

## **Proposal for amendment to ECE/TRANS/WP.29/GRSG/2013/12 Regulation No. 67 (Equipment for LPG)**

The present document assumes that the changes proposed by document ECE/TRANS/WP.29/GRSG/2013/12 are adopted. The modifications are marked in bold for new or strikethrough for deleted characters.

### **I. Proposal**

*Paragraph 4.4.*, amend to read

- "4.4. In addition to the provisions of paragraphs 4.1. and 4.2., one of the following additional marks **indicating the durability performance specified in Annex 3, paragraph 4.7., or Annex 7, paragraph 1.7.** shall be used for remotely controlled service valves and remotely controlled shut-off valves, which comply respectively with Annex 3, paragraph 4.7., or Annex 7, paragraph 1.7., **used for start-stop systems, hybrid electric systems or start-stop systems with coasting:**
- (a) "H1" ~~in case of valves used in start-stop systems;~~ or
  - (b) "H2" ~~in case of valves used in hybrid electric systems;~~ or
  - (c) "H3" ~~in case of valves used in start-stop systems with coasting.~~"

*Paragraph 17.9.6.*, amend to read

- "17.9.6. The remotely controlled shut-off valve may stay in an open position during the activated stop phase of an automatic stop-start or hybrid electric system. ~~¶The remotely controlled shut-off valve shall be closed in case of a broken fuel supply pipe caused by an accident.¶~~"

*Annex 3, paragraph 4.7.*, amend to read:

- "4.7. The remotely controlled service valves for use **in stop-start or hybrid electric systems** in accordance with paragraph 17.6.1.4.(b) shall be submitted to the following numbers of operations during the endurance test of Annex 15, paragraph 9.:
- (a) 200,000 cycles (mark "H1") for ~~stop-start-stop~~ **stop-start-stop** systems; or
  - (b) 500,000 cycles (mark "H2") for hybrid electric systems; or
  - (c) 1,000,000 cycles (mark "H3") for ~~stop-start-stop~~ **stop-start-stop** systems with coasting.
- Notwithstanding, the valves complying with (b) shall be deemed to satisfy (a), and the valves complying with (c) shall be deemed to satisfy (a) and (b)."**

*Annex 7, paragraph 1.7., amend to read:*

- "1.7. The remotely controlled shut-off valves for use in accordance with paragraph 17.9.7.(b) shall be submitted to the following numbers of cycles during the endurance test of Annex 15, paragraph 9.:
- (a) 200,000 cycles (mark "H1") for ~~stop~~-start-**stop** systems; or
  - (b) 500,000 cycles (mark "H2") for hybrid electric systems; or
  - (c) 1,000,000 cycles (mark "H3") for ~~stop~~-start-**stop** systems with coasting.

**Notwithstanding, the valves complying with (b) shall be deemed to satisfy (a), and the valves complying with (c) shall be deemed to satisfy (a) and (b)."**

*Annex 14, paragraph 2.1., amend to read:*

- "2.1. Notwithstanding the provisions of paragraphs 1. and 2. above, the remotely controlled service valve and shut-off valves may stay in an open position during the activated stop phase of an automatic stop-start system. [The valves and fuel pump shall be closed in the case of a broken fuel supply pipe or/and in case of stalling of the engine.]"

## **II. Justification**

ECE/TRANS/WP.29/GRSG/2013/12 seems to limit the possible combination of valves and systems. For example, it could be interpreted that the valves marked by H3, which are complying with the provisions of Annex 3, paragraph 4.7., or Annex 7, paragraph 1.7. (1,000,000 cycle operation), cannot be installed with start-stop or hybrid electric systems even though the valves have enough durability for each system.

OICA believes that such limitation is not the intention of the proposal.

OICA can accept the proposal that the remotely controlled shut-off valve must be closed in case of a broken fuel supply pipe (sentence in square brackets in the proposed paragraph 17.9.6.), but OICA questions the test method for simulating an "accident".

OICA questions the proposed provision in Annex 14, paragraph 2.1., requesting that the valves and fuel pump shall be closed in the case of a broken fuel supply pipe or/and in case of stalling of the engine (sentence in square brackets in the proposal). OICA is keen to get clarification about this provision.

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