Steering Control Rearward Displacement


Publication Date: February 13, 2013
Effective Date: February 13, 2013
Mandatory Compliance Date: August 13, 2013

(Ce document est aussi disponible en français)
Introduction

As defined by section 12 of the Motor Vehicle Safety Act, a Technical Standards Document (TSD) is a document that reproduces an enactment of a foreign government (e.g. a Federal Motor Vehicle Safety Standard issued by the U.S. National Highway Traffic Safety Administration). According to the Act, the Motor Vehicle Safety Regulations (MVSR) may alter or override some provisions contained in a TSD or specify additional requirements; consequently, it is advisable to read a TSD in conjunction with the Act and its counterpart Regulation. As a guide, where the corresponding Regulation contains additional requirements, footnotes indicate the amending subsection number.

TSDs are revised from time to time in order to incorporate amendments made to the reference document, at which time a Notice of Revision is published in the Canada Gazette, Part I. All TSDs are assigned a revision number, with “Revision 0” designating the original version.

Identification of Changes

In order to facilitate the incorporation of a TSD, certain non-technical changes may be made to the foreign enactment. These may include the deletion of words, phrases, figures, or sections that do not apply under the Act or Regulations, the conversion of imperial to metric units, the deletion of superseded dates, and minor changes of an editorial nature. Additions are underlined, and provisions that do not apply are stroked through. Where an entire section has been deleted, it is replaced by: “[CONTENT NOT REPRODUCED]”. Changes are also made where there is a reporting requirement or reference in the foreign enactment that does not apply in Canada. For example, the name and address of the United States Department of Transportation are replaced by those of the Department of Transport.

Effective Date and Mandatory Compliance Date

The effective date of a TSD is the date of publication of its incorporating regulation or of the notice of revision in the Canada Gazette, and the date as of which voluntary compliance is permitted. The mandatory compliance date is the date upon which compliance with the requirements of the TSD is obligatory. If the effective date and mandatory compliance date are different, manufacturers may follow the requirements that were in force before the effective date, or those of the TSD, until the mandatory compliance date.

In the case of an initial TSD, or when a TSD is revised and incorporated by reference by an amendment to the Regulations, the mandatory compliance date is as specified in the Regulations, and it may be the same as the effective date. When a TSD is revised with no corresponding changes to the incorporating Regulations, the mandatory compliance date is six months after the effective date.

Effective: February 13, 2013
Official Version of Technical Standards Documents

The PDF version is a replica of the TSD as published by the Department and is to be used for the purposes of legal interpretation and application.
S1. Purpose and Scope

This Technical Standards Document (TSD) standard specifies requirements limiting the rearward displacement of the steering control into the passenger compartment to reduce the likelihood of chest, neck, or head injury.

S2. Application

[CONTENT NOT REPRODUCED]

S3. Definitions

Steering column means a structural housing that surrounds a steering shaft (Colonne de direction).

Steering shaft means a component that transmits steering torque from the steering wheel to the steering gear (Arbre de direction).

S4. Requirements

S4.1 [CONTENT NOT REPRODUCED]

S4.2 Vehicles manufactured on or after September 1, 1991

When a passenger car or a truck, bus or multipurpose passenger vehicle with a gross vehicle weight rating of 4,536 kg or less and an unloaded vehicle weight of 2,495 kg or less is tested under the conditions of S5 in a 48 km/h perpendicular impact into a fixed collision barrier, the upper end of the steering column and shaft in the vehicle shall not be displaced more than 127 mm in a horizontal rearward direction parallel to the longitudinal axis of the vehicle. The amount of displacement shall be measured relative to an undisturbed point on the vehicle and shall represent the maximum dynamic movement of the upper end of the steering column and shaft during the crash test.

S5. Test conditions

The requirements of S4 shall be met when the vehicle is tested in accordance with the following conditions.

S5.1 Untitled

The vehicle, including test devices and instrumentation, is loaded to its unloaded vehicle weight.
S5.2 Untitled

Adjustable steering controls are adjusted so that a tilting steering wheel hub is at the geometric center of the locus it describes when it is moved through its full range of driving positions. A telescoping steering control is set at the adjustment position midway between the forwardmost and rearwardmost position.

S5.3 Untitled

Convertibles and open-body type vehicles have the top, if any, in place in the closed passenger compartment configuration.

S5.4 Untitled

Doors are fully closed and latched but not locked.

S5.5 Untitled

The fuel tank is filled to any level from 90 to 95 percent of capacity.

S5.6 Untitled

The parking brake is disengaged and the transmission is in neutral.

S5.7 Untitled

Tires are inflated to the vehicle manufacturer's specifications.