DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA-2019-0009]

RIN 2127-AM10

Federal Motor Vehicle Safety Standards;

Electric-Powered Vehicles: Electrolyte Spillage and Electrical Shock Protection

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes to amend Federal Motor Vehicle Safety Standard (FMVSS) No. 305, “Electric-powered vehicles: electrolyte spillage and electrical shock protection,” to clarify the direct contact protection requirements that apply to high voltage connectors, and to explicitly permit the use of high voltage connectors that cannot be separated without the use of tools. The proposed changes to these requirements would harmonize FMVSS No. 305 with Global Technical Regulations (GTRs) No. 13 and No. 20, which explicitly permit such connectors. In addition, it would make three minor technical corrections to the standard.

DATES: Comments must be received on or before [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments identified by the docket number in the heading of this document or by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments on the electronic docket site by clicking on “Help” or “FAQ.”

• Hand Delivery: U.S. Department of Transportation, 1200 New Jersey Avenue S.E., West Building, Ground Floor, Room W12-140, Washington, D.C. 20590 between 9 a.m. and 5 p.m. Eastern Time, Monday through Friday, except Federal Holidays.

• Fax: 202-493-2251.

Regardless of how you submit comments, you must include the docket number identified in the heading of this notice.

You may call the Docket Management Facility at 202-366-9826.

Instructions: For detailed instructions on submitting comments and additional information on the rulemaking process, see the Public Participation heading of the SUPPLEMENTARY INFORMATION section of this document. Note that all comments received will be posted without change to www.regulations.gov, including any personal information provided.

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its decision-making process. DOT posts these comments, without edit, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice (DOT/ALL-14 FDMS), which can be reviewed at www.transportation.gov/privacy. In order to facilitate comment tracking and response, we encourage commenters to provide their name, or the name of their organization; however, submission of names is completely optional. Whether or not commenters identify themselves, all timely comments will be fully considered.
This document proposes to amend FMVSS No. 305, paragraph S5.4.1.5, to clarify that the three compliance options listed in S5.4.1.5(a), (b) and (c) only pertain to connectors that can be separated without the use of a tool. This proposal would make clear that S5.4.1.5(a), (b) and (c) do not apply to high voltage connectors that require the use of a tool to separate from their
mating component and that meet S5.4.1.4’s IPXXD or IPXXB requirements\(^1\) when the connector is connected to its mating component. NHTSA believes that connectors that require the use of a tool to separate from their mating component provide a level of direct contact protection that is equivalent to that provided by connectors already allowed under the standard. NHTSA believes that this proposed amendment will provide additional design flexibility to manufacturers of electric and fuel cell vehicles, thus facilitating the manufacture of such vehicles.

The changes proposed in this document would amend regulatory requirements that were established in the agency’s September 27, 2017 final rule (82 FR 44945), which added several new requirements to improve electric vehicle safety. The final rule also sought to harmonize FMVSS No. 305 with the electrical safety requirements of GTR No. 13, “Hydrogen and fuel cell vehicles,” and a then-pending GTR No. 20, “Electric vehicle safety.”\(^2\) (NHTSA voted in favor of establishing GTR No. 20 in March 2018.) This NPRM proposes to better harmonize FMVSS No. 305 with GTRs No. 13 and No. 20, which allow for the use of connectors that require the use of a tool to separate. NHTSA seeks to issue a final rule based on today’s NPRM as soon as possible, in light of the September 27, 2017 final rule’s compliance date of September 27, 2018.

II. Background

FMVSS No. 305 establishes requirements to reduce deaths and injuries during and after a crash that occur because of electrolyte spillage from electric energy storage devices, intrusion of electric energy storage/conversion devices into the occupant compartment, and electric shock.

\(^1\) Protection degree IPXXD is protection from contact with high voltage live parts. It is tested by probing electrical protection barriers with the test wire probe, IPXXD, shown in Figure 7a of FMVSS No. 305. Protection degree IPXXB is protection from contact with high voltage live parts. It is tested by probing electrical protection barriers with the jointed test finger probe, IPXXB, shown in Figure 7b of FMVSS No. 305.

\(^2\) GTRs are model standards that are developed through collaboration between contracting parties to the 1998 Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles (the “1998 Agreement”). As a contracting party to the 1998 Agreement, the United States, through NHTSA, worked closely with experts from other contracting parties to develop GTR No. 13 and GTR No. 20.
On September 27, 2017, NHTSA published a final rule amending FMVSS No. 305 by, among other things, adopting several electrical safety requirements found in GTR No. 13 (and later, GTR No. 20). 82 FR 44945. The GTR provisions adopted in the final rule included general requirements for protecting humans against direct contact with high-voltage live parts (FMVSS No. 305, S5.4.1.4), as well as specific direct contact protection requirements for high-voltage connectors (FMVSS No. 305, S5.4.1.5).³ (The reason for specialized direct contact protection requirements for high voltage connectors is that, unlike other high voltage equipment, connectors are designed to separate from a mating component, which could potentially expose high voltage conductive parts to human contact.)

S5.4.1.4 requires that all high voltage sources, including high-voltage connectors, meet protection degree IPXXD or IPXXB (as appropriate) during normal vehicle operation. In addition, S5.4.1.5 requires that high voltage connectors must meet at least one of the following three compliance options to provide protection when separated: (a) the connector meets protection degree IPXXD/IPXXB when separated from its mating component, if the connector can be separated without the use of tools; (b) the voltage of the live parts becomes less than or equal to 60 volts of direct current (VDC) or 30 volts of alternating current expressed using the root mean square value (VAC) within one second after the connector is separated from its mating component; or (c) the connector is provided with a locking mechanism⁴ and there are other components that must be removed in order to separate the connector from its mating component and these other components cannot be removed without the use of tools.

³ FMVSS No. 305 defines a “connector” as “a device providing a mechanical connection and disconnection of high voltage electrical conductors to a suitable mating component, including its housing.”
⁴ A locking mechanism requires at least two distinct actions to separate the connector from its mating component and is intended to prevent inadvertent disconnection of the connector from its mating component.
NHTSA had intended for these provisions to harmonize the direct contact requirements for high voltage connectors in FMVSS No. 305 with those in GTRs No. 13 and No. 20 (which explicitly permit the use of connectors that require the use of a tool to separate). However, following its issuance of the final rule, the agency received petitions for reconsideration from the Alliance of Automobile Manufacturers and Global Automakers, which argued in part that the regulatory text adopted in the final rule did not appear to permit use of connectors that require the use of a tool to separate. For this reason, the petitions requested that NHTSA amend S5.4.1.5 to provide a compliance option for high voltage connectors that meet IPXXD/IPXXB protection degree when connected, and that require the use of a tool to separate.

NHTSA agrees with the petitioners that, although the agency had intended to permit connectors that require the use of a tool to separate, that intent is not clear in the current regulatory text. In addition, NHTSA believes that the current wording of S5.4.1.5 does not make clear whether the provision would permit a connector that requires the use of a tool to separate when the connector does not have the “other components” mentioned in S5.4.1.5(c). The absence of a compliance option that allows high voltage connectors that require the use of a tool to separate burdens vehicle manufacturers because it is a common method of providing direct contact protection for connectors. NHTSA proposes to amend S5.4.1.5 to make clear that connectors that require the use of a tool to separate are permitted.

The agency notes that, although these issues are within the scope of the September 27, 2017 final rule and could have been addressed in a response to the petitions for reconsideration,

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5 See September 27, 2017 final rule (82 FR at 44953) (Stating that the direct contact requirements for connectors “are harmonized with GTR No. 13, ECE R100, and the draft EVS-GTR for electric vehicles.”)
the agency would like to seek public comment on its proposed changes to the regulatory text. NHTSA believes public comments would be beneficial in ensuring that the changes proposed achieve their intended purpose of harmonizing FMVSS No. 305 with GTRs No. 13 and No. 20.

III. Proposal

NHTSA proposes to amend S5.4.1.5 to clarify that connectors are only required to meet one of the three listed compliance options if the connector can be separated without the use of a tool. NHTSA believes this change will harmonize that provision in FMVSS No. 305 with GTRs No. 13 and No. 20, as the agency had intended in its September 27, 2017 final rule. Moreover, NHTSA believes that this change will provide additional design flexibility to manufacturers of electric vehicles and fuel cell vehicles without compromising safety.

This change will harmonize FMVSS No. 305 with GTRs No. 13 and No. 20 because it will clarify that high voltage connectors that require the use of a tool to separate meet requirements for direct contact protection. As noted above, NHTSA had intended to provide the same level of direct contact protection as GTRs No. 13 and No. 20, which explicitly permit such connectors. Because FMVSS No. 305 currently does not appear to permit high voltage connectors that require the use of a tool to separate, adopting the proposed changes would bring FMVSS No. 305 in line with GTRs No. 13 and No. 20.

The proposed change will not affect electric vehicle safety because a connector that requires the use of a tool to separate will not inadvertently separate due to vehicle jostling or human error. Thus, it eliminates the possibility that a person is inadvertently exposed to a risk of electric shock. NHTSA notes that connectors requiring the use of a tool to separate provide essentially the same level of electrical shock protection as connectors that are currently permitted under provision (c) of S5.4.1.5. That provision currently permits connectors that cannot be
accessed without removing surrounding components that themselves require the use of a tool to remove. Connectors under S5.4.1.5(c) provide the same level of protection as connectors that require the use of a tool to separate because both cannot be separated without a person intentionally using a tool to accomplish connector separation, which effectively eliminates the risk of accidental shock. Thus, NHTSA believes that requiring a connector that cannot be separated without the use of a tool to also meet one of the three existing compliance options in S5.4.1.5 is unwarranted.

IV. Technical Corrections

NHTSA is also proposing to make several technical corrections to the language of FMVSS No. 305, which are described below.

Definition of “high voltage live part”

NHTSA is proposing to add a definition for the term “high voltage live part” to the definitions section of FMVSS No. 305. The term would be defined as “a live part of a high voltage source.” NHTSA had intended to add this definition as part of the September 27, 2017 final rule, as indicated by the agency’s statement that it will “adopt terms such as ‘high voltage live parts’...in place of proposed terms that were less clear.” 82 FR at 44948. In addition, the agency stated in Table 1 of the final rule that adding the term “high voltage live parts” to S4 will clarify the requirements of the final rule, such as the applicability of IPXXD protection requirements. The agency will add this missing definition as a technical correction.

Cross-reference

NHTSA is proposing to amend the cross-reference to the electrical isolation monitoring system requirement in S8 so that it is consistent with the reorganization of the FMVSS No. 305 that was done as part of the September 27, 2017 final rule. The final rule redesignated the
electrical isolation monitoring system requirement from “S5.4” to “S5.4.4,” but did not make a conforming change to S8, which still refers to “S5.4.” The agency will change the S8 cross-reference to “S5.4.4” as a technical correction.

Corrected term

NHTSA is proposing to correct the use of incorrect terminology in the description of the requirements for a resistance tester in S9.2(a). Currently, that provision states that “resistance is measured using a resistance tester that can measure current levels of at least 0.2 Amperes.” (Emphasis added.) The term “measure” should be “supply.”7 Accordingly, the agency will replace “measure” with “supply” in S9.2(a) as a technical correction.

V. Effective Date and Comment Period

NHTSA proposes that the final rule that follows this NPRM will have an immediate effective date upon publication of the final rule in the FEDERAL REGISTER.

The Safety Act states that an amendment to a safety standard may not take effect earlier than 180 days after the standard is prescribed, or later than one year after the standard is prescribed unless, for good cause shown, a different effective date would be in the public interest. 49 U.S.C. 30111(d). NHTSA has tentatively concluded that good cause exists for this rule to become effective immediately, because the rule would not impose new substantive requirements that would burden vehicle manufacturers, and in fact would relieve an existing restriction. Similarly, the Administrative Procedure Act (APA) states that a rule cannot be made effective less than 30 days after publication, unless the rule falls under one of three enumerated exceptions. One of these exceptions is for a rule that “grants or recognizes an exemption or relieves a restriction.” 5 U.S.C. 553(d)(1). This rule would fall under this exception because it

7 A resistance tester does not “measure” current in a circuit; it supplies current to a circuit which allows the tester to measure that circuit’s level of electrical resistance.
would relieve the existing restriction that prohibits the use of high voltage connectors that cannot be separated without the use of tools. NHTSA seeks comment on its tentative conclusion that good cause exists to justify an immediate effective date for a final rule based on this proposal.

DOT Order 2100.5 requires that NHTSA provide a public comment period of at least 45 days for non-significant regulations, but may provide a shorter comment period if the proposed regulation is accompanied by a brief statement of reasons. NHTSA is providing a shortened 15-day comment period principally for two reasons. First, the September 27, 2017 final rule’s effective date was September 27, 2018. The proposed amendments provide flexibility to manufacturers in meeting the final rule’s requirements, so NHTSA would like to issue a final rule based on this NPRM as soon as possible. Second, the proposed changes are merely corrective and clarifying in nature, and a review of them by the public can be done quickly.

VI. Rulemaking Analyses and Notices

Executive Order 12866, Executive Order 13563, and DOT Regulatory Policies and Procedures

We have considered the potential impact of this proposed rule under Executive Order (E.O.) 12866, E.O. 13563, and the Department of Transportation’s regulatory policies and procedures and have determined that today’s proposed rule is nonsignificant. This rulemaking document was not reviewed by the Office of Management and Budget (OMB) under E.O. 12866. It is not considered to be significant under E.O. 12866 or the Department of Transportation’s Regulatory Policies and Procedures. The amendments proposed by this NPRM mostly clarify or correct text adopted by a September 27, 2017 final rule and will have no significant effect on the national economy. This NPRM would clarify the direct contact protection requirements that apply to high voltage connectors, and to explicitly permit the use of high voltage connectors that cannot be separated without the use of tools.
As noted above, NHTSA is providing a 15-day comment period for two principal reasons. First, the September 27, 2017 final rule’s effective date is September 27, 2018. The proposed amendments provide flexibility to manufacturers in meeting the final rule’s requirements, so NHTSA would like to issue a final rule based on this NPRM as soon as possible. Second, the proposed changes are merely corrective and clarifying in nature, and a review of them by the public can be done quickly.

Executive Order 13771

This proposed rule is E.O. 13771 titled “Reducing Regulation and Controlling Regulatory Costs,” directs that, unless prohibited by law, whenever an executive department or agency publicly proposes for notice and comment or otherwise promulgates a new regulation, it shall identify at least two existing regulations to be repealed. In addition, any new incremental costs associated with new regulations shall, to the extent permitted by law, be offset by the elimination of existing costs. Only those rules deemed significant under section 3(f) of E.O. 12866, “Regulatory Planning and Review,” are subject to these requirements. This proposed rule is not expected to be an E.O. 13771 regulatory action because this proposed rule is not significant under E.O. 12866.

Executive Order 13609: Promoting International Regulatory Cooperation

The policy statement in section 1 of E.O. 13609 provides that unnecessary differences in regulatory approaches between U.S. agencies and their foreign counterparts can negatively affect the international competitiveness of U.S. businesses. Accordingly, U.S. agencies should, where possible, engage with these foreign counterparts to identify regulatory approaches that are at least as protective as those that are or would be adopted in the absence of such cooperation.
This rulemaking harmonizes FMVSS No. 305 with provisions that are in GTRs No. 13 and No. 20. Specifically, the primary clarification proposed by this document—that the use of connectors that cannot be separated without the use of tools is permissible under FMVSS No. 305—will bring FMVSS No. 305 into alignment with GTRs No. 13 and No. 20 requirements relating to high voltage connectors, and so will further the goals of E.O. 13609.

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 proposed rulemaking 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)(1)). No regulatory flexibility analysis is required if the head of an agency certifies the proposal will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a proposal will not have a significant economic impact on a substantial number of small entities.

I hereby certify that this proposed rule would not have a significant economic impact on a substantial number of small entities. The amendments proposed by this NPRM mostly clarify or correct text adopted by a September 27, 2017 final rule. This proposed rule would make clear that connectors that cannot be separated without the use of a tool are permitted under FMVSS No. 305 without having to have present "other components" needing a tool to separate.
This action would not impose any additional restrictions that would affect small entities, and in fact, would give greater design flexibility to manufacturers of electric vehicles and HFCVs.

Executive Order 13132 (Federalism)

NHTSA has examined today’s proposed rule pursuant to E.O. 13132 (64 FR 43255, August 10, 1999) and concluded that no additional consultation with States, local governments or their representatives is mandated beyond the rulemaking process. The agency has concluded that the rulemaking would not have sufficient federalism implications to warrant consultation with State and local officials or the preparation of a federalism summary impact statement. Today’s proposed rule would not 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.”

NHTSA rules can have preemptive effect in two ways. First, the National Traffic and Motor Vehicle Safety Act contains an express preemption provision stating that, if NHTSA has established a standard for an aspect motor vehicle or motor vehicle equipment performance a State may only prescribe or continue in effect a standard for that same aspect of performance if the State standard is identical to the Federal standard. 49 U.S.C. 30103(b)(1). It is this statutory command by Congress that preempts any non-identical State legislative and administrative law addressing the same aspect of performance.

The express preemption provision described above is subject to a savings clause under which “[c]ompliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law.” 49 U.S.C. 30103(e). Pursuant to this provision, State common law tort causes of action against motor vehicle manufacturers that might
otherwise be preempted by the express preemption provision are generally preserved. However, the Supreme Court has recognized the possibility, in some instances, of implied preemption of State common law tort causes of action by virtue of NHTSA’s rules—even if not expressly preempted.

This second way that NHTSA rules can preempt is dependent upon the existence of an actual conflict between an FMVSS and the higher standard that would effectively be imposed on motor vehicle manufacturers if someone obtained a State common law tort judgment against the manufacturer—notwithstanding the manufacturer’s compliance with the NHTSA standard. Because most NHTSA standards established by an FMVSS are minimum standards, a State common law tort cause of action that seeks to impose a higher standard on motor vehicle manufacturers will generally not be preempted. However, if and when such a conflict does exist—for example, when the standard at issue is both a minimum and a maximum standard—the State common law tort cause of action is impliedly preempted. See Geier v. American Honda Motor Co., 529 U.S. 861 (2000).

Pursuant to E.O. 13132, NHTSA has considered whether this proposed rule could or should preempt State common law causes of action. The agency’s ability to announce its conclusion regarding the preemptive effect of one of its rules reduces the likelihood that preemption will be an issue in any subsequent tort litigation.

To this end, the agency has examined the nature (e.g., the language and structure of the regulatory text) and objectives of today’s proposed rule and finds that this proposed rule, like many NHTSA rules, prescribes only a minimum safety standard. Accordingly, NHTSA does not intend that this proposed rule preempt state tort law that would effectively impose a higher standard on motor vehicle manufacturers than that established by today’s proposal.
Establishment of a higher standard by means of State tort law would not conflict with the minimum standard proposed in this document. Without any conflict, there could not be any implied preemption of a State common law tort cause of action.

Executive Order 12988 (Civil Justice Reform)

When promulgating a regulation, E.O. 12988 specifically requires that the agency must make every reasonable effort to ensure that the regulation, as appropriate: (1) specifies in clear language the preemptive effect; (2) specifies in clear language the effect on existing Federal law or regulation, including all provisions repealed, circumscribed, displaced, impaired, or modified; (3) provides a clear legal standard for affected conduct rather than a general standard, while promoting simplification and burden reduction; (4) specifies in clear language the retroactive effect; (5) specifies whether administrative proceedings are to be required before parties may file suit in court; (6) explicitly or implicitly defines key terms; and (7) addresses other important issues affecting clarity and general draftsmanship of regulations.

Pursuant to this Order, NHTSA notes as follows. The preemptive effect of this proposed rule is discussed above in connection with E.O. 13132. NHTSA notes further that there is no requirement that individuals submit a petition for reconsideration or pursue other administrative proceeding before they may file suit in court.

Executive Order 13045 (Protection of Children from Environmental Health and Safety Risks)

E.O. 13045, “Protection of Children from Environmental Health and Safety Risks,” (62 FR 19885; April 23, 1997) applies to any proposed or final rule that: (1) is determined to be “economically significant,” as defined in E.O. 12866, and (2) concerns an environmental health or safety risk that NHTSA has reason to believe may have a disproportionate effect on children. If a rule meets both criteria, the agency must evaluate the environmental health or safety effects
of the rule on children, and explain why the rule is preferable to other potentially effective and reasonably feasible alternatives considered by the agency.

This proposed rule is not subject to E.O. 13045 because it is not economically significant.  

National Technology Transfer and Advancement Act  

Under the National Technology Transfer and Advancement Act of 1995 (NTTAA) (Public Law 104-113), “all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments.” 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 us to provide Congress, through OMB, explanations when we decide not to use available and applicable voluntary consensus standards.  

Pursuant to the above requirements, the agency conducted a review of voluntary consensus standards to determine if any were applicable to this proposed rule. NHTSA searched for but did not find voluntary consensus standards directly applicable to the amendments proposed in this NPRM.  

However, consistent with the NTTAA, this proposal is aligned with regulations developed globally on electric vehicle safety, namely GTR No. 13 and GTR No. 20. The GTRs permit the use of high voltage connectors that cannot be separated without the use of tools. We

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8 The NTTAA seeks to support efforts by the Federal government to ensure that agencies work with their regulatory counterparts in other countries to address common safety issues. Circular No. A-119, “Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities,” January 27, 2016, p. 15.
believe that the proposed amendment to FMVSS No. 305 would promote harmonization of our countries’ regulatory approaches on electric vehicles and HFCVs.

**Unfunded Mandates Reform Act**

The Unfunded Mandates Reform Act of 1995 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 (adjusted for inflation with base year of 1995). We note that as this proposed rule only makes minor adjustments and clarifications to FMVSS No. 305. Thus, it would not result in expenditures by any of the aforementioned entities of over $100 million annually.

**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.

**Paperwork Reduction Act**

Under the Paperwork Reduction Act of 1995 (PRA), a person is not required to respond to a collection of information by a Federal agency unless the collection displays a valid OMB control number. This proposed rule imposes no new reporting requirements on manufacturers.

**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.

VII. Public Participation

How do I prepare and submit comments?

- To ensure that your comments are correctly filed in the Docket, please include the Docket Number found in the heading of this document in your comments.
- Your comments must not be more than 15 pages long. NHTSA 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, and there is no limit on the length of the attachments.
- If you are submitting comments electronically as a PDF (Adobe) file, NHTSA asks that the documents be submitted using the Optical Character Recognition (OCR) process, thus allowing NHTSA to search and copy certain portions of your submissions.
- Please note that pursuant to the Data Quality Act, in order for substantive data to be relied on and used by NHTSA, it must meet the information quality standards set forth in the OMB and DOT Data Quality Act guidelines. Accordingly, NHTSA encourages you to consult the guidelines in preparing your comments. DOT's guidelines may be accessed at [https://www.transportation.gov/regulations/dot-information-dissemination-quality-guidelines](https://www.transportation.gov/regulations/dot-information-dissemination-quality-guidelines).

Tips for Preparing Your Comments:

When submitting comments, please remember to:

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9 49 CFR 553.21
• Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).

• Explain why you agree or disagree, suggest alternatives, and substitute language for your requested changes.

• Describe any assumptions you make and provide any technical information and/or data that you used.

• If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

• Provide specific examples to illustrate your concerns, and suggest alternatives.

• Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

• To ensure that your comments are considered by the agency, make sure to submit them by the comment period deadline identified in the DATES section above.

For additional guidance on submitting effective comments, visit:
 https://www.regulations.gov/docs/Tips_For_Submitting_Effective_Comments.pdf.

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 a copy, from which
you have deleted the claimed confidential business information, to the docket 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 received before the close of business on the comment closing date indicated above under DATES. To the extent possible, we will also consider comments that the docket receives after that date. If the docket receives a comment too late for us to consider 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 the docket 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, go to http://www.regulations.gov. Follow the online instructions for accessing the dockets.

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. You can arrange with the docket to be notified when others file comments in the docket. See www.regulations.gov for more information.

List of Subjects in 49 CFR Part 571

Imports, Motor vehicles, Motor vehicle safety.
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:


2. Amend § 571.305 by:

a. Adding, in alphabetical order, a definition for “High voltage live part” to paragraph S4;

b. Revising paragraph S5.4.1.5;

c. Revising the introductory text of paragraph S8; and

d. Revising paragraph S9.2(a).

The addition and revisions read as follows:

§571.305 Standard No. 305; Electric-powered vehicles; electrolyte spillage and electrical shock protection.

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S4. Definitions.

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High voltage live part means a live part of a high voltage source.

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S5.4.1.5 Connectors. All connectors shall provide direct contact protection by:

(a) Meeting the requirements specified in S5.4.1.4 when the connector is connected to its corresponding mating component; and,
(b) If a connector can be separated from its mating component without the use of a tool, meeting at least one of the following conditions (1), (2), or (3):

(1) The connector meets the requirements of S5.4.1.4 when separated from its mating component;

(2) The voltage of the live parts becomes less than or equal to 60 VDC or 30 VAC within one second after the connector is separated from its mating component; or,

(3) The connector requires at least two distinct actions to separate from its mating component and there are other components that must be removed in order to separate the connector from its mating component and these other components cannot be removed without the use of tools.

S8. Test procedure for on-board electrical isolation monitoring system. Prior to any impact test, the requirements of S5.4.4 for the on-board electrical isolation monitoring system shall be tested using the following procedure.

(a) Test method using a resistance tester. The resistance tester is connected to the measuring points (the electrical chassis and any exposed conductive part of electrical protection barriers or any two simultaneously reachable exposed conductive parts of electrical protection barriers that are less than 2.5 meters from each other), and the resistance is measured using a resistance tester that can supply current levels of at least 0.2 Amperes with a resolution of 0.01 ohms or less. The resistance between two exposed conductive parts of electrical protection
barriers that are less than 2.5 meters from each other may be calculated using the separately measured resistances of the relevant parts of the electric path.

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Issued in Washington, D.C., under authority delegated in 49 CFR 1.95 and 501.8.

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Raymond R. Posten
Associate Administrator for Rulemaking

Billing Code 4910-59-P

[FR Doc. 2019-03181 Filed: 2/27/2019 8:45 am; Publication Date: 2/28/2019]