

# TECHNICAL SERVICE BULLETIN

## Fuel Delivery System Diagnostic Procedures

Fuel delivery systems are becoming a complex part of the electronic fuel injection operation. Diagnostic approach found in shop manuals is limited to the actual circuit fault or failure trouble codes. An automotive technician must use a systematic approach to determine what may have caused the failure. Besides the immediate failure, additional components must be inspected to prevent any comebacks and unsatisfied customer.

Here is a general overview of added elements to analyze when servicing the fuel delivery system.

If possible, always road test the vehicle when a performance related problem is mentioned.

Perform a complete visual inspection of the fuel delivery system.

Verify the on-board computer for any trouble codes and fix them first.

Verify fuel pressure "key on engine off" and engine running.

Verify the fuel pressure regulator operation.

Inspect the electrical circuit for voltage drops and signs of damage including connectors and grounds. Perform all necessary circuit repairs.

When replacing the in-tank pump, verify fuel filler cap, filler neck and tank for damage or contamination.

Install all parts supplied with the pump specially the wiring harness connector as this is the major electrical cause of fuel delivery system failure.

Always replace the in-line fuel filter when installing a new pump assembly.

If the fuel tank is contaminated, add new clean fuel to prevent premature failure.

When a modular fuel pump is replaced, make sure to add sufficient fuel to the tank for the pump to be able to soak in fuel. The pump in a fuel module is mounted much higher and a few liters of fuel may not be enough and prevent proper pump aspiration and will be diagnosed as a defective pump.

Recheck fuel pressure after pump assembly replacement as mentioned in the guidelines above.

Perform a final road test to confirm proper system operation before returning the vehicle to the customer.

**THE  
PREMIUM  
CHOICE**

**SPECTRA  
PREMIUM™**