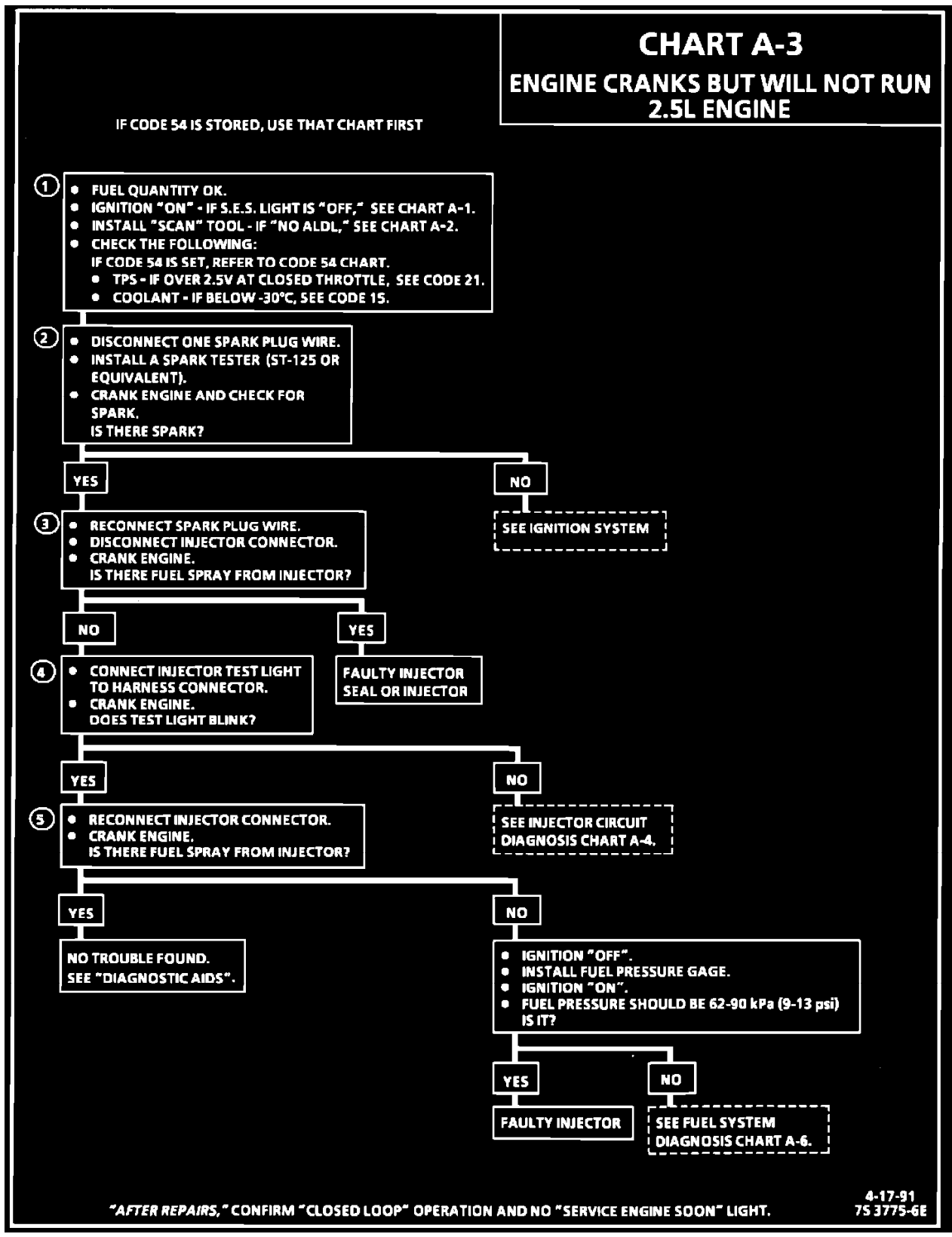
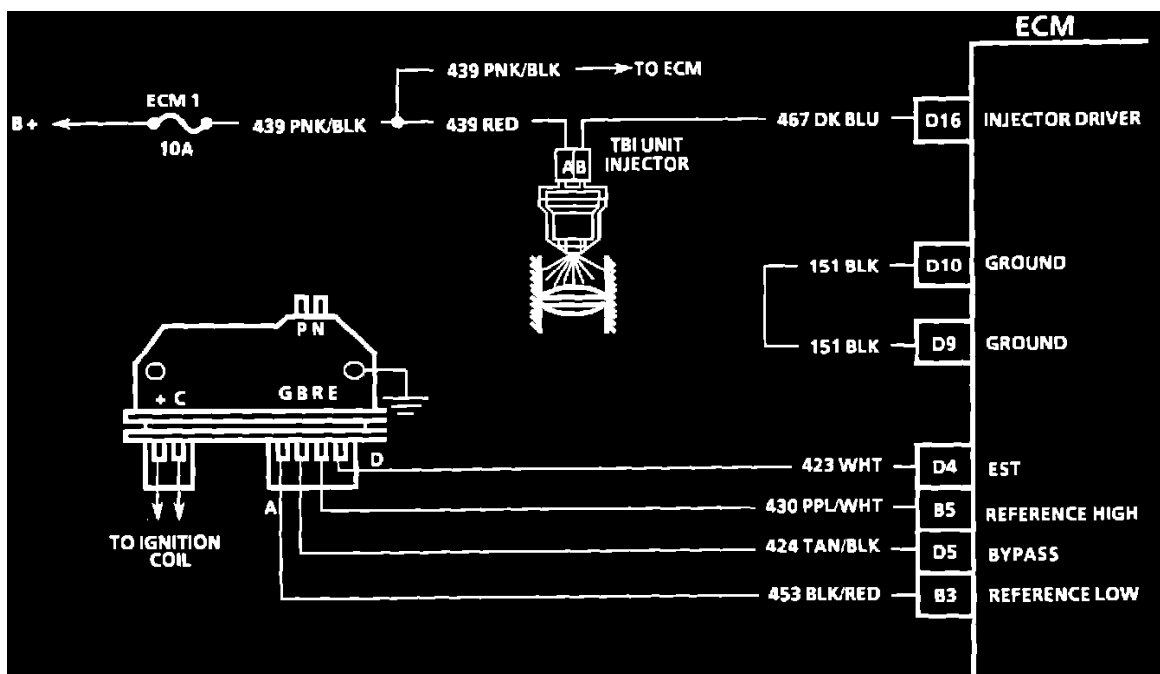


Computers and Control Systems: Symptom Related Diagnostic Procedures

Chart A-3 Engine Cranks But Will Not Run



Engine Cranks But Won't Run Chart A-3



Engine Cranks But Won't Run

CIRCUIT DESCRIPTION

This chart assumes that the battery condition and engine cranking speed are OK, and there is adequate fuel in the tank. This chart should be used on engines using the Model 700 throttle body.

TEST DESCRIPTION

Number(s) below refer to circled number(s) on the diagnostic chart:

1. A "Service Engine Soon" light "ON" is a basic test to determine if there is a 12 volt supply and ignition 12 volts to ECM. No ALDL may be due to an ECM problem and CHART A-2 will diagnose the ECM. If TPS is over 2.5 volts the engine may be in the clear flood mode which will cause starting problems. If coolant sensor is below -30°C , the ECM will provide fuel for this extremely cold temperature which will severely flood the engine.
2. Voltage at the spark plug is checked using spark tester tool ST-125 (J 26792) or equivalent. No spark indicates a basic ignition problem.
3. While cranking engine there should be no fuel spray with injector disconnected. Replace an injector if it sprays fuel or drips like a leaking water faucet.
4. Use an injector test light like J 34730, BT-8329A or equivalent, to test injector circuit. A blinking light indicates the ECM is controlling the injector.
5. This test will determine if there is fuel pressure at the injector and that the injector is operating.

DIAGNOSTIC AIDS

If no trouble is found in the fuel pump circuit or ignition system and the cause of a "Engine Cranks But Will Not Run" has not been found, check for:

- ^ Fouled spark plugs.
- ^ EGR valve stuck open.
- ^ Low fuel pressure.
- ^ Water or foreign material in the fuel system.
- ^ A ground circuit 423 (EST) may cause a "No Start" or a "Start then Stall" condition.
- ^ Basic engine problem.