Troubleshooting Engine Performance

Problem	Cause	Solution
Faulty acceleration (cont.)	• Improper feedback system operation	• Refer to Chapter 4
Faulty high speed operation	• Incorrect ignition timing	• Adjust timing (if possible)
	• Faulty advance mechanism	• Check advance mechanism and repair as necessary (Distributor systems only)
	• Low fuel pump volume	• Replace fuel pump
	• Wrong spark plug air gap or wrong plug	• Adjust air gap or install correct plug
	• Partially restricted exhaust manifold, exhaust pipe, catalytic converter, muffler, or tailpipe	• Eliminate restriction
	• Restricted vacuum passages	• Clean passages
	• Restricted air cleaner	• Cleaner or replace filter element as necessary
	• Faulty distributor rotor or cap	• Replace rotor or cap (Distributor systems only)
	• Faulty ignition coil	• Test coil and replace as necessary
	• Improperly seated valve(s)	• Test cylinder compression, repair as necessary
	• Faulty valve spring(s)	• Inspect and test valve spring tension, replace as necessary
	• Incorrect valve timing	• Check valve timing and repair as necessary
	• Intake manifold restricted	• Remove restriction or replace manifold
	• Worn distributor shaft	• Replace shaft (Distributor systems only)
	• Improper feedback system operation	• Refer to Chapter 4
Misfire at all speeds	• Faulty spark plug(s)	• Clean or relace spark plug(s)
	• Faulty spark plug wire(s)	• Replace as necessary
	• Faulty distributor cap or rotor	• Replace cap or rotor (Distributor systems only)
	• Faulty ignition coil	• Test coil and replace as necessary
	• Primary ignition circuit shorted or open intermittently	• Troubleshoot primary circuit and repair as necessary
	• Improperly seated valve(s)	• Test cylinder compression, repair as necessary
	• Faulty hydraulic tappet(s)	• Clean or replace tappet(s)
	• Improper feedback system operation	• Refer to Chapter 4
	• Faulty valve spring(s)	• Inspect and test valve spring tension, repair as necessary
	• Worn camshaft lobes	• Replace camshaft
	• Air leak into manifold	• Check manifold vacuum and repair as necessary
	• Fuel pump volume or pressure low	• Replace fuel pump
	• Blown cylinder head gasket	• Replace gasket
	• Intake or exhaust manifold passage(s) restricted	• Pass chain through passage(s) and repair as necessary
Power not up to normal	• Incorrect ignition timing	• Adjust timing
	• Faulty distributor rotor	• Replace rotor (Distributor systems only)