



Parts List for Section 207(a) Emission Design and Defect Warranty

This list is effective for model year 1992, and later vehicles. EPA will use this list as guidance for all earlier model year vehicles.

I. Air Induction System parts, components and seals including but not limited to:

1. Temperature sensor elements
2. Air door
3. Air cleaner housing
4. Cold air duct
5. Heated air duct
6. Intake manifold
7. Turbocharger (including wastegate, pop-off, etc.), by-pass valves, ducting
8. Charge air cooler or intercooler
9. Supercharger
10. Vacuum motor for air control

II. Fuel Metering System:

1. Carburetor
 - a. Carburetor assembly, housing, and idle mixture adjustment limiting device
 - b. Internal carburetor parts, components, and seals, including but not limited to:
 - i) metering jets and rods
 - ii) needle and seat
 - iii) accelerator pump
 - iv) power valve
 - v) float circuit
 - c. External carburetor parts, components, and seals including but not limited to:
 - i) altitude compensator
 - ii) vacuum diaphragms
 - iii) engine coolant temperature sensor--ECTS
 - iv) intake air temperature sensor--IATS
 - v) manifold absolute pressure sensor--MAP
 - vi) manifold vacuum sensor--MVS
 - vii) manifold vacuum zone switch--MVZS
 - viii) mixture control solenoid--MSC

- d. Throttle and throttle controls including, but not limited to:
 - i) solenoids
 - ii) dashpots
 - iii) deceleration valve
 - iv) idle stop solenoid, anti-dieseling assembly
 - v) idle speed control (ISC) system
 - vi) throttle position sensor--TPS

 - e. Choke Mechanism including, but not limited to:
 - i) adjustment limiting device
 - ii) heater
 - iii) early fuel evaporative valve, device or system--EFE
 - iv) choke delay valve

 - f. Non-maintenance adjustments
 - i) idle mixture
 - ii) idle speed
 - iii) choke adjustment
2. Fuel Injection, Throttle Body or Multipoint (Mechanical or Electronic)
- a. Temperature sensors including, but not limited to:
 - i) engine coolant temperature sensor--ECTS
 - ii) intake air temperature sensor--IATS
 - iii) manifold surface temperature sensor--MSTS

 - b. Air flow devices or sensors including, but not limited to:
 - i) air flow sensor
 - ii) manifold pressure sensor--MAP
 - iii) altitude/barometric pressure sensor
 - iv) manifold vacuum sensor--MVS

 - c. Engine position sensors including, but not limited to:
 - i) engine speed sensor

 - d. Fuel system including, but not limited to:
 - i) early fuel evaporation switch or system
 - ii) fuel damper or accumulator
 - iii) fuel pressure regulator
 - iv) injectors
 - v) fuel delivery/return lines

- vi) fuel distributor (distribution manifold)
- vii) inertia fuel shut-off switch--IFSS
- viii) cold start valve or injector

e. Throttle body assembly and housing

f. Throttle and throttle controls including, but not limited to:

- i) idle air control valve system--IACV
- ii) idle speed control system--ISC
- iii) throttle position sensor--TPS

g. Fuel composition sensors and control system (e.g., oxygenated fuel sensor).

3. Fuel Injection--Diesel

- a. Injectors
- b. Fuel pressure regulator
- c. Fuel supply pump (only if no separate fuel injection pump exists)
- d. Fuel injection pump
- e. Smoke puff limiter--SPL
- f. Glow plugs
- g. Engine coolant temperature sensor--ECTS
- h. Crankshaft position sensor
- i. Metering valve solenoid
- j. Fast idle solenoid
- k. Cold start solenoid
- l. Altitude control solenoid

III. Ignition System including, but not limited to:

- 1. Distributor assembly and internal parts
- 2. Initial timing
- 3. Initial timing limiting device
- 4. Spark plugs
- 5. Spark plug wires/coil wire
- 6. Breakerless pickup (all types)
- 7. Ignition module
- 8. Spark timing control module
- 9. Coil/coil pack
- 10. Dwell/points
- 11. Vacuum advance assembly
- 12. Weights/springs
- 13. Spark delay devices
- 14. Knock sensors--KS

15. Engine speed sensors
16. Camshaft position sensor
17. Crankshaft position sensor--CPS
18. Engine coolant temperature sensor--ECTS
19. Thermal vacuum switch--TVS
20. Distributorless ignition control module
21. Vacuum switching valve
22. Vacuum by-pass valve
23. Vacuum solenoid
24. Transmission switch
25. Time delay

IV. Exhaust Gas Recirculation (EGR) System including, but not limited to:

1. EGR valve assembly(ies)
2. EGR flow sensor
3. EGR spacer plate
4. Internal passages and exhaust gas orifices
5. EGR function sensor--EGRS
6. EGR function control--EGRC
7. Delay solenoid/valves
8. Vacuum amplifier
9. Vacuum reservoir
10. Engine coolant temperature sensor--ECTS
11. Speed sensors
12. Solenoid vacuum valve
13. Thermal-controlled vacuum valve
14. Temperature-controlled vacuum valve
15. Vacuum reducing valve
16. EGR coolant override valve
17. Backpressure transducer
18. Exhaust pressure regulator

V. Positive Crankcase Ventilation System--PCV

1. PCV valve or orifice
2. Oil filler cap
3. PCV Connection Assembly

VI. Fuel Evaporative Control (EVAP) System including, but not limited to:

1. Canister
2. Canister purge solenoid/valve
3. Fuel filler cap
4. Fuel filler neck restrictor
5. Fuel fill pipe
6. Fuel tank
7. Fuel lines
8. Vapor separator
9. On-board refueling evaporative system
10. Pressure relief valve
11. Rollover valve
12. Anti-siphon valve (only if related to evaporative system)
13. Bowl vent valve

VII. Secondary Air Injection System, including but not limited to:

1. Secondary air management control valves including, but not limited to:
 - a) secondary air bypass valve--SABV
 - b) secondary air anti-backfire valve--SABFV
 - c) secondary air switching valve--SASV
 - d) secondary air pulse valve--SAPV
2. Secondary air injection pump
3. Drive belt
4. Injection tubes or manifolds
5. Pressure relief valve
6. Pressure setting plug
7. Pulse air system
8. Deceleration control valve
9. Temperature sensors

VIII. Exhaust

1. Exhaust manifold
2. Thermal reactor casing and lining
3. Catalytic converters
4. Catalytic converter shell, nipples and heat shield
5. Traps, filters, precipitators, and any other device used to capture particulate emissions
6. Regenerators, oxidizers, fuel additive devices, and any other device used to regenerate or aid in the regeneration of the particulate control device
7. Control device enclosures and manifolding
8. Exhaust port liners

9. Double walled portion of exhaust system
10. Heat riser valve and control assembly
11. All parts or pipes between converters or between converters and exhaust manifold

IX. Engine Emission Control System Sensors (modules, sensors, solenoids, valves) including, but not limited to:

1. Ambient air temperature sensor
2. Electronic control unit (module)--ECU or ECM
3. Powertrain control module (engine)--PCM
4. Powertrain control module (transmission)--PCMT
5. Oxygen sensors
6. Heated oxygen sensors
7. Air conditioner sensor--ACS
8. Barometric absolute pressure sensor--BARO
9. Coolant level sensor--COLS
10. Engine coolant temperature sensor--ECTS
11. Fuel temperature sensor
12. Manifold absolute pressure sensor--MAP
13. Manifold vacuum sensor--MVS
14. Manifold vacuum zone switch--MVZS
15. Wide open throttle switch--WOTS
16. Engine speed sensor
17. Torque sensor
18. Cylinder chamber temperature sensor
19. Catalyst temperature sensor
20. Coolant fan control switch
21. Thermal vacuum switch--TVS
22. Vehicle speed sensor--VSS
23. Vehicle speed pulse generator--VSPG
24. Operating gear selector switch--OGSS
25. Gear selector switch--GSS
26. Torque converter lockup switch--TCLS
27. Park neutral switch--PNS

X. On Board Diagnostics--OBD

1. Malfunction indicator light--MIL
2. MIL bulb
3. OBD system
4. Service reminder
5. Data link connector--DLC

XI. Related Parts Associated With The Above Systems

1. Hoses
2. Switches, sensors, solenoids
3. Gaskets/seals
4. Wires/harnesses/connectors