

# TROUBLESHOOTING

Problem	Possible cause	Remedy	Page
Engine overheats	Cooling system faulty Incorrect ignition timing	Troubleshoot cooling system Reset timing	CO-4
Engine will not crank or cranks slowly	Starting system faulty	Troubleshoot starting system	ST-2
Engine will not start/hard to start (cranks OK)	Vacuum leaks <ul style="list-style-type: none"> <li>• PCV hoses</li> <li>• EGR valve</li> <li>• Intake manifold</li> <li>• Air intake chamber</li> <li>• Throttle body</li> <li>• ISC valve</li> </ul> Pulling in air between air flow meter and throttle body Ignition problems <ul style="list-style-type: none"> <li>• Ignition coil</li> <li>• Igniter</li> <li>• Distributor</li> </ul> Ignition wiring disconnected or broken No fuel supply to injector <ul style="list-style-type: none"> <li>• No fuel in tank</li> <li>• Fuel pump not working</li> <li>• Fuel filter clogged</li> <li>• Fuel line clogged or leaking</li> </ul> EFI system problems ISC system problems Spark plugs faulty Low compression	Repair as necessary  Repair as necessary Perform spark test  Inspect wiring Troubleshoot EFI system  Repair as necessary Check ISC system Inspect plugs Check compression	FI-66, 68 IG-5  FI-7  FI-72 IG-6 EM-15
Rough idle, stalls or misses	Vacuum leaks <ul style="list-style-type: none"> <li>• PCV hoses</li> <li>• EGR valve</li> <li>• Intake manifold</li> <li>• Air intake chamber</li> <li>• Throttle body</li> <li>• ISC valve</li> </ul> Pulling in air between air flow meter and throttle body Incorrect idle speed Incorrect ignition timing Ignition problems <ul style="list-style-type: none"> <li>• Ignition coil</li> <li>• Igniter</li> <li>• Distributor</li> </ul> Ignition wiring faulty EFI system problems Spark plugs faulty Engine overheats Low compression	Repair as necessary  Repair as necessary Check ISC system Reset timing Perform spark test Inspect coil  Inspect distributor Inspect wiring Repair as necessary Inspect plugs Check cooling system Check compression	FI-66, 68 FI-72 IG-12 IG-5  IG-6 CO-4 EM-15

## TROUBLESHOOTING (Cont'd)

Problem	Possible cause	Remedy	Page
Engine hesitates/poor acceleration	Vacuum leaks <ul style="list-style-type: none"> <li>• PCV hoses</li> <li>• EGR valve</li> <li>• Intake manifold</li> <li>• Air intake chamber</li> <li>• Throttle body</li> <li>• ISC valve</li> </ul>	Repair as necessary	
	Pulling in air between air flow meter and throttle body Incorrect ignition timing Emission control system problems (cold engine) <ul style="list-style-type: none"> <li>• EGR system always on</li> </ul> High-tension cord faulty Fuel system clogged Air cleaner clogged EFI system problems Spark plugs faulty Engine overheats Low compression	Repair as necessary  Reset timing  Check EGR system Inspect cord Check fuel system Check air cleaner Repair as necessary Inspect plugs Check cooling system Check compression	  FI-66, 68  IG-12  EC-10  FI-48  IG-6 CO-4 EM-15
Engine diesels (runs after ignition switch is turned off)	EFI system problems	Repair as necessary	
Muffler explosion (after fire) on deceleration only	Deceleration fuel cut system always off	Check EFI (fuel cut) system	FI-88
Muffler explosion (after fire) all the time	Air cleaner clogged ER system problems Incorrect ignition timing	Check air cleaner Repair as necessary Reset timing	IG-12
Engine backfires	Vacuum leak <ul style="list-style-type: none"> <li>• PCV hoses</li> <li>• EGR valve</li> <li>• Intake manifold</li> <li>• Air intake chamber</li> <li>• Throttle body</li> <li>• ISC valve</li> </ul>	Check hoses and repair as necessary	
	Pulling in air between air flow meter and throttle body EFI system problems Insufficient fuel flow Incorrect ignition timing Carbon deposits in combustion chambers	Repair as necessary  Repair as necessary Troubleshoot fuel system Reset timing Inspect cylinder head	  FI-66, 68  IG-12 EM-27
Excessive oil consumption	Oil leak PCV line clogged Piston rings worn or damaged	Repair as necessary Check PCV system Check rings	EC-4 EM-52

## TROUBLESHOOTING (Cont'd)

Problem	Possible cause	Remedy	Page
Excessive oil consumption (cont'd)	Valve stem and guide worn Valve stem seal worn	Check valves Check seals	<a href="#">EM-27</a> <a href="#">EM-52</a>
Excessive fuel consumption	Fuel leak Air cleaner clogged Incorrect ignition timing EFI system problems <ul style="list-style-type: none"> <li>• Injector faulty</li> <li>• Deceleration fuel cut system faulty</li> </ul> Idle speed too high Spark plugs faulty EGR system always on Low compression Tires improperly inflated Brakes drag	Repair as necessary Check air cleaner Reset timing Repair as necessary  Check ISC system Inspect plugs Check EGR system Check compression Inflate tires to proper pressure Troubleshoot brakes	IG- 12  <a href="#">FI-73</a> <a href="#">IG-6</a> <a href="#">EC-7</a> <a href="#">EM-15</a>
Unpleasant odor	Incorrect idle speed Incorrect ignition timing Vacuum leaks <ul style="list-style-type: none"> <li>• PCV hoses</li> <li>• EGR valve</li> <li>• Intake manifold</li> <li>• Air intake chamber</li> <li>• Throttle body</li> </ul> EFI system problems	Check ISC system Reset timing Repair as necessary   Repair as necessary	<a href="#">FI-73</a> <a href="#">IG-12</a>

