Counsel, NHTSA, 400 Seventh Street SW., Washington, D.C. 20590. Ms. Nakama's telephone number is (202) 366–2992, and her FAX number is (202) 366–3820. Please note that written comments should be sent to the Docket Section rather than faxed to the above contact persons.

SUPPLEMENTARY INFORMATION:

President's Regulatory Reinvention Initiative

Pursuant to the March 4, 1995 directive "Regulatory Reinvention Initiative'' from the President to the heads of departments and agencies, NHTSA undertook a review of its regulations and directives. During the course of this review, the agency identified rules that it could propose to eliminate as unnecessary or to amend to improve their comprehensibility, application or appropriateness. As described below, NHTSA has identified Federal Motor Vehicle Safety Standard (FMVSS) No. 124, Accelerator control systems, as one rule that may benefit from amendments.

Background of Standard No. 124

Standard No. 124's purpose is to reduce deaths and injuries resulting from loss of control of a moving vehicle's engine, due to malfunctions in the vehicle's accelerator control system. Since 1972, Standard No. 124 has specified requirements for ensuring the return of a vehicle's throttle to the idle position under each of the following two circumstances, (1) when the driver removes the actuating force (typically, the driver's foot or cruise control) from the accelerator control. and (2) when there is a severance or disconnection in the accelerator control system. Standard No. 124 applies to passenger cars, multipurpose passenger vehicles, trucks, and buses.

Paragraph S5.1 of Standard No. 124 requires that, under any load condition, and within the time specified in S5.3, the throttle must return to the idle position from any accelerator position or any speed of which the engine is capable, whenever the driver removes the actuating force. The standard defines the throttle as "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."

Standard No. 124 has two further requirements to provide safety in the event of accelerator control failure. The first, specified at S5.1, requires "at least two sources of energy," each capable of returning the throttle to idle position within the time limit for normal operation, from any accelerator position or speed whenever the driver removes the opposing actuating force. The second, specified at S5.2, requires that the throttle return to idle "whenever any one component of the accelerator control system is disconnected or severed at a single point" and the driver releases the pedal.

Paragraph S5.3 requires that the throttle return to idle within 1 second for vehicles of 10,000 pounds or less gross vehicle weight rating (GVWR) and within 2 seconds for vehicles with a GVWR greater than 10,000. The maximum allowable time is increased to 3 seconds for any vehicle that is exposed to ambient air at O degrees to -40 degrees F. during the test or for any portion of a 12 hour conditioning period.

Standard No. 124 Applies to Electronic Accelerator Control Systems

When promulgated, the definitions and requirements of Standard No. 124 were easy to understand and apply because their language was strongly influenced by the design of mechanical accelerator control systems and because all control systems were mechanical then. The "throttle" of a gasoline engine was the carburetor shaft that opened and closed the air passages in the base plate. The "throttle" of a diesel engine was the control rod, or rack that controlled fuel flow to the high pressure injectors. The two energy sources were simply two return springs acting on the linkages and/or cables between the accelerator pedal and the throttle. If at least one of those springs was connected directly to the carburetor or to the diesel fuel injection rack, it would cause the throttle to return to idle in the event of a disconnection of the linkage. And, if the single contemplated failure occurred at one spring, the other would permit continued driver control.

Subsequent to the promulgation of Standard No. 124, electronic accelerator controls with on-board computer systems were introduced on motor vehicles. Their use is steadily increasing, especially in heavy trucks.

The introduction of electronic systems led to questions about their status and treatment under the Standard. Stating that some of the language in Standard No. 124 seemed more appropriate for mechanical accelerator control systems than for electronic ones, Isuzu Motors America, Inc., asked the agency a variety of questions concerning electronic systems. Its central question was whether the Standard applies to electronic systems. In an August 8, 1988 interpretation letter to Isuzu, NHTSA stated that the Standard does apply to electronic accelerator control systems. Among its other questions, Isuzu asked whether a severance in electric wires in its electronic accelerator control system is a severance within the meaning of S5.2 of Standard No. 124. Isuzu expressed its belief that because the electric wires were not a "moving part," the answer should be "no." NHTSA disagreed.

It interpreted Standard No. 124's requirement that the throttle return to idle "whenever any one component of the accelerator control system is disconnected or severed at a single point," to include all severances or disconnections of any component of the accelerator control system as within the standard, not just disconnections of moving parts.

Need To Amend Standard No. 124

Most accelerator linkages on the largest classes of trucks (i.e., those over 33,001 lbs. GVWR) are now electronic. A mechanical accelerator linkage controlling a fuel rack (i.e., a device that controls fuel flow to the high pressure injectors) is now rare on the largest classes of trucks. Most of today's heavy diesel trucks have no mechanical connection between the accelerator pedal and the throttle.

Although the agency has been issuing interpretations about the Standard's application to electronic accelerator control systems for the last seven years, the flow of interpretation requests remains unabated. Manufacturers continue to ask the basic question of whether the Standard applies to electronic accelerator control systems. One correspondent presumed that since those systems do not include springs and linkages, as described in Standard No. 124, electronic accelerator controls are not regulated. Another asked for a legal interpretation of "throttle," as applied to electronic accelerator control systems. Other correspondents have understood Standard No. 124 to mean simply that two return springs should be placed on the treadle assembly. In response, the agency has recited in its interpretation letters the requirement that the sources of energy must be capable of returning the throttle to idle in the event of a single severance or disconnection. The correspondents did not submit sufficient information to enable the agency to determine whether the proper mechanical operation of the treadle was sufficient to assure return to idle in the event of an electrical severance.

NHTSA notes that although the use of two springs on the treadle assembly may