

DIAGNOSIS (Continued)

PINPOINT TEST A: FUEL SYSTEM DIAGNOSTICS (Continued)

TEST STEP		RESULT	ACTION TO TAKE
A3	CHECK FUEL INJECTION SUPPLY MANIFOLD STATIC PRESSURE		
	<ul style="list-style-type: none"> ● Run fuel pump as in A2. ● Verify that the observed fuel pressure is within 255-297 kPa (37-43 psi). ● Observe the time it takes to reach the specified fuel pressure limits. ● Is the fuel pressure with 255-297 kPa (37-43 psi) within 3 seconds of turning key to RUN? <p>NOTE: If fuel has been evacuated from the lines which occurs when a line is disconnected or schrader valve is depressed for an extended time (no fuel in lines), it may take up to 12 seconds to obtain system pressure.</p>	Yes No	GO to A4. If pressure is high, GO to A11. Otherwise, GO to A12.
A4	CHECK FUEL INJECTION SUPPLY MANIFOLD STATIC LEAKDOWN		
	<ul style="list-style-type: none"> ● Run fuel pump as in A2 for 10 seconds and note pressure. ● Turn off fuel pump and monitor pressure for 1 minute. (Remove ground or turn ignition switch to the OFF position.) ● Does the fuel rail pressure remain within 34 kPa (5 psi) of shut off pressure for one-minute? 	Yes No	GO to A5. GO to A13.
A5	TEST VEHICLE UNDER LOAD		
	<ul style="list-style-type: none"> ● Remove and block vacuum hose to pressure regulator. ● Run vehicle at idle and then increase engine speed to 2000 rpm or more in short bursts. ● Does fuel injection supply pressure remain 210-310 kPa (30-45 psi) with engine running? <p>NOTE: Running vehicle under load with vacuum hose removed from fuel pressure regulator (road test) may give better results.</p> <p>NOTE: The Taurus FF vehicle has a voltage control system for the fuel pump. When starting and when the engine speed is greater than 3300 rpm, the fuel pump electrical supply will be at system voltage. At other times, voltage to the fuel pump will be reduced. If this system fails to operate properly, a diagnostic test code will be produced. Refer to Powertrain Control/Emissions Diagnosis² manual for electrical system diagnostics for these codes.</p>	Yes No	Fuel system is OK. DISCONNECT all test connections. CONNECT vacuum hose to pressure regulator. GO to A14 to check injectors. CONNECT vacuum hose to pressure regulator, GO to A6.
A6	CHECK FUEL PUMP VOLTAGE SUPPLY		
	<ul style="list-style-type: none"> ● Check for voltage to fuel pump through the wiring harness by connecting pump power to ground wire leads through a voltmeter. Test point should be in the body wiring harness as close to the fuel pump as is possible. ● Attempt to run pump as in A2. ● Check battery voltage with voltmeter. ● Is voltage greater than 10.5 volts and within 0.5 volt of battery voltage? <p>NOTE: The Taurus FF vehicle has a voltage control system for the fuel pump. When operating the fuel as in Step A2, the fuel pump is powered by system voltage.</p>	Yes No	GO to A7. RUN Self-Test to check electrical system diagnostics. SERVICE as needed, then GO to A3 to verify.

² Can be purchased as a separate item.