



AVOID SEVERE ENGINE DAMAGE • ALWAYS FOLLOW MANUFACTURER'S SERVICE PROCEDURES

BE SURE:

- Copper washer is present on injector being replaced.
- Copper washer is installed on replacement injector.
- Injector is properly torqued - see service manual.
- Engine oil is clean and at the proper level.
- Fuel supply is free from water, air and contamination.
- Fuel pressure is at manufacturer's specifications.
- Injector sleeve is clean and damage-free.
- Engine coolant shows no sign of engine oil (sleeve failure).

 <p>MISSING COPPER WASHER</p> <p>A missing copper washer or improperly torqued injector can allow hot combustion gases into the injector cavity. This will cause the lower fuel o-ring to fail allowing fuel to enter the combustion chamber. This can cause hydrostatic engine lock-up and engine failure. Furthermore, hot gases can overheat the injector's internal components causing injector failure.</p> <p>Black soot from combustion gases is evidence of missing copper washer or improperly torqued injector.</p> <p>Soot →</p> <p>→ Missing Washer</p>	 <p>FUEL CONTAMINATION</p> <p>Fuel contamination with water, air or debris can cause injector tip failure resulting in severe engine damage. Fuel is used to cushion the needle in the nozzle and lubricates the nozzle. The lack of fuel at the nozzle, caused by air in the system, low fuel pressure or no fuel pressure can result in this type of failure. Water lacks the characteristics of diesel fuel for lubricity, viscosity and specific gravity. Water present in the fuel can result in fracturing of the nozzle tip.</p> <p>A split injector tip is the result of fuel quality issues.</p>
<p>THESE TYPES OF INJECTOR FAILURES ARE NOT COVERED BY GB's LIMITED WARRANTY</p>	

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