1985-1992 TPI 5.0L and 5.7L Troubleshooting Tips:

When troubleshooting a fuel injected engine, the following items should be checked and confirmed before calling Fuel Injection Specialties for technical assistance.

- Check fuel pressure and record at idle as well as snap throttle.
- Check for spark at coil and spark plugs
- Injector pulse at all injectors (if possible)
- Check compression
- Check for vacuum leaks (smoke machine or equivalent recommended)
- Check out on a scanner – we need scan tool data codes & readings to help solve the issue!

Fuel Pressure should be set to 37-45 PSI with the engine running, vacuum line on the fuel pressure regulator. If it isn’t, check the following:

NO FUEL PRESSURE: Check the relay. Confirm the following:
- Orange wire should have battery power (12-13) volts at all times.
- Black wire is a Ground. Verify that this has continuity to the negative terminal on the battery.
- Green with white stripe wire is for the 2 second prime at starting for the ECM (Computer).
- Gray wire is the Hot lead to the positive side of the fuel pump. Verify that the pump is also grounded. Make sure it is wired properly.

LOW FUEL PRESSURE: Check for the following:
- Weak fuel pump.
- Inefficient fuel system set-up, e.g. pick-up tube in tank not picking up, pump mounted too high, the pump should be mounted low etc; screen in tank plugged with debris.
- Fuel pump is mounted too far away from fuel tank. Fuel pump is designed to push fuel, not pull it.
- Gauge could be incorrect, check pressure with another gauge.

HIGH FUEL PRESSURE: Check for the following:
- Restriction on the return fuel line.
- Stuck diaphragm on the fuel pressure regulator.
- Fuel lines hooked up backwards on rails.
- Gauge could be incorrect, check pressure with another gauge.

Check for injector pulse:
- Verify that the all pink wires are getting ignition power. There should be 12 volts in “Key On” and “Crank” positions.
- Verify that you have injector pulse using a noid light (or equivalent).
- Another common problem found is clogged or stuck injectors and.

Check for Spark. If there is no spark, or weak spark, verify the following:
- 12 Volt switched ignition power to the coil. There should be about 12-12.5 volts in “Key On” position and 11.5-12 volts in “Crank” position.
- If the voltage drops below 10.5 while cranking volts there may be a battery issue.
- Confirm plug wire does not have high resistance.
- Bad coil(s)? Bad spark plug wires, fouled out or wrong spark plugs?
- If you are running an Ignition Box (MSD, Mallory, etc.), disconnect to troubleshoot.

Check for vacuum leaks – the ECM wants to have 15-17 inches of vacuum.

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