DIAGNOSIS (Continued)

PINPOINT TEST A: FUEL SYSTEM DIAGNOSTICS (Continued)

TEST STEP		RESULT ▶	ACTION TO TAKE
A7	CHECK ELECTRICAL RESISTANCE OF FUEL PUMP		
	• Check for continuity through fuel pump by connecting ohmmeter to pump power and ground wire leads as close to fuel pump as possible. • **Is there continuity through the fuel pump?**	Yes ▶	If fuel pump runs, GO to **A8**. If fuel pump does not run, GO to **A10**.
		No ▶	REPLACE fuel pump and RECHECK as in A2. If fuel pump runs, GO to **A3**. If fuel pump does not run, RECHECK fuel pump connectors for oversize connectors or other source of non-continuous electrical circuit. SERVICE as required, GO to **A3**.
A8	CHECK FUEL PUMP STATIC PRESSURE (IN-LINE FUEL FILTER CHECK)		
	• Install a second fuel pressure tester on schrader valve equivalent installed between fuel pump and the in-line fuel filter, as close to fuel pump as possible. • Operate fuel pump as in A3 and compare pressure observed at the fuel injection supply manifold with the pressure observed at the fuel pump. • **Is pressure at fuel pump within 68 kPa (10 psi) of fuel injection supply manifold pressure?** NOTE: When fuel pump is not in operation, the fuel delivery system is at the same pressure, regardless of location of pressure tap. Therefore, both gauges should read the same pressure when pump is not in operation. Any difference in pressure readings when fuel pump is not in operation is due to pressure gauge error.	Yes ▶	GO to **A10**.
		No ▶	REPLACE in-line fuel filter and GO to **A3**. If pressure is OK, GO to **A4**. If pressure is not OK, RECHECK fuel lines for kinks or other restrictions. SERVICE and RECHECK as in Step A3.
A9	TEST FUEL PUMP CHECK VALVE		
	• Install fuel pressure tester on schrader valve equivalent installed between fuel pump and in-line fuel filter, as close to fuel pump as possible. • Operate fuel pump momentarily as in A2 and bring pressure to about system pressure. • Observe fuel pressure for one minute. • **Does pressure remain within 34 kPa (5 psi) of starting pressure over one minute period?**	Yes ▶	GO to **A5**.
		No ▶	REPLACE fuel pump assembly. RECHECK pressure as in Step A3.
A10	CHECK STATIC FUEL PUMP CURRENT DRAW		
	• Install an ammeter in series with the fuel pump electrical circuit. • Operate fuel pump as in A2. • **Is current draw within 2-9 amps?**	Yes ▶	Static test of fuel pump is OK. GO to **A14** to check injectors. Dynamic testing may be required to detect root cause.
		No ▶	REPLACE fuel pump assembly. If current is high, contamination may be a concern. INSPECT fuel tank for debris and CLEAN tank as needed. GO to **A2**.
A11	CHECK FUEL PRESSURE REGULATOR		
	• Disconnect return line at fuel pressure regulator. Connect outlet of regulator to appropriate receptacle to catch return fuel. • Run fuel pump as in Step A2. • **Is fuel pressure within 255-297 kPa (37-43 psi)?**	Yes ▶	GO to **A18**.
		No ▶	REPLACE fuel pressure regulator. RECHECK pressure as in Step A3.