

2 July 2021

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## **Agreement**

### **Concerning the Adoption of Harmonized Technical United Nations Regulations 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 United Nations Regulations\***

(Revision 3, including the amendments which entered into force on 14 September 2017)

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#### **Addendum 12 – UN Regulation No. 13**

#### **Revision 8 - Amendment 7**

Supplement 17 to the 11 series of amendments – Date of entry into force: 9 June 2021

#### **Uniform provisions concerning the approval of vehicles of categories M, N and O with regard to braking**

This document is meant purely as documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2020/119.



**UNITED NATIONS**

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\* Former titles 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 (original version); 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, done at Geneva on 5 October 1995 (Revision 2).

*Annex 7 (Provisions relating to energy sources and energy storage devices (energy accumulators), Part A (Compressed-Air braking systems))*

*Paragraph 1.2.1., amend to read:*

"1.2.1. The energy storage devices (energy reservoirs) of power-driven vehicles shall be such that after eight full-stroke actuations of the service braking system control the pressure remaining in the energy storage device(s) shall be not less than the pressure required to obtain the specified secondary braking performance."

*Paragraph 1.2.2.3., amend to read:*

"1.2.2.3. In the case of power-driven vehicle to which the coupling of a trailer is authorized and with a pneumatic control line, the supply line shall be stopped and a compressed-air reservoir of 0.5 litre capacity shall be connected directly to the coupling head of the pneumatic control line. Before each braking operation, the pressure in this compressed-air reservoir shall be completely eliminated. After the test referred to in paragraph 1.2.1. above, at the additional (ninth) actuation of the service braking system control, the energy level supplied to the pneumatic control line shall not fall below a level equivalent to one-half the figure obtained at the first brake application. "

*Paragraph 1.3.1., amend to read:*

"1.3.1. The energy storage devices (energy reservoirs) with which trailers are equipped shall be such that, after eight full-stroke actuations of the towing vehicle's service braking system, the energy level supplied to the operating members using the energy obtained at the additional (ninth) actuation of the towing vehicle's service braking system, does not fall below a level equivalent to one-half of the figure obtained at the first brake application and without actuating either the automatic or the parking braking system of the trailer."

*Annex 7, Part B (Vacuum braking systems)*

*Paragraph 1.2.1., amend to read:*

"1.2.1. The energy storage devices (energy reservoirs) of power-driven vehicles shall be such that it is still possible to achieve the performance prescribed for the secondary braking system:

1.2.1.1. After eight full-stroke actuations of the service braking system control where the energy source is a vacuum pump; and

1.2.1.2. After four full-stroke actuations of the service brake control where the energy source is the engine."

*Paragraph 1.2.2.3., amend to read:*

"1.2.2.3. In the case of a power-driven vehicle authorized to tow a trailer, the supply line shall be stopped and an energy storage device of 0.5 litre capacity shall be connected to the control line. After the test referred to in paragraph 1.2.1. above, at the additional actuation of the service braking system control, the vacuum level provided at the control line shall not have fallen below a level equivalent to one-half of the figure obtained at the first brake application. "

*Paragraph 1.3.1., amend to read:*

"1.3.1. The energy storage devices (energy reservoirs) with which trailers are equipped shall be such that after a test comprising four full-stroke actuations of the trailer's service braking system, at its additional (fifth) actuation the vacuum level provided at the user points shall not have fallen below a level equivalent to one-half of the value obtained at the first brake application."