

State of California  
AIR RESOURCES BOARD

**CALIFORNIA ASSEMBLY-LINE TEST PROCEDURES FOR 2001  
AND SUBSEQUENT MODEL-YEAR PASSENGER CARS,  
LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES**

Adopted: August 5, 1999

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**CALIFORNIA ASSEMBLY-LINE TEST PROCEDURES FOR 2001  
AND SUBSEQUENT MODEL-YEAR PASSENGER CARS,  
LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES**

**A. GENERAL PROVISIONS**

**1. APPLICABILITY**

These test procedures, adopted pursuant to Section 43210 of the California Health and Safety Code, are applicable to all new 2001 and subsequent model-year passenger cars, light-duty trucks, and medium-duty vehicles subject to certification and manufactured for sale in California, except for zero-emission vehicles and medium-duty vehicles certified according to the standards and test procedures of section 1956.8, Title 13, California Code of Regulations (CCR). A vehicle is in compliance with these assembly-line test procedures when that vehicle is in compliance with the inspection test requirements. These test procedures also apply to any 2000 model-year vehicle that a manufacturer elects to make subject to 40 CFR, part 86, subpart S in lieu of subpart A.

**2. ACCESS**

Air Resources Board (ARB) personnel and mobile laboratories shall have access to vehicle assembly plants, distribution facilities, and test facilities for the purpose of vehicle selection, testing, and observation. Scheduling of access shall be arranged with the designated manufacturer's representative and shall not unreasonably disturb normal operations.

**3. VARIATIONS AND EXEMPTIONS**

Variations from these procedures which produce substantially equivalent results may be authorized by the Executive Officer. In extraordinary circumstances where compliance with these procedures is not possible or practicable, a manufacturer may appeal to the Air Resources Board for a temporary exemption.

**4. COMMUNICATIONS**

All reports required by these procedures shall be sent to:

Chief, Mobile Source Operations Division  
California Air Resources Board  
9528 Telstar Avenue  
El Monte, CA 91731

## **5. REPORTING**

Each vehicle manufacturer shall submit a quarterly report to the ARB within 45 calendar days after the end of each calendar quarter and 45 calendar days after the end of the production year. More frequent reports may be required if the Executive Officer invokes Title 13 CCR Section 2109. The quarterly report shall include the total test group quarterly production of vehicles produced and delivered for sale in California for the quarter, reported by vehicle class, the standards to which the test group is certified, the production start date, and for the final quarter, the final production date.

### **B. INSPECTION TEST PROCEDURES**

#### **1. TEST PROCEDURES**

The inspection test is a functional test of the emission control components and systems used on the vehicle to determine whether the emission control system is operating properly. It shall be performed on all passenger cars, light-duty trucks and medium-duty vehicles subject to these assembly-line test procedures, in accordance with a plan approved by the Executive Officer. At least 90 days prior to the start of production, the manufacturer shall submit to the Executive Officer a plan for functional testing which lists the emission control components and systems to be tested and specifies the testing procedures to be used. This plan shall include, but not be limited to, the list of components and systems contained in Appendix A, which sets forth typical types of components and systems. If an on-board emission control diagnostic system of any type, either completely self-contained or requiring external peripheral equipment, is installed on a vehicle, it must be included in the components to be functionally tested and the on-board diagnostic system must be used to the fullest extent practical in functionally testing the vehicle emission control system. In appropriate instances, functional tests may be conducted during the vehicle assembly process before the end of the assembly line. For components that cannot practically be functionally checked on every vehicle, a statistically valid sampling test may be used as the functional tests. The Executive Officer shall approve the plan unless he or she determines that the tests are not designated for the appropriate control components and systems or that the tests will be inadequate to reasonably assure that the components and systems are correctly installed and are functioning properly. Approval of the test plan applies to subsequent model years until changes are made to the emission control components or systems being used, or to the approved test plan. The manufacturer may at any time submit proposed changes to the plan for functional testing. An update to an approved plan or resubmittal of a new plan is required when changes are made to the emission control components or systems necessitating a change in the functional tests, or changes are proposed to the test plan.

## **2. EVALUATION**

Only vehicles that pass every test sequence in the approved functional test plan will be considered to be in compliance with the inspection test requirements. In order for a vehicle to satisfy the inspection test requirements, each of the emission control components and systems identified in the approved plan for testing must be correctly installed and functioning properly pursuant to the specified approved test.

## **3. REPORTING**

Each manufacturer shall submit quarterly a statement that the functional tests included in the approved test plan have been conducted on all vehicles produced for sale in California. The statement shall be signed by an official of the manufacturer who has verified the accuracy of the statement and shall accompany the quarterly audit test report.

## APPENDIX A

### EMISSION CONTROL COMPONENTS AND SYSTEMS

Air Diverter Valve  
Air/Fuel Control System  
Air Injection Control Valves  
Air Injection Pump  
Camshaft Position Sensor  
Canister Purge Valve  
Carburetor or Fuel Injection System  
Catalyst  
Choke  
Controlled Air Intake System  
Coolant Temperature Sensor  
Crankshaft Position Sensor  
Diesel Particulate Control System  
Distributor  
EGR Control System Components  
Electronic (Computer) Control System  
Emissions Related Hoses, Tubing, Clamps, Belts, Fittings, Wiring,  
Connectors, Sensors and Switches.  
Evaporative System  
Exhaust Gas Recirculation (EGR)  
Ignition Coil & Wires  
Ignition Control Module  
Intake Air Temperature Sensor  
Malfunction Indicator Light (MIL)  
Mass Air Flow Sensor  
Misfire Detection System  
On-Board Diagnostic System  
Oxygen Sensor  
Positive Crankcase Ventilation  
Power Train Control Module (Built-in test, BIT)  
Throttle Position Sensor  
Vacuum Hose Connections