Appendix B

State of California
AIR RESOURCES BOARD

Emissions-Related Parts List

Adopted November 4, 1977
Amended May 19, 1981

The following list of components are examples of emissions-related parts as defined in Section 1900 (b) (3), Chapter 3, Title 13, California Code of Regulations.

I. Carburetion and Air Induction System

A. Air Induction System:

1. Temperature sensor elements
2. Vacuum motor for air control
3. Hot air duct & stove
4. Air filter housing & element
5. Turbocharger or Supercharger
6. Intercooler

B. Emissions Calibrated Carburetors:

1. Metering jets
2. Metering rods
3. Needle and seat
4. Power valve
5. Float circuit
6. Vacuum break
7. Choke mechanism
8. Throttle control solenoid
9. Deceleration valve
10. Dashpot
11. Idle stop solenoid, anti-dieseling assembly
12. Accelerating pump
13. Altitude compensator

C. Mechanical Fuel Injection:

1. Pressure regulator
2. Fuel injection pump
3. Fuel injectors
4. Throttle-position compensator
5. Engine speed compensator
6. Engine temperature compensator
7. Altitude cut-off valve
8. Deceleration cut-off valve
9. Cold-start valve

D. Continuous Fuel Injection:

1. Fuel pump
2. Pressure accumulator
3. Fuel filter
4. Fuel distributor
5. Fuel injectors
6. Air-flow sensor
7. Throttle-position compensator
8. Warm-running compensator
9. Pneumatic overrun compensator
10. Cold-start valve

E. Electronic Fuel Injection:

1. Pressure regulator
2. Fuel distribution manifold
3. Fuel injectors
4. Electronic control unit
5. Engine speed sensor
6. Engine temperature sensor
7. Throttle-position sensor
8. Altitude/manifold-pressure sensor
9. Cold-start valve

F. Air Fuel Ratio Control:

1. Frequency valve

2. Oxygen sensor
3. Electronic control unit

G. Intake Manifold

II. Ignition System

A. Distributor:

1. Cam
2. Points
3. Rotor
4. Condenser
5. Distributor cap
6. Breaker plate
7. Electronic components (breakerless or electronic system)

B. Spark Advance/Retard Systems:

1. Centrifugal advance mechanism:

   a. weights
   b. springs

2. Vacuum advance unit

3. Transmission controlled spark system:

   a. Vacuum solenoid
   b. Transmission switch
   c. Temperature switches
   d. Time delay
   e. CEC (Computerized Emissions Control) valve
   f. Reversing relay

4. Electronic spark control systems:

   a. Computer circuitry
   b. Speed sensor
   c. Temperature switches
   d. Vacuum switching valve

5. Orifice spark advance control system:

    a. Vacuum by-pass valve
    b. OSAC (orifice spark advance control) valve
    c. Temperature control switch
    d. Distributor vacuum control valve

6. Speed controlled spark system:

    a. Vacuum solenoid
    b. Speed sensor and control switch
    c. Thermal vacuum switch

C. Spark Plugs

D. Ignition Coil

E. Ignition Wires

III. Mechanical Components

A. Valve Trains:

1. Intake valves
2. Exhaust valves
3. Valve guides
4. Valve springs
5. Valve seats
6. Camshaft

B. Combustion Chamber:

1. Cylinder head or rotor housing
2. Piston or rotor

IV. Evaporative Control System

A. Vapor Storage Canister and Filter

B. Vapor Liquid Separator

C. Filler Cap

D. Fuel Tank

F. Canister Purge Valve

V. Positive Crankcase Ventilation System

A. PCV Valve

B. Oil Filler Cap

C. Manifold PCV Connection Assembly

VI. Exhaust Gas Recirculation System

A. EGR Valve:

1. Valve body and carburetor spacer
2. Internal passages and exhaust gas orifices

B. Driving Mode Sensors:

1. Speed sensors
2. Solenoid vacuum valve
3. Electronic amplifier
4. Temperature-controlled vacuum valve
5. Vacuum reducing valve
6. EGR coolant override valve
7. Backpressure transducer

B. Driving Mode Sensors: (continued)

8. Vacuum amplifier
9. Delay valves

Rotary (Wankel) engines only

VII. Air Injection System

A. Air Supply Assembly:

1. Pump

2. Pressure relief valve
3. Pressure-setting plug
4. Pulsed air system

B. Distribution Assembly:

1. Diverter, relief, bypass, or gulp valve
2. Check or anti-backfire valve
3. Deceleration control part
4. Flow control valve
5. Distribution manifold
6. Air switching valve

C. Temperature sensor

VIII. Catalyst, Thermal Reactor, and Exhaust System

A. Catalytic Converter:

1. Constricted fuel filler neck
2. Catalyst beads (pellet type converter)
3. Ceramic support and monolith coating (monolith type converter)
4. Converter body and internal supports
5. Exhaust manifold

B. Thermal Reactor:

1. Reactor casing and lining
2. Exhaust manifold and exhaust port liner

C. Exhaust System:

1. Manifold
2. Exhaust port liners
3. Double walled portion of exhaust system
4. Heat riser valve and control assembly

IX. Miscellaneous Items Used in Above Systems

1. Hoses, clamps, and pipes
2. Pulleys, belts, and idlers

X. Computer Controls

Emissions-Related Parts List

1. Electronic Control Unit (ECU)
2. Computer-coded engine operating parameters (including computer chips)
3. All sensors and actuators associated with the ECU