

Engine Troubleshooting

TROUBLE														CAUSE															
COMPRESSION POOR	CONNECTING ROD BUSHINGS BEARINGS WORN	COOLANT TEMPERATURE TOO HIGH (FRESH WATER SYSTEM)	COOLANT TEMPERATURE TOO LOW (FRESH WATER SYSTEM)	ENGINE LOSS (FRESH WATER SYSTEM)	ENGINE HEAVY	ENGINE POWER LOW	ENGINE OVERHEAT	ENGINE SPEED TOO LOW	FUEL CONSUMPTION TOO HIGH	FUEL CONSUMPTION TOO LOW	GOVERNOR EXCESSIVE	GOVERNOR CONTROL EXCESSIVE	HUNTING	INJECTION CONTROL LOSS	MECHANICAL KNOCKS	OIL CONSUMPTION INCORRECT	OIL CONSUMPTION EXCESSIVE - LIGHT BLUE SMOKE EXHAUST	OIL CONSUMPTION EXCESSIVE - NO SMOKE INCREASE	OIL DILUTED	OIL PRESSURE HIGH	OIL PRESSURE LOW	PISTON CYLINDER AND RING WEAR	STARTER SPEED SLOW	STARTER MOTOR DOES NOT TURN	SENSITIVITY POOR	VALVE BREAKAGE	VALVE BURNING	VALVE STICKING	
STARTING SYSTEM																													
																													Discharged or Defective Battery
																													Defective Glow Plug or Lead
																													Load Connected When Starting
																													Defective Solenoid
																													Defective Starter
																													Defective Control Circuit
FUEL SYSTEM																													
																													Defective Fuel System
																													Air in Fuel System
																													Incorrect Timing
																													Restricted Air Intake - Dirty Air Filter
																													Poor Quality Fuel
																													Dirty Fuel Filters
																													Out of Fuel or Shut Off Closed
																													Worn or Damaged Transfer Pump, Leaking Diaphragm
																													Faulty Injection Pump, Nozzles or Gaskets
																													Fuel Line Leaks
																													Wrong Timing Button in Injection Pump
																													Wrong Thickness Pump Mounting Gaskets
																													Run For Long Periods of Time at NO LOAD
LUBRICATION SYSTEM																													
																													Low Oil Supply
																													Defective Oil Gauge
																													Excess Oil in Crankcase
																													Oil Leaks From Engine Base or Connections
																													Light or Diluted Crankcase Oil
																													Leaky Oil Seals
																													Improper Lubrication
																													Faulty Oil By-Pass
																													Worn Oil Pump
																													Heavy Oil or Clogged Passages
																													Dirty Oil Filter
GOVERNOR SYSTEM																													
																													Loose or Disconnected Linkage
																													Binding Linkage
																													Excessive Wear in Linkage
																													Incorrect Governor Adjustment
																													High Spring Sensitivity
																													Incorrectly Installed Governor Yoke or Cup
COOLING SYSTEM																													
																													Insufficient Coolant
																													Faulty Thermostat
																													Worn Water Pump or Defective Seals
																													Water Passages Restricted
																													Blown Head Gasket
																													Overheating
																													Restricted or Too Long Water Lines
																													Defective Expansion Tank Pressure Cap
																													Inadequate Air Circulation
INTERNAL ENGINE																													
																													Poor Compression
																													Loose Piston
																													Loose Connecting Rod or Crankshaft Bearing
																													Incorrect Valve Clearance
																													Broken or Weak Valve Spring
																													High Exhaust Back Pressure
																													Valves Not Seating Properly
																													Worn Bearings
																													Worn Cylinder Walls, Pistons, Rings
																													Sticking Valves
																													Worn or Dirty Valve Guides