DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA–2002–11652]

RIN 2127–AI47

Federal Motor Vehicle Safety Standards; Hydraulic and Electric Brake Systems

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

ACTION: Notice of proposed rulemaking.

SUMMARY: This document proposes to amend the Federal motor vehicle safety standard on hydraulic and electric brake systems to extend the current minimum performance requirements and associated test procedures for parking brake systems to all vehicles with a gross vehicle weight rating (GVWR) greater than 10,000 pounds (4,536 kilograms). Currently, the only vehicles with a GVWR greater than 10,000 pounds to which the standard's parking brake requirements apply are school buses. The agency tentatively concludes that it is in the interest of safety to require all vehicles with a GVWR over 10,000 pounds to have parking brakes that meet the performance requirements currently applicable to heavy school buses. This document also proposes to change the application language of the standard and grants a petition for rulemaking requesting that the agency update a reference to an industry standard for assessing the performance of parking brakes in moving barrier collision tests so that the most recent version of the standard is referenced.

DATES: Comments must be received on or before December 30, 2002.

ADDRESSES: Comments should refer to the docket number above and be submitted to: Docket Section, National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC 20590. Alternatively, you may submit your comments electronically by logging onto the Docket Management System (DMS) Web site at *http://dms.dot.gov.* Click on ''Help & Information'' or ''Help/Info'' to view instructions for filing your comments electronically. Regardless of how you submit your comments, you should mention the docket number of this document.

You may call the Docket at 202–366–9324. Docket hours are 9:30 a.m. to 4 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: For non-legal issues, Mr. Samuel Daniel, Vehicle Dynamics Division, Office of Vehicle Safety Standards (Telephone: 202–366–4921) (Fax: 202–366–4929).

For legal issues, Mr. Edward Glancy, Office of the Chief Counsel (Telephone: 202–366–2992) (Fax: 202–366–3820).

Both can be reached by mail at the National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

Background

Federal Motor Vehicle Safety Standard No. 105, *Hydraulic and electric brake systems,* sets forth minimum performance requirements for a vehicle's service and parking brake systems. Originally, the standard applied exclusively to passenger cars with hydraulic brake systems.[1] On September 2, 1972, the agency published a final rule extending the standard to multipurpose passenger vehicles, trucks, and buses with hydraulic service brake systems (37 FR 17970). Later, however, the agency withdrew its final rule prior to its effective date because data indicated that the costs of extending the standard to such vehicles at that time outweighed the anticipated benefits (40 FR 18411, Apr. 28, 1975).

On January 16, 1976, the agency extended the standard's service and parking brake requirements to school buses with hydraulic service brake systems (41 FR 2391). Then, on October 18, 1979, the agency again published a proposal to extend the standard to multipurpose passenger vehicles, trucks, and all types of buses with hydraulic service brake systems (44 FR 60113). While the agency proposed extending the standard's service brake requirements to all multipurpose passenger vehicles, trucks, and buses, regardless of the vehicle's GVWR, the agency proposed a more limited extension of the standard's parking brake requirements. The agency's proposal excluded all vehicles with a GVWR greater than 10,000 pounds (4,536 kilograms), other than school buses, from the application of Standard No. 105's parking brake requirements.

Although NHTSA did not propose extending the standard's parking brake requirements to multipurpose passenger vehicles, trucks, and buses (other than school buses) with a GVWR greater than 10,000 pounds at that time, the agency did indicate, in the notice of proposed rulemaking, that it intended to establish additional performance requirements for such vehicles in future rulemaking. The final rule extending Standard No. 105's parking brake requirements to multipurpose passenger vehicles, trucks, and buses with a GVWR of 10,000 pounds or less was published on January 2, 1981 (46 FR 55). Among other things, it required parking brakes on multipurpose passenger vehicles, trucks, and buses with a GVWR of 10,000 pounds or less to hold the vehicle stationary, in both forward and reverse directions, for five minutes on a 30 percent grade. In response to three petitions for reconsideration, the agency decided to change the gradient requirement for parking brakes on these vehicles from 30 percent to 20 percent (46 FR 61887, Dec. 21, 1981).

The Safety Need

The agency believes that parking brakes are an important operational safety feature and tentatively concludes that it is in the interest of safety to require that all vehicles be equipped with parking brakes that comply with Federal requirements. When properly engaged, parking brakes can prevent driverless roll-away events, which can result in collisions, injuries, and fatalities. A review of the agency's Fatality Analysis Reporting System (FARS) database indicates that a total of three to five fatal vehicle roll-away events involving large, hydraulically-braked, non-school bus vehicles occurred between 1991 and 1999. Additionally, during that same period, there were annually about 574 crashes with 82 injured people resulting from roll-away, heavy duty trucks, according to data from the General Estimates System (GES). The GES data are not sufficiently detailed to determine which of the vehicles were hydraulically-braked and which were air-braked, nor can the data be used to determine if the vehicles were parked prior to the roll-away incident. Therefore, these figures likely represent the upper bound of the number of crashes and injuries caused by the rolling away, due to parking brake problems, of parked, heavy duty, heavy trucks and buses equipped with hydraulic brakes.

Many of the driverless roll-away events may be caused by misapplication or non-use of the parking brake. Requiring all heavy vehicles to meet the same parking brake performance requirements would not affect the non-use problem; however, it might increase the likelihood that operators of these vehicles (particularly fleet drivers who must operate a large number of different heavy vehicles) would be better able to

[1] The agency extended Standard No. 105 to vehicles with electric braking systems on September 5, 1997 (62 FR 46907).

engage their vehicle's parking brake fully because the force required to apply the parking brake would be standardized. This might reduce the incidence of parking brake misapplication. In addition, requiring that all heavy vehicles remain stationary with the parking brake fully engaged, in both forward and reverse directions, when parked on a 20 percent grade, should prevent the occurrence of driverless roll-away events due to parking brake failure on most roads in the United States because most U.S. roads have less than a 20 percent grade. Accordingly, requiring all vehicles to which Standard No. 105 applies to have parking brakes meeting the standard's effort limit and gradient requirements should decrease the likelihood of driverless roll-away events and, therefore, lead to modest collision, injury, and fatality reduction benefits.

As explained more fully below, it is likely that most, if not all, heavy vehicles are already manufactured with parking brakes designed to meet Standard No. 105's requirements. Even if this is true, however, we do not know whether those parking brakes would actually perform successfully when tested under the conditions and according to the test procedures outlined in paragraphs S6 and S7 of the standard because manufacturers are currently not required to certify compliance. Requiring manufacturers to certify the performance of the parking brakes on these heavy vehicles would provide added assurance that they actually meet the standard's requirements. It would also guard against the possibility of a decrease in performance of these parking brakes due to future truck chassis design changes.

Paragraph S5.2 of the standard currently requires that all heavy school buses be manufactured with a parking brake of a friction type with a solely mechanical means to retain engagement. Such parking brakes are required to meet the standard's effort limit and gradient requirements, found in paragraphs S5.2(b) and S5.2.3, respectively. Paragraph S5.2(b) requires that the parking brake be capable of being engaged fully with a force applied to the control of not more than 150 pounds for a foot-operated system and not more than 125 pounds for a hand-operated system. Paragraph S5.2.3 requires that the parking brake system be capable of holding the vehicle stationary for five minutes, in both forward and reverse directions, on a 20 percent grade.

NHTSA believes that it is reasonable to assume that operators of heavy school buses and other heavy vehicles are of similar size and strength. In addition, the agency believes heavy school buses and other heavy vehicles are parked in similar environments. Therefore, the agency tentatively concludes that it is appropriate to apply the same effort limit and gradient requirements (and associated test procedures) to these vehicles as are currently applied to heavy school buses. Nevertheless, the agency requests comments on the appropriateness of applying the heavy school bus effort limit and gradient requirements to other heavy vehicles.

Costs and Benefits

During October and November of 2000, several heavy vehicle manufacturers, including General Motors, Ford Motor Company, and International Truck and Bus Corporation, indicated that they are not aware of any vehicles for sale in the United States that are not equipped with a parking brake system. These manufacturers also expressed the belief that parking brake systems for trucks and buses with a GVWR greater than 10,000 pounds are already designed to meet the requirements specified in Standard No. 105 for heavy school buses. With respect to those trucks and buses with a GVWR greater than 10,000 pounds that are built on the same chassis used to build heavy school buses, it is likely that they are equipped with the same parking brake systems found in heavy school buses.

If this is true, then the agency estimates that the cost of requiring all manufacturers of non-school bus vehicles with a GVWR greater than 10,000 pounds to meet the standard's parking brake requirements would be minimal (less than $10 per vehicle) because few, if any, modifications to the already existing parking brakes would be necessary to bring those brakes into compliance with the standard. The cost of conducting the parking brake compliance test should not be significant when compared to the total cost of FMVSS No. 105 compliance testing. The agency believes that most test facilities already have the 20 percent grade slope we are proposing. The proposed test procedure is straightforward and not time consuming. Accordingly, the agency does not anticipate that the cost of certifying compliance to the proposed requirements would be significant. Nevertheless, the agency is interested in receiving estimates from heavy vehicle manufacturers regarding the anticipated costs of conducting the parking brake certification tests as well as the costs of meeting the proposed requirements. Any cost estimates submitted should include a detailed description of the modifications the commenter considers necessary to bring these vehicles' parking brakes into compliance with the standard and/or a detailed estimate of certification test costs.

Given the likelihood that most vehicles with a GVWR over 10,000 pounds are already equipped with a parking brake system that meets the performance requirements of S5.2 and S5.2.3, NHTSA anticipates only marginal safety benefits from formally extending these requirements. Nevertheless, to the extent that any vehicles with a GVWR over 10,000 pounds do not already comply with these requirements, the agency does expect that the extension of the parking brake effort limit and gradient requirements to such vehicles would reduce the number of collisions, injuries, and fatalities due to driverless roll-away events.

As stated above, NHTSA believes that many roll-away events occur when the parking brake is either not used or misapplied. It is also possible that some roll-away events are caused by parking brake failure, which occurs when the parking brake is properly applied but fails to hold the vehicle stationary, due to catastrophic failure, wear-and-tear, or other factors. While the proposed changes are not likely to have any effect on the non-use problem, the standardization of parking brake effort limit requirements for all heavy vehicles may reduce the incidence of misapplication by making it easier for operators of these vehicles to fully engage the parking brake. In addition, requiring all hydraulically-braked heavy vehicles to have parking brakes that meet the gradient requirement should decrease the likelihood of parking brake failure on most U.S. roads. For these reasons, the agency anticipates modest collision, injury, and fatality reduction benefits from extending Standard No. 105's parking brake requirements to all hydraulically-braked vehicles with a GVWR greater than 10,000 pounds.

Additional Rulemaking

The agency is using this rulemaking proposal to address several other Standard No. 105 issues that have been recently brought to our attention. In addition to the substantive changes outlined above, the agency also proposes to change the language in the application paragraph of the standard (S3. *Application*) to reflect the inapplicability of the standard's requirements to hydraulically-braked vehicles with a GVWR of 3,500 kilograms (7,716 pounds) or less. Standard No. 105 used to apply to these

vehicles. However, Standard No. 135 now applies instead.

In addition, on June 10, 2002, the agency received a petition for rulemaking from Mr. James E. Stocke of Ann Arbor, Michigan, requesting that NHTSA update a reference to the Society of Automotive Engineers' (SAE) Recommended Practice for Moving Barrier Collision Tests, J972 (SAE J972). A portion of an older (November 1966) version of SAE J972 is referenced in Standard No. 105, paragraph S7.19, as part of the parking brake test procedures for passenger cars and school buses with a GVWR of 10,000 pounds or less. Although there are no changes to the description of the rigid moving barrier in the more recent (May 2000) version of the document, the ''Barrier'' paragraph has been re-designated as paragraph 4.3 instead of paragraph 3.3, its designation in the November 1966 version of the document.

The agency does not necessarily update references to SAE or other industry standards every time those standards are amended, especially when the standard referenced by the agency is properly identified (and therefore easy to locate) through publication dates or other appropriate information, such as title. However, in this case, Standard No. 105 references a version of the SAE document that is more than 35 years old and may be difficult to locate. Furthermore, the information in the updated reference is substantively identical to the information in the original reference. Accordingly, NHTSA has decided to grant Mr. Stocke's petition and proposes to amend paragraph S7.19 to update the reference to the May 2000 version of SAE J972.

Rulemaking Analyses and Notices

Executive Order 12866 and DOT Regulatory Policies and Procedures

Executive Order 12866, ''Regulatory Planning and Review'' (58 FR 51735, October 4, 1993), provides for making determinations whether a regulatory action is ''significant'' and therefore subject to Office of Management and Budget (OMB) review and to the requirements of the Executive Order. The Order defines a ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations or recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

This notice was not reviewed under Executive Order 12866. Further, this notice was determined not to be significant within the meaning of the DOT Regulatory Policies and Procedures.

In this document, NHTSA is proposing to extend the applicability of already existing parking brake requirements to cover vehicles previously excluded. As explained above, anecdotal evidence from heavy vehicle manufacturers suggests that most, if not all, of these vehicles are already manufactured with parking brakes designed to meet the minimum performance requirements that the agency is proposing to apply. For the remaining vehicles, the agency estimates the cost of complying with these requirements to be less than $10 per vehicle. Considering that the total number of such vehicles that would be subject to the proposed requirements is estimated to be about 212,000 annually, the agency estimates that the total annual effect of this proposed rule would be less than $2,120,000. Accordingly, the agency does not believe that this proposal would have any significant economic effects.

The DOT's regulatory policies and procedures require the preparation of a full regulatory evaluation, unless the agency finds that the impacts of a rulemaking are so minimal as not to warrant the preparation of a full regulatory evaluation. Since anecdotal evidence suggests that most, if not all, of these vehicles are already manufactured with parking brakes designed to meet the minimum performance requirements that the agency is proposing to apply, the agency believes that the impacts of this rulemaking would be minimal. Thus, it has not prepared a full regulatory evaluation.

Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). The Small Business Administration's regulations at 13 CFR Part 121 define a small business, in part, as a business entity ''which operates primarily within the United States.'' (13 CFR § 121.105(a)). No regulatory flexibility analysis is required if the head of an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

NHTSA has considered the effects of this rulemaking action under the Regulatory Flexibility Act. As explained above, anecdotal evidence from heavy vehicle manufacturers suggests that most, if not all, of these vehicles are already manufactured with parking brakes designed to meet the minimum performance requirements that the agency is proposing to apply. For the remaining vehicles, the agency estimates the cost of complying with these requirements to be less than $10 per vehicle. Considering that the total number of such vehicles that would be subject to the proposed requirements is estimated to be about 212,000 vehicles annually, the agency estimates that the total annual effect of this proposed rule would be less than $2,120,000. Accordingly, I hereby certify that it would not have a significant economic impact on a substantial number of small entities.

National Environmental Policy Act

NHTSA has analyzed this rulemaking action for the purposes of the National Environmental Policy Act. The agency has determined that implementation of this action would not have any significant impact on the quality of the human environment.

Executive Order 13132 (Federalism)

Executive Order 13132 requires NHTSA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' The Executive Order defines ''policies that have federalism implications'' to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States,

or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, NHTSA may not issue a regulation with Federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, the agency consults with State and local governments, or the agency consults with State and local officials early in the process of developing the proposed regulation. NHTSA also may not issue a regulation with Federalism implications and that preempts State law unless the agency consults with State and local officials early in the process of developing the proposed regulation.

NHTSA has analyzed this rulemaking action in accordance with the principles and criteria set forth in Executive Order 13132. The agency has determined that this proposed rule would not have sufficient federalism implications to warrant consultation with State and local officials or the preparation of a federalism summary impact statement. The proposal would not have any substantial effects on the States, or on the current Federal-State relationship, or on the current distribution of power and responsibilities among the various local officials.

Civil Justice Reform

This proposed amendment would not have any retroactive effect. Under 49 U.S.C. 30103, whenever a Federal motor vehicle safety standard is in effect, a State may not adopt or maintain a safety standard applicable to the same aspect of performance which is not identical to the Federal standard, except to the extent that the state requirement imposes a higher level of performance and applies only to vehicles procured for the State's use. 49 U.S.C. 30161 sets forth a procedure for judicial review of final rules establishing, amending, or revoking Federal motor vehicle safety standards. That section does not require submission of a petition for reconsideration or other administrative proceedings before parties may file suit in court.

Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995, a person is not required to respond to a collection of information by a Federal agency unless the collection displays a valid Office of Management and Budget (OMB) control number. This proposed rule would not require any collections of information as defined by the OMB in 5 CFR Part 1320.

National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, section 12(d) (15 U.S.C. 272) directs NHTSA to use voluntary consensus standards in its regulatory activities unless doing so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies, such as the Society of Automotive Engineers (SAE). The NTTAA directs the agency to provide Congress, through the OMB, explanations when we decide not to use available and applicable voluntary consensus standards.

There are no voluntary consensus standards available at this time. However, NHTSA will consider any such standards if they become available.

Unfunded Mandates Reform Act

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) requires Federal 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 in any one year (adjusted for inflation with base year of 1995). Before promulgating a rule for which a written statement is needed, section 205 of the UMRA generally requires NHTSA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows NHTSA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the agency publishes with the final rule an explanation why that alternative was not adopted.

This proposed rule would not result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector of more than $100 million annually. The estimated cost of complying with the proposed requirements is less than $10 per vehicle. Considering that the total number of vehicles to which these requirements would apply is estimated to be about 212,000 vehicles annually, the estimated aggregate cost of this proposed rule would be less than $2,120,000. Accordingly, the agency has not prepared an Unfunded Mandates assessment.

Plain Language

Executive Order 12866 requires each agency to write all rules in plain language. Application of the principles of plain language includes consideration of the following questions:

—Have we organized the material to suit the public's needs?
—Are the requirements in the rule clearly stated?
—Does the rule contain technical language or jargon that is not clear?
—Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand?
—Would more (but shorter) sections be better?
—Could we improve clarity by adding tables, lists, or diagrams?
—What else could we do to make this rulemaking easier to understand?

If you have any responses to these questions, please include them in your comments on this NPRM.

Regulation Identifier Number (RIN)

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. You may use the RIN contained in the heading at the beginning of this document to find this action in the Unified Agenda.

Comments

How Do I Prepare and Submit Comments?

Your comments must be written and in English. To ensure that your comments are correctly filed in the Docket, please include the docket number of this document in your comments.

Your comments must not be more than 15 pages long. (49 CFR 553.21). We established this limit to encourage you to write your primary comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit on the length of the attachments.

Please submit two copies of your comments, including the attachments, to Docket Management at the address given above under **ADDRESSES.**

You may also submit your comments to the docket electronically by logging onto the Dockets Management System website at *http://dms.dot.gov.* Click on ''Help & Information'' or ''Help/Info'' to obtain instructions for filing the document electronically.

How Can I Be Sure That My Comments Were Received?

If you wish Docket Management to notify you upon its receipt of your comments, enclose a self-addressed, stamped postcard in the envelope containing your comments. Upon receiving your comments, Docket Management will return the postcard by mail.

How Do I Submit Confidential Business Information?

If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, NHTSA, at the address given above under **FOR FURTHER INFORMATION CONTACT**. In addition, you should submit two copies, from which you have deleted the claimed confidential business information, to Docket Management at the address given above under **ADDRESSES.** When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in our confidential business information regulation. (49 CFR Part 512.)

Will the Agency Consider Late Comments?

We will consider all comments that Docket Management receives before the close of business on the comment closing date indicated above under **DATES**. To the extent possible, we will also consider comments that Docket Management receives after that date. If Docket Management receives a comment too late for us to consider it in developing a final rule (assuming that one is issued), we will consider that comment as an informal suggestion for future rulemaking action.

How Can I Read the Comments Submitted by Other People?

You may read the comments received by Docket Management at the address given above under **ADDRESSES.** The hours of the Docket are indicated above in the same location.

You may also see the comments on the Internet. To read the comments on the Internet, take the following steps:

1. Go to the Docket Management System (DMS) Web page of the Department of Transportation (*http://dms.dot.gov/*).
2. On that page, click on ''search.''
3. On the next page (*http://dms.dot.gov/search/*), type in the four-digit docket number shown at the beginning of this document. Example: If the docket number were ''NHTSA–1998–1234'', you would type ''1234''. After typing the docket number, click on ''search''.
4. On the next page, which contains docket summary information for the docket you selected, click on the desired comments. You may download the comments. Although the comments are imaged documents, instead of word processing documents, the ''pdf'' versions of the documents are word searchable.

Please note that even after the comment closing date, we will continue to file relevant information in the Docket as it becomes available. Further, some people may submit late comments. Accordingly, we recommend that you periodically check the Docket for new material.

List of Subjects in 49 CFR Part 571

Imports, Motor vehicle safety, Motor vehicles, Rubber and rubber products, and Tires.

In consideration of the foregoing, NHTSA proposes to amend 49 CFR part 571 as follows:

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

1. The authority citation for part 571 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30166, and 30177; delegation of authority at 49 CFR 1.50.

2. Section 571.105 is amended by revising S3, S5.2, S5.2.3, S7.7.1, paragraph (b) of S7.7.1.3, and S7.19 as follows:

§ 571.105 Standard No. 105; Hydraulic and electric brake systems.

* * * * *

S3. *Application.* This standard applies to vehicles with a GVWR greater than 3,500 kilograms (7,716 pounds) that are equipped with hydraulic or electric brake systems.

* * * * *

S5.2 *Parking brake system.* Each vehicle shall be manufactured with a parking brake system of a friction type with a solely mechanical means to retain engagement, which shall under the conditions of S6, when tested according to the procedures specified in S7, meet the requirements specified in S5.2.1, S5.2.2, or S5.2.3 as appropriate, with the system engaged—

(a) In the case of a vehicle with a GVWR of 10,000 pounds or less, with a force applied to the control not to exceed 125 pounds for a foot-operated system and 90 pounds for a hand-operated system; and

(b) In the case of a vehicle with a GVWR greater than 10,000 pounds, with a force applied to the control not to exceed 150 pounds for a foot-operated system and 125 pounds for a hand-operated system.

* * * * *

S5.2.3 (a) The parking brake system on a multipurpose passenger vehicle, truck and bus (other than a school bus) with a GVWR of 10,000 pounds or less shall be capable of holding the vehicle stationary for 5 minutes, in both forward and reverse directions, on a 20 percent grade.

(b) The parking brake system on a vehicle with a GVWR greater than 10,000 pounds shall be capable of holding the vehicle stationary for 5 minutes, in both forward and reverse directions, on a 20 percent grade.

* * * * *

S7.7.1 *Test procedure for requirements of S5.2.1 and S5.2.3.*

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S7.7.1.3

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(b) In the case of a vehicle with a GVWR greater than 10,000 pounds not more than 150 pounds for a foot-operated system, and not more than 125 pounds for a hand-operated system.

* * * * *

S7.19 *Moving barrier test.* (Only for vehicles that have been tested according to S7.7.2.) Load the vehicle to GVWR, release parking brake, and place the transmission selector control to engage the parking mechanism. With a moving barrier as described in paragraph 4.3 of SAE recommended practice J972 ''Moving Barrier Collision Tests,'' May 2000, impact the vehicle from the front at 2½ mph. Keep the longitudinal axis of the barrier parallel with the longitudinal axis of the vehicle. Repeat the test, impacting the vehicle from the rear.

Note: The vehicle used for this test need not be the same vehicle that has been used for the braking tests.

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Issued: October 23, 2002.

Stephen R. Kratzke,

Associate Administrator for Rulemaking.

[FR Doc. 02–27526 Filed 10–29–02; 8:45 am]

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