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INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

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> REGULATION No. 48 (Installation of lighting and light-signalling devices)

> > Arrangement of electrical connections

Proposal for Supplement 2 to the 04 series of amendments to Regulation No. 48

Submitted by the expert from Italy */

The text reproduced below was prepared by the expert from Italy to allow the arrangement of electrical connections resulting in a longer service life for front position lamps. It is based, on TRANS/WP.29/GRE/2004/39 from the expert of the Working Party "Brussels 1952" (GTB), distributed during the fifty-third session of the Working Party on Lighting and Light-signalling (GRE). The modifications to the current text of Regulation No. 48 are marked in **bold** characters.

 $[\]frac{*}{}$ 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 performance of vehicles. The present document is submitted in conformity with that mandate.

A. PROPOSAL

Paragraph 5.12., amend to read:

- "5.12. The electrical connections SHALL be such that the main-beam and dipped-beam headlamps and the front fog lamps cannot be switched on unless the lamps referred to in paragraph 5.11. are also switched on. This requirement shall not **apply to**:
- **5.12.1.** main-beam or dipped beam headlamps when their luminous warnings consist of the intermittent lighting up at short intervals of the main-beam headlamps or the intermittent lighting up at short intervals of the dipped-beam headlamps or the alternate lighting up at short intervals of the main-beam and dipped-beam headlamps;
- 5.12.2. front position lamps, when the dipped-beam headlamps and/or the main-beam headlamps and/or the front fog lamps are switched on, under condition that:
 - (a) their electrical connections are such that in case of failure of any of these lighting devices the front position lamp or the daytime running lamps (DRL) are automatically activated [on the side on which the failure occurred];
 - (b) the headlamps / front fog lamps fulfil also the geometric visibility angles prescribed for the front position lamps in paragraph 6.9.5. of this Regulation."

B. JUSTIFICATION

During the fifty-third session of the Working Party on Lighting and Light-signalling (GRE), the expert from GTB introduced TRANS/WP.29/GRE/2004/39 to modify the general requirements on electrical connection (see paragraph 5.12. of Regulation No. 48) to allow headlamps and front fog lamps to be switched on even if front position lamps are not switched on. This proposal was justified by the fact that it results in a longer service life for front position lamps and therefore there is a higher probability of correct function in case of failure of dipped-beam headlamps and/or front fog lamps. In addition, power consumption is reduced by 10 to 12 W. The proposal was rejected since GRE experts were concerned about the reduced geometric visibility due to the absence of the light emitted by the front position lamps.

The expert from Italy deems that the justifications given by the expert from GTB were interesting. Accordingly, after having examined again the proposal, he presents now an amended proposal in which the visibility problems are avoided. Thus, he requests that the headlamps/front fog lamps are allowed to be switched on without switching on the front position lamps; in the case the headlamp/front fog lamp fulfil the geometrical visibility angles of the front position lamp.

Moreover it is proposed as "recovery function" to switch on the front position lamp, as already proposed by GTB, or as for DRL. The activation of this recovery function on both sides or on the side on which the failure occurs, should be decided on the basis of advantages and disadvantages introduced by both solutions.

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