

TROUBLESHOOTING ENGINE OVERHEATING

Problem	Possible cause	Remedy	Page
Engine overheats	Cooling system faulty Incorrect ignition timing	Troubleshoot cooling system Reset timing	CO-4 IG-11

HARD STARTING

Problem	Possible cause	Remedy	Page
Engine will not crank or cranks slowly	Starting system faulty	Troubleshoot starting system	ST-2
Engine will not start/ hard to start (cranks OK)	No fuel supply to injector • No fuel in tank • Fuel pump not working • Fuel filter clogged • Fuel line clogged or leaking EFI system problems Ignition problems • Ignition coil • Igniter • Distributor Spark plug faulty High-tension cords disconnected or broken Vacuum leaks • PCV line • EGR line • Intake manifold • Air intake chamber • Throttle body • ISC valve • Brake booster line Pulling in air between air flow meter and throttle body Low compression	Troubleshoot EFI system Repair as necessary Perform spark test Inspect plugs Inspect cords Repair as necessary Repair as necessary Check compression	FI-9 IG-5 IG-6 IG-6 EM-12

ROUGH IDLING

Problem	Possible cause	Remedy	Page
Rough idle, stalls or misses	Spark plug faulty High-tension cord faulty Ignition problems • Ignition coil • Igniter • Distributor Incorrect ignition timing Vacuum leaks • PCV line • EGR line • Intake manifold • Air intake chamber	Inspect plugs Inspect cords Inspect coil Inspect igniter Inspect distributor Reset timing Repair as necessary	IG-6 IG-6 IG-7 IG-7 IG-7 IG-11

ROUGH IDLING (Cont'd)

Problem	Possible cause	Remedy	Page
Rough idle, stalls or misses (Cont'd)	• Throttle body • ISC valve • Brake booster line Air suction between air flow meter and throttle body Incorrect idle speed Incorrect valve clearance EFI system problems Engine overheats Low compression	Check ISC system Adjust valve clearance Repair as necessary Check cooling system Check compression	FI-44 FI-76 EM-9 CO-4 EM-12

ENGINE HESITATES/POOR ACCELERATION

Problem	Possible cause	Remedy	Page
Engine hesitates/ poor acceleration	Spark plug faulty High-tension cord faulty Vacuum leaks • PCV line • EGR line • Intake manifold • Air intake chamber • Throttle body • ISC valve • Brake booster line Pulling in air between air flow meter and throttle body Incorrect ignition timing Incorrect valve clearance Fuel system clogged Air cleaner clogged EFI system problems Emission control system problem (Cold engine) • EGR system always on Engine overheats Low compression	Inspect plugs Inspect cords Repair as necessary Repair as necessary Reset timing Adjust valve clearance Check fuel system Check air cleaner Repair as necessary Check EGR system Check cooling system Check compression	IG-6 IG-6 IG-11 EM-9 MA-5 EC-11 CO-4 EM-12

ENGINE DIESELING

Problem	Possible cause	Remedy	Page
Engine diesels (runs after ignition switch turned off)	EFI system problems	Repair as necessary	

AFTER FIRE, BACKFIRE

Problem	Possible cause	Remedy	Page
Muffler explosion (after fire) on deceleration only	Deceleration fuel cut system always off	Check EFI (fuel cut) system	
Muffler explosion (after fire) all the time	Air cleaner clogged EFI system problem Incorrect ignition timing	Check air cleaner Repair as necessary Reset timing	MA-5 IG-11
Engine backfires	EFI system problem Vacuum leak • PCV line • EGR line • Intake manifold • Air intake chamber • Throttle body • ISC valve • Brake booster line Air suction between air flow meter and throttle body Insufficient fuel flow Incorrect ignition timing Incorrect valve clearance Carbon deposits in combustion chambers	Repair as necessary Check hoses and repair as necessary Repair as necessary Troubleshoot fuel system Reset timing Adjust valve clearance Inspect cylinder head	FI-9 IG-11 EM-9 EM-13

EXCESSIVE OIL CONSUMPTION

Problem	Possible cause	Remedy	Page
Excessive oil consumption	Oil leak PCV line clogged Piston ring worn or damaged Valve stem and guide bushing worn Valve stem oil seal worn	Repair as necessary Check PCV system Check rings Check valves and guide bushing Check seals	EC-4 EM-63 EM-20

POOR GASOLINE MILEAGE

Problem	Possible cause	Remedy	Page
Poor gasoline mileage	Fuel leak Air cleaner clogged Incorrect ignition timing EFI system problems • Injector faulty • Deceleration fuel cutoff system faulty Idle speed too high Spark plug faulty EG R 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	MA-5 IG-11 FI-44 FI-76 IG-6 EC-11 EM-12

UNPLEASANT ODOR

Problem	Possible cause	Remedy	Page
Unpleasant odor	Incorrect idle speed Incorrect ignition timing Vacuum leaks • PCV line • EGR line • Intake manifold • Air intake chamber • Throttle body • ISC valve • Brake booster line EFI system problems	Check ISC system Reset timing Repair as necessary Repair as necessary	FI-44 FI-76 IG-11