

# Troubleshooting Engine Performance

Problem	Cause	Solution
Hard starting (engine cranks normally)	<ul style="list-style-type: none"> <li>Faulty engine control system component</li> <li>Faulty fuel pump</li> <li>Faulty fuel system component</li> <li>Faulty ignition coil</li> <li>Improper spark plug gap</li> <li>Incorrect ignition timing</li> <li>Incorrect valve timing</li> </ul>	<ul style="list-style-type: none"> <li>Repair or replace as necessary</li> <li>Replace fuel pump</li> <li>Repair or replace as necessary</li> <li>Test and replace as necessary</li> <li>Adjust gap</li> <li>Adjust timing</li> <li>Check valve timing; repair as necessary</li> </ul>
Rough idle or stalling	<ul style="list-style-type: none"> <li>Incorrect curb or fast idle speed</li> <li>Incorrect ignition timing</li> <li>Improper feedback system operation</li> <li>Faulty EGR valve operation</li> <li>Faulty PCV valve air flow</li> <li>Faulty TAC vacuum motor or valve</li> <li>Air leak into manifold vacuum</li> <li>Faulty distributor rotor or cap</li> <li>Improperly seated valves</li> <li>Incorrect ignition wiring</li> <li>Faulty ignition coil</li> <li>Restricted air vent or idle passages</li> <li>Restricted air cleaner</li> </ul>	<ul style="list-style-type: none"> <li>Adjust curb or fast idle speed (If possible)</li> <li>Adjust timing to specification</li> <li>Refer to Chapter 4</li> <li>Test EGR system and replace as necessary</li> <li>Test PCV valve and replace as necessary</li> <li>Repair as necessary</li> <li>Inspect manifold vacuum connections and repair as necessary</li> <li>Replace rotor or cap (Distributor systems only)</li> <li>Test cylinder compression, repair as necessary</li> <li>Inspect wiring and correct as necessary</li> <li>Test coil and replace as necessary</li> <li>Clean passages</li> <li>Clean or replace air cleaner filter element</li> </ul>
Faulty low-speed operation	<ul style="list-style-type: none"> <li>Restricted idle air vents and passages</li> <li>Restricted air cleaner</li> <li>Faulty spark plugs</li> <li>Dirty, corroded, or loose ignition secondary circuit wire connections</li> <li>Improper feedback system operation</li> <li>Faulty ignition coil high voltage wire</li> <li>Faulty distributor cap</li> </ul>	<ul style="list-style-type: none"> <li>Clean air vents and passages</li> <li>Clean or replace air cleaner filter element</li> <li>Clean or replace spark plugs</li> <li>Clean or tighten secondary circuit wire connections</li> <li>Refer to Chapter 4</li> <li>Replace ignition coil high voltage wire (Distributor systems only)</li> <li>Replace cap (Distributor systems only)</li> </ul>
Faulty acceleration	<ul style="list-style-type: none"> <li>Incorrect ignition timing</li> <li>Faulty fuel system component</li> <li>Faulty spark plug(s)</li> <li>Improperly seated valves</li> <li>Faulty ignition coil</li> </ul>	<ul style="list-style-type: none"> <li>Adjust timing</li> <li>Repair or replace as necessary</li> <li>Clean or replace spark plug(s)</li> <li>Test cylinder compression, repair as necessary</li> <li>Test coil and replace as necessary</li> </ul>