

§ 571.124 Standard No. 124; Accelerator control systems.

S1. *Scope.* This standard establishes requirements for the return of a vehicle's throttle to the idle position when the driver removes the actuating force from the accelerator control, or in the event of a severance or disconnection in the accelerator control system.

S2. *Purpose.* The purpose of this standard is to reduce deaths and injuries resulting from engine overspeed caused by malfunctions in the accelerator control system.

S3. *Application.* This standard applies to passenger cars, multi-purpose passenger vehicles, trucks, and buses.

S4. Definitions.

S4.1 *Driver-operated accelerator control system* means all vehicle components, except the fuel metering device, that regulate engine speed in direct response to movement of the driver-operated control and that return the throttle to the idle position upon release of the actuating force.

Fuel metering device means the carburetor, or in the case of certain engines the fuel injector, fuel distributor or fuel injection pump.

Throttle means the component of the fuel metering device that connects to the driver-operated accelerator control system and that by input from the driver-operated accelerator control system controls the engine speed.

Idle position means the position of the throttle at which it first comes in contact with an engine idle speed control appropriate for existing conditions according to the manufacturers' recommendations. These conditions include, but are not limited to, engine speed adjustments for cold engine, air conditioning, and emission control, and the use of throttle setting devices.

Ambient temperature means the surrounding air temperature, at a distance such that it is not significantly affected by heat from the vehicle under test.

S4.2 In the case of vehicles powered by electric motors, the words *throttle* and *idle* refer to the motor speed controller and motor shutdown, respectively.

S5. *Requirements.* The vehicle shall meet the following requirements when the engine is running under any load

condition, and at any ambient temperature between –40 degrees Celsius and +52 degrees Celsius after 12 hours of conditioning at any temperature within that range.

S5.1 There shall be at least two sources of energy capable of returning the throttle to the idle position within the time limit specified by S5.3 from any accelerator position or speed whenever the driver removes the opposing actuating force. In the event of failure of one source of energy by a single severance or disconnection, the throttle shall return to the idle position within the time limits specified by S5.3, from any accelerator position or speed whenever the driver removes the opposing actuating force.

S5.2 The throttle shall return to the idle position from any accelerator position or any speed of which the engine is capable whenever any one component of the accelerator control system is disconnected or severed at a single point. The return to idle shall occur within the time limit specified by S5.3, measured either from the time of severance or disconnection or from the first removal of the opposing actuating force by the driver.

S5.3 Except as provided below, maximum time to return to idle position shall be 1 second for vehicles of 4536 kilograms or less GVWR, and 2 seconds for vehicles of more than 4536 kilograms GVWR. Maximum time to return to idle position shall be 3 seconds for any vehicle that is exposed to ambient air at –18 degrees Celsius to –40 degrees Celsius during the test or for any portion of the 12-hour conditioning period.

[38 FR 2980, Jan. 31, 1973; as amended at 60 FR 13645, Mar. 14, 1995]

§ 571.125 Standard No. 125; Warning devices.

S1. *Scope.* This standard establishes requirements for devices, without self-contained energy sources, that are designed to be carried in motor vehicles and used to warn approaching traffic of the presence of a stopped vehicle, except for devices designed to be permanently affixed to the vehicle.