

## DEPARTMENT OF ENERGY

## Federal Energy Regulatory Commission

## 18 CFR Parts 161, 250, and 284

[Docket No. RM98-10-000]

## Regulation of Short-Term Natural Gas Transportation Services; Notice of Workshop on Pipeline Capacity Auctions

September 18, 1998.

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of Workshop on Pipeline Capacity Auctions.

**SUMMARY:** The staff of the Federal Energy Regulatory Commission is holding a workshop to discuss pipeline capacity auctions as contemplated in the Notice of Proposed Rulemaking issued on July 29, 1998 (NOPR) (63 FR 42982, August 11, 1998). The purpose of the workshop is for staff to provide background information about auctions and auction formats and to answer questions to facilitate the submission of comments on the NOPR. The workshop will include time for questions and answers.

DATES: October 20, 1998, 9:30 a.m.

ADDRESSES: Federal Energy Regulatory Commission, 888 First Street, N.E., Washington DC 20426.

**FOR FURTHER INFORMATION CONTACT:** Laurel C. Hyde, Office of Economic Policy, Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, DC 20426, 202-208-0146.

**SUPPLEMENTARY INFORMATION:** In addition to publishing the full text of this document in the **Federal Register**, the Commission also provides all interested persons an opportunity to inspect or copy the contents of this document during normal business hours in the Public Reference Room at 888 First Street, N.E., Room 2A, Washington, D.C. 20426.

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Finally, the complete text on diskette in WordPerfect format may be purchased from the Commission's copy contractor, RVJ International, Inc. RVJ International, Inc. is located in the Public Reference Room at 888 First Street, N.E., Washington, D.C. 20426.

Take notice that on October 20, 1998, the staff of the Federal Energy Regulatory Commission will hold a workshop to discuss pipeline capacity auctions as contemplated in the Notice of Proposed Rulemaking (NOPR), issued on July 29, 1998.<sup>1</sup> The purpose of the workshop is for staff to provide background information about auctions and auction formats and to answer questions to facilitate the submission of comments on the NOPR. The workshop will include time for questions and answers.

The workshop will begin at 9:30 a.m. at the Commission's offices, 888 First Street, N.E., Washington, D.C. in a room to be designated. All interested persons are invited to attend and participate.

To ensure the workshop provides information responsive to parties' specific questions or to areas in which parties believe clarification would be helpful, staff asks that questions or clarifications be submitted by October 13, 1998. Responsive information will be integrated, to the extent possible, into the workshop presentations. Such questions or clarification requests can be either faxed or sent by Internet E-Mail. Faxes should be addressed to Laurel Hyde at 202-208-1010. E-Mail should be sent to [comment.rm@ferc.fed.us](mailto:comment.rm@ferc.fed.us). The subject line of the E-Mail should specify "Docket No. RM98-10-000—Auction

Workshop". Any attachments to the E-Mail should be in WordPerfect 6.1 or lower format or in ASCII format. A reply to the E-Mail will be sent to acknowledge receipt.

In addition, those who wish to participate in the question and answer period are encouraged to register in advance to reserve a place in the main workshop room. Please register by October 13, 1998, by calling Tawanna Lewis, Shirley Parker or Rita Carter at 202-208-1007 or sending a fax or E-Mail as described above.

The Capitol Connection may broadcast this workshop in the Washington, D.C. area if there is sufficient interest. For those outside the Washington, D.C. area, the Capitol Connection may broadcast the workshop live via satellite for a fee if there is sufficient interest to justify the cost. To indicate interest in either the local or national broadcast, please call Shirley Al-Jarani or Julia Morelli at the Capitol Connection (703-993-3100) as soon as possible, or e-mail to [capcon@gmu.edu](mailto:capcon@gmu.edu).

In addition, National Narrowcast Network's Hearing-On-The-Line service covers all FERC meetings live by telephone so that interested persons can listen at their desks, from their homes, or from any phone, without special equipment. Billing is based on time on-line. Call 202-966-2211 for further details.

Questions about the workshop should be directed to: Laurel C. Hyde, Office of Economic Policy, Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, DC 20426, 202-208-0146.

**David P. Boergers,**  
Secretary.

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## DEPARTMENT OF TRANSPORTATION

## National Highway Traffic Safety Administration

## 49 CFR Part 595

[Docket No. NHTSA-98-4332]

RIN 2127-AG40

## Exemption From the Make Inoperative Prohibition

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Notice of proposed rulemaking.

**SUMMARY:** NHTSA is proposing a limited exemption from a statutory provision prohibiting dealers, repair businesses

<sup>1</sup> Regulation of Short-Term Natural Gas Transportation Services, Notice of Proposed Rulemaking, 63 FR 42982 (Aug. 11, 1998).

and other specified commercial entities from removing safety equipment or features installed on motor vehicles pursuant to the Federal motor vehicle safety standards and from altering the equipment or features so as to adversely affect their performance. Repair businesses and dealers would be exempted from the prohibition to facilitate their modification of motor vehicles so that persons with disabilities can drive or ride in them. The exemption would permit modifications that have an unavoidable adverse effect on safety equipment or features installed pursuant to some, but not all requirements of the Federal safety standards. The requirements tentatively selected for inclusion in the exemption were chosen after carefully balancing their safety significance against the types of modifications needed for persons with disabilities. By specifying which modifications may be made, the proposal rule would provide universal, comprehensive guidance to all modifiers and would thereby enhance the safety of vehicles modified to accommodate people with disabilities.

**DATES:** Comments must be received by December 28, 1998.

**ADDRESSES:** Comments should refer to the docket number of this proposed rule and be submitted to: Docket Management, Room PL-401, 400 Seventh Street, SW, Washington, DC 20590 (Docket Room hours are 10:00 a.m.-5 p.m., Monday through Friday.)

**FOR FURTHER INFORMATION CONTACT:**

*For non-legal issues:* Gayle Dalrymple, Office of Crash Avoidance Standards, NPS-20, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590, telephone (202) 366-5559.

*For legal issues:* Nicole Fradette, Office of Chief Counsel, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590, telephone (202) 366-2992, facsimile (202) 366-3820.

**SUPPLEMENTARY INFORMATION:**

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**I. Background and Overview**

The U.S. Census Bureau estimates that nearly 49 million Americans, or 19.4 percent of the American population, have some type of physical, mental or other disability.<sup>1</sup> Their disabilities provide special challenges for these people in obtaining and using various necessities of life. One of those necessities is transportation.

Persons with disabilities often need their motor vehicles modified to allow them to drive or ride in those vehicles. For example, wheelchair lifts, power seats and hand controls are often installed to enable paraplegics to enter and operate vehicles. The National Highway Traffic Safety Administration (NHTSA) estimates that some 383,000 vehicles have some type of adaptive equipment installed in them to accommodate a driver or passenger with a disability.<sup>2</sup> The agency believes the number of vehicles modified annually will increase as a greater percentage of the population ages and as the Americans With Disabilities Act (ADA)<sup>3</sup> improves access to employment, travel, and recreation for people with disabilities.<sup>4</sup>

Modifying vehicles often involves removing equipment or features installed pursuant to the Federal motor vehicle safety standards (standards) promulgated by NHTSA or altering them so as to reduce their performance.<sup>5</sup> For example, some

<sup>1</sup> John McNeil, Disability, U.S. Census Bureau (May 9, 1997).

<sup>2</sup> Estimating the Number of Vehicles Adapted for Use by Persons with Disabilities, NHTSA Research Note, Dec. 1997.

<sup>3</sup> Pub. L. 101-336, 42 U.S.C. sections 12101, *et seq.*

<sup>4</sup> The ADA sweepingly endorsed the rights of persons with disabilities and greatly expanded the existing obligations of the public sector towards persons with disabilities under the Rehabilitation Act of 1973 (29 U.S.C. sections 701 *et seq.*). The ADA created specific affirmative obligations on private entities who conduct business with the general public.

<sup>5</sup> NHTSA issues safety standards that specify performance requirements for new motor vehicles and items of motor vehicle equipment. 49 U.S.C. 30111 and 49 CFR Part 571. Vehicle and equipment manufacturers must certify that their new products comply with all applicable standards before they sell their products. For vehicles manufactured by two or more manufacturers, the final-stage manufacturer is ultimately responsible for certifying the vehicle. A final-stage manufacturer is defined as a person who performs such manufacturing operations on an incomplete vehicle that it becomes a completed vehicle. 49 CFR 568.3. If a completed, certified vehicle is modified prior to its first retail sale (other than by the addition, substitution, or removal of readily attachable components), the person making the modification is an alterer and is

individuals who have limited range of motion in their arms need to replace the vehicle's original steering wheel with a reduced diameter steering wheel so that they can operate the vehicle. Removing the original steering wheel and air bag and replacing it with a smaller steering wheel that lacks an air bag affects the vehicle's compliance with Standard No. 208, Occupant Crash Protection, which requires the vehicle to be equipped with a driver's side air bag.

Such removal or alteration violates a statutory provision which prohibits certain parties from making such equipment and features inoperative. Section 30122 of Title 49 of the United States Codes provides that manufacturers, distributors, dealers,<sup>6</sup> and repair businesses<sup>7</sup> may not knowingly make inoperative any part of a device or element of design installed on or in a motor vehicle in compliance with an applicable standard. The agency interprets "make inoperative" to mean any action that removes or disables safety equipment or features installed to comply with an applicable standard, or degrades the performance of such equipment or features.<sup>8</sup> Violations of this provision are punishable by civil penalties of up to \$1,100 per violation.

The statute authorizes NHTSA to issue regulations exempting a person from the make inoperative prohibition and specifying which equipment and features may be made inoperative. 49 U.S.C. 30122(c)(1). Such a regulation may be issued for an individual or for a class of individuals.<sup>9</sup> The legislative

required to certify that, as altered, the vehicle continues to comply with all applicable standards. 49 CFR 567.7. Businesses that modify a vehicle after its first sale for purposes other than resale are not required to certify that the vehicle, as modified, continues to comply with the standards.

<sup>6</sup> Section 30102 of 49 U.S.C. defines "dealer" as "a person selling and distributing new motor vehicles or motor vehicle equipment primarily to purchasers that in good faith purchase the vehicles or equipment other than for resale."

<sup>7</sup> Section 30122(a) of 49 U.S.C. defines "motor vehicle repair business" as "a person holding itself out to the public to repair for compensation a motor vehicle or motor vehicle equipment." NHTSA has interpreted this term to include businesses that service vehicles by adding features or components to or otherwise customizing those vehicles.

<sup>8</sup> For example, Standard 208, Occupant crash protection, requires certain vehicles to be equipped with air bags and to meet specified injury criteria in a crash. Deactivating or removing the air bag would make inoperative the air bag installed to comply with the standard. Cutting the knee bolster could affect the femur load criterion and, therefore, degrade the performance of the vehicle in a crash.

<sup>9</sup> Section 30122(c)(1) of Title 49 of the United States Code authorizes the agency "to exempt a person from" the make inoperative provision if the agency "decides the exemption is consistent with motor vehicle safety. \* \* \*" The question of whether the agency has the authority to exempt classes of people from the make inoperative prohibition or is limited to exempting individuals

history of the Act makes it clear that one of the intended purposes of the exemption was to accommodate the need of individuals with disabilities for vehicle modifications.<sup>10</sup>

To date, the agency has not issued a regulation exempting modifiers as a class from the make inoperative provision for the purpose of modifying vehicles to accommodate individuals with disabilities.<sup>11</sup> Instead, the agency considers requests from individual modifiers for permission to modify vehicles for individuals with disabilities and responds on a request by request basis. In some cases, the Chief Counsel of NHTSA has issued letters stating that the agency will not institute enforcement proceedings against the motor vehicle dealer or repair business for modifying a particular vehicle to accommodate a person's disability. Such letters also caution that only necessary modifications may be made and that the person making the modifications should consider the safety consequences of the modifications. While this approach eliminates the risk of civil penalties, it still leaves vehicle dealers and repair businesses in technical violation of the make inoperative prohibition. Further, it does not provide guidance to modifiers as to which Federally-required safety equipment and features may be modified consistent with the interests of motor vehicle safety. In addition, the agency is concerned that the process is largely bypassed by most modifiers.

The agency believes that many modifiers modify vehicles without

requesting agency permission, and without receiving any agency guidance.<sup>12</sup> Although approximately 383,000 vehicles have been modified to date<sup>13</sup> and there are an estimated 400 modifiers,<sup>14</sup> the agency has only received a total of approximately 250 requests<sup>15</sup> for permission to modify a particular vehicle to accommodate a driver or passenger with a disability. While NHTSA estimates that approximately 200 of the modifiers receive some guidance on making vehicle modifications from industry associations and others, the balance apparently receive no guidance at all.<sup>16</sup>

The making of modifications without sufficient guidance raises concerns about the ability of persons with disabilities to have their vehicles

modified in ways that do not unnecessarily or excessively affect the safety of their vehicles. Modifiers tend to be small businesses with limited engineering and other resources. Most do not have the resources to test whether a particular modification would affect a vehicle's compliance with a particular standard.<sup>17</sup>

The agency's experience with the vehicle modification industry indicates that knowledge of the standards varies among the modifiers. While some modifiers are very knowledgeable of the standards and the need to preserve a vehicle's compliance with them, others are less knowledgeable. Many modifiers do not possess sufficient knowledge of the standards to judge whether a particular modification may affect a vehicle's compliance with the standards.

To address these safety concerns, the agency has attempted to increase the level of knowledge by participating in national industry conferences and through other means.<sup>18</sup> As a result, modifiers have increasingly sought NHTSA's guidance with respect to the specific modifications they wish to perform for individuals with disabilities. The agency has also amended several of its standards to address particular needs of persons with disabilities.<sup>19</sup>

However, NHTSA believes that a more comprehensive method is needed now to address all of the standards and to reach the industry as a whole. The agency believes that a regulation is needed to assist modifiers and members of the disabled population in making appropriate decisions with respect to

on a case-by-case basis arose in the agency's rulemaking on air bag on-off switches. 62 FR 62406; November 21, 1997. The agency believes that Congress intended to permit an exemption based on classes of people. The singular includes the plural, absent contrary statutory language or purpose. Section 30122 neither contains any language nor has any purpose that would preclude reading "person" in the plural. NHTSA notes that similar use of the singular in 15 U.S.C. 1402(e), the statutory predecessor to 49 U.S.C. 30118(a) regarding the making of a defect and noncompliance determination concerning a motor vehicle or replacement equipment, has repeatedly been judicially interpreted to permit NHTSA to make determinations regarding classes of vehicles or equipment. Section 30118(a) was enacted in the same public law, Pub. L. No. 93-492, that contained the make inoperative prohibition.

<sup>10</sup>The report stated that "exemptions may be warranted for owners with special medical problems, who require special controls. \* \* \* H. Rep. accompanying 1974 Amendments to the Motor Vehicle Safety Act (1974).

<sup>11</sup>NHTSA recently issued its first regulation exempting motor vehicle dealers and repair businesses from the statutory prohibition against making federally-required safety equipment inoperative so that they may install retrofit manual on-off switches for air bags in vehicles owned by or used by people whose requests for switches have been approved by NHTSA. 62 FR 62406; Nov. 21, 1997.

<sup>12</sup>The agency believes that several factors account for this situation. First, NHTSA believes that some modifiers may be unaware of the statutory make inoperative prohibition. Others may not be aware that they should seek the agency's permission before modifying a vehicle in a way that compromises the vehicle's compliance with any of the standards. Third, some vehicle modifiers believe that their modifications do not make inoperative any device or element of design installed on or in a motor vehicle in compliance with the standards. Agency staff discussions with modifiers revealed that much of this was due to a lack of familiarity with the standards rather than poor engineering judgment. In general, NHTSA found that once modifiers understood and familiarized themselves with the standards, most modifiers exercised sound engineering judgment with respect to modifying the vehicles. For example, the agency learned that some modifiers were unaware that replacing the original steering wheel and column with horizontal steering affected the vehicle's compliance with Standard No. 203, Impact protection for the driver from the steering control system, Standard No. 204, Steering control rearward displacement, and Standard No. 208, Occupant crash protection. Some thought they had only affected compliance with Standard No. 208's air bag requirement. Thus, many modifiers only requested permission to deactivate the air bag. NHTSA is increasing its efforts to raise the level of knowledge of the standards and the make inoperative prohibition within both the disabled community and the vehicle modification industry to address this problem. Finally, some dealers and repair businesses who are aware of the need to seek permission simply ignore that requirement because they consider the requirement to write a letter for every vehicle modification onerous.

<sup>13</sup>The agency notes that some of these modifications did not adversely affect the vehicles' compliance with any applicable safety standards and, therefore, did not violate the make inoperative prohibition.

<sup>14</sup>This estimate is from the National Mobility Equipment Dealers Association (NMEDA).

<sup>15</sup>The majority of these requests were made in the past few years. Since all of the modifications were based on the need to accommodate a person's disability, the agency granted all of the requests.

<sup>16</sup>NMEDA, a professional association composed of vehicle alterers, modifiers, equipment manufacturers, occupational therapists (OTs), and driver trainers, has issued recommended practice guidelines for particular types of vehicle modifications, such as dropping a floor to accommodate a wheelchair or installing a power seat base, to assist its members in modifying vehicles safely.

<sup>17</sup>NHTSA notes that NMEDA has tried to address this issue by developing a Quality Assurance Program (QAP) and conducting crash tests of modified vehicles. In addition, the agency is aware that alterers who also certify vehicles built to accommodate persons with disabilities prior to their first retail sale have also performed crash tests on modified vehicles.

<sup>18</sup>For example, NHTSA has required manufacturers to recall adaptive equipment, investigated complaints about a modified vehicle and a hand control, participated in outside research groups concerned with modified vehicles and adaptive equipment, and researched air bag interaction with, and injury potential from, steering control devices.

<sup>19</sup>See for example, Standard No. 213, Child restraint systems, final rule, 51 FR 5335; February 13, 1986 and 49 CFR Part 571.213.S6.1.2.(a)(1)(I); Standard No. 222, School bus passenger seating and crash protection, final rule, 58 FR 4586; January 15, 1993 and technical amendment, 58 FR 46873; September 3, 1993; Standard No. 208, Occupant crash protection, 58 FR 11975; March 2, 1993, amended Standard No. 208 to provide manufacturers of light trucks and vans (LTVs) "designed to be driven by persons with disabilities" an alternative to complying with the dynamic testing requirement for manual seat belts at outboard seating positions.

the majority of vehicle modifications.<sup>20</sup> To this end, the agency is proposing an exemption from the make inoperative prohibition that will:

- Promote the mobility and safety of persons with disabilities by providing comprehensive, universally available guidance;
- Improve the industry's ability to assess what modifications are consistent with the statutory provision and the interests of safety;
- Improve the agency's ability to achieve its safety goals; and
- Relieve modifiers of the burden of writing a letter to the agency for each and every modification they wish to perform.

## II. Proposed Exemption

### A. Summary

NHTSA is proposing a limited exemption from the statutory provision prohibiting motor vehicle dealers, repair businesses and other specified commercial entities from removing or altering safety equipment or features installed pursuant to the Federal motor vehicle safety standards so as to make them inoperative. Repair businesses and dealers would be exempted from the make inoperative prohibition for the purpose of modifying motor vehicles after the first retail sale to accommodate a person with a disability. The exemption would permit modifications affecting some, but not all, standards.

### B. Specifics of the Proposed Exemption

While NHTSA believes that all individuals should, to the extent possible, be provided with an equivalent level of vehicle safety, it also believes that all Americans should, to the extent possible, be provided with an equivalent level of mobility. Vehicles must often be modified to make them accessible to and usable by people with disabilities. These modifications often make features installed in compliance with the standards inoperative.

Among persons with disabilities, the type and severity of physical impairments that affect a person's ability to access and use a vehicle vary from person to person. Different impairments require different vehicle modifications.<sup>21</sup> Each different

modification may affect a vehicle's compliance with the standards in a different way. Consequently, due to the wide range of disabilities and the various modifications needed to accommodate them, it would be difficult for the agency to attempt to develop a regulation that lists each type and level of severity of disability and that specifies the particular set of standards that may be adversely affected by the modifications suitable for each of those listed types and levels of severity of disability. Instead, the agency has decided to issue the proposed regulation, which would take a more general approach and provide modifiers with the flexibility and guidance they need to accommodate various people with disabilities while preserving the safety of the vehicle to the greatest extent possible.

For a modification to be exempt from the make inoperative prohibition, a dealer or repair business would have to meet certain conditions. The modification would be permitted to affect compliance with the standards specified, in whole or in part, below. However, the exemption would not grant permission with respect to any other standards.<sup>22</sup> Although it is not expressly required, the agency expects that the dealer or motor vehicle repair business would not modify the vehicle in a manner that adversely affects the vehicle's compliance with those specified standards any more than is reasonably necessary, considering cost and available technology, to accommodate the person with the disability.

The standards and portions thereof proposed for exemption are specified below:

- Standard No. 101, Controls and displays, S5.1 (a), which governs the symbols and abbreviations used for certain controls; S5.3.1, which requires illumination of certain controls when the head lights are on; S5.3.2 which governs the color of telltales; or S5.3.5 which requires cabin lighting forward of

the driver's H point<sup>23</sup> to be able to be adjustable or turned off. The purpose of Standard No. 101 is to limit driver distraction from the driving task.

- S5.1.1.5 of Standard No. 108, Lamps, reflective devices, and associated equipment, where the vehicle is modified to be driven without a steering wheel and where it is not feasible to retain the original equipment manufacturer (OEM) turn signal lever required by S5.1.1.5. The purpose of Standard No. 108 is to ensure that roadways are illuminated, drivers can signal their intentions, and vehicles are conspicuous.

- S4(a) of Standard No. 118, Power-operated window, partition, and roof panel systems, where a remote ignition device is necessary. Standard No. 118 specifies requirements for the operation of power-operated windows, partitions, and roof panels to help prevent injury or death from a window, partition, or panel closing on a vehicle occupant (particularly children).

- S5.3.1 of Standard No. 135, Passenger car brake systems, where the foot control must be removed to accommodate a person's disability. Standard No. 135 specifies requirements for service brake and associated parking brake systems to ensure safe braking performance under normal and emergency driving conditions.

- Standard No. 202, Head restraints, where (1) a vehicle modified for a wheelchair seated driver or right front passenger and where no other seat is supplied with the vehicle for the driver or right front passenger seating position or (2) where the head restraint must be altered to accommodate a driver's impairment. To reduce the frequency and severity of neck injuries in rear-end and other collisions, Standard No. 202 requires all vehicles to be equipped with a head restraint at each front outboard seating position that meets specific size and performance requirements.

- S5.1 Standard No. 203, Impact protection for the driver from the steering control system, where the modification requires a structural change to, or removal of, the OEM steering shaft. The standard serves to reduce the likelihood and severity of head, chest, neck, and facial injuries from impact with the steering wheel.

- Standard No. 204, Steering control rearward displacement, where the modification requires a structural change to, or removal of, the OEM

<sup>20</sup>The agency notes that industry members, including NMEDA, and members of the disabled community have urged NHTSA to issue clearer guidance in the area of modifying vehicles for the individuals with disabilities.

<sup>21</sup>For example, a paraplegic may need to drop the floor of a vehicle and install a lift and hand controls to accommodate his entering the vehicle and transferring to a power seat to drive, while a person with limited range of motion in her right arm may simply need to install a knob on the vehicle's

steering wheel. Another individual may need to have the right-front passenger seat removed and a wheelchair restraint installed so that he may ride in the vehicle while seated in a wheelchair.

Further, two paraplegics with similar limited range of motion could require different modifications. One individual may be able to operate the vehicle with the steering wheel originally installed by the manufacturer while another might require a smaller steering wheel to be installed. The first modification would not require removal of the air bag, the second would.

<sup>22</sup>For a full discussion of the standards proposed for inclusion in the exemption as well as some of the standards not proposed for inclusion, see Section II. C. of this notice.

<sup>23</sup>The H-point is the manufacturer's reference point for determining where the passenger's hip joint should be located for testing purposes. The hip joint's location affects the head's location.

steering shaft. The standard serves to reduce the likelihood and severity of head, chest, neck, and facial injuries due to vehicle components forcing the steering shaft rearward toward the driver in a crash.

- Standard No. 207, Seating systems, where a vehicle is modified to be driven by a person seated in a wheelchair and no other seat is supplied with the vehicle for the driver; provided, that a wheelchair securement device is installed at the driver's position. To minimize the likelihood that a seat will collapse during a collision, Standard No. 207 establishes performance, installation, and attachment requirements for seats.

- Standard No. 208, Occupant crash protection, provided that Type 2 or 2A seat belts meeting the requirements of Standard No. 209 and anchorages meeting the requirements of Standard No. 210 are installed. The purpose of Standard 208 is to reduce the number of vehicle occupant deaths and the severity of vehicle occupant injuries incurred in a collision.

- S5 (the dynamic performance requirement only) of Standard No. 214, Side impact protection, where the seat position must be changed to accommodate a person's disability. Standard No. 214's requirements serve to minimize the risk of serious and fatal injuries to vehicle occupants in side impact collisions.

Under the proposed procedure, modifiers would no longer have to seek the agency's approval before modifying a vehicle to accommodate a person with a disability. The modifier could make

the necessary modifications as long as the modifications are needed to accommodate a person's disability and only affect the vehicle's compliance with the specified standards. The agency has not proposed to require modifiers to maintain records of the vehicles they modify or notify the agency of such modifications. Further, the agency has not proposed to require modifiers to affix a label to the vehicle stating that the vehicle has been modified and may no longer comply with all standards. A complete discussion of these issues and requests for comments are contained in Sections III, IV and Section V of this notice.

### C. Scope of Proposed Exemption

The agency believes that compliance with certain standards is potentially often affected by the manner in which vehicle modifications are currently made for persons with disabilities. NHTSA has tried to identify those standards and determine whether they are appropriate candidates for inclusion in the proposed exemption.

In making this determination, the agency was mindful that its authority to grant exemptions from the make inoperative exemption is limited, as noted above, to those cases in which an exemption is consistent with safety. In light of the legislative history indicating that one of the intended purposes of the exemption was to accommodate persons with disabilities, NHTSA interprets this limitation as requiring that an exemption not lead to any unnecessary reduction in safety. A stricter reading of

the limitation would defeat the goal of allowing those modifications necessary to facilitate the mobility needs of those persons. Although some modifications to a vehicle may result in a decrease in safety to the vehicle's occupants, without such modifications, persons with disabilities often cannot use their vehicles.

Accordingly, in developing this proposal, the agency has sought to accommodate the mobility needs of people with disabilities, while preserving safety to the extent possible. The agency is proposing to grant an exemption from the make inoperative prohibition only with respect to those standards or portions of standards requiring safety devices or features whose performance would unavoidably have to be compromised to accommodate a person's disability.

In determining whether to propose inclusion of modifications affecting devices or features installed pursuant to a particular standard, NHTSA first considered the range of specific disabilities that need to be accommodated to enable people with disabilities to operate or ride in a vehicle. Second, the agency considered what type of modifications would be necessary to accommodate such disabilities. The following table includes illustrative examples of disabilities and identifies the common vehicle modifications made to accommodate those disabilities. These items are included here only as examples and are, by no means, all inclusive.

### EXAMPLES OF VEHICLE MODIFICATIONS TO ACCOMMODATE PARTICULAR DISABILITIES

For driver or passenger	Disability	Vehicle type	Modification needed
Driver .....	Right side hemiplegia due to stroke .....	Passenger car .....	Install a left foot accelerator.
Driver .....	Lower level paraplegia, multiple sclerosis, or a double leg amputee.	Passenger car .....	Install hand controls for brake and throttle, a spinner knob steering control device, and a wheelchair hoist to lift chair into or on top of vehicle for storage.
Driver .....	Lower level paraplegia, multiple sclerosis, or a double leg amputee.	Pickup truck .....	Install hand controls for brake and throttle, a spinner knob steering control device, a wheelchair hoist to lift chair into or on top of vehicle for storage, and a transfer seat to lift driver into seat.
Driver .....	Higher level paraplegia or lower level quadriplegia, a wheelchair user who does not want to lift the wheelchair in and out of a car.	Mini van .....	Lower floor and install a lift or ramp, hand controls (manual or power assist), a power seat base or a wheelchair tie down, a reduced diameter steering wheel, and reduced effort braking and/or steering
Driver .....	Higher level quadriplegia .....	Full-sized van .....	Lower floor and raise body off the suspension or raise the roof and install a lift, a wheelchair tie down, power assist hand controls or joy stick steering, and brake and throttle control.
Passenger .....	Higher level paraplegia or lower level quadriplegia, a wheelchair user who does not want to lift the wheelchair in and out of a car, a child with cerebral palsy.	Mini van .....	Lower floor and install a lift or ramp, a power seat base or a wheelchair tie down.

## EXAMPLES OF VEHICLE MODIFICATIONS TO ACCOMMODATE PARTICULAR DISABILITIES—Continued

For driver or passenger	Disability	Vehicle type	Modification needed
Passenger .....	Lower level paraplegia, multiple sclerosis, or a child with muscular dystrophy or cerebral palsy. Passenger car.	Passenger car .....	Install a wheelchair hoist to lift chair into or on top of vehicle for storage.

Third, after considering the array of disabilities, NHTSA used its engineering judgment to determine tentatively which safety devices or features required by the standards might be affected by the variety of modifications needed to accommodate individuals with those disabilities. For each standard whose required device or feature might be affected by a vehicle modification, the agency considered whether modifications to enable a person with disabilities to operate or occupy a motor vehicle could be made reasonably without violating the make inoperative prohibition. Many modifications can be made without compromising a vehicle's compliance with the standards. If the agency believed that compliance could be preserved easily or with a reasonable amount of cost and effort, it did not include modifications involving that standard in the proposed exemption.

The following cases illustrate how the agency determined whether a particular modification should be exempt from the make inoperative prohibition:

Case 1. A modifier may need to replace the original vehicle floor covering with a material that is more conducive to the motion of a wheelchair's wheels. With a minimum amount of effort, the original floor covering can be replaced with a material that preserves the vehicle's certification to Standard No. 302, Flammability of interior materials. Thus, NHTSA did not propose to include Standard No. 302 in the proposed exemption.

Case 2. A modifier may have to remove the driver's seat and install wheelchair restraints to enable a quadriplegic to drive from a wheelchair. Since Standard No. 207, Seating systems, requires that a driver's seat be installed in the vehicle, removing the driver's seat would violate the make inoperative prohibition. Since the only way the person could drive is from a wheelchair, NHTSA tentatively determined that the modification was necessary and that an exemption would, therefore, be appropriate.

Case 3. A modifier may have to lower the floor of the vehicle to accommodate a person with a disability. Lowering the floor may require relocating the vehicle's fuel tank which could affect

the vehicle's compliance with Standard No. 301, Fuel system integrity, which sets performance requirements for fuel systems in crashes. The agency determined that it is possible to make the modification without compromising compliance with the standard. The agency determined that permitting a modifier to compromise compliance with the standard was unacceptable since it could unnecessarily expose occupants to an increased risk of fire.

Following is a discussion of the standards the agency believes are appropriate candidates for the exemption and those it believes are inappropriate. The discussion addresses only those standards the agency believes might be affected by common vehicle modifications. The following standards will *not* be discussed and are *not* recommended for exemption because the agency believes there are no common vehicle modifications that should affect the vehicles, vehicle systems, or equipment to which they apply:

Standard No. 106, Brake hoses  
Standard No. 109, New pneumatic tires  
Standard No. 110, Tire selection and rims  
Standard No. 114, Theft protection  
Standard No. 116, Motor vehicle brake fluids  
Standard No. 117, Retreaded pneumatic tires  
Standard No. 119, New pneumatic tires for vehicles other than passenger cars  
Standard No. 120, Tire selection and rims for vehicles other than passenger cars  
Standard No. 122, Motorcycle brake systems  
Standard No. 123, Motorcycle controls and displays  
Standard No. 125, Warning devices  
Standard No. 129, Non-pneumatic tires for passenger cars  
Standard No. 131, School bus pedestrian safety devices  
Standard No. 205, Glazing materials  
Standard No. 212, Windshield mounting  
Standard No. 213, Child restraint systems  
Standard No. 217, Bus emergency exits and window retention and release  
Standard No. 218, Motorcycle helmets  
Standard No. 219, Windshield zone intrusion

Standard No. 220, School bus rollover protection  
Standard No. 221, School bus body joint strength  
Standard No. 222, School bus passenger seating and crash protection  
Standard No. 223, Rear impact guards  
Standard No. 224, Rear impact protection  
Standard No. 304, Compressed natural gas fuel container integrity

#### 1. Standards for Which Permission Would Be Granted To Make Safety Features Inoperative

*a. Standard No. 101, Controls and displays.* The purpose of Standard 101 is to limit driver distraction from the driving task. The standard does not require or prescribe exact locations or methods of operation for any control or display. The standard does, however, require that if certain controls are provided, they "shall be operable by the driver" and that if certain displays are furnished, they "shall be visible to the driver." The standard also directs that the driver be restrained for testing and lists which controls must be illuminated when the vehicle's headlights are on.

Controls and displays, as well as the driver's seating position, are often moved when a vehicle is modified. These changes create the potential to take the vehicle out of compliance with 49 CFR 571.101 in three ways. First, controls or displays may be moved to a position that is not visible to the driver when the driver is looking forward (e.g. switches may be moved to a door mounted touch panel to be operated by the driver's elbow, or switches may be mounted in a head rest). Second, a change in the driver's seating position may result in the driver's inability to see or reach an OEM control or display. Finally, changing the restraint system can make it impossible to comply with section 6 of the standard which requires the driver to be restrained pursuant to the requirements of Standard No. 208, Occupant Crash Protection. The agency believes that such changes do not create a safety problem since the purpose of the modification is to make as many functions as possible operable by the disabled driver.

NHTSA is aware that other drivers may occasionally use the modified

vehicle; however, the agency does not believe this presents a serious problem. The vehicle is primarily designed for the disabled person and that individual will be accustomed to the availability and placement of controls and displays in his or her vehicle. The controls can still be placed in a way that minimizes any potential distraction for the driver with a disability. NHTSA believes that most of the vehicles will be driven by someone other than the disabled driver only infrequently. For these reasons, NHTSA believes a limited exemption from the make inoperative exemption for Standard No. 101 is appropriate. NHTSA does not believe that an exemption would be appropriate from S5.1(a), which governs the symbols and abbreviations used for certain controls; S5.3.1, which requires illumination of certain controls when the head lights are on; S5.3.2 which governs the color of telltales; or S5.3.5 which requires cabin lighting forward of the driver's H point<sup>24</sup> to be able to be adjustable or turned off.

*b. Standard No. 108, Lamps, reflective devices, and associated equipment.* The purpose of Standard No. 108 is to ensure that roadways are illuminated, drivers can signal their intentions, and vehicles are conspicuous. NHTSA is aware of only two situations in which common vehicle modifications could take the vehicle out of compliance with 49 CFR § 571.108. NHTSA believes the make inoperative exemption is necessary for only one of the modifications; the other modification can be performed in a way that preserves the vehicle's compliance with the standard.

The agency believes that vehicles that are modified so that they no longer have a steering wheel cannot conform to S5.1.1.5, which requires turn signals to be self-canceling by the steering wheel rotation. Although NHTSA believes that such cases are rare, the agency believes that such a modification cannot be made without taking the vehicle out of compliance with Standard No. 108. Other modifications to the self-canceling feature of the turn signal are made without removing the steering wheel. For example, touch pads that control the vehicle's turn signals can be installed without removing the steering wheel. Some touch pad actuated turn signals are canceled by a timer, not the steering wheel rotation. In all cases known to NHTSA where a touch pad is installed to control the vehicle's turn

signals and the steering wheel is not removed, the OEM turn signal lever and canceling feature is retained on the vehicle. Since the OEM turn signal lever and canceling feature is retained on the vehicle, the modification would not compromise the compliance of the OEM equipment provided to meet S5.1.1.5.

The standard requires the installation of a center high-mounted stop lamp (CHMSL) and specifies its location. 49 CFR §§ 571.108, S5.1.1.27, S5.3.1.8(a). Certain vans which require the installation of a raised roof to accommodate a wheelchair seated occupant will require the CHMSL to be moved. NHTSA believes that the CHMSL can be reinstalled in a way that preserves the vehicle's compliance with Standard No. 108. NHTSA is unaware of any situations in which this cannot be done. For example, sometimes in a van conversion rear doors must be lengthened when a raised roof is installed. If the van originally had one CHMSL above the doors, the lengthened doors could be retrofitted with two CHMSLs pursuant to S5.1.1.27(b) of the standard.<sup>25</sup>

NHTSA believes a make inoperative exemption from S5.1.1.5 of Standard No. 108 is appropriate only where a vehicle is modified to be driven without a steering wheel and where it is not feasible to retain the OEM turn signal lever. NHTSA seeks comment on whether there are cases in which the OEM turn signal actuating device and function is not retained for the use of drivers *other* than the driver for whom the vehicle was modified. If such cases exist, do the substitute turn signal controls installed for the driver with a disability have the self-canceling feature required by Standard No. 108 S5.1.1.5? Do they have some self-canceling feature other than steering wheel rotation?

<sup>25</sup> S5.1.1.27(b) of Standard No. 108 provides that: "Each multipurpose passenger vehicle, truck and bus whose overall width is less than 80 inches, whose GVWR is 10,000 pounds or less, whose vertical centerline, when the vehicle is viewed from the rear, is not located on a fixed body panel but separates one or two movable body sections, such as doors, which lacks sufficient space to install a single high-mounted stop lamp on the centerline above such body sections, and which is manufactured on or after September 1, 1993, shall have two high mounted stop lamps which:

- (1) Are identical in size and shape and have an effective projected luminous area not less than 2 1/4 inches each.
- (2) Together have a signal to the rear visible as specified in paragraph (a)(2) of this S5.1.1.27.
- (3) Together have the minimum photometric values specified in paragraph (a)(3) of this S5.1.1.27.
- (4) Shall provide access for convenient replacement of the bulbs without special tools. 49 CFR § 571.108, S5.1.1.27(b).

*c. Standard No. 118, Power-operated window, partition, and roof panel systems.* Standard No. 118 specifies requirements for the operation of power-operated windows, partitions, and roof panels to help prevent injury or death from a window, partition, or panel closing on a vehicle occupant (particularly children). NHTSA knows of only one situation where a modification would take the vehicle out of compliance with Standard No. 118. Disabled persons who have trouble maintaining a constant body temperature (e.g. paraplegics and burn victims) and live in very cold or very hot climates use a remote control ignition device so that the occupant compartment can be warmed or cooled before they enter. Section 4(a) of the standard requires that before a power operated window, partition, or roof panel system can be closed, the key that activates the vehicle's engine must be in the "ON", "START", or "ACCESSORY" position." In the modified vehicle under discussion here, the vehicle is running when the person enters, hence the person has control of the power operated windows even though there is no key in the ignition. Thus, NHTSA believes make inoperative exemption from S4(a) of Standard No. 118 is appropriate where a remote ignition device is necessary to accommodate a disability.

*d. Standard No. 135, Passenger car brake systems.* Standard No. 135 specifies requirements for service brake and associated parking brake systems to ensure safe braking performance under normal and emergency driving conditions.<sup>26</sup> The addition of some sort of hand control to the OEM system—usually a system that attaches in some manner to the brake pedal—is the most common modification made to any brake system for a driver with a disability. Normally these systems maintain the OEM brake control. Also common are modifications made to the level of effort (pressure) required of the driver to operate the brake. Such modifications are known as low-effort and zero-effort braking and increase the amount of power assist to the driver. Low-effort and zero-effort braking is accomplished by reworking the OEM power brake system. Most of these modifications preserve the OEM foot pedal and affect only the method of actuation of the braking system. The agency believes that some, relatively

<sup>26</sup> Until August 31, 2000, manufacturers of passenger cars may elect to comply with Standard No. 135 instead of Standard No. 105, Hydraulic Brake Systems, Passenger cars manufactured on or after September 1, 2000 will have to comply with Standard No. 135.

<sup>24</sup> The H-point is the manufacturer's reference point for determining where the passenger's hip joint should be located for testing purposes. The hip joint's location affects the head's location.



uncommon, modifications may require removal of the OEM foot pedal. For example, a disabled person who experiences involuntary muscle spasms in his legs may have to have the OEM foot control removed to prevent him from inadvertently activating the vehicle's brake during a spasm. S5.3.1 of Standard No. 135 specifies that the service brakes be activated by a foot control. Consequently, NHTSA has tentatively concluded that exemption from S5.3.1 of Standard No. 135 may be appropriate in those situations where the foot pedal must be removed to accommodate a person's disability. NHTSA seeks comment on whether its tentative conclusion is correct. Are there disabilities which require removal of the OEM foot pedal? The agency also seeks comment from the vehicle manufacturers, hand control manufacturers, vehicle modifiers, those who adapt power brake systems, and users, as to whether there are brake modifications that incapacitate the OEM brake controls and would affect the vehicle's performance in any of the required tests. Specifically, does any joy stick driving control prevent the use of the OEM brake pedal or affect the vehicle's potential to perform the braking tests? Does increasing the power assist to the brakes affect the vehicle's potential to perform the braking test? The agency also seeks comment as to whether there are modifications made to the accelerator control that do not preserve the OEM performance and function.

*e. Standard No. 202, Head restraints.* To reduce the frequency and severity of neck injuries in rear-end and other collisions, Standard No. 202 requires each front outboard seating position in all vehicles to be equipped with a head restraint that meets specific size and performance requirements. Vehicles may be modified to accommodate a wheelchair seated driver or right front seat passenger. Such a modification requires the removal of the OEM seat and, as a consequence, the head restraint. NHTSA is aware that some wheelchairs are equipped with head rests or positioning devices and that some vehicles modified to be driven by wheelchair seated drivers are equipped with swing-away head rests. Although the agency does not know for certain, it doubts that the head rests installed on some wheelchairs or the swing away head rests attached to vehicles comply with Standard No. 202. Thus, NHTSA believes that compliance with Standard No. 202 may be compromised when the OEM seat is permanently removed to accommodate a wheelchair-seated

occupant at either of the front outboard seating positions.

In addition to the case of a wheelchair seated occupant, NHTSA knows of another modification that could make Standard No. 202 inoperative. Some drivers (such as a driver with poor peripheral vision) may need to alter the size of their vehicle's head restraint so it no longer interferes with their ability to see rearward over their shoulders.<sup>27</sup> Reducing the size of the head restraint could affect the vehicle's compliance with Standard No. 202 in a variety of ways. If the head restraint is altered so that the remaining height of the head restraint is less than 27.5 inches above the seating reference point, the remaining width is less than 10 inches on a bench seat, or the remaining width is less than 6.75 inches on an individual seat,<sup>28</sup> the vehicle may no longer comply with the requirements of Standard No. 202. Even smaller reductions in the size of a head restraint affect the head restraint's ability to meet the performance requirements of S4.3 of Standard No. 202.

In light of the above, NHTSA believes an exemption from the make inoperative prohibition with regard to Standard No. 202 is warranted in two situations only. First, where the OEM seat is permanently removed so that only a wheelchair seated driver or right front passenger can occupy either or both front outboard seating positions. If the vehicle is modified to have a detachable driver or right front passenger seat, the detachable seat must comply with Standard No. 202.<sup>29</sup> If an OEM driver or passenger seat is supplied with the vehicle, that seat must comply with Standard No. 202. Second, an exemption would be warranted if the head restraint must be altered to accommodate a driver's disability. NHTSA solicits comment on whether the head rests used on some wheelchairs would meet Standard No. 202's requirements.

*f. Standard No. 203, Impact protection for the driver from the steering control system and Standard No. 204, Steering control rearward displacement.* Standard No. 203 and Standard No. 204 serve to reduce the likelihood and severity of head, chest, neck, and facial injuries due to contact

with the steering wheel. Standard No. 203 requires (1) that the impact force developed on a chest body block impacting the steering wheel at 15 mph be less than 2,500 pounds in a three millisecond interval,<sup>30</sup> and (2) that no steering control system components catch the driver's clothing or jewelry. The standard does not apply to vehicles that conform to S5.1, Standard No. 208 (i.e., air bag requirements). Standard No. 204 requires that the upper end of the steering column<sup>31</sup> be displaced less than five inches when the vehicle impacts a fixed full frontal barrier at 30 mph.

These two standards assume that the vehicle uses the type of steering system typically installed in a vehicle: the steering column longitudinal axis points toward the driver and a steering wheel, mounted at the end of the column, is used by the driver to steer the vehicle. Vehicles modified to be driven by persons with disabilities do not always have such steering systems. Some individuals with disabilities require alternative steering systems such as joystick steering (usually mounted to one side of the driver), horizontal steering (the column points toward the driver, but the face plane of the steering wheel is parallel to the column), foot steering, or the Scott steering system to accommodate their particular disability.<sup>32</sup> In addition, extensions are sometimes added to the OEM steering shaft to allow a wheelchair seated driver to sit further back in the vehicle than the OEM shaft will allow (usually because his or her wheelchair will not fit into the area reachable by the OEM system).

The agency would like to point out the difference between the steering "shaft" and the steering "column". While the words "steering column" are often used in everyday conversation when referring to the system consisting of the steering shaft, covered by the steering column, S3 of Standard 204 specifically defines the steering shaft as "a component that transmits steering torque from the steering wheel to the steering gear," while the steering column is "a structural housing that surrounds a steering shaft." It is the agency's intent to discriminate between fairly minor modifications that may

<sup>27</sup> See, e.g., Letter from Ms. Jessie Flautt, to Chief Counsel in 1991, requesting permission to cut the width of a head restraint for a driver with poor peripheral vision.

<sup>28</sup> 49 CFR Part 571.202 S4.3(b)(1) and (2), respectively.

<sup>29</sup> In most instances when a vehicle is modified to allow a person to drive from a wheelchair, an additional driver's seat and a means for attaching the seat to the vehicle floor are provided. An attachable passenger's seat is also usually provided.

<sup>30</sup> Essentially, this requires that the steering column must have an energy absorbing feature.

<sup>31</sup> Steering shaft means a component that transmits steering torque from the steering wheel to the steering gear. Steering column means a structural housing that surrounds a steering shaft. 49 CFR Part 571.204, S3.

<sup>32</sup> The Scott steering system is similar to the steering system used on airplanes and is used primarily by quadruplegics.



involve attaching equipment to the steering column, or cutting away a portion of that housing, from more serious modifications that require a change to the component that connects the driver control to the steering gear, because it is the steering shaft that is most likely to transmit crash loads from the engine compartment of the vehicle to the driver. Therefore, NHTSA believes that a person modifying a vehicle for a person with disabilities should preserve the vehicle's certification with respect to the requirements of Standard Nos. 203 and 204 except when a modification requires a structural change to, or removal of, the original steering *shaft*. NHTSA does not believe that the simple addition of a piece of adaptive equipment (AE), such as a hand control, to the steering column constitutes a change to the steering shaft. The agency requests comment on whether the following modifications can be performed in a manner that preserves the vehicle's compliance with Standard No. 204's steering column displacement requirements: (1) the extension of the steering shaft, (2) the installation of horizontal steering, or (3) the installation of mechanical hand controls. The agency also seeks comment on whether there are modifications which require changes to the steering column, without a change to the steering shaft, and which can *only* be made in a way that would affect the vehicle's compliance with S5.1 of Standard No. 203 or with Standard No. 204.

*g. Standard No. 207, Seating systems.* To minimize the likelihood that a seat will collapse during a collision, Standard No. 207, Seating systems establishes performance, installation, and attachment requirements for seats. The standard requires vehicles to be equipped with a driver's seat and requires all seats installed in a vehicle to both withstand and remain in their adjusted position when certain loads are applied in various directions to the seats. The standard also requires folding seats to be equipped with a restraining device and a release mechanism. NHTSA knows of only one vehicle modification in which certification to Standard No. 207 cannot be maintained—the permanent removal of the driver's seat so that the vehicle can be driven by a driver seated in a wheelchair. In most instances when the driver for whom the vehicle is modified is sitting in a wheelchair, an additional driver's seat and a means for attaching the seat to the vehicle floor are provided. This seat and the attachment

mechanism should conform to the requirements of Standard No. 207; NHTSA knows of no reason why it cannot.

NHTSA believes that only a limited exemption from Standard No. 207 is appropriate. Wheelchairs and other non-automotive seats are not designed to withstand loads and remain in position during a collision. NHTSA believes that only vehicles modified to be driven by a person seated in a wheelchair and that are equipped with a wheelchair securement device should be exempt from compliance with Standard No. 207. The exemption would not apply to any vehicle equipped with a detachable driver's seat; in that case, the detachable seat would have to comply with the standard's requirements.

The agency is aware that some commenters may argue that the installation of a six-way power seat base (allowing a wheelchair user to transfer to the OEM driver's seat) requires exemption from Standard No. 207. NHTSA disagrees. The agency believes that it is reasonable and practicable to attach these seat bases to a vehicle in a manner that would not compromise a vehicle's compliance with Standard No. 207. Thus, NHTSA believes that an exemption from the make inoperative prohibition for the installation of a power seat base is inappropriate.

*h. Standard No. 208, Occupant crash protection.* The purpose of Standard No. 208 is to reduce the number of vehicle occupant deaths and the severity of vehicle occupant injuries in a crash. The standard requires vehicles to be equipped with specific manual and automatic restraint systems (e.g. seat belts and air bags) and to meet specified injury criteria during a crash test.<sup>33</sup> Many vehicle modifications could affect a vehicle's compliance with this standard. The agency has tried to determine how various modifications might affect a vehicle's compliance with the standard. NHTSA knows that some types of modifications unavoidably affect a vehicle's compliance with Standard No. 208. For example, any modification that requires the removal of the OEM steering wheel, and hence the driver air bag, affects the vehicle's compliance with Standard No. 208. In addition, any modification to the seat which requires removing an air bag sensor located under the seat

<sup>33</sup> Passenger cars and light trucks and vans with a curb weight of 5,500 pounds or a Gross Vehicle Weight Rating (GVWR) of 8,500 pounds or less are required to be equipped with air bags at both front outboard seating positions. Heavier vehicles are not required to have air bags at both front outboard seating positions and may instead be equipped with a belt system.

compromises a vehicle's compliance with the standard. Based on the results of testing, NHTSA knows of other modifications that will not affect a vehicle's compliance with the standard. For example, the results of a crash test conducted at the University of Virginia indicate that raising the body off the frame or lowering the floor of a full size van will not compromise a vehicle's compliance with Standard No. 208, at least for a driver seated in a modified OEM seat.<sup>34</sup> In addition, NHTSA believes that the simple attachment of a steering control device on the OEM steering wheel will not affect a vehicle's compliance with Standard No. 208.<sup>35</sup>

The agency is also aware that there are some modifications which may take a vehicle out of compliance with Standard No. 208. For example, nearly every modification to the occupant compartment forward of the B pillar could compromise a vehicle's compliance with Standard No. 208. At this point in time, the agency lacks the data or test results needed to determine whether some modifications affect a vehicle's compliance with Standard No. 208.<sup>36</sup> For example, the agency does not know if cutting the knee bolster to accommodate the push rods in a standard set of mechanical hand controls affects the vehicle's ability to meet the injury criteria in a crash. The agency is also uncertain whether cutting the vehicle floor to install a power pan in the driver's area or whether cutting the roof adversely affects the vehicle's structural response in a crash to the point that Standard No. 208's criteria can no longer be met. Finally, NHTSA does not know whether removing pretensioners during a modification of the belt system makes it impossible to meet the criteria of Standard No. 208.

In light of the standard's complexity and the uncertainty concerning the effect of some modifications on a vehicle's compliance with Standard No. 208, NHTSA believes that exemption from the make inoperative prohibition for Standard No. 208 should be granted for any modification necessary to accommodate a disability, provided the

<sup>34</sup> University of Virginia, Automobile Safety Laboratory crash test of Ford E150 van for NHTSA.

<sup>35</sup> "Air Bag Interaction with and Injury Potential from Common Steering Control Devices," final report DOT-HS-808-580, Nov. 1996; Pilkey *et al.* Univ. of Virginia Automobile Safety Lab.

<sup>36</sup> The fact that OEMs refuse to pass through certification for Standard No. 208 in any case where the vehicle is changed forward of the B-pillar indicates the difficulty of knowing whether certain modifications will affect a vehicle's compliance with Standard No. 208. In addition, the OEMs instruct modifiers not to place any equipment in the air bag deployment zone.

modifier installs Type 2<sup>37</sup> or Type 2A<sup>38</sup> belts that comply with Standard No. 209, and provided the belt anchorages comply with Standard No. 210. The agency notes, however, that the exemption would not apply in any situation where compliance with the standard could be preserved and a person's disability could be accommodated by the installation of an air bag on-off switch. NHTSA seeks comment from drop floor minivan alterers on whether they have been able to certify their vehicles to Standard No. 208 since September 1, 1997 (the date the section 4.2 exclusion expired). The agency also seeks comment from hand control manufacturers as to whether they believe OEM components installed to meet Standard No. 208 (e.g. knee bolsters) are made inoperable by the installation of their controls. The agency seeks comments from modifiers on how, how often, and why they must disable seat pretensioners.

*i. Standard No. 214, Side impact protection.* Standard No. 214's requirements serve to minimize the risk of serious and fatal injuries to vehicle occupants in side impact collisions. The standard specifies injury criteria to be measured during a crash test and sets strength requirements for doors. With respect to the dynamic performance requirement of Standard No. 214, NHTSA believes that an exemption from the make inoperative prohibition is warranted for cases in which the seat position must be changed to accommodate a person's disability. The agency discovered during the course of the development of the test procedure for the side impact crash test that data indicating injury to the dummy will be affected by seat height, fore/aft position, and the distance between the dummy and the door interior surface. (The use of occupant restraints, however, did not affect the test results significantly.) The agency requests comments on whether OEMs or modifiers believe there are modifications, other than those that change the seat position, that would affect the vehicle's compliance with S5 of Standard No. 214. NHTSA does not believe there are any modifications which would necessarily reduce door strength to an extent that the strength requirement of Standard No. 214 could not be met. Thus, NHTSA does not believe a make inoperative exemption is warranted for that portion of the standard. NHTSA requests comment on whether OEMs or modifiers believe there are modifications which must be

done in a manner that necessarily compromises door strength.

## 2. Standards for Which Permission Would Not Be Granted To Make Safety Features Inoperative

*a. Standard No. 102, Transmission shift lever sequence, starter interlock, and transmission braking effect.* Standard No. 102 requires automatic transmissions to have: (1) a specified transmission shift lever sequence, (2) a starter interlock, and (3) at least one forward drive transmission position that provides a greater degree of engine braking than the highest speed transmission ratio (i.e. one low gear). To accommodate certain disabilities, some modifications are made to the method by which the vehicle is started and the transmission gear is selected. A common modification is the attachment of an extension lever to the column-mounted gear selection lever in a passenger car to permit left-handed gear selection. NHTSA is unaware of any modification which would need to change the transmission gear selection sequence, disable the starter interlock, or disable the lower forward drive gear ratios so there is no longer a low gear. Thus, NHTSA does not believe a make inoperative exemption for Standard No. 102 is appropriate. NHTSA solicits comment on whether modifications to the method by which the vehicle is started and the transmission gear is selected are necessary to accommodate a person with a disability.

*b. Standard No. 103, Windshield defrosting and defogging systems, and Standard No. 104, Windshield wiping and washing systems.* Standard No. 103 and Standard No. 104 specify requirements for the area of the windshield that must be cleared by the defrosting and defogging and windshield wiping and washing systems, respectively. Vehicle modifications commonly result in the relocation of switches and a reduction in the features normally available to the driver while the vehicle is in motion. For example, if the OEM provides three or four wiper speeds on a dial control, a disabled driver who needs a touch pad or other switch panel may have access to only two speeds. However, neither this situation nor any other modification to these systems that NHTSA knows of are violations of the make inoperative prohibition since the minimum requirements of the standard are met. The agency is unaware of any reason why a modification would affect the performance level of these systems to the extent that the vehicle no longer complied with these standards. NHTSA, therefore, does not believe an exemption

for Standard No. 103 or Standard No. 104 is appropriate.

*c. Braking Standards.* Standard No. 105, Hydraulic brake systems and Standard No. 121, Air brake systems govern the performance of various braking systems in different types of vehicles. Standard No. 105 applies to multipurpose passenger vehicles (MPVs), trucks, buses and passenger cars (manufactured before September 1, 2000) with hydraulic brake systems. Standard No. 121 applies to trucks, buses and trailers equipped with air brake systems. Manufacturers of passenger cars may elect to comply with Standard No. 135 instead of Standard No. 105 until August 31, 2000.<sup>39</sup> All of these standards help ensure safe vehicle braking performance in normal and emergency driving situations.

The most common modification to any brake system when adapting a vehicle to be driven by a person with a disability is the addition of some sort of hand control to the OEM system—usually a system that attaches in some manner to the brake pedal. Normally these systems maintain the OEM brake control. Also common are modifications to the level of effort (pressure) required of the driver to operate the brake. These modifications are called low-effort and zero-effort braking and increase the amount of power assist to the driver. This is accomplished by reworking the OEM power brake system. Since these modifications are only to the method of actuation and in most cases preserve the OEM foot pedals, NHTSA does not believe that these modifications take a vehicle out of compliance with any part of these braking standards. Unlike Standard No. 135, Standard Nos. 105 and 121 do *not* specify that the service brakes be activated by a foot control. Therefore, NHTSA does not believe that make inoperative exemption for Standard Nos. 105 and 121 is warranted. The agency seeks comment from the vehicle manufacturers, hand control manufacturers, vehicle modifiers, those who adapt power brake systems, and users, as to whether there are brake modifications that incapacitate the OEM brake controls and would affect the vehicle's performance in any of the required tests. Specifically, does any joy stick driving control prevent the use of the OEM brake pedal or affect the vehicle's potential to perform the braking tests? Does increasing the power assist to the brakes affect the vehicle's potential to perform the braking test?

<sup>39</sup> Passenger cars manufactured on or after September 1, 2000 will have to comply with Standard No. 135. See discussion of Standard No. 135 in Section II, C, 1, d above.

<sup>37</sup> An integrated lap and shoulder belt.

<sup>38</sup> A separate lap and shoulder belt.

The agency also seeks comment as to whether there are modifications made to the accelerator control that do not preserve the OEM performance and function.

*d. Standard No. 111, Rearview mirrors.* To ensure that drivers have a clear and unobstructed view to the rear of the vehicle, the standard specifies the location, field of view, magnification and labeling of rearview mirrors on all vehicles. While mirrors are relocated, extra mirrors added, or larger mirrors substituted for the OEM when vehicles are modified for persons with disabilities, NHTSA does not believe these modifications should affect the vehicles' certification to Standard No. 111. Since there should be no situation in which non-compliance with the standard is necessary or advised, NHTSA is not proposing a make inoperative exemption from Standard No. 111.

*e. Standard No. 113, Hood latch systems.* Standard No. 113 requires that cars, MPVs, trucks and buses have a second latch position on the hood latch system to prevent the hood from unlatching, opening and blocking a driver's view through the windshield. NHTSA is not aware of any modifications that are made to hood latch systems when a vehicle is modified to accommodate a person with a disability. NHTSA is aware that a modification to the method of unlatching might be necessary to allow a person with reduced range of motion or strength, or seated in a wheelchair to open the hood. NHTSA does not believe, however, that a modification to the method of unlatching would require the elimination of the second latch position; thus, the agency does not believe a make inoperative exemption for Standard No. 113 is warranted. The agency seeks comment on whether there are modifications that would require eliminating the second latch position.

*f. Standard No. 124, Accelerator control systems.* Accelerator control systems is intended to help prevent runaway acceleration of vehicles. The standard requires a vehicle's throttle to return to its idle position when the driver withdraws all force from the accelerator control or when there is a disconnection in the accelerator system between the control and the engine. The vehicle modification situation with respect to Standard No. 124 is directly analogous to the previous discussion of the braking standards. Most modifications to the accelerator system involve the addition of hand operated controls to the OEM system. NHTSA does not believe, therefore, that the vehicle is taken out of compliance with

the standard as long as the OEM performance and function are preserved. Thus, NHTSA does not believe an exemption for Standard No. 124 is justified. The agency seeks comment from the vehicle manufacturers, hand control manufacturers, vehicle modifiers, those who adapt acceleration systems, and users, as to whether there are accelerator modifications that incapacitate the OEM accelerator controls and would affect the vehicle's performance in any of the required tests. Are there modifications made to the accelerator control that do not preserve the OEM performance and function?

*g. Standard No. 201, Occupant protection in interior impact.* The purpose of this standard is to protect vehicle occupants from serious injury from impacts with interior components in a collision. The certification of a vehicle to the current standard would most likely be affected, if at all, through the installation of adaptive equipment (AE) for secondary controls. Special switches or touch pads are often installed to allow a person to reach and operate the controls for power windows, washer/wipers, and headlights. These controls can be mounted almost anywhere: on the side door panel, the arm rest, the front instrument panel, or the windshield header. It does not appear that these controls are large, heavy or rigid enough to cause significant injury upon occupant impact, although they may inflict lacerations. NHTSA seeks comments from OEMs and modifiers on whether or not the addition of adaptive equipment and devices, such as hand controls or knobs, affect the results of tests required by 49 CFR 571.201, S5.1, "Instrument Panels"?

NHTSA believes, however, that there may be a problem with van conversions for wheelchair-seated drivers when the new requirements for impact testing to the upper interior components become effective. The extra padding needed on the windshield header to comply with the new requirements may interfere with a driver's line of sight, since a wheelchair-seated driver sits higher above the vehicle floor than a driver using an OEM seat. NHTSA believes this could be accommodated by lowering the floor in the driver area; the agency is aware that this will not be a solution for everyone. Those drivers who are very tall, or for whom the floor cannot be lowered enough, may need to have sections of padding on the header removed. Also, it may be much safer to remove padding from the header than to lower the floor of the vehicle further than would be necessary if the header were not padded. NHTSA seeks

comments from OEMs on how they expect upper interior components to change under the new requirements. Specifically, if the eye ellipse of a wheelchair-seated driver is higher than that of a 95th percentile male, will increased padding or other design changes affect that driver's line of sight?

*h. Standard No. 206, Door locks and door retention components.* To minimize the likelihood that vehicle occupants will be ejected from a vehicle during a crash, Standard No. 206, Door locks and door retention components, requires hinged doors to have latches with two positions: fully latched and secondarily latched. The latch and striker must not separate under certain longitudinal, transverse, and inertial load and the door hinges must not separate under certain longitudinal and transverse loads. The standard also specifies that track and slide combinations on sliding doors must not separate under a 4,000 pound transverse load. The standard also requires vehicles to have door locks operable from the interior of the vehicle. Standard No. 206 excludes "\* \* \* side doors which are equipped with wheelchair lifts and which are linked to an alarm system." The agency has granted a petition asking to expand this exclusion to side doors fitted with ramps.<sup>40</sup> This action by the agency does not mean that the action desired by the petitioner will be taken, only that NHTSA will examine the issue.

Several vehicle modifications have the potential to affect door closures and the doors' ability to remain closed during impact. Examples include electrically operated door openers for both hinged and sliding doors and lengthened doors that are sometimes installed when the vehicle roof is raised. Standard 206 is crucial in preventing the ejection of occupants in a crash. NHTSA has no compelling evidence that the OEM door latching mechanism cannot be preserved, or its equivalent installed, in the course of door modifications. Therefore, NHTSA does not believe exemption from the make inoperative prohibition for Standard No. 206 is justified. The agency also solicits comment on whether door latching and locking mechanisms *must be* disabled or changed in the course of vehicle modifications in a manner that takes them out of compliance with Standard No. 206, Door locks and door retention components.

*i. Standard No. 209, Seat belt assemblies.* This standard sets out requirements for seat belt assemblies as items of motor vehicle equipment.

<sup>40</sup> 61 FR 27325; May 31, 1996.

NHTSA is not proposing exemption from the make inoperative prohibition since the agency sees no reason why modifiers cannot use Standard No. 209-compliant systems.

*j. Standard No. 210, Seat belt assembly anchorages.* Standard No. 210 is a vehicle standard that establishes strength and location requirements for seat belt assembly anchorages. The requirements ensure that the belt loads during a crash are transferred to the skeleton of the occupant and not to the occupant's soft tissue. The standard also ensures that the restraint anchorages are strong enough to withstand the force of a crash. Compliance with the criteria is fairly simple to measure. Traditionally, NHTSA has said that a vehicle may comply with Standard No. 210 as manufactured or as modified. The agency does not believe, therefore, that exemption from make inoperative with respect to Standard No. 210 is necessary. If belt anchorages are moved, or otherwise modified, to accommodate a person with a disability, NHTSA believes measurements, calculations, or engineering judgement can be used to ensure that Standard No. 210 is met in the new position.

*k. Standard No. 216, Roof crush resistance.* The purpose of Standard No. 216 is to reduce the number of deaths and injuries caused by a roof crushing into the vehicle during a rollover. The standard establishes static strength requirements for both car and LTV roofs. A common modification that could compromise a vehicle's certification to this standard is the installation of a raised roof (most often made of fiberglass). The agency believes that modifiers almost always, if not exclusively, achieve this roof modification by purchasing a replacement roof from a roof manufacturer and installing the new roof according to the roof manufacturer's instructions. NHTSA believes that the roof manufacturer should be able to provide guidance to the vehicle modifier on the strength of the roof and the vehicle make/models for which installation of that roof is appropriate. The agency does not believe that it is necessary for a raised roof to be installed in a manner that takes a vehicle out of compliance with Standard No. 216. NHTSA invites roof manufacturers and vehicle modifiers to comment on whether there are raised roofs which *must* be installed in a way that adversely affects the vehicle's compliance with Standard No. 216, Roof crush resistance, or if there are instances in which a raised roof is achieved by some method other than installing a replacement roof.

*l. Standard No. 301, Fuel system integrity and Standard No. 303, Fuel system integrity of compressed natural gas vehicles.* To reduce deaths and injuries occurring from fires caused by leaking fuel during and after a crash, Standard No. 301, Fuel system integrity and Standard No. 303, Fuel system integrity of compressed natural gas vehicles set performance requirements for fuel systems in crashes. Preserving fuel system integrity in a crash to prevent occupant exposure to fire is extremely important to all persons, but perhaps even more so for persons with disabilities since they often require more time to exit a vehicle.

Vehicle certification to Standard No. 301 can be compromised when the fuel tank, supply lines, and filler neck are moved in the process of lowering the floor of a van or minivan. NHTSA believes it is essential for safety that anyone working on a motor vehicle place a tank in such a way that it is not subject to impact by the sharp edges of the vehicle's structures, that fuel lines are not routed near hot surfaces, and that the fuel filler neck is not installed in such a way that it will separate from the tank, or be sheared off in a collision. In addition, NHTSA is aware of one tank manufacturer who has demonstrated that when its tank was correctly installed in the rear of a 1992 Ford E150 with a lowered floor and raised body, the vehicle met the performance requirements of Standard No. 301. The points discussed under Standard No. 301 are applicable to Standard No. 303, Fuel system integrity of compressed natural gas vehicles. NHTSA, therefore, believes strongly that a make inoperative exemption for Standard No. 301 and Standard No. 303 is not justified.

*m. Standard No. 302, Flammability of interior materials.* To reduce the occurrence of deaths and injuries to vehicle occupants from fire, especially those which originate in the vehicle's interior, Standard 302, Flammability of interior materials specifies that any material within one-half inch of the occupant compartment air space shall not "burn, nor transmit a flame front across its surface, at a rate of more than four inches per minute." Materials meeting this standard are readily available and the test procedure described in the standard is fairly simple.

There are many modifications which have the potential to compromise a vehicle's certification to Standard No. 302. One example is the replacement of OEM carpet in vans with a surface which is easier for wheelchairs to roll on. Carpet may also be replaced in the

process of lowering a floor. Some vehicle modifiers have told NHTSA staff that they do not use OEM materials when making changes because these materials are much more expensive than others more commonly available.

The agency believes that fire safety for persons with disabilities should not be compromised during vehicle modification. Even if OEM materials are not used, modifiers can employ substitutes that comply with Standard No. 302. NHTSA believes it is the duty of the vehicle modifier to get information from its suppliers on the fire resistance of the materials it uses. Suppliers should be able to tell modifiers whether the material will meet Standard No. 302 requirements. The agency is not proposing a make inoperative exemption for Standard No. 302.

### **III. Explanation of Procedural Differences Between Proposed Exemption and Existing Exemption re Air Bag On-Off Switches**

In developing the procedures for implementing the proposed exemption, the agency considered the detailed eligibility procedures it adopted as part of the make inoperative exemption that it issued in November 1997 to permit the retrofit installation of on-off switches for air bags. Generally, the agency tentatively concluded that the circumstances warranting the detailed procedures in that rulemaking are not present in this rulemaking.

The agency included detailed paperwork and agency authorization procedures for individual requests for on-off switches because information in the media and from the commenters indicated that many people misperceived the extent and source of the risk associated with air bags. The agency was concerned that many people who were not at risk for death or injury from an air bag would reduce their safety by unnecessarily installing and using switches. Therefore, NHTSA drafted the regulation granting the exemption to counteract that misperception and its potential consequences. The regulation requires vehicle owners to first read an information brochure explaining the actual risks associated with air bags and what most owners can do to virtually eliminate the risks to themselves and the users of their vehicle and to then submit a request for a switch to the agency. The vehicle owner may obtain a switch only after the agency sends the owner a letter authorizing a motor vehicle dealer or repair business to install it. The regulation also requires dealers or repair businesses to provide

the vehicle owner with information about the potential safety consequences of using the switch to turn off an air bag when they install a switch. In addition, dealers and repair businesses must notify the agency when they install a switch.

The agency has not proposed any of those procedural provisions as part of the exemption from the make inoperative prohibition for persons who modify vehicles to accommodate people with disabilities. More specifically, the agency has not proposed to require that vehicle owners or modifiers perform any of the tasks: fill out written requests, certify the need for modifications, certify having read the information concerning the safety consequences of modifications, or obtain prior agency approval of their requests. Similarly, the agency has not proposed to require that modifiers notify the agency of the modifications they make or provide vehicle owners with information concerning the safety consequences of the modifications.

The proposed exemption addresses the requests for modifications based on objective physical inability to use an unmodified vehicle, not any potentially overgeneralized or overstated fear of an item of vehicle equipment, as in the case of air bags. Thus, there is no gap between the actual need for modifications and the perceived need for them. Further, there is a limitation on the modifications that vehicle owners can obtain under the exemption. The modifications must be necessary to accommodate a particular disability. There is little likelihood that persons lacking disabilities will seek the types of modifications addressed by this proposed exemption. Most such modifications have appeal only to those with a need for them. In addition, most of these modifications are expensive. For example, a fairly extensive modification to allow a quadriplegic to drive costs anywhere from \$27,000 to \$80,000 (for the most advanced modifications). Even a relatively simple set of hand controls costs between \$300 and \$500. Further, the agency believes that most modifications, particularly the most extensive, are paid for in whole or in part by organizations that generally require individuals desiring vehicle modifications to be evaluated by an occupational therapist (OT), or other appropriate professional<sup>41</sup> before vehicles are modified. These organizations include the U.S.

Department of Veterans Affairs (VA),<sup>42</sup> the states,<sup>43</sup> or third party payers, such as workman's compensation or disability insurers.<sup>44</sup> The OT assesses the severity of the person's disability and issues a prescription specifying the vehicle modifications that are needed to accommodate the person's disability.

A final factor that would tend to discourage persons without disabilities from attempting to obtain the modifications at issue in this proposed exemption is that those modifications take a considerable period of time. This is in part because modifiers must typically customize the vehicle to fit the person with a disability. For example, the modifications for a quadriplegic could take from several weeks to several months to complete. The modifier must take measurements and ensure that the location and alignment of all the controls and equipment are accessible to and operable by the person with a disability. In order to do this, a modifier must often schedule several "fittings" with the person for whom the vehicle is being modified.

Based on these considerations, the agency tentatively concluded that there is no need to propose special procedural provisions to limit the availability of modifications under the proposed exemption. There is little risk that people would seek to have their vehicles modified unless the modification was genuinely needed to accommodate a person's disability. The agency also believes there is little risk that modifiers would agree to modify vehicles for persons without disabilities. The exemption would not apply to any modifications performed for the convenience of an able-bodied person and modifiers would be subject to civil penalties for any such modifications. For the same reasons, the agency tentatively concludes also that there is no need for modifiers to inform the agency when it makes modifications under the exemption.

- NHTSA seeks comment on whether its tentative conclusions are correct. Is there a significant risk that individuals would seek modifications unrelated to the accommodation of persons with disabilities? Should the agency require any paperwork or record retention requirements to ensure either that the

intended beneficiary is a person with disabilities or that the modifications are necessary to accommodate a specific disability or set of disabilities?

Finally, virtually all the businesses who perform vehicle modifications for individuals with disabilities are small businesses. The agency does not want to impose any unnecessary requirements on these businesses. The agency is concerned that requiring dealers and repair businesses to submit a complete copy of an authorization form to NHTSA would impose an unnecessary burden on these businesses. Under such a requirement, modifiers would incur the additional costs associated with preparing, printing, and maintaining such forms, and then mailing them after they have been filled in and signed.

- NHTSA requests comment on whether it should require dealers and repair businesses to submit such information to NHTSA and what the estimated burden for these businesses would be.

#### IV. Additional Issues and Considerations

NHTSA strongly encourages those who modify vehicles for disabled drivers and passengers to strive to ensure that disabled people receive a level of safety that is as close as possible to that provided able-bodied drivers and passengers. In order to operate, or ride in, motor vehicles, many disabled individuals have no choice but to accept a lower level of safety in their vehicle due to their disability and the technology that is currently available. For example, a disabled person with limited range of motion may have to sit extremely close to the steering wheel in order to drive. Sitting too close to the steering wheel places that person at increased risk of head, neck, and chest injuries in a crash.

NHTSA notes that in addition to the guidance that would be provided under this proposal, there is guidance available from the best available industry standards, such as the Society of Automotive Engineers (SAE) Recommended Practices, Test Procedures, and Information Reports. The agency urges modifiers to consult these materials. NHTSA encourages vehicle manufacturers to work closely with those who modify vehicles for persons with disabilities to develop vehicle designs which minimize the need for aftermarket modifications, and to develop appropriate mobility arrangements, adaptive devices, and other hardware that will work harmoniously with the requirements of all applicable standards.

<sup>41</sup> Medical doctors, rehabilitation specialists, and driver trainer/evaluators also evaluate persons with disabilities for vehicle modifications.

<sup>42</sup> Disabled veterans are eligible for financial assistance from the VA to help defray the cost of their vehicle modifications.

<sup>43</sup> Funding for vehicle modifications is available in most states through the Vocational Rehabilitation Departments to a person with a disability who needs a personal vehicle to travel to work or school.

<sup>44</sup> In addition, most major vehicle manufacturers offer rebates to people with disabilities who purchase their vehicles to help defray the cost of vehicle modifications and adaptive equipment.

The agency believes that the proposed exemption would meet the needs of most persons with disabilities seeking necessary vehicle modifications, but recognizes that there might be instances in which relief might be appropriate, but would not be available under the conditions of the exemption. For example, additional exemptions may be required due to advances in technology, amendments to the current standards, or to accommodate an extremely rare disability or condition. Consequently, to the extent consistent with this rulemaking, NHTSA would continue to review written requests for an exemption from the make inoperative prohibition for vehicle modifications not covered under this rulemaking.

## V. Request for Comments

In addition to the questions raised above with respect to specific safety standards and the procedural differences between today's proposal and the existing exemption for air bag on-off switches, NHTSA requests comments about the appropriateness of the provisions of the proposed exemption. Among the specific issues are the following:

- NHTSA solicits comment on whether the standards proposed for inclusion under the exemption are appropriate. Are additional limitations needed with respect to these standards? The agency is particularly interested in the results of any tests that have been performed on modified vehicles and adaptive equipment. NHTSA seeks comment on whether there are modifications that would necessarily take a vehicle out of compliance with a standard but are not included in the proposed exemption. For the standard requirements that NHTSA is not proposing for inclusion in the exemption, the agency solicits comment on whether the agency's analysis is correct or whether any of those standards' requirements warrant inclusion in the exemption, and, if so, why?

- NHTSA seeks comment on the use of vehicle modification prescriptions in the vehicle modification industry. How often do vehicle owners provide modifiers with a prescription? Do modifiers generally follow the prescription's exact specifications or do they use the prescription as a general guide to how they should modify a vehicle? How often do vehicle owners provide modifiers with a license restriction identifying the needed accommodation? Should NHTSA expressly require motor vehicle dealers or repair businesses to obtain from vehicle owners either a prescription or

a valid restricted driver's license? Would such a requirement improve safety? What effect would such a requirement have on individuals with disabilities? Would requiring individuals without a prescription or license restriction to submit a request to modify to NHTSA be unduly burdensome? Is such a requirement needed to ensure that modifications are performed only to accommodate a person's disability and not for the convenience of an able bodied individual?

- The agency is aware of one situation in which a person with a disability did not have a prescription because he did not seek medical treatment due to his personal religious beliefs. The agency solicits comment on whether people who do not consult medical professionals for religious reasons consult some other trained professional for advice on vehicle modifications. If they do consult another professional, what type of professional is it? The agency also requests comment on whether there are professionals other than doctors, occupational therapists, or driver specialists who evaluate persons with disabilities and recommend vehicle modifications.

- The agency seeks comment on the type of information that modifiers currently provide consumers concerning the specific vehicle modifications that they make to accommodate persons with disabilities and concerning the potential safety consequences of those modifications. Should NHTSA require the disclosure of such information by all modifiers? Should motor vehicle dealers and repair businesses be required to identify any steps they would take to minimize the vehicle's noncompliance with the particular standards?

- The agency seeks comment on whether it should require modifiers to disclose particular safety related information to the consumer. If so, what information should that be? Should NHTSA require the information to be presented in a particular way?

- The agency solicits comments on the appropriateness of requiring modifiers to obtain a written authorization from the vehicle owner before any modifications can be made. Do dealers and repair businesses already require such authorizations? The agency solicits comment from modifiers who currently obtain written authorization on how much time is involved in gathering and maintaining the forms.

- The agency seeks comment on whether it should require dealers or motor vehicle repair businesses to affix a permanent label to the vehicle to

ensure that subsequent purchasers are aware that the vehicle has been modified and of the possible safety implications associated with such modifications. If the agency were to require a label, what should the format and the content of the label be? Where should it be placed? Do modifiers currently affix labels? If so, what does the label look like?

- The agency seeks comment on the cost of vehicle modifications made to accommodate people with disabilities.

- The agency requests comment on any state efforts to regulate the business of modifying vehicles to accommodate a person with a disability and the potential effect the proposed rule would have on those states' regulatory efforts.

- Finally, the agency has posted information on vehicle modifications and adaptive equipment at its Website ("www.nhtsa.dot.gov/cars/rules/adaptive"). The agency requests comment on whether this information is presented in a useful way. Is there information that is not available at the Website that modifiers and people with disabilities would like to have posted?

## VI. Proposed Effective Date

Since this proposal would remove a restriction on the modification of vehicles for persons with disabilities, NHTSA anticipates making this amendment effective 30 days after publication of a final rule under the Administrative Procedures Act, 5 U.S.C. § 553(d). The agency requests comment as to the appropriateness of the effective date.

## VII. Rulemaking Analyses and Notices

### *Executive Order 12866 and DOT Regulatory Policies and Procedures*

NHTSA has considered the impact of this rulemaking action under E.O. 12866 and the Department of Transportation's regulatory policies and procedures. This rulemaking document was not reviewed under E.O. 12866, "Regulatory Planning and Review." NHTSA has analyzed this proposal and determined that it is not "significant" within the meaning of the Department of Transportation's regulatory policies and procedures. NHTSA has, therefore, determined that a regulatory evaluation, designed to discuss the benefits/disbenefits and consumer costs/cost savings of a proposal, is not needed to support the subject rulemaking.

Clearly, modifying a vehicle in a way that degrades the performance of certain federal motor vehicle safety standards would produce some negative safety benefits for the occupants of the vehicle. However, the number of safety

standards affected would be very small and the number of vehicles potentially modified would be very few in number. Thus, the agency believes the disbenefits, if any exist, would be minimal. This is essentially the trade-off that NHTSA is faced with when increasing mobility for persons with disabilities—when necessary vehicle modifications are made, some safety may unavoidably be lost.

It is cost prohibitive to have every vehicle modification tested in advance for safety performance or safety compliance. The vehicle modifications being made today to accommodate disabled persons are based on engineering experience/judgment and have proven to be successful in the real-world. For this particular proposal, which is administrative in nature, no costs will be imposed by the agency's actions. The cost of doing business for the vehicle modification industry will not be changed by the subject proposal. If anything, there could be a cost savings due to eliminating the requirements that the modifier contact the agency about pending vehicle modifications.

#### *Regulatory Flexibility Act*

NHTSA has also considered the impacts of this notice under the Regulatory Flexibility Act. Most dealerships and repair businesses are considered small entities, and a substantial number of these businesses modify vehicles to accommodate individuals with disabilities. I hereby certify that this proposed rule would not have a significant economic impact on a substantial number of small entities. As explained above, this action would create a formal procedure to replace the current requirement that dealers or repair businesses write to NHTSA and request permission each time they need to modify a vehicle in a way that compromises a vehicle's compliance with any standard to accommodate an individual with a disability. While most dealers and repair businesses would be considered small entities, the proposed requirements would not impose any mandatory significant economic impact on them considering that: (1) for the vast majority of cases, the agency believes the rule codifies standard industry practices and procedures used to make vehicle modifications, (2) the proposed rule would assist dealers and repair businesses in making appropriate design choices, and (3) the proposed rule would eliminate the costs associated with submitting a written request to NHTSA to modify each vehicle as well as the costs associated with waiting for the agency's response. Therefore, a Preliminary Regulatory Flexibility

Analysis is not required as the subject rule does not impose any significant costs on small business entities.

#### *Paperwork Reduction Act*

NHTSA has analyzed this proposed rule under the Paperwork Reduction Act of 1995 (P.L. 104-13) and determined that it would not impose any information collection requirements as that term is defined by the Office of Management and Budget (OMB) in 5 CFR part 1320.

#### *The National Environmental Policy Act*

NHTSA has also analyzed this proposed rule under the National Environmental Policy Act and determined that it would have no significant impact on the human environment.

#### *The Unfunded Mandates Reform Act*

The Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires agencies to prepare a written assessment of the costs, benefits and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local or tribal governments, in the aggregate, or by the private sector, of more than \$100 million annually. This proposed rule does not meet the definition of a Federal mandate, because it is completely permissive. In addition, annual expenditures will not exceed the \$100 million threshold.

#### *Executive Order 12612 (Federalism)*

The agency has analyzed this proposed rule in accordance with the principles and criteria set forth in Executive Order 12612. NHTSA has determined that this proposed rule would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

#### *Civil Justice Reform*

This proposed rule has no retroactive effect. NHTSA is not aware of any state law that would be preempted by this proposed rule. This proposed rule would not repeal any existing Federal law or regulation. It would modify existing law only to the extent that it replaces an agency procedure under which dealers and repair businesses had to obtain the agency's permission to modify a vehicle to accommodate a person with a disability in a way that compromised the vehicle's compliance with the Standard. This proposed rule would not require submission of a petition for reconsideration or the initiation of other administrative proceedings before a party may file suit in court.

### **VIII. Comments**

NHTSA is providing a 90 day comment period. Interested persons are invited to submit comments on this proposal. It is requested but not required that 2 copies be submitted.

All comments should not exceed 15 pages in length (49 CFR 553.21). Necessary attachments may be appended to these submissions without regard to the 15 page limit. The limitation is intended to encourage commenters to detail their primary arguments in a concise fashion.

If a commenter wishes to submit certain information under a claim of confidentiality, three copies of the complete submission, including the purportedly confidential business information, should be submitted to the Chief Counsel, NHTSA, 400 7th Street, SW, Room 5219, Washington, DC 20590, and two copies from which the purportedly confidential information has been deleted should be submitted to the NHTSA Docket Section. A request for confidentiality should be accompanied by a cover letter setting forth the information specified in the agency's confidential business information regulation. 49 CFR Part 512.

All comments received by NHTSA before the close of business on the comment closing date indicated above for the proposal will be considered, and will be available for examination in the docket at the above address both before and after that date. To the extent possible, comments filed after the closing date will also be considered. Comments received too late for consideration in regard to the final rule will be considered as suggestions for further rulemaking action. Comments on the proposal will be available for inspection in the docket. The NHTSA will continue to file relevant information as it becomes available in the docket after the closing date, and recommends that interested persons continue to examine the docket for new material.

Those persons desiring to be notified upon receipt of their comments in the rulemaking docket should enclose a self-addressed, stamped postcard in the envelope with their comments. Upon receiving the comments, the docket supervisor will return the postcard by mail.

#### **List of Subjects in 49 CFR Part 595**

Imports, Motor vehicle safety, Motor vehicles, Disability.

For the reasons set forth in the preamble, NHTSA proposes to amend Part 595 of Title 49 of the Code of Federal Regulations as follows:



**PART 595—EXEMPTIONS FROM THE MAKE INOPERATIVE PROHIBITION**

1. The authority citation for part 595 would continue to read as follows:

**Authority:** 49 U.S.C. 322, 30111, 30115, 30117, 30122, and 30166; delegation of authority at 49 CFR 1.50.

2. The heading of part 595 would be revised to read as set forth above.

3. Sections 595.1, 595.2, 595.3, and 595.4 would be designated as "Subpart A—General".

4. Section 595.1 would be revised to read as follows:

**§ 595.1 Scope.**

This part establishes conditions under which the compliance of motor vehicles and motor vehicle equipment with the Federal motor vehicle safety standards is to be made inoperative.

5. Section 595.2 would be revised to read as follows:

**§ 595.2 Purpose.**

The purpose of this part is to provide an exemption from the "make inoperative" provision of 49 U.S.C. 30122 that permits motor vehicle dealers and motor vehicle repair businesses to install retrofit on-off switches for air bags and to otherwise modify motor vehicles to enable people with disabilities to operate or ride as a passenger in a motor vehicle.

6. Section 595.5 is designated as "Subpart B—Retrofit On-off Switches for Air Bags".

7. The heading of Section 595.5 would be revised to read as follows: "Requirements for Retrofit Air Bag On-off Switches."

8. Subpart C would be added to read as follows:

**Subpart C—Vehicle Modifications To Accommodate People With Disabilities****§ 595.6 Requirements for Vehicle Modifications To Accommodate People With Disabilities.**

(a) Any dealer or motor vehicle repair business that modifies a motor vehicle to enable a person with a disability to operate or ride as a passenger in the motor vehicle is exempted from the "make inoperative" prohibition of 49 U.S.C. 30122 to the extent that those modifications affect the motor vehicle's compliance with the Federal motor vehicle safety standards or portions thereof specified in paragraph (b) of this section. No other Federal motor vehicle safety standards, or portions thereof, are included.

(b)(1) 49 CFR 571.101, except for S5.1 (a), S5.3.1, S5.3.2, and S5.3.5 of that section.

(2) Paragraph S5.1.1.5 of 49 CFR 571.108, in the case of a motor vehicle that is modified to be driven without a steering wheel or for which it is not feasible to retain the turn signal lever installed by the vehicle manufacturer.

(3) Paragraph S4(a) of 49 CFR 571.118, in cases in which the medical condition of the person for whom the vehicle is modified necessitates a remote ignition switch to start the vehicle.

(4) Paragraph S5.3.1 of 49 CFR 571.135, in cases in which the modification requires removal of the original equipment manufacturer foot pedal.

(5) 49 CFR 571.202, in any case in which:

(i) a motor vehicle is modified to be operated by a driver seated in a wheelchair and no other seat is supplied with the vehicle for the driver;

(ii) a motor vehicle is modified to transport a right front passenger seated in a wheelchair and no other right front passenger seat is supplied with the vehicle; or

(iii) the driver's head restraint must be modified to accommodate a driver with a disability.

(6) Paragraph S5.1 of 49 CFR 571.203, in cases in which the modification requires a structural change to, or removal of, the original equipment manufacturer steering shaft.

(7) 49 CFR 571.204, in cases in which the modification requires a structural change to, or removal of, the original equipment manufacturer steering shaft.

(8) 49 CFR 571.207, in cases in which a vehicle is modified to be driven by a person seated in a wheelchair and no other driver's seat is supplied with the vehicle, provided that a wheelchair securement device is installed at the driver's position.

(9) 49 CFR 571.208, provided Type 2 or 2A seat belts meeting the requirements of 571.209 and 571.210 of this chapter are installed.

(10) Paragraph S5 of 49 CFR 571.214, in cases in which the restraint system and/or seat must be changed to accommodate a person with a disability.

Issued on September 22, 1998.

**L. Robert Shelton,**

*Associate Administrator for Safety Performance Standards.*

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