

Performance4

TABLE 1

| Device categories | Characteristics adversely affected |
|---|------------------------------------|
| Fuel-Air System | |
| Carburetors and fuel injection systems | All. |
| Air-fuel ratio modifiers (e.g., air bleeds) ... | All. |
| Atomization devices (acoustic and mechanical). | All. |
| Vapor Injectors | All. |
| Choke controls | 1, 2, and 4. |
| Air filters | 1, 2, and 4. |
| Fuel-air distribution systems (intake manifolds). | 1, 2, and 4. |
| Fuel pressure regulators | All. |
| Ignition System | |
| Spark plugs | All. |
| Spark timing control systems | All. |
| Spark duration control systems | 1, 4. |
| Spark energy sources | 1, 4. |
| Emission Control Systems | |
| Exhaust gas recirculation (EGR) systems | All. |
| After-treatment devices | 1, 2, and 4. |
| Drivetrain | |
| Tires | 1. |
| Overdrive units | All. |
| Torque converter lockups | 1, 2, and 4. |
| Exhaust System | |
| Headers | 1. |
| Tuned exhaust systems | 1. |
| Accessories | |
| Cooling fan or cooling fan couplings | 1. |
| Cold start aids (e.g., engine heaters) | 1. |
| Lubrication | |
| Oil filters | 3. |
| Vehicle Body | |
| Aerodynamic drag reduction devices | 1. |
| Miscellaneous | |
| Modification to valve timing | All. |
| Retrofit prechambers | All. |
| Fuel additives | All. |
| Other miscellaneous | Potentially all. |

(d) In the absence of sufficient information from the device manufacturer on this topic or if the Administrator's preliminary analysis indicates that testing is necessary to determine the nature or extent of possible adverse effects of device installation and use on vehicle operation and performance, the Administrator will require such tests to be conducted prior to the publication of a complete evaluation of the device.

[44 FR 17946, Mar. 23, 1979, as amended at 49 FR 18489, May 1, 1984]

§ 610.22 Device integrity.

The integrity of a device will be evaluated with respect to:

(a) The extent to which device manufacture is standardized by means of drawings, specifications, and other fabrication and quality assurance controls;

(b) The degree of sensitivity of device effectiveness to deterioration under exposure to normal operating conditions.

(c) The susceptibility of the device to deterioration of effectiveness under abnormal operating conditions;

(d) The effect upon its surroundings of device malfunction which may be reasonably anticipated to occur in actual use; and

(e) The extent to which test data support (b), (c) and (d).

§ 610.23 Operator interaction effects.

The device will also be evaluated with respect to:

(a) The degree of sensitivity of device effectiveness to variances in installation, operation and maintenance;

(b) The adequacy of manufacturer-furnished instructions for minimizing variances in installation, operation and maintenance;

(c) The extent to which device installation or use, or the effects of such installation or use, relate to Federal emission control regulations;

(d) Effects on the performance, safety, or occupant comfort of the retrofitted vehicle, and on that of other vehicles; and

(e) The relationship between total cost of ownership of the device (purchase price plus maintenance costs) and the cost savings realizable from its fuel economy effects.

§ 610.24 Validity of test data.

The Administrator will make a determination as to the validity of manufacturer-furnished test data on the basis of:

(a) The correlation between the test procedures used by the manufacturer or testing agent and the procedures prescribed in subpart D;

(b) The choice of test vehicle(s) as representative of the manufacturer's claim for operation and/or principles of operation;