

ENGINE DOES NOT START OR IS HARD TO START

1. Spark Plug Inspection

Remove and inspect spark plug.

Are the spark plugs in good condition?

- NO – • Incorrect spark plug heat range
• Incorrect spark plug gap
• Dirty air cleaner

YES – GO TO STEP 2.

2. Spark Test

Perform spark test.

Are there good sparks?

- NO – • Loose or disconnected ignition system wire
• Faulty ignition coil
• Broken or shorted direct ignition coil connector wire
• Faulty ignition pulse generator
• Faulty engine stop switch
• Faulty engine control module (ECM)

YES – GO TO STEP 3.

3. Fuel Pump Inspection

Check for operation of the fuel pump and inspect the fuel flow.

Is the fuel pump unit normal?

- NO – Faulty fuel pump unit (page 6-58).

YES – GO TO STEP 4.

4. Programmed Fuel Injection System Inspection

Check the fuel injection system.

Is the fuel injection system normal?

- NO – Faulty fuel injection system (page 6-79), (page 6-67).

YES – GO TO STEP 5.

5. Cylinder compression Inspection

Test the cylinder compression.

Is the compression specified?

- NO – • *Valve stuck open*
• Worn cylinder and piston rings
• Damaged cylinder head gasket
• Seized valves
• Improper valve timing

YES – GO TO STEP 6.

6. Engine Start Condition

Start by following normal procedure.

Did the engine start but stops?

- YES – • Leaking intake manifold
• Leaking intake pipes
• Faulty starter valves
• Improper ignition timing (Faulty ECM or ignition pulse generator)
• Contaminated fuel