

Misfire causes can be categorized into four possible areas:

- **Ignition System**

- Fouled/worn spark plugs
- Shorts, leaks or open circuits in secondary ignition wiring/components
- Defective ignition coil(s) (COP or DIS)
- Intermittent ignition module/coil driver
- Low system voltage

- **Mechanical**

- Carbon deposits
- Worn valve train/burnt valves
- Loose timing belt or chain/valve timing
- Head gasket failure
- Worn rings, piston mechanical damage

- **Air/Fuel System**

- Low fuel level/poor fuel quality
- False air/vacuum leaks
- Clogged fuel filter
- Low fuel pressure/volume
- Open or shorted injector coil
- Damaged injector driver
- Injector ground/power supply circuit problems
- Clogged injectors
- Stuck (open) EGR valve
- Low system voltage

- **False Misfires**

- Rough road
- Heavy acceleration when cold
- Loose motor or transmission mounts
- Transmission/torque converter mechanical faults