drain and refill crankcase with correct viscosity oil • Replace oil pressure gauge • Remove and inspect oil pressure relief valve assembly
Main bearing noise	<ul style="list-style-type: none"> • Insufficient oil supply • Main bearing clearance excessive • Bearing insert missing • Crankshaft end-play excessive • Improperly tightened main bearing cap bolts • Loose flywheel or drive plate • Loose or damaged vibration damper 	<ul style="list-style-type: none"> • Inspect for low oil level and low oil pressure • Measure main bearing clearance, repair as necessary • Replace missing insert • Measure end-play, repair as necessary • Tighten bolts with specified torque • Tighten flywheel or drive plate attaching bolts • Repair as necessary