

steering lock. Consequently, to harmonize the Canadian and U.S. safety standards, this proposal introduces a new definition for the term "key"; provides additional key removal and transmission override options; and, harmonizes the steering lock requirements and test procedures with regards to vehicle motion.

The introduction of the U.S. requirements will be completed by incorporating by reference a new Technical Standard Document (TSD) 114. The new TSD 114 would reproduce the U.S. requirements, as amended from time to time, with certain adaptations. Studies have demonstrated that an average of 11 lives would be saved each year as a result of mandatory immobilization system installation. The Government would also maintain the current requirement that, starting September 1, 2007, most new vehicles be equipped with theft immobilization systems.

This amendment also proposes to add a new compliance option for immobilization systems [Part IV of the United Nations Economic Commission for Europe (ECE) Regulation No. 116] and to clarify current test requirements of the Canadian safety standard by removing performance tests concerning environmental durability.

If Canada does not harmonize with the recently published U.S. amendments and does not update the immobilization requirements, the sale of some vehicles could be prevented in Canada and there could be increases in manufacturing costs. Harmonizing with the United States and updating immobilization requirements is not expected to have any effect on vehicle safety.

Background

In Canada, section 114 of Schedule IV of the *Motor Vehicle Safety Regulations* (Canadian Motor Vehicle Safety Standard 114) hereafter referred to as Canadian safety standard, governs the design and performance of locking and immobilization systems. This standard requires every vehicle built for sale in Canada to be equipped with a key-operated locking system. The Canadian safety standard was recently amended (see footnote 1) to require that, starting September 1, 2007, every non-emergency vehicle be equipped with an immobilization system. This Canadian safety standard does not apply to a vehicle that has a gross vehicle weight rating (GVWR) of 4 536 kg or more or to a walk-in van.

The current Canadian safety standard includes the following test conditions and requirements:

- a vehicle must be equipped with a key-operated locking system that
 - when the key is removed, prevents the activation of the vehicle engine or main power source and steering or the forward self-mobility of the vehicle or both; and
 - if an automatic transmission control is used, prevents the removal of the key unless the transmission or the transmission control is locked in the park position.
- a vehicle that is equipped with an automatic transmission may be equipped with an overriding device that
 - allows the removal of the key if it meets certain requirements; and
 - allows the unlocking of the transmission or transmission control if it meets certain requirements.

- a vehicle must not move more than 150 mm on a 10% grade when the transmission or transmission control is locked in the park position;
- a warning to the driver of the vehicle must be activated whenever the key has been left in the locking system and the driver's door is opened; and
- starting September 1, 2007, all vehicles with a GVWR of less than 4 536 kg, except walk-in vans and emergency vehicles, must be equipped with an immobilization system that, at the option of the manufacturer, meets one of the following standards:
 - National Standard of Canada CAN/ULC-S338-98, entitled Standard for Automobile Theft Deterrent Equipment and Systems: Electronic Immobilization; (see footnote 2) or
 - Part III of ECE Regulation No. 97, entitled Uniform Provisions Concerning the Approval of Vehicle Alarm Systems (VAS) and of Motor Vehicles with Regard to Their Alarm Systems (AS). (see footnote 3)

In the United States, Federal Motor Vehicle Safety Standard No. 114, hereafter referred to as U.S. safety standard, (see footnote 4) specifies vehicle performance requirements intended to reduce the incidence of crashes resulting from theft and accidental rollaway of motor vehicles. These amendments result from technical advances in vehicle design with a corresponding update of terminology to include modern technology.

Description of proposed amendments

Definition

The definition of the term "key" was revised in the U.S. safety standard to make it appropriate for conventional and newer designs of electronic codes as a means of unlocking and operating a vehicle. The definition states that "key" means a physical device or an electronic code which, when inserted into the starting system (by physical or electronic means), enables the vehicle operator to activate the engine or motor. The current Canadian regulations do not include a definition of the term "key."

This amendment proposes to introduce the same definition of "key" in Canada through TSD 114. This definition would clarify and alleviate interpretation issues. It would permit the sale and manufacturing of vehicles equipped with conventional key, electronic code and other technologies as long as they meet all safety requirements specified in this proposed Canadian safety standard.

Warning

Both the current Canadian and U.S. safety standards mandate that a warning to the vehicle operator be activated whenever the key is in the starting system and the door closest to the driver is opened. The U.S. safety standard also specifies that the warning must be audible.

By proposing the same U.S. requirement for an audible signal, safety will be increased and property damage reduced as this feature will help prevent the key from being forgotten or left in the ignition, thus increasing the opportunity for vehicle theft or inadvertent use of the vehicle. Key removal override option

Both the current Canadian and U.S. safety standards allow the option of an overriding device that permits the removal of the key without the transmission locked in the park position. In the current Canadian safety standard, this option is allowed provided that steering or forward self-mobility is prevented. The Canadian safety standard specifies that devices must require the use of a tool and be protected by an opaque cover.

In addition to the current Canadian requirement, the U.S. safety standard also includes the additional option that if this device and the removal of the key are simultaneously activated, then the requirement for an opaque cover is not required. This additional option presents sufficient complexity to prevent possible activation by a child.

Transmission override option

Both the current Canadian and U.S. safety standards allow the option of an overriding device that permits the user to move the gear selection control from the "park" position after the key has been removed from the starting system.

In the current Canadian safety standard, this option is allowed as long as it is designed to be activated by the use of a key or by other means to which access is protected by an opaque cover that must be removed with a tool. In this situation, when the device is not activated by the use of a key, steering must be prevented.

The United States also provides the same requirement for the use of the transmission override option. In addition, the U.S. safety standard presents alternate options: 1) if the device and movement of the gear selection control from the "park" position are simultaneously activated, then an opaque cover is not required; and 2) if the device is not activated by the use of a key, steering or forward self-mobility must be prevented.

By proposing to introduce in the Canadian safety standard the transmission override options presented in U.S. safety standard, the costs to the industry would be reduced. Proposing these additional options would eliminate the requirement for a steering lock due to the mandatory installation of an engine immobilizer in Canada. Preventing forward self-mobility with an immobilizer would provide adequate theft protection.

Test procedure

Both standards specify that vehicle movement must be less then 150 mm from the "park" position when the vehicle is parked up a hill. The U.S. safety standard specifies that this test should also be conducted when the vehicle is parked down a hill. This amendment proposes to adopt the U.S. requirements to harmonize the two test procedures.

Immobilizer

As noted previously, the Canadian safety standard would require most vehicles built for sale in Canada starting September 1, 2007, be equipped with an immobilization system. The U.S. safety standard does not require vehicles to be equipped with such systems nor does it provide for any performance requirements if vehicles are fitted with such systems.

A study indicates that vehicle theft is a serious road safety issue resulting in 27 fatalities per year. (see footnote 5) Studies have estimated the direct dollar losses from motor vehicle theft in Canada to be \$600 million per year. (see footnote 6) Transport Canada's research indicates that installation of immobilization systems, which make it difficult for the car engine to be started, will reduce vehicle theft, especially youth theft. Furthermore, these studies have demonstrated that an average of 244 to 345 serious injuries and 11 lives will be saved every year as a result of immobilization systems. (see footnote 7) This amendment, therefore, does not propose to harmonize with the U.S. safety standard with respect to immobilization systems.

Proposed alternative for immobilization standard

Additionally, this amendment proposes to incorporate a new option in the Canadian safety standard that would reflect changes in the ECE regulation. The option would allow conforming to the general and particular specifications, operation parameters and test conditions of an immobilizer that are set out in Part IV of ECE Regulation No. 116, as revised on March 6, 2006, except that

(i) requirements respecting aftermarket installation of an immobilization system, type approval and radio emissions will not apply;

(ii) for the purposes of section 8.2.7, the word "rapidly" will mean less than five minutes and the words "time consuming" will mean at least five minutes;

(iii) despite any statement to the contrary in sections 8.2.10 and 8.2.11, the immobilization system will be required to not have any impact on the vehicle's brake system; and

(iv) for the purposes of section 8.3.4.1, the words "a maximum of 5 min" will be replaced by the words "a maximum of 1 min."

Clarification of CAN/ULC-S338-98 standard and ECE Regulation No. 97 requirements

The Department received several comments from manufacturers concerning durability requirements present in the CAN/ULC-S338-98 and ECE Regulation No. 97. Manufacturers pointed out that these standards introduce very specific component testing and design parameters. They argued that the introduction of component environmental requirements (temperature, vibration, humidity and dust) for vehicle subsystems goes beyond performance requirements generally identified in a vehicle safety standard that consider the vehicle as a whole. They also pointed out that these requirements were developed for aftermarket immobilization systems and should not apply to original equipment manufacturers.

The Department agrees with the manufacturers and proposes to remove all environmental durability components test from the requirements of the Canadian safety standard.

Alternatives

Status quo, no changes to the Canadian safety standard

The Department of Transport believes that this alternative would have a negative effect on the industry. In certain cases, it would require vehicles to be equipped with steering lock and conventional key in Canada, but not in the United States. This could result in additional costs to the industry and could also prevent the sale of some vehicles in Canada without presenting significant safety benefits to the public.

Harmonize Canadian and U.S. safety standards by use of a TSD with the prescriptions concerning immobilization system

By following this alternative, harmonizing Canadian and U.S. safety standards and updating the current requirements concerning immobilization systems, the Department believes that safety will be improved.

Fully harmonize the Canadian and U.S. safety standards by use of a TSD (elimination of mandatory immobilization system)

Total harmonization of the Canadian and U.S. safety standards would significantly increase the risk of property loss, injury and death due to the elimination of a compulsory immobilization system. Studies completed by the Department indicate that vehicle theft is a serious issue in Canada and that immobilization systems aid in reducing vehicle theft.

Benefits and costs

This proposed amendment is not expected to have any significant negative cost impact on vehicle manufacturers. It is expected that, in certain cases, there would be a cost reduction as some manufacturers may be able to remove steering locking devices. It is also expected that this amendment will eliminate potential impact on consumer choice that may result from non-harmonized requirements with the United States.

Under the Department's Strategic Environmental Assessment Policy, a preliminary evaluation of the possible environmental effects of this amendment was carried out. It was determined that the proposed changes would have no impact on the environment.

Consultation

General communication process

The Department has instituted a systematic and extensive information process that is intended to keep the automotive industry, public safety organizations, and the general public informed of projected and recent changes to the regulatory requirements governing motor vehicle safety in Canada. This process includes information sessions with the provinces and territories, as well as with the authorities of other countries, and it provides a mechanism for interested parties to comment on the Department's planned initiatives.

In particular, meetings are held three times a year with the Canadian Vehicle Manufacturers' Association (CVMA), which represents Canada's leading motor vehicle manufacturers. (see footnote 8) Departmental representatives meet three times a year with the Association of International Automobile Manufacturers of Canada (AIAMC), which represents international motor vehicle manufacturers and importers. (see footnote 9) There are semi-annual meetings with the Motorcycle and Moped Industry Council and the Rubber Association of Canada. As well, semi-annual meetings are held with the U.S. Department of Transportation.

Mainly through the Department's membership in the Canadian Council of Motor Transport Administrators, discussions that deal with a broad range of issues take place on a regular basis with the provinces and territories. There are also semi-annual meetings with national public safety organizations in order to discuss future regulatory changes and emerging safety problems.

Specific consultation for CAN/ULC-S338-98 and the ECE regulations

In addition to this proposed amendment, comments from stakeholders are being sought on the elimination of performance tests included in the CAN/ULC-S338-98 standard and the ECE regulations. More specifically, for the CAN/ULC-S338-98 standard, the Department would appreciate comments regarding the elimination of mandatory compliance with section 12.3 Reverse Polarity, 12.4 Excess Voltage, 12.5 Short Circuit and Open Circuit, 12.6 Voltage Reduction or Removal and 12.12 Electromagnetic Compatibility. Similarly, for the ECE regulations, comments are being sought concerning removal of compliance with the following tests: Test for safety against reverse polarity, and Test for safety against short-circuits and electromagnetic compatibility.

This additional consultation is requested following comments made by manufacturers. They indicated that a vehicle manufacturer should have the flexibility to continue to use systems and components that have been designed in accordance with design requirements, and not be restricted to comply with imposed requirements. They also pointed out that there is no evidence that current immobilization systems fail due to inadequate testing or lax test criteria.

Compliance and enforcement

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

Contact

For further information, please contact Jean-François Roy, Road Safety and Motor Vehicle Regulation Directorate, Transport Canada, 330 Sparks Street, Tower C, 8th Floor, Ottawa, Ontario K1A 0N5, 613-998-1940 (telephone), 613-990-2913 (fax), royje@ tc.gc.ca (email).

Copies of Technical Standards Document No. 114, *Locking and Immobilization Systems* may be obtained on the Internet at www.tc.gc.ca/RoadSafety/mvstm_tsd/index_e.htm.

PROPOSED REGULATORY TEXT

Notice is hereby given, pursuant to subsection 11(3) of the *Motor Vehicle Safety Act* (see <u>footnote a</u>), that the Governor in Council proposes, pursuant to section 5 (see footnote b) and subsection 11(1) of that Act, to make the annexed *Regulations Amending the Motor Vehicle Safety Regulations (Theft Protection and Rollaway Prevention — Standard 114)*.

Interested persons may make representations concerning the proposed Regulations to the Minister of Transport, Infrastructure and Communities within 75 days after the date of publication of this notice. All representations must cite the *Canada Gazette*, Part I, and the date of publication of this notice, and be addressed to Jean-François Roy, Acting Senior Regulatory Development Engineer, Road Safety and Motor Vehicle Regulation Directorate, Department of Transport, Place de Ville, Tower C, 8th Floor, 330 Sparks Street, Ottawa, Ontario K1A 0N5 (Tel: 613-998-1940; fax: 613-990-2913; e-mail: royje@tc.gc.ca).

Persons making representations should identify any of those representations the disclosure of which should be refused under the *Access to Information Act*, in particular under sections 19 and 20 of that Act, and should indicate the reasons why and the period during which the representations should not be disclosed. They should also identify any representations for which there is consent to disclosure for the purposes of that Act.

Ottawa, February 22, 2007

MARY O'NEILL Assistant Clerk of the Privy Council

REGULATIONS AMENDING THE MOTOR VEHICLE SAFETY REGULATIONS (THEFT PROTECTION AND ROLLAWAY PREVENTION — STANDARD 114)

AMENDMENTS

1. (1) Paragraph 102(3)(*a*) of Schedule IV to the *Motor Vehicle Safety Regulations* (see footnote 10) is replaced by the following:

(a) the ignition switch is set to the position where the transmission can be shifted; or

(2) Subsections 102(4) and (5) of Schedule IV to the Regulations are replaced by the following:

(4) Subject to subsection (5), if the transmission control sequence does not include a park position, the identification of the transmission control positions and the position selected shall be displayed in at least a single location in view of the driver when the ignition switch is set to the position where the engine is capable of operation.

(5) The identification of transmission control positions need not be displayed when the ignition switch is set to the position used to start the vehicle.

2. Section 114 of Schedule IV to the Regulations and the headings before it are replaced by the following:

THEFT PROTECTION AND ROLLAWAY PREVENTION (STANDARD 114)

114. (1) With the exception of a walk-in van, every passenger car, every three-wheeled vehicle, and every multi-purpose passenger vehicle or truck with a GVWR of 4 536 kg or less shall conform to the requirements of *Technical Standards Document No. 114, Theft protection and rollaway prevention* (TSD 114), as amended from time to time.

(2) Subsection (1) expires on January 1, 2010.

Immobilization System

(3) With the exception of a walk-in van and an emergency vehicle, every passenger car, every three-wheeled vehicle, and every multi-purpose passenger vehicle and truck with a GVWR of 4 536 kg or less shall be equipped with an immobilization system that meets one of the following sets of requirements as modified by subsection (4), (5) or (6):

(*a*) section 3, subsection 4.3, sections 6 to 10 and subsections 12.1 to 12.6, 12.12 and 12.16 of National Standard of Canada CAN/ULC-S338-98, entitled *Standard for Automobile Theft Deterrent Equipment and Systems: Electronic Immobilization* (May 1998), published by the Underwriters' Laboratories of Canada;

(*b*) the general and particular specifications, operation parameters and test conditions of an immobilizer that are set out in Part III of ECE Regulation No. 97, entitled *Uniform Provisions Concerning the Approval of Vehicle Alarm Systems (VAS) and of Motor Vehicles with Regard to Their Alarm Systems (AS)*, as revised on October 14, 2002; or

(c) the general and particular specifications, operation parameters and test conditions of an immobilizer that are set out in Part IV of ECE Regulation No. 116, entitled *Uniform Technical Prescriptions Concerning the Protection of Motor Vehicles Against Unauthorized Use*, as revised on March 6, 2006.

(4) The requirements set out in National Standard of Canada CAN/ULC-S338-98 are modified as follows:

(*a*) the requirements respecting non-OEM systems as defined in section 2, local noise regulations and radio frequency interference immunity do not apply; and

(*b*) a reference to a "manufacturer of an electronic immobilization system" is to be read as a reference to a "manufacturer".

(5) The requirements set out in Part III of ECE Regulation No. 97 are modified as follows:

(a) the aftermarket, type approval and radio emission requirements do not apply;

(*b*) for the purposes of section 31.7, the word "rapidly" means less than 5 minutes and the words "time consuming" mean at least 5 minutes;

(c) despite any statement to the contrary in sections 31.10 and 31.11, the immobilization system shall not have any impact on the vehicle's brake system;

(*d*) for the purposes of section 32.4.1, the expression "maximum of 5 minutes" is replaced by the expression "a maximum of 1 minute"; and

(*e*) for the purposes of section 33.3, the words "All components of the immobilizer shall comply with prescriptions given in paragraphs 7.2.2 to 7.2.8 and 7.2.12" shall be read as "All components of the immobilizer shall comply with prescriptions given in paragraphs 7.2.5, 7.2.6 and 7.2.12".

(6) The requirements set out in Part IV of ECE Regulation No. 116 are modified as follows:

(a) the aftermarket, type approval and radio emission requirements do not apply;

(*b*) for the purposes of section 8.2.7, the word "rapidly" means less than 5 minutes and the words "time consuming" mean at least 5 minutes;

(c) despite any statement to the contrary in sections 8.2.10 and 8.2.11, the immobilization system shall not have any impact on the vehicle's brake system;

(*d*) for the purposes of section 8.3.4.1, the expression "maximum of 5 minutes" is replaced by the expression "a maximum of 1 minute"; and

(e) for the purposes of section 8.4.3, the words "All components of the immobilizer shall comply with prescriptions given in paragraphs 6.4.2.2 to 6.4.2.8 and 6.4.2.12" shall be read as "All components of the immobilizer shall comply with prescriptions given in paragraphs 6.4.2.5, 6.4.2.6 and 6.4.2.12".

(7) A vehicle equipped with an immobilization system shall be accompanied by the following written information:

(a) instructions for operating and maintaining the system; and

(*b*) a warning not to leave in the vehicle a device or a combination that disarms or deactivates the system.

(8) The information shall be provided in English, French or both official languages, as requested by the first retail purchaser.

COMING INTO FORCE

3. These Regulations come into force on September 1, 2007.

[9-1-0]

Footnote 1

SOR/2005-45

Footnote 2

Dated May 1998, published by the Underwriters's Laboratories of Canada (ULC)

Footnote 3

Dated October 14, 2002

Footnote 4

Title 49, Part 571, of the *Code of Federal Regulations*, Docket No. NHTSA-2005-22093 published on April 7, 2006

Footnote 5

The Motor Vehicle Theft Problem: An Exploration and Development of Future Options, Michael Parkes, October 15, 1999; Fatalities and Injuries as a Result of Stolen Motor Vehicles (1999-2001), prepared for Project 6116 by Matthew J. Miceli, December 2002

Footnote 6

The Auto Theft Industry – The Cost to Canadians, prepared for the Insurance Bureau of Canada by Standard & Poor's DRI, Toronto, Ontario, April 2000

Footnote 7

SOR/2005-45

Footnote 8

The CVMA represents DaimlerChrysler Canada Inc.; Ford Motor Company of Canada, Limited; General Motors of Canada Limited; and International Truck and Engine Corporation Canada

Footnote 9

The AIAMC represents the following automotive manufacturers and importers as voting

members: BMW Canada Inc.; Honda Canada Inc.; Hyundai Auto Canada; Kia Canada Inc.; Mazda Canada Inc.; Mercedes-Benz Canada Inc.; Mitsubishi Motor Sales of Canada, Inc.; Nissan Canada Inc.; Porsche Cars Canada Ltd.; Subaru Canada Inc.; Suzuki Canada Inc.; Toyota Canada Inc.; and Volkswagen Canada Inc.

Footnote a

S.C. 1993, c. 16

Footnote b

1999, c. 33, s. 351

Footnote 10

C.R.C., c. 1038

NOTICE:

The format of the electronic version of this issue of the *Canada Gazette* was modified in order to be compatible with hypertext language (HTML). Its content is very similar except for the footnotes, the symbols and the tables.

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