

E/ECE/324 }
E/ECE/TRANS/505 } Rev.2/Add.104/Amend.2

30 April 2002

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 104: Regulation No. 105

Amendment 2

02 series of amendments - Date of entry into force: 5 December 2001

**UNIFORM PROVISIONS CONCERNING THE APPROVAL OF VEHICLES INTENDED
FOR THE CARRIAGE OF DANGEROUS GOODS WITH REGARD TO THEIR
SPECIFIC CONSTRUCTION FEATURES**



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.

GE.02-21691

Paragraph 1., amend to read (including also a new footnote 1/):

A categories O2, O3 and O4 1/ intended for the transport of dangerous goods and which are subject to section 9.1.2. of annex B to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).

1/ As defined in annex 7 to the Consolidated Resolution on the Construction of Vehicles (R.E.3) (document TRANS/WP.29/78/Rev.1/Amend.2)"

Paragraph 3.2.2., amend the reference to Amarginal 22.301@ to read
Aparagraph 9.1.1.2.@"

Paragraph 4.2., amend the words "(at present O1 for the Regulation in its O1 series of amendments)" to read "(at present O2 for the Regulation in its O2 series of amendments)".

Paragraph 4.4.1., footnote 1/, renumber as footnote 2/, and amend to read:

A2/ 1 for Germany, 33 (vacant), 34 for Bulgaria, 35 (vacant), 36 for Lithuania, 38 (vacant), 39 for Azerbaijan, 43 for Japan, 44 (vacant), 45 for Australia, 46 for Ukraine, 47 for South Africa and 48 for New Zealand. Subsequent numbers@"

Paragraph 4.4.3., amend the reference to Amarginal 22.301@ to read
Aparagraph 9.1.1.2.@"

Paragraph 5.1., footnote 2/, renumber as footnote 3/.

Paragraph 5.1., the table, amend to read:

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TECHNICAL SPECIFICATIONS		VEHICLE DESIGNATION (according to chapter 9.1 of Annex B to ADR)				
		EX/II	EX/III	AT	FL	OX
	Electrical equipment					
5.1.1.2.	Wiring		x	x	x	x
5.1.1.3.	Battery master switch					
5.1.1.3.1.			x		x	
5.1.1.3.2.			x		x	
5.1.1.3.3.					x	
5.1.1.3.4.			x		x	
5.1.1.4.	Batteries	x	x		x	
5.1.1.5.	Permanently energized circuits					
5.1.1.5.1.					x	
5.1.1.5.2.			x			
5.1.1.6.	Electrical installation at the rear of the cab		x		x	
5.1.2.	Prevention of fire risks					
5.1.2.2.	Vehicle cab					
5.1.2.2.1.		x	x			
5.1.2.2.2.						x
5.1.2.3.	Fuel tanks	x	x		x	x
5.1.2.4.	Engine	x	x		x	x
5.1.2.5.	Exhaust system	x	x		x	
5.1.2.6.	Vehicle endurance braking		x	x	x	x
5.1.2.7.	Combustion heaters					
5.1.2.7.1., 2. and 5.		x	x	x	x	x
5.1.2.7.3. and 4.					x	
5.1.2.7.6.		x	x			
5.1.3.	Braking equipment	x	x	x	x	x
5.1.4.	Speed limitation device	x	x	x	x	x
5.1.5.	Coupling devices for trailers	x	x			

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Paragraph 5.1.1.2.1., amend to read:

- A except for the following:
- from the battery to the cold start and @

Paragraph 5.1.1.3.1., amend to read:

- A ... as close to the battery as practicable.@

Paragraph 5.1.1.3.2., amend to read:

- A5.1.1.3.2. A control device to facilitate the disconnecting and the reconnecting functions of the switch shall be installed in the driver's cab. It shall be readily accessible to the driver and distinctively marked. It shall be protected against inadvertent operation by either adding a protective cover, by using a dual movement control device, or by other suitable means. Additional control devices may be installed provided they are distinctively marked and protected against inadvertent operation.@

Paragraph 5.1.1.3.3., amend to read:

- A5.1.1.3.3. The switch shall have a casing with protection degree IP65 in accordance with IEC Standard 529.@

Paragraph 5.1.1.3.4., amend to read:

- A5.1.1.3.4. The cable connections on the switch shall have protection degree IP54. However, this ...@

Paragraph 5.1.1.5., should be deleted.

Paragraph 5.1.1.6., renumber as paragraph 5.1.1.5., and amend to read (including new footnotes 4/ and 5/):

A5.1.1.5. Permanently energized circuits

- 5.1.1.5.1. Those parts of the electrical installation, including the leads which shall remain energized when the battery master-switch is open, shall be suitable for use in hazardous areas. Such equipment shall meet the appropriate requirements of IEC 60079 4/, parts 0 and 14 and the additional requirements applicable of IEC parts 1, 2, 5, 6, 7, 11, 15 or 18. 5/

For the application of IEC 60079 part 14 5/, the following classification shall be used:

Permanently energized electrical equipment including the leads that are not subject to paragraphs 5.1.1.3. and 5.1.1.4. shall meet the requirements for zone 1 for electrical equipment in general or meet the requirements for zone 2 for electrical equipment situated in the driver's cab. The requirements for explosion group IIC, temperature class T6, shall be met.

5.1.1.5.2. Bypass connections to the battery master switch for electrical equipment which must remain energized when the battery master switch is open shall be protected against overheating by suitable means, such as a fuse, a circuit breaker or a safety barrier (current limiter).

4/ The requirements of IEC 60079 part 14 do not take precedence over the requirements of this Regulation.

5/ As an alternative, the general requirements of EN 50014 and the additional requirements of EN 50015, 50016, 50017, 50018, 50019, 50020, or 50028 may be used."

Paragraph 5.1.1.7., renumber as paragraph 5.1.1.6., and amend to read:

A ... under normal conditions of use of vehicles and that these risks@

Paragraph 5.1.1.7.1., renumber as paragraph 5.1.1.6.1., and amend to read:

A located to the rear of the driver's cab ... figures 1, 2, 3 and 4 below. However, the sensor@

Paragraphs 5.1.1.7.2. and 5.1.1.7.3., renumber as paragraphs 5.1.1.6.2. and 5.1.1.6.3.

Paragraph 5.1.1.7.4., should be deleted.

Paragraph 5.1.2.1., amend to read:

A5.1.2.1. General provisions

The following technical ...@

Paragraph 5.1.2.2.2., amend to read:

A5.1.2.2.2. Unless the driver's cab is made of materials which are not readily flammable, a shield made of fitted at the rear of the cab. Any window in the rear of the cab ...@

Paragraph 5.1.2.3.2., amend to read:

A ... or with a closure enabling the opening to be kept hermetically sealed.@

Paragraph 5.1.2.4., amend to read:

A through heating or ignition. In the case of EX/II and EX/III vehicles the engine shall be of compression-ignition construction.@

Paragraph 5.1.2.5., amend to read:

Aclearance of at least 100 mm or be protected by a thermal shield.@

Insert a new paragraph 5.1.2.7.6., to read:

A5.1.2.7.6. Combustion heaters with gaseous fuels are not permitted.@

Paragraph 5.1.3., amend to read:

A5.1.3. Braking equipment

Vehicles subject to the ADR Agreement shall fulfil all relevant requirements of Regulation No. 13 (including those of annex 5) as amended in accordance with the dates of application specified therein.@

Paragraphs 5.1.3.1. and 5.1.3.2., should be deleted.

Paragraph 5.1.4., amend to read:

A5.1.4. Speed limitation device

Power driven vehicles (rigid vehicles and tractors for semi-trailers) with a maximum mass exceeding 12 tonnes, shall be equipped with a speed limitation device according to the technical requirements of Regulation No. 89 as amended in accordance with the dates of application specified therein. The set speed as defined in paragraph 2.1.2 and specified in paragraph 4.9.4. of Regulation No. 89 shall not exceed 85 km/h."

Insert a new paragraph 5.1.5., to read:

A5.1.5. Coupling devices for trailer

Coupling devices for trailers shall comply with the technical requirements of Regulation No. 55 as amended in accordance with the dates of application specified therein.@

Insert a new paragraph 10., to read:

10. TRANSITIONAL PROVISIONS

10.1. As from the official date of entry into force of the 02 series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approval under this Regulation as amended by the 02 series of amendments.

10.2. Contracting Parties applying this Regulation shall continue to grant approvals and extensions to such approvals to types of vehicles which comply with the requirements of this Regulation as amended by the preceding series of amendments until 31 December 2002.

- 10.3. As from 1 January 2003 Contracting Parties applying this Regulation shall grant ECE approvals and extensions of such approvals only if the vehicle type to be approved meets the requirements of this Regulation as amended by the 02 series of amendments.
- 10.4. No Contracting Party applying this Regulation shall refuse national type approval of a vehicle type approved to the 02 series of amendments to this Regulation.
- 10.5. Until 31 December 2002 no Contracting Party applying this Regulation shall refuse national type approval of a vehicle type approved to the preceding series of amendments to this Regulation.
- 10.6. As from 1 January 2003 Contracting Parties applying this Regulation may refuse first national registration (first entry into service) of a vehicle which does not meet the requirements of the 02 series of amendments to this Regulation."

Paragraph 10. (former), renumber as paragraph 11.

Annex 2,

Model A of the approval mark, in the figure and in the caption below amend the number "012492" to read "022492" (twice). In addition, in the caption below the figure, amend the words "Regulation No. 105, as amended by the 01 series of amendments" to read "Regulation No. 105, as amended by the 02 series of amendments".

Model B of the approval mark, in the figure amend the number "012492" to read "022492" and in the caption below the figure amend the words "Regulation No. 105 included the 01 series of amendments" to read "Regulation No. 105 included the 02 series of amendments".
