

15 August 2012

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## 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)

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## **Addendum 112: Regulation No. 113**

### **Revision 2 – Amendment 1**

Supplement 10 to the original version of the Regulation - Date of entry into force: xx

### **Uniform provisions concerning the approval of motor vehicle headlamps emitting a symmetrical passing beam or a driving beam or both and equipped with filament, gas-discharge light sources or LED modules**



**UNITED NATIONS**

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\* 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.

*Paragraph 1.9.*, shall be deleted.

*Paragraph 1.10.*, renumber as paragraph 1.9.

*Paragraph 2.2.2.1.*, amend to read:

"2.2.2.1. For gas discharge lamps, the make and type of the ballast(s) in the case that the ballast(s) is (are) not integrated with the light source(s);"

*Paragraph 6.1.4.3.*, amend to read:

"6.1.4.3. Four seconds after ignition of a headlamp, equipped with a gas discharge light source with the ballast not integrated with the light source, and which has not been operated for 30 minutes or more, 60 lux at least must be reached at point HV of a driving beam and 6 lux at point 2 ( 0. 86D-V) of a passing beam for headlamps incorporating driving beam and passing beam functions, or 6 lux at point point 2 ( 0. 86D-V) for headlamps having only a passing beam function. The power supply shall be sufficient to secure the quick rise of the high current pulse."

*Paragraph 6.2.7.1.*, amend to read:

"6.2.7.1. The voltage applied at the terminals of the ballast( s) or at the terminals of the light source in case the ballast is (are) integrated with the light source, is: either: 13.5 V  $\pm$  0. 1 V for 12 V systems or: otherwise specified (see Annex 11)."

*Annex 4,*

*Paragraph 1.1.1.2.*, amend to read:

" ....

(b) In case of replaceable gas discharge light source(s): The test voltage for the electronic light source control-gear or the light source in case the ballast is integrated with the light source, is 13. 2  $\pm$  0.1 volts for 12 V vehicle voltage systems, or otherwise specified in the application for approval."

*Annex 5,*

*Paragraph 1.3.1.*, amend to read:

"1.3.1. Equipped with gas discharge light sources according to Regulation No. 99:

1.3.1.1. With respect to photometric performance, the conformity of mass-produced headlamps shall not be contested when testing photometric performance of any headlamp chosen at random and measured at 13.5 V  $\pm$  0.1 V or as otherwise specified

Either equipped with a replaceable standard gas-discharge light source. The luminous flux of this gas-discharge light source may differ from the objective luminous flux specified in Regulation No. 99. In this case, the illuminances shall be corrected accordingly; or

Equipped with the serial production gas-discharge light source and the serial ballast, possibly integrated with the light source. The luminous flux of this light source may deviate from the objective luminous flux due to light source and ballast tolerances as specified in Regulation No. 99; accordingly the measured illuminances may be corrected by 20 per cent in the favourable direction;"

*Annex 5,*

*Paragraph 1.3.5.,* amend to read:

"1.3.5. If the results of the tests described above do not meet the requirements, tests on the headlamp shall be repeated using another standard gas-discharge light source, gas-discharge light source and/or ballast, or LED module and electronic light source control gear, whichever is applicable according to paragraph 1.3.1. above."

*Annex 7,*

*Paragraph 1.3.1.1.,* amend to read:

"1.3.1.1. Gas discharge light sources according to Regulation No. 99:  
With respect to photometric performance, the conformity of mass-produced headlamps shall not be contested when testing photometric performance of any headlamp chosen at random and measured at  $13.5\text{ V} \pm 0.1\text{ V}$  or as otherwise specified if  
Either equipped with a replaceable standard gas-discharge light source. The luminous flux of this gas-discharge light source may differ from the objective luminous flux specified in Regulation No. 99. In this case, the illuminances shall be corrected accordingly; or  
Equipped with the serial production gas-discharge light source and the serial ballast, possibly integrated with the light source. The luminous flux of this light source may deviate from the objective luminous flux due to light source and ballast tolerances; accordingly the measured illuminances may be corrected by 20 per cent in the favourable direction."

*Annex 7,*

*Paragraph 1.3.5.,* amend to read:

"1.3.5. If the results of the tests described above do not meet the requirements, tests on the headlamp shall be repeated using another standard gas-discharge light source, a gas-discharge light source and/or ballast, or (an) LED module(s) and electronic light source control gear(s), whatever is applicable according to paragraph 1.3.1. above."

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