

**Proposal for the 03 series of amendments to Regulation No. 34
(Fire prevention)**

The modifications to the current text of the Regulation are marked in bold or strikethrough characters.

A. PROPOSAL

Paragraph 1.2., amend to read:

~~"1.2. PART II: at the request of the manufacturer to the approval of vehicles of categories M, N and O approved to Part I or IV of this Regulation fitted with liquid fuel tank(s) with regard to the prevention of fire risks in the event of a frontal and/or lateral and/or rear collision.~~

PART II-1: at the request of the manufacturer, the approval of vehicles of categories M, N and O approved to Part I or IV of this Regulation fitted with liquid fuel tank(s) with regard to the prevention of fire risks in the event of a frontal and/or lateral collision as well as the approval of vehicles of categories M1 and N1, which are of a total permissible mass exceeding 2.8 tonnes, and categories M2, M3, N2, N3 and O, fitted with tank(s) for liquid fuel, which have been approved to Part I or IV of this Regulation with regard to the prevention of fire risks in the event of a rear collision.

PART II-2: [Each Contracting Party or regional economic integration organization may request the following provision.]

the approval of vehicles of categories M1 and N1, which are of a total permissible mass not exceeding 2.8 tonnes, approved to Part I or IV of this Regulation fitted with liquid fuel tank(s) with regard to the prevention of fire risks in the event of a rear collision."

Paragraph 3.1.4.2., amend to read:

"3.1.4.2. the number of this Regulation, followed by "RI", if the vehicle is approved pursuant to Part I of the Regulation, or by "RII-1" if the vehicle is approved pursuant to Parts I or IV and to Part II-1 of the Regulation, **or by "RII-2" if the vehicle is approved pursuant to Parts I or IV and to Part II-2 of the Regulation**, a dash and the approval number to the right of the circle prescribed in paragraph 3.1.4.1."

*Part II, renumber as **Part II-1***

Paragraph 9.4., amend to read:

" 9.4. During and after the impacts described in paragraph 9. above, the battery shall be kept **in a position by its securing device as specified by the manufacturer.**"

Insert new Part, to read:

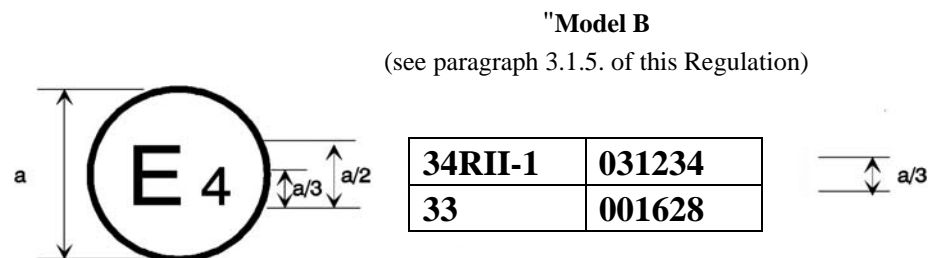
"PART II-2 - APPROVAL OF VEHICLE WITH REGARD TO THE PREVENTION OF FIRE RISKS IN THE EVENT OF REAR COLLISION

1. Paragraphs 7. to 8.2.2. of Part II-1 shall apply.
2. The vehicle test shall be performed according to the procedures described in Annex 4 of this Regulation.
- 2.1. After the collision test, the requirements in paragraphs 9.1. to 9.4. of Part II-1 shall be met."

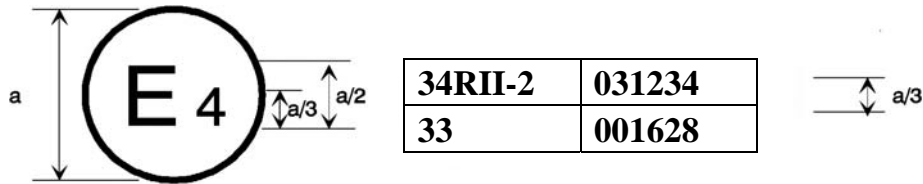
Insert new Paragraphs 17.7-11, to read:

- "17.7. As from the official date of entry into force of the 03 series of amendments, no Contracting Party applying this Regulation shall refuse to grant or refuse to accept type approvals under this Regulation as amended by the 03 series.
- 17.8. As from [XX] months after the date of entry into force of the 03 series of amendments, Contracting Parties applying this UN Regulation with respect to Part II shall grant type approvals only if the vehicle type to be approved meets the requirements of Part II of this Regulation as amended by the 03 series of amendments.
- 17.9. Contracting Parties applying this Regulation shall not refuse to grant extensions of type approvals for existing types which have been granted according to the preceding series of amendments to this Regulation.
- 17.10. Even after the date of entry into force of the 03 series of amendments to this Regulation, type approvals for other than Part II to the preceding series of amendments to the Regulation which are not affected by the 03 series of amendments shall remain valid and Contracting Parties applying this Regulation shall continue to accept them.
- 17.11. Notwithstanding the transitional provisions above, Contracting Parties whose application of this UN Regulation comes into force after the date of entry into force of the most recent series of amendments are not obliged to accept type approvals which were granted in accordance with any of the preceding series of amendments to this Regulation are only obliged to accept type approvals granted in accordance with the 03 series."

Annex 2 Model B, amend to read:



The above approval mark affixed to a vehicle shows that the type concerned was approved in the Netherlands (E4) pursuant to Regulations Nos. 34 Parts I or IV and II-1 and 33 */. The approval numbers indicated that, at the date when the respective approvals were given, Regulation No. 34 included the ~~02~~ 03 series of amendments and Regulation No. 33 was still in its original form.



The above approval mark affixed to a vehicle shows that the type concerned was approved in the Netherlands (E4) pursuant to Regulations Nos. 34 Parts I or IV and II-2 and 33 */. The approval numbers indicated that, at the date when the respective approvals were given, Regulation No. 34 included the 03 series of amendments and Regulation No. 33 was still in its original form."

Annex 4, paragraph 2.1., amend to read:

"2.1. Testing ground

The test area shall be large enough to accommodate the impactor (striker) propulsion system and to permit after-collision displacement of the vehicle struck and installation of the test equipment. The part in which vehicle collision and displacement occur shall be horizontal, flat and smooth and have a coefficient of friction of not less than 0.5 and **uncontaminated, and representative of a normal, dry, uncontaminated road surface.**"

Annex 4, paragraph 2.2.2., amend to read:

"2.2.2. The impacting surface shall be flat, not less than 2,500 mm wide, and 800 mm high, and its edges shall be rounded to a radius of curvature of between 40 and 50 mm. It shall be clad with a layer of plywood ~~20 mm thick.~~ **20 +/- 2 mm thick, in good condition.**"

Annex 4, paragraph 2.4.2., amend to read:

"2.4.2. The velocity of collision shall be between ~~35 and 38 km/h~~ **48 and 52 km/h.**"

B. Justification

For the purpose of enhancing safety, Japan proposes to amend certain collision conditions in the UN Regulation's provisions for fire prevention in the event of a rear collision to conform to the conditions that have been made mandatory in Japan.

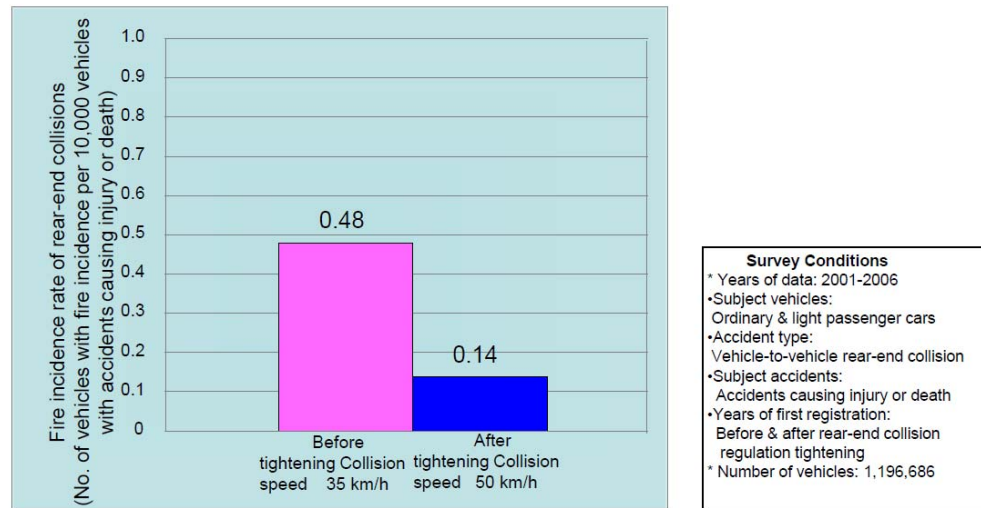
Japan has made the standards for fire prevention in the event of a rear collision mandatory for passenger cars.

The collision speed was 35 km/h in the original standards but has been raised to 48 to 52 km/h since 1993. The following chart compares the fire incidence rates of rear-end collisions before and after the raising of the collision speed. Since the fire incidence rate in rear-end collisions has reduced to about 1/3 after the raising of the collision speed in the regulation, we can say that the regulatory tightening is effective as a safety enhancement measure.

Japan intends to forthwith adopt the UN Regulation No. 34 after the amendment, which will be part of our preparation for IWVTA.

Fire Incidence Rate of Rear-End Collisions (Japan)

After the tightening of the rear-end collision regulation (collision speed 35 km/h → 50 km/h), the fire incidence rate of rear-end collisions has reduced to about 1/3, indicating that the regulatory tightening is effective.



Paragraph 1.2.:

Currently, the rear-collision fire prevention requirements are voluntary for manufacturers. On the other hand, Japan has made them mandatory. For this reason, we propose to allow each Contracting Party to choose such requirements. In addition, we propose to divide the scope of Part II in order to distinguish between the approval to be granted at the request of the manufacturer based on the frontal/lateral collision fire prevention requirements or on the rear collision fire prevention requirements for M2, M3, N2, N3 and O and the approval based on the mandatory rear-collision requirements.

As regards the sentence in brackets, from the standpoint of promoting the IWVTA, Japan believes it appropriate to remove the brackets so as to make the sentence valid.

Paragraph 3.1.4.2. and Annex 2 Model B:

Based on the justifications for paragraph 1.2. above, Japan proposes to amend the approval number provisions and approval mark models.

Paragraph 9.4.:

Japan considers that the purpose of this paragraph is to prevent fires from being caused by a battery projecting at the time of collision. Keeping it in position by its securing device is merely one of the ways to prevent it.

This paragraph should require the prevention of battery projection, not the method for it. It should allow each manufacturer to choose a method at their discretion.

Part II-2:

We propose to add the requirements on the approval of vehicle with regard to the prevention of fire risks in the event of rear collision.

Annex 4 Paragraph 2.1.:

We propose to make the road surface conditions of the test area consistent with those specified in UN Regulation No. 95.

Annex 4 Paragraph 2.2.2.

We propose to make the impacting surface thickness consistent with that specified in UN Regulation No. 12.

Annex 4 Paragraph 2.4.2:

We believe that the rear collision speed specified in Japan's current Safety Regulations is appropriate, as the accident data indicate that the fire incidence rate of rear-ended vehicles is declining.