



Economic and Social Council

Distr.: General
22 August 2019

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

179th session

Geneva, 12-14 November 2019

Item 4.7.6 of the provisional agenda

1958 Agreement:

Consideration of draft amendments to existing

UN Regulations submitted by GRSG

Proposal for Supplement 2 to the 02 series of amendments to UN Regulation No. 67 (LPG vehicles)

Submitted by the experts from the Working Party on General Safety*

The text reproduced below was adopted by the Working Party on General Safety (GRSG) at its 116th session (ECE/TRANS/WP.29/GRSG/95, para. 38). It is based on ECE/TRANS/WP.29/GRSG/2018/2 as reproduced in Annex III 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 at their November 2019 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, Cluster 3.1), the World Forum will develop, harmonize and update UN regulations to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

Supplement 2 to the 02 series of amendments to UN Regulation No. 67 (LPG vehicles)

Add a new paragraph 11.6. (transitional provisions), to read:

"11.6. As from 1 September 2022, Contracting Parties applying this Regulation may refuse the sale of a type of component which does not meet the requirements of the 02 series of amendments to this Regulation, unless the component is intended as a replacement for fitting on vehicles in use."

Annex 3

Paragraph 3., amend to read:

"3. Pressure relief valve (discharge valve) and components connecting the pressure relief valve with the gaseous phase inside the LPG container"

Paragraph 3.6., amend to read (inserting also a reference to existing footnote**):

"3.6. Applicable test procedures:	
Overpressure test	Annex 15, para. 4.
...	
Temperature cycle	Annex 15, para. 16.**
Test on non-metallic material inside a container	Annex 15, para. 18.**"

Paragraph 7., amend to read:

"7. Provisions regarding the approval of the pressure relief device (fuse) and components connecting the pressure relief device with the gaseous phase inside the LPG container.

Paragraph 7.6., amend to read (inserting also a new reference to existing footnote**):

"7.6. Test procedures to be applied:	
Overpressure test	Annex 15, para. 4.
...	
Temperature cycles	Annex 15, para. 16.**
Test on non-metallic material inside a container	Annex 15, para. 18.**"

Annex 15, insert new paragraphs 18. to 18.3.2., to read:

"18. Test on non-metallic material inside a container

All components connecting the pressure relief valve and/or the pressure relief device with the gaseous phase in the LPG container shall be tested using the following procedure.

The tests shall be carried out on two samples, "a" and "b":

Sample "a" shall be aged according to paragraph 18.1.1. or 18.1.2.

The aged sample "a" shall undergo the vibration test according to paragraph 18.2.

The virgin sample "b" shall be used as a reference for the flow test according to paragraph 18.3.

18.1. Ageing tests on sample "a"

18.1.1. Ageing procedure 1 (component disassembled)

18.1.1.1. Disassemble, using instructions from the manufacturer, all non-metallic materials from the component in contact with the liquid LPG.

18.1.1.2. Age the non-metallic materials using the test description of Annex 15, paragraph 11.1.

18.1.1.3. Check compliance to Annex 15, paragraph 11.2.

- 18.1.1.4. Reassemble the aged non-metallic materials to the component using the instructions from the manufacturer.
 - 18.1.2. Ageing procedure 2 (entire component)
 - 18.1.2.1. Expose the entire component to n-Pentane according to Annex 15, paragraph 11.1.
 - 18.1.2.2. Check compliance to Annex 15, paragraph 11.2.
 - 18.2. Vibration test on aged sample "a"
 - 18.2.1. Perform on the aged sample the vibration test in Annex 15, paragraph 10.5., procedures A or B. The sample shall comply with the test requirements in Annex 15, paragraph 10.5., procedure A or B.
 - 18.3. Flow test with dummy tank to compare sample "a" and reference sample "b"
 - 18.3.1. Perform for both samples the flow test according to paragraph 6.15.8.3. of this Regulation.
 - 18.3.2. Requirements:

Both aged and non-aged samples "a" and "b" shall comply with the flow requirements as per paragraph 6.15.8.3. of this Regulation.

The non-metallic material of the samples "a" and "b" shall show no cracks, deformation or any visual damage."
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