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1958 Agreement – Consideration of draft

corrigenda to existing Regulations proposed by GRB

Proposal for Corrigendum 1 to the 02 series of amendments to Regulation No. 117 (Tyre rolling noise, wet grip adhesion and rolling resistance)

Submitted by the Working Party on Noise *

The text reproduced below was adopted by the Working Party on Noise (GRB) at its fifty-second session in September 2010. It is based on ECE/TRANS/WP.29/GRB/2010/8 as amended by paragraph 21 of the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee (AC.1) for consideration (ECE/TRANS/WP.29/GRB/50, para. 21).

* In accordance with the programme of work of the Inland Transport Committee for 2006–2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

Paragraph 3.2.1., amend to read:

“3.2.1. Details of the major features, with respect to the effects on the performance (i.e. rolling sound emission level, adhesion on wet surfaces, rolling resistance and snow grip) of the tyres, including the tread pattern, included in the designated range of tyre sizes. This may be by means of descriptions supplemented by technical data, drawings, photographs and Computer Tomography (CT), and must be sufficient to allow the type approval authority or technical service to determine whether any subsequent changes to the major features will adversely affect the tyre performance. The effects of changes to minor details of tyre construction on tyre performances will be evident and determined during checks on conformity of production;”

Paragraph 6.4., amend to read (inserting also a new footnote */):

“6.4. In order to be classified in the category of use “snow tyre”, a tyre is required to meet performance requirements based on a test method by which:

- (a) the mean fully developed deceleration (“mfdd”) in a braking test,
- (b) or alternatively an average traction force in a traction test,
- (c) or alternatively the mean fully developed acceleration in an acceleration test */

of a candidate tyre is compared to that of a standard reference tyre.

The relative performance shall be indicated by a snow index.

*/ This test procedure is currently under development.”

Paragraph 6.4.1., amend to read:

“6.4.1. Tyre snow performance requirements”

Paragraph 6.5.1., amend to read:

“6.5.1. The tyre shall have a tread pattern with minimum two circumferential ribs, each containing a minimum of 30 block-like elements, separated by grooves and/or sipe elements the depth of which has to be minimum of one half of the tread depth. The use of an alternative option of a physical test will only apply at a later stage following a further amendment to the Regulation including a reference to an appropriate test methods and limit values.”

Paragraphs 12.1. to 12.3., amend to read:

“12.1. As from the date of entry into force of the 02 series of amendments to this Regulation, Contracting Parties applying this Regulation shall not refuse to grant ECE approval under this Regulation for a type of tyre if the tyre complies with the requirements of the 02 series of amendments, including the stage 1 or stage 2 rolling sound requirements set out in paragraphs 6.1.1. to 6.1.3., the requirements for wet grip performance set out in paragraph 6.2.1., and the stage 1 or stage 2 rolling resistance requirements set out in paragraph 6.3.1. or 6.3.2.

- 12.2. As from 1 November 2012, Contracting Parties applying this Regulation shall refuse to grant ECE approval if the tyre type to be approved does not meet the requirements of this Regulation as amended by the 02 series of amendments, and shall, in addition, refuse to grant ECE approval if the stage 2 rolling sound requirements set out in paragraphs 6.1.1. to 6.1.3., the requirements for wet grip performance set out in paragraph 6.2.1., and the stage 1 rolling resistance requirements set out in paragraph 6.3.1. are not complied with.
- 12.3. As from 1 November 2014, Contracting Parties applying this Regulation may refuse to allow the sale or entry into service of a tyre which does not meet the requirements of this Regulation as amended by the 02 series, and which does not meet the requirements of this Regulation as amended by the 02 series of amendments including the wet grip performance requirements set out in paragraph 6.2.1.”

Annex 5, paragraph 1.1.1., amend to read:

“1.1.1. Standard reference test tyre (SRTT) method

When tested using the SRTT and the method given in paragraph 2.1. the average peak brake force coefficient (pbfc) shall be between 0.6 and 0.8. The measured values shall be corrected for the effects of temperature as follows:

$$\text{pbfc} = \text{pbfc (measured)} + 0.0035 \cdot (t - 20)$$

where "t" is the wetted track surface temperature in degrees Celsius.

The test shall be conducted using the lanes and length of the track to be used for the wet grip test;”

Annex 7

Paragraph 1.4., should be deleted.

Paragraph 2., amend to read (inserting also a reference to the existing footnote 1/):

“2. Spin traction method for Class C1 and C2 tyres

The test procedure of ASTM standard F1805-06 shall be used to assess snow performance through spin traction values on medium packed snow (The snow compaction index measured with a CTI penetrometer 1/ shall be between 70 and 80).

1/ See appendix of ASTM standard F1805-06 for details.”

Insert new paragraphs 2.1. and 2.2., to read:

- “2.1. The test course surface shall be composed of a medium packed snow surface, as characterized in table A2.1 of ASTM standard F1805-06.
- 2.2. The tyre load for testing shall be as per option 2 in paragraph 11.9.2. of ASTM standard F1805-06.”

Paragraph 3.1.1., amend to read (including the existing footnote 1/):

“3.1.1. Test course

The braking tests shall be done on a flat test surface of sufficient length and width, with a maximum 2 per cent gradient, covered with packed snow.

The snow surface shall be composed of a hard packed snow base at least 3 cm thick and a surface layer of medium packed and prepared snow about 2 cm thick.

Both air temperature, measured about one meter above the ground, and snow temperature, measured at a depth of about one centimetre, shall be between -2 °C and -15 °C.

It is recommended to avoid direct sunlight, large variations of sunlight or humidity, as well as wind.

The snow compaction index measured with a CTI penetrometer 1/ shall be between 75 and 85.

1/ See appendix of ASTM standard F1805-06 for details.”
