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World Forum for Harmonization of Vehicle Regulations**Working Party on General Safety Provisions****114th session**

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Item 6(b) of the provisional agenda

Amendments to gas-fuelled vehicle**regulations – UN Regulation No. 110 (CNG and LNG vehicles)****Proposal for Corrigendum 1 to Revision 3 of UN Regulation
No. 110 (CNG and LNG vehicles)****Submitted by the experts from the International Organization for
Standardization and the International Association for Natural Gas
Vehicles***

The text reproduced below was prepared by the experts from the International Organization for Standardization (ISO) and the International Association for Natural Gas Vehicles (NGV Global) to correct Table 6.4 of Annex 3A. It is based on informal document GRSG-113-06, presented at the 113th session of the Working Party on General Safety Provisions (GRSG) (see report ECE/TRANS/WP.29/GRSG/92, para. 43). The modifications to the current text of UN Regulation No. 110 are marked in bold characters.

* In accordance with the programme of work of the Inland Transport Committee for 2014–2018 (ECE/TRANS/240, para. 105 and ECE/TRANS/2014/26, cluster 02.4), the World Forum will develop, harmonize and update UN regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.



I. Proposal

Annex 3A, Table 6.4, replace by:

"Table 6.4

Cylinder design qualification tests

Test and annex reference	Cylinder type			
	CNG-1	CNG-2	CNG-3	CNG-4
A.12. Burst	X *	X	X	X
A.13. Ambient temperature/cycle	X *	X	X	X
A.14. Acid environment test		X	X	X
A.15. Bonfire	X	X	X	X
A.16. Penetration	X	X	X	X
A.17. Flaw tolerance		X	X	X
A.18. High temperature creep		X	X	X
A.19. Stress rupture		X	X	X
A.20. Drop test			X	X
A.21. Permeation				X
A.24. PRD performance	X	X	X	X
A.25. Boss torque test				X
A.27. Natural gas cycling				X
A.6. LBB assessment	X	X	X	
A.7. Extreme temperature/cycle		X	X	X

X = required

* = Not required for cylinders designed to ISO 9809 (ISO 9809 already provides for these tests)."

II. Justification

Since it is unlikely that GRSG will accept the complete harmonization with ISO 11439, it is recommended that Table 6.4 specify the following corrections for CNG-1 designs:

- (a) Delete in the second column the entries for A.17, A.25, and A.7, since they are obviously wrong as they do not match the tests specified in paragraph 7.5. on cylinder design qualification tests.
- (b) Add an entry for A.15 and A.6, since they do match the tests specified in paragraph 7.5. on cylinder design qualification tests.
- (c) Add an entry for A.24 because paragraph 6.9. on fire protection does require all PRDs on all cylinder types to comply with A.24.