

Troubleshooting Engine Mechanical Problems

Problem	Cause	Solution
External oil leaks	<ul style="list-style-type: none">• Cylinder head cover RTV sealant broken or improperly seated• Oil filler cap leaking or missing• Oil filter gasket broken or improperly seated• Oil pan side gasket broken, improperly seated or opening in RTV sealant• Oil pan front oil seal broken or improperly seated• Oil pan rear oil seal broken or improperly seated• Timing case cover oil seal broken or improperly seated• Excess oil pressure because of restricted PCV valve• Oil pan drain plug loose or has stripped threads• Rear oil gallery plug loose• Rear camshaft plug loose or improperly seated	<ul style="list-style-type: none">• Replace sealant; inspect cylinder head cover sealant flange and cylinder head sealant surface for distortion and cracks• Replace cap• Replace oil filter• Replace gasket or repair opening in sealant; inspect oil pan gasket flange for distortion• Replace seal; inspect timing case cover and oil pan seal flange for distortion• Replace seal; inspect oil pan rear oil seal flange; inspect rear main bearing cap for cracks, plugged oil return channels, or distortion in seal groove• Replace seal• Replace PCV valve• Repair as necessary and tighten• Use appropriate sealant on gallery plug and tighten• Seat camshaft plug or replace and seal, as necessary
Excessive oil consumption	<ul style="list-style-type: none">• Oil level too high• Oil with wrong viscosity being used• PCV valve stuck closed• Valve stem oil deflectors (or seals) are damaged, missing, or incorrect type• Valve stems or valve guides worn• Poorly fitted or missing valve cover baffles• Piston rings broken or missing• Scuffed piston• Incorrect piston ring gap• Piston rings sticking or excessively loose in grooves• Compression rings installed upside down• Cylinder walls worn, scored, or glazed	<ul style="list-style-type: none">• Drain oil to specified level• Replace with specified oil• Replace PCV valve• Replace valve stem oil deflectors• Measure stem-to-guide clearance and repair as necessary• Replace valve cover• Replace broken or missing rings• Replace piston• Measure ring gap, repair as necessary• Measure ring side clearance, repair as necessary• Repair as necessary• Repair as necessary