

1982 Fuel Systems

DIESEL FUEL INJECTION TROUBLE SHOOTING

CONDITION & POSSIBLE CAUSE	CONDITION & POSSIBLE CAUSE
<p>Engine Cranks But Will Not Start</p> <ul style="list-style-type: none"> ● Incorrect starting procedure. ● No voltage to fuel solenoid. ● Faulty glow plugs or glow plug control system. ● Plugged fuel return system. ● No fuel to nozzles. ● No fuel to injection pump. ● Clogged fuel tank filter. ● Incorrect or contaminated fuel. ● Incorrect pump timing. <p>Engine Starts But Stalls at Idle</p> <ul style="list-style-type: none"> ● Incorrect slow idle adjustment. ● Faulty fast idle solenoid. ● Plugged fuel return system. ● Glow plugs turn off too soon. ● Incorrect pump timing. ● Limited fuel to injection pump. ● Air in injection lines to nozzles. ● Incorrect or contaminated fuel. ● Faulty injection pump. ● Fuel solenoid closes in "RUN" position. <p>Engine Starts, Idles Rough Without Unusual Noise Or Smoke</p> <ul style="list-style-type: none"> ● Incorrect slow idle adjustment. ● Leaking injection line. ● Plugged fuel return line. ● Air in lines to nozzles. ● Internal fuel leak at nozzles. ● Faulty nozzle. ● Improper or contaminated fuel. ● Uneven fuel distribution. <p>Engine Starts and Idles Rough With Excessive Noise and/or Smoke</p> <ul style="list-style-type: none"> ● Incorrect pump timing. ● Air in injection lines to nozzles. ● Faulty nozzles. ● Improperly installed high pressure lines. 	<p>Engine Idles Correctly, But Misfires Above Idle</p> <ul style="list-style-type: none"> ● Plugged fuel filter. ● Incorrect pump timing. ● Incorrect or contaminated fuel. <p>Engine Will Not Return To Idle</p> <ul style="list-style-type: none"> ● Linkage binding or maladjusted. ● Defective injection pump. <p>Fuel Leaks on Ground, No Other Engine Malfunction</p> <ul style="list-style-type: none"> ● Loose or broken fuel line or connection. ● Internal seal leak at injection pump. <p>Low Engine Power</p> <ul style="list-style-type: none"> ● Restricted air intake. ● Plugged fuel filter. ● Restricted fuel return system. ● Restricted fuel supply from tank to pump. ● Incorrect or contaminated fuel. ● Restricted fuel tank filter. ● Compression leaks at nozzles or glow plugs. ● Plugged nozzle(s). <p>"Rapping" Noise From One or More Cylinders</p> <ul style="list-style-type: none"> ● Air in fuel system. ● Air in high pressure lines. ● Nozzle sticking in open position; low nozzle opening pressure. <p>Excessive Combustion Noise With Black Smoke</p> <ul style="list-style-type: none"> ● Incorrect pump timing. ● Incorrect pump housing pressure. ● Defective injection pump. <p>Engine Will Not Shut Off With Key</p> <ul style="list-style-type: none"> ● Injection pump fuel solenoid does not return to "OFF" position.