TROUBLESHOOTING

Use the below to help you find the cause of the problem.

The numbers indicate the priority of the likely cause of the problem. Check each part in order. If necessary, replace these parts.

| | See page | IG-5 | IG-5 | EG1-216 to 218 | EG1-135 | EG1-135 153 or 171 | EG1-133 151 or 169 | EG1-133 151 or 169 | EG1-136 154 or 172 | ı | ı | 1 | EG1-182 | EG1-191 | EG1-197 | EG1-192 | EG1-188 | 1 |
|-----------------------|---|-----------------------|------------------|---------------------------------|--|------------------------------------|-------------------------------|-------------------------------------|-----------------------|-------------------------|-----------------------|-----------------------|-----------|----------------------------|---------------|-----------|----------------------|------------------------|
| | Suspect area | ignal | Ignition Circuit | Heated Oxygen Sensor Circuit | Engine Coolant Temp. Sensor Circuit | Air Intake Temp. Sensor Circuit | Air Flow Sircuit | Throttle Position Sensor Circuit | gnal | Sensor | gnal | ınal | dui | essure or | sət | S | art | y Air |
| | Symptom | RPM Signal Circuit | Ignitior | Heated Sensor | Engine Co Temp. Se | Air Intal Sensor | Volume Air F Meter Circuit | Throttle Positic Sensor Circuit | STA Signal Circuit | Knock Sensor Circuit | PNP Signal Circuit | A/C Signal Circuit | Fuel Pump | Fuel Pressure Regulator | Fuel Lines | Injectors | Cold Start System | Axuiliary Air valve |
| | Engine does not crank | | | | | | | | | | | | | | | | L | |
| Does not start | Starter runs – engine does not crank | | | | | | | | | | | | | | | | | |
| Does | No initial combustion | 12 | 2 | | | | 5 | ļ | | | | | 6 | | | | 13 | 8 |
| | No complete combustion | | | ļ | 4 | | 1 | | | | | | | 3 | | 9 | 10 | 2 |
| ೨ | Engine cranks slowly | | | | | | | | | | | 2 | | | | | | |
| 1= 1 | Under normal conditions | 12 | 13 | | 4 | 14 | | | | | | | 7 | 6 | 8 | 16 | 17 | 3 |
| Difficult to start | Cold engine | | | | 1 | 6 | | | 2 | | | | 8 | 7 | 9 | 10 | 5 | 4 |
| St 🖂 | Hot engine | | | | 1 | 5 | | | | | | | 8 | 7 | 9 | 10 | 6 | 3 |
| | Incorrect first idle | | | | 3 | | | | | | | | | | | | | 4 |
| Poor Idling | High engine idle speed | | | | 4 | 6 | | 7 | | | 9 | 8 | | | | 10 | 11 | 5 |
| 흔 | Low engine idle speed | | | | 1 | | 4 | | | | | | | | | 5 | | 2 |
| 8 | Rough idling | | 18 | | 2 | | 12 | | | | | | 7 | 6 | 8 | 16 | 17 | 9 |
| | Misfire | | 4 | | 6 | | 8 | | | | | | | | | 9 | 10 | |
| ı≩ | Hesitation Poor Acceleration | | | 12 | 10 | 11 | 9 | 8 | | | | | 14 | 13 | 15 | 18 | 19 | |
| 를 [| Back fire | | | 6 | 3 | 7 | 5 | 4 | | | | | 9 | 8 | 10 | 11 | | |
| Poor drivablity | Muffler explosion (after fire) | | | 8 | 3 | 7 | 5 | 6 | | | | | | 4 | | 9 | 10 | |
| % [| Surging | | | | | | | | | | | | | 1 | | 4 | | |
| | Knocking | | | | | | | | | 1 | | | | | | | | |
| | Engine stall soon after starting | | | | 8 | | 7 | | | | | | 3 | 2 | 4 | 9 | 10 | 6 |
| Engine stall | After accelerator pedal depressed | | | | | | 1 | 3 | | | | | | 5 | 6 | 7 | | |
| Engin | After accelerator pedal released | | | | | | 3 | | | | | | | | | | | 1 |
| 1 [| During A/C operation | | | | | | | | | | | 1 | | | | | | 2 |
| | When N to D shift | | | | | | | | | | 1 | | | | | | | 2 |
| | Poor fuel economy | | | 21 | 16 | 22 | 18 | 17 | | | 19 | 20 | | | | 14 | 15 | |
| | Engine overheat | | | | | 1 | | | | 9 | | | | | | | | |
| | Engine overcool | | | | | | | | | | | | | | | | | |
| [| Excessive oil consumption | | | | | | | | | | | | | | | | | |
| [| Low oil pressure | | | | | | | · | | | | | | | $\overline{}$ | | | |
| | High oil pressure | | | | | | | | | | | | | | | | | |
| | Starter keeps running | | | | | | | | | | | | | | | | | |
| | Battery often discharges | | | | | | | | | | | | | | | | | |

HINT: When inspecting a wire harness or circuit, the electrical wiring diagrams at the end of this repair manual should be referred to and the circuits of related systems also should be checked.

| | See page | EG1-210 | EG1-211 | EG1-224 | EG1-214 | EG1-220 | ı | ı | l | ı | ST-16 | AT or CL Sec. | ST-4 | 1G-7 | IG-10 | EG1-219 | 1 | 1 |
|-----------------------|---|-------------------|--------------------------|-----------------|---------------------------------|--------------------------|--------------|--------------|---------------------------|-------------|---------------|-----------------------------|---------|------------|-------------|------------|---------------------------|-----------------------------------|
| | Suspect area | ain | Circuit Opening Relay | Fuel Cut System | Fuel Pressure Control System | Engine Control Module | ıality | akage | Engine Coolant Leakage | kage | Relay | PNP SW or Cluth Start SW | | ānl | tor | ystem | ator ink | Brakes Drag Even When Released |
| | Symptom | EFI Main Relay | Circuit Relay | Fuel Cu | Fuel Pressure Control Systen | Engine Module | Fuel Quality | Fuel Leakage | Engine Leakag | Oil Leakage | Starter Relay | PNP SI Cluth S | Starter | Spark Plug | Distributor | EGR System | Accelerator Pedal Link | Brakes When F |
| | Engine does not crank | | | | | | | | | | 1 | 3 | 2 | | | | | |
| Does not start | Starter runs – engine does not crank | | | | | | | | | | | | 1 | | | | | |
| Soe | No initial combustion | 3 | 4 | | | 14 | 7 | | | | | | | | 1 | L | | |
| L s | No complete combustion | | | | | 11 | | | | | | | | | | | | |
| 2 | Engine cranks slowly | | | <u> </u> | | | | | | | | | 1 | | | | | |
| 불 | Under normal conditions | | | | | 18 | 1 | | | | | | | 2 | 15 | 5 | | |
| Difficult to start | Cold engine | | | | | 11 | 3 | | | | | | | | | | | |
| St. | Hot engine | | | | 4 | 11 | 2 | <u> </u> | | | | | | | | | | |
| б | Incorrect first idle | | | | | 5 | | | | | | | | | | | 1 | |
| Poor Idling | High engine idle speed | | | | | 12 | | <u> </u> | | | | | | ļ | | | 1 | |
| = | Low engine idle speed | | | | | 6 | | | | | | | | | | 1 | | |
| % | Rough idling | | | | | 19 | 1 | | | | | | | 4 | 5 | 3 | | |
| | Misfire | | | | | 11 | 1 | | | | | | | 3 | 5 | 2 | | |
| ity | Hesitation Poor Acceleration | | | | | 20 | 3 | | | | | | | 5 | 6 | 4 | | 2 |
| abj | Back fire | | | | | 12 | | | | | | | | | | 1_ | | |
| Poor drivablity | Muffler explosion (after fire) | | | 1 | | 11 | | | | | | | | | | | | |
| l & | Surging | | | | | 5 | | | | | | | | 2 | 3 | | | |
| | Knocking | | | | | 10 | 2 | | | | | | | 3 | | 4 | | |
| | Engine stall soon after starting | | | | | 11 | 1 | | | | | | | | | 5 | | |
| Engine stall | After accelerator pedal depressed | | | | | 8 | | | | | | | | 4 | | 2 | | |
| -Ingine | After accelerator pedal released | | | | | 4 | | | | | | | | | | 2 | | |
| " | During A/C operation | | | | | 3 | | | | | | | | | | | | |
| | When N to D shift | | | | | 3 | | | | | | | | | | | | |
| | Poor fuel economy | | | 8 | | | 2 | 1 | | | | | | 9 | 10 | 7 | 3 | 6 |
| | Engine overheat | | | | | | | | 1 | | | | | 1 | | | | |
| | Engine overcool | | | | | | | | | | | | | | | | | |
| STS | Excessive oil consumption | | | | | | | | | 1 | | | | | | | | |
| Others | Low oil pressure | | $\neg \uparrow$ | | | | | | | 1 | | | | | | | | |
| 0 | High oil pressure | | | | | | | | | | | | | | | | | |
| | Starter keeps running_ | | | | | | | | | | 1 | | 2 | | | | | |
| | Battery often discharges | | | | | | | | | | | | | | | | | |

| | EG1-203 | CL Sec. | EG1-13 | MA-14 | EG1-40 | EG1-40 | EG1-23 | EG1-23 | EG1-244 | EG1-53 | EG1-56 | EG1-21 | EG1-59 | ı | EG1-235 | EG1-233 | CH-8 | BE Sec. | BE Sec. | CH-9 | EG1-57 |
|----------|-----------------|---------|-------------|--|---|---|--|-----------------------------|----------|---------------------------|-----------------------|------------------|---|----------------------------|------------------------------|------------|------------|---|-----------------------|-----------|----------------|
| Dash Pot | Throttle Opener | Clutch | Compression | Valve Clearance | Valve Timing | Timing Belt | Water Pump | Vavle Stem Guide Bushing | Oil Pump | Connecting Rod Bearing | Crankshaft Bearing | Cylinder Head | Piston Ring | Flywheel or Drive Plate | Radiator and Radiator cap | Thermostat | Drive Belt | Engine Coolant Temp. Sensor Gauge | Oil Presure Switch | Generator | Cylinder Block |
| | | | 9 5 9 | | 10 7 | 11 8 | | - | | 3 | 4 | | 6 | 2 | | | | | | | |
| 2 | 3 | 1 | 10 7 | 13 | 14 | 15 | | | | | | 20 | 11 | | | | | | | | |
| | | | | | 2 2 5 | | 9 | | | | | | | | 6 | 8 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 4 | | 5 | 3 | | 13 | 5 | 6 | 2 | 2 | 3 | 4 | 11 | 12 | | 3 | 4 2 | | 13 | 5 2 | | 6 |
| | 2 2 | 2 3 2 | 2 3 2 | 9 5 9 2 3 2 10 7 1 7 | 9 5 5 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 9 10 5 7 9 11 2 3 2 10 13 14 7 16 17 1 7 16 17 2 2 2 2 4 5 11 13 | 9 10 11 5 7 8 2 3 2 10 11 7 16 17 1 7 16 17 2 2 4 5 11 13 7 5 | 9 10 11 5 7 8 | 9 10 11 | 9 10 11 | | 9 10 11 | 9 10 11 3 4 5 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 9 10 11 | | | | | | | |