

 142, No. 37 — September 13, 2008

Regulations Amending the Motor Vehicle Safety Regulations (Head Restraints)

Statutory authority

Motor Vehicle Safety Act

Sponsoring department

Department of Transport

REGULATORY IMPACT ANALYSIS STATEMENT

(This statement is not part of the Regulations.)

Issue and objectives

This proposed amendment to standard 202 (Head Restraints) of Schedule IV of the *Motor Vehicle Safety Regulations* (MVSR), hereafter referred to as the Canadian safety standard, would update the requirements for head restraints of passenger cars and three-wheeled vehicles and every truck, bus or multi-purpose passenger vehicle with a gross vehicle weight rating of 4 536 kg or less. This proposed amendment would provide vehicle occupants improved protection from neck injuries in the event of a collision. In addition to providing improved occupant protection, this regulatory update is necessary to minimize the burden to manufacturers caused by misaligned North American regulations.

This proposed amendment is a first step towards the expected international harmonization of requirements for head restraints. This proposed amendment would harmonize the requirements in the Canadian safety standard with the corresponding safety standard 202, Title 49, Part 571 of the United States *Code of Federal Regulations*. Work is currently well underway to develop similar international safety requirements for head restraints and when this work is completed it is expected that the world regulatory requirements for

head restraints would be aligned.

Description and rationale

The current Canadian safety standard, enacted in 1978, requires that the front outboard seating positions of an applicable vehicle be equipped with head restraints meeting the specified criteria of either a quasi-static test or a dynamic simulated crash test. The quasi-static test consists of a series of measurements and tests done directly to the head restraint while the dynamic test involves a full vehicle test simulating a crash that measures the impact between the head of a test dummy and the head restraint. Four minor amendments have been made to clarify individual sections since its enactment. To date, these requirements have been aligned with the corresponding requirements of the United States. As such, vehicles that were designed to meet the requirements of the United States have also complied with the requirements of the existing Canadian safety standard.

On December 14, 2004, the United States published a final rule modifying the requirements of safety standard 202 (69CFR74848) of the United States. These requirements were further amended on May 4, 2007. The requirements of the final rule, which have been voluntary since publication, are to be phased in beginning September 1, 2009, through September 1, 2011, when 100% of specified vehicles manufactured would need to meet the requirements.

As was the case with the previous regulation of the United States, the amended regulation maintains both quasi-static and dynamic testing options, with the new requirements being significantly more stringent than the previous requirements of the United States.

The new quasi-static requirement increases the minimum height of outboard head restraints from 700 to 750 mm, changes the measurement reference point and provides more detailed instructions for height measurement. In addition, it introduces a maximum backset requirement, a maximum gap between the head restraint and seat, as well as testing for height retention and energy absorption. The requirements for strength testing and backset retention are also more detailed and stringent than the previous safety standard. The new dynamic test requirement introduces new testing protocols, including updated male test dummies.

Under the final rule, manufacturers continue to have the option to equip vehicles with or without head restraints in the rear outboard positions. However, those vehicles that are equipped with head restraints in the rear outboard positions must meet the requirements specified in the new regulation of the United States. Finally, there are new requirements for folding or retracting rear head restraints for non-use positions, such as for folding seats.

With the new testing protocols of the United States specified above, there are sufficient differences between the current Canadian requirements and the new requirements of the United States, that it is no longer possible to determine compliance to both standards by completing only the United States or Canadian testing protocols. As a result, both testing protocols would need to be performed to ensure

compliance in both jurisdictions. Some manufacturers have noted that this may increase costs associated with compliance testing.

Shortly after the introduction of the final rule of the United States, in 2004, on head restraints, a project to develop an international standard on head restraint testing requirements was initiated under the auspices of the World Forum for the Harmonization of Vehicle Regulations (WP.29) under the direction of the United Nations Economic Commission for Europe (UNECE). Canada has been closely involved in this development work, which has led to the agreement on a global technical regulation for head restraints, which was approved at the 144th session of WP.29 in March 2008.

While the global technical regulation has been approved, unfortunately it was not possible to obtain consensus on both the quasi-static and dynamic testing requirements. The global technical regulation will only include quasi-static testing requirements. The dynamic testing protocol as specified by the United States was not accepted as an international requirement. As a result, work is underway to develop an internationally accepted dynamic testing protocol. It is expected that this work will take another two years to complete.

With regards to the quasi-static testing requirements, while the global technical regulation provides details on the quasi-static testing requirements, it allows two alternative methods of measuring compliance. These two methods represent the past practices of Europe and North America. As it was not possible during the development of the global technical regulation to obtain agreement on only one method, both methods have been added as optional requirements in the global technical regulation, with the choice of the applicable method left to the country applying the regulation.

It was Canada's position to wait until the global technical regulation was developed before updating the Canadian safety standard. The intention was to allow manufacturers to comply with either the testing requirements adopted by the United States or that adopted by Europe. As it has not been possible to finalize the testing requirements for dynamic testing as there was no agreement on the testing method, this proposal would, as a first step, harmonize the Canadian testing requirements with the requirements introduced in the United States. Once the second phase of the global technical regulation is complete it is proposed that the European test requirements will be permitted as an alternative means of compliance.

This amendment is needed to ensure that the Canadian and the United States requirements remain harmonized. Having unharmonized regulations potentially may increase costs to manufacturers due to the increased testing requirements. The new testing requirements of the United States also result in improved safety for vehicle occupants seated in positions with head restraints. Therefore, it is proposed that the harmonized North American head restraint requirements should be introduced in lieu of waiting for final agreement on the global technical regulation testing protocols.

Consultation

The Department of Transport informs the automotive industry, public safety organizations, and the general public when changes are planned to the *Motor Vehicle Safety Regulations* (MVSR). This gives them the opportunity to comment on these changes by letter or email. The Department also consults regularly, in face-to-face meetings or teleconferences, with the automotive industry, public safety organizations the provinces and the territories.

In addition, the Department meets regularly with the federal authorities of other countries. Given that harmonized regulations are key to trade and to a competitive Canadian automotive industry, the Department and the United States Department of Transportation hold semi-annual meetings to discuss problems of mutual interest and planned regulatory changes. In addition, departmental officials participate in and support the development of global technical regulations, which are developed by the WP.29 under the direction of the UNECE.

The Department's intention to develop new head restraint testing requirements has been part of the regulatory plan since 2005. The project on head restraints was initiated following the formation of the global technical regulation informal group in 2005. Since that time, Department officials have been actively involved in developing a harmonized solution to the quasi-static testing requirements, specifically, completing testing to both the United States and European testing protocols. At the seventh meeting of the informal group, Canada presented a study on the use of a Head Restraint Measuring Device (HRMD), created by the Insurance Corporation of British Columbia (ICBC), used for measuring backset in the rule of the United States. Testing done verified that the HRMD provides repeatable and reproducible results. Within the findings, Canada also determined that increasing the number of measurements always reduces the backset variability. From these findings, the United States amended its final rule to increase the number of backset measurements from one to three. The global technical regulation has also adopted the use of the HRMD.

Implementation, enforcement, and service standards

Motor vehicle manufacturers and importers are responsible for ensuring that their products conform to the requirements of the MVSR. The Department of Transport monitors self-certification programs of manufacturers and importers by reviewing their test documentation, inspecting vehicles, and testing vehicles obtained in the open market. In addition, when a defect in a vehicle or equipment is identified, the manufacturer or importer must issue a Notice of Defect to the owners and to the Minister of Transport, Infrastructure and Communities. If a vehicle does not comply with a Canadian safety standard, the manufacturer or importer is liable to prosecution and, if found guilty, may be fined as prescribed in the *Motor Vehicle Safety Act*.

Contact

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Please note: It is important that your submission be provided to the attention of the person noted above before the closing date. Submissions not sent directly to the person noted may not be considered as part of this regulatory proposal. Individual responses to your submission will not be sent. Any subsequent final regulation that is published in the *Canada Gazette*, Part II would contain any changes that are made, along with a summary of the relevant comments received. Please indicate in your submission if you do not wish to be identified or if you do not wish to have your comments published in the *Canada Gazette*, Part II.

PROPOSED REGULATORY TEXT

Notice is hereby given, pursuant to subsection 11(3) of the *Motor Vehicle Safety Act* ([see footnote a](#)), that the Governor in Council, pursuant to subsection 11(1) of that Act, proposes to make the annexed *Regulations Amending the Motor Vehicle Safety Regulations (Head Restraints)*.

Interested persons may make representations with respect to the proposed Regulations to the Minister of Transport, Infrastructure and Communities within 75 days after the date of publication of this notice. All such representations must be in writing and cite the *Canada Gazette*, Part I, and the date of publication of this notice, and be sent to Anthony Jaz, Senior Regulatory Development Engineer, Road Safety and Motor Vehicle Regulation Directorate, Department of Transport, 275 Slater Street, 17th Floor, Ottawa, Ontario K1A 0N5 (tel.: 613-998-1963; fax: 613-990-2913; e-mail: jaza@tc.gc.ca).

Ottawa, September 4, 2008

MARY PICHETTE
Assistant Clerk of the Privy Council

REGULATIONS AMENDING THE MOTOR VEHICLE SAFETY REGULATIONS (HEAD RESTRAINTS)

AMENDMENT

1. Section 202 of Schedule IV to the *Motor Vehicle Safety Regulations* ([see footnote 1](#)) is replaced by the following:

202. (1) Subject to subsection (2), every multi-purpose passenger vehicle, bus or truck with a GVWR of 4 536 kg or less, every passenger car and every three-wheeled vehicle shall conform to the requirements of *Technical Standards Document No. 202, Head*

Restraints (TSD 202), as amended from time to time.

(2) Until August 31, 2011, a vehicle referred to in subsection (1) may conform to the requirements of this section as it read on the day before the day on which this version of the section came into force.

(3) This section expires on May 1, 2013.

COMING INTO FORCE

2. These Regulations come into force on the day on which they are published in the *Canada Gazette*, Part II.

