

17 October 2014

Agreement

Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions*

(Revision 2, including the amendments which entered into force on 16 October 1995)

Addendum 109 – Regulation No. 110

Revision 3 - Amendment 1

Supplement 2 to the 01 series of amendments – Date of entry into force: 9 October 2014

Uniform provisions concerning the approval of:

- I. Specific components of motor vehicles using compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system**
- II. Vehicles with regard to the installation of specific components of an approved type for the use of compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system**



UNITED NATIONS

* Former title of the Agreement: Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958.

Part I,

Insert a new paragraph 6.1.1., to read:

- "6.1.1. In addition to provisions of paragraph 6.1., one of the following additional marks shall be used for automatic cylinder valve which comply with paragraph 2.2.4. of Annex 4A:
- (a) "H1"
 - (b) "H2"
 - (c) "H3" "

Insert a new paragraph 4.77., to read:

- "4.77. "Commanded stop phase" defines the period of time during which the combustion engine is switched off automatically for fuel saving and is allowed to start again automatically."

Part II,

Paragraph 18.5.1., amend to read:

"18.5.1. Automatic cylinder valve"

Insert new paragraphs 18.5.1.3. and 18.5.1.4., to read:

- "18.5.1.3. Notwithstanding the provisions of paragraph 18.5.1.2., the automatic cylinder valve may stay in an open position during commanded stop phases.
- 18.5.1.4. If the automatic cylinder valve is closed during commanded stop phases, the valve shall comply with paragraph 2.2.4. of Annex 4A."

Insert new paragraphs 18.6.1.3. and 18.6.1.4., to read:

- "18.6.1.3. Notwithstanding the provisions of paragraph 18.6.1.2., the automatic valve may stay in an open position during commanded stop phases.
- 18.6.1.4. If the automatic valve is closed during commanded stop phases, the valve shall comply with paragraph 2.2.4. of Annex 4A."

Paragraph 18.11.2., amend to read:

- "18.11.2. Vehicles with more than one fuel system shall have a fuel selection system which shall prevent both a flow of gaseous fuel into the petrol or diesel tank and a flow of petrol or diesel into the gaseous fuel tank, even in the case of a fault of the fuel selection system."

Insert a new paragraph 18.11.3., to read:

- "18.11.3. The measures shall be demonstrated during the type approval."

Paragraph 18.11.3. (former), renumber as paragraph 18.11.4.

Annex 4A,

Insert new paragraph 2.2.4., to read:

- "2.2.4. If the automatic valve is closed during commanded stop phases, the valve shall be submitted to the following numbers of operations during test according paragraph 2.2.3. above:
- (a) 200,000 cycles (mark "H1") if the engine shuts off automatically when the vehicle comes to a halt;

- (b) 500,000 cycles (mark "H2") if, in addition to (a), the engine also shuts off automatically when the vehicle drives with the electric motor only;
- (c) 1,000,000 cycles (mark "H3") if, in addition to (a) or (b), the engine also shuts off automatically when the accelerator pedal is released.

Notwithstanding the above-mentioned provisions, the valve complying with (b) shall be deemed to satisfy (a), and the valve complying with (c) shall be deemed to satisfy (a) and (b)."

Paragraph 2.2.4. (former), renumber as paragraph 2.2.5.

Annex 4H,

Paragraph 2.1., amend to read:

"2.1. The electronic control ... valve in case of a switch off of the engine or a broken fuel supply pipe or ..."

Insert a new paragraph 2.1.1., to read:

"2.1.1. Notwithstanding the provisions of paragraph 2.1., the automatic valve may stay in an open position during commanded stop phases."

Paragraph 2.2., amend to read:

"2.2. The switch-off delay of ..."
