

**PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 64**  
**(ECE/TRANS/WP.29/GRRF/2002/17/Rev.5)**  
(Temporary-use spare wheels/tyres)

Note: The text reproduced below was prepared by the expert from Japan in order to amend ECE/TRANS/WP.29/GRRF/2002/17/Rev.5, transmitted by the expert from the United Kingdom.

**A. PROPOSAL**

Paragraphs 5.1.6.1. to 5.1.6.5., amend to read (including the addition of a new paragraphs 5.1.6.4. and 5.1.6.5.):

"5.1.6.1. The warning indication symbol shall be in accordance with UNECE Regulation No. 121.

5.1.6.2. The warning signal shall be activated when the ignition (start) switch is in the "on" (run) position (bulb check).

5.1.6.3. When any tyre is in the flat tyre running mode, it shall be indicated to the driver by operation of the warning signal referred to in paragraph 5.1.6.1.

5.1.6.4. Electrical failure or sensor anomaly that affects the Run-Flat Warning System, including failure of the electrical source, supply or transmission of the output signal, shall be indicated to the driver by operation of the warning signal referred to in paragraph 5.1.6.1.

5.1.6.5. The operation of the warning signal specified in paragraphs 5.1.6.2. to 5.1.6.4. shall meet the requirements in Annex 3."

Paragraphs 5.2.1. and 8.1.6.5., amend the reference to "annex 3" to read "Annex 4".

Insert a new Annex 3, to read:

"Annex 3

TEST FOR RUN-FLAT WARNING SYSTEM

1. Test Conditions

1.1. Ambient temperature

The ambient temperature shall be between 0 °C and 40 °C.

- 1.2. Test road surface  
The test road surface shall be dry and smooth.
- 1.3. Test location  
The test location shall be other than an environment susceptible to radio wave interference such as a strong electric field.
- 1.4. Condition of the test vehicle in a stationary state  
The vehicle's tyres shall be shaded from direct sun when the vehicle is parked.
2. Test Method  
The vehicle's Run-Flat Warning System is prepared and tested at speeds between 40 km/h and 100 km/h. More specifically, testing is conducted when the vehicle speed is  $70 \pm 30$  km/h. For vehicles equipped with cruise control, cruise control must not be engaged during testing.
  - 2.1. Test procedures for detection of flat tyre running mode
    - 2.1.1. Inflate the tyres to the pressure recommended by the vehicle manufacturer.
    - 2.1.2. With the vehicle stationary and the ignition (start) switch in the "Lock" or "Off" position, turn the ignition (start) switch to the "On" ("Run") position or, where applicable, the appropriate position for the lamp check. Confirm the activation of the warning signal.
    - 2.1.3. Turn off the ignition and reduce the inflation pressure of any one of the tyres until the adjusted tyre inflation pressure is 70 kPa, which is the upper limit for the flat tyre running mode.
    - 2.1.4. Within 5 minutes after reducing the inflation pressure in the tyre, start the test by turning on the ignition and drive the vehicle at the test speed.
  - 2.2. Test procedures for detection of failure mode  
Stop the vehicle and simulate Run-Flat Warning System failures by, for example, disconnecting connectors for wiring related to the power supply from the power source or wiring related to the input/output to/from the ALU controlling the warning system.
    - 2.2.1. Start the test by turning on the ignition and drive the vehicle at the test speed.
3. Requirements
  - 3.1. The following requirements shall be satisfied when the test procedures in paragraph 2.1. are

performed.

- 3.1.1. The Run-Flat Warning System must be activated within 10 minutes after starting the test.
- 3.1.2. After 5 minutes have elapsed since the Run-Flat Warning System was deactivated by turning the ignition (start) switch to the "Off" or "Lock" position, the warning shall be activated as the ignition (start) switch is turned to the "On" ("Run") position, and shall remain active as long as the ignition (start) switch is in the "On" ("Run") position.
- 3.2. The following requirements shall be satisfied when the test procedures in 2.2. are performed.
  - 3.2.1. The failure indication for the Run-Flat Warning System shall be activated within 20 minutes after starting the test.
  - 3.2.2. After 5 minutes have elapsed since the failure indication for the Run-Flat Warning System was deactivated by turning the ignition (start) switch to the "Off" or "Lock" position, the failure indication shall be activated as the ignition (start) switch is turned to the "On" ("Run") position, and shall remain active as long as the ignition (start) switch is in the "On" ("Run") position."

Annex 3 (former), renumber as Annex 4.

## **B. JUSTIFICATION**

In order to verify the conformity of the Run-Flat Warning System from an objective point of view, specific test procedures are necessary. For this reason, Japan proposes to add the test procedures as above. The test procedures were developed based on US standard FMVSS 138. The detection speeds and times for driving in the flat tyre running mode, however, remain as they were in the proposal from the United Kingdom (ECE/TRANS/WP.29/GRRF/2002/17/Rev.5).

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