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## Economic Commission for Europe

### Inland Transport Committee

### World Forum for Harmonization of Vehicle Regulations

#### 163<sup>rd</sup> session

Geneva, 24-27 June 2014

Item 4.9.5 of the provisional agenda

**1958 Agreement – Consideration of draft amendments  
to existing Regulations submitted by GRRF**

## **Proposal for Supplement 2 to the 02 series of amendments to Regulation No. 90 (Replacement brake linings)**

### **Submitted by the Working Party on Brakes and Running Gear \***

The text reproduced below was adopted by the Working Party on Brakes and Running Gear (GRRF) at its seventy-sixth session (ECE/TRANS/WP.29/GRRF/76, para. 22). It is based on ECE/TRANS/WP.29/GRRF/2014/9 as amended by Annex IV to the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration.

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\* In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

GE.14-21679



\* 1 4 2 1 6 7 9 \*

Please recycle The recycling symbol, consisting of three chasing arrows forming a triangle.



*Paragraph 1.2.*, amend to read:

- "1.2. Original brake discs, brake drums, brake lining assemblies and drum brake linings fitted at time of manufacturing of the vehicle and original replacement brake discs, brake drums, brake lining assemblies and drum brake linings intended for the servicing of the vehicle are not subject to this Regulation."

*Insert new paragraphs 2.2.13. and 2.2.14.*, to read:

- "2.2.13. *"Identical brake lining assembly"* is a replacement brake lining assembly identical to the brake lining assembly supplied and fitted as original equipment and included in the vehicle type approval to Regulation No. 13 or Regulation No. 13-H with the exception of the vehicle/brake assembly manufacturers mark which is omitted.
- 2.2.14. *"Identical drum brake lining"* is a replacement drum brake lining identical to the drum brake lining supplied and fitted as original equipment and included in the vehicle type approval to Regulation No. 13 or Regulation No. 13-H with the exception of the vehicle/brake assembly manufacturers mark which is omitted."

*Paragraph 2.3.3.2.*, amend to read:

- "2.3.3.2. *"Identical brake disc"* is a replacement brake disc identical to the brake disc supplied and fitted as original equipment and included in the vehicle type approval to Regulation No. 13 or Regulation No. 13-H with the exception of the vehicle/brake assembly manufacturers mark and the identification code which are omitted."

*Paragraph 2.3.3.3.*, amend to read:

- "2.3.3.3. *"Identical brake drum"* is a replacement brake drum identical to the brake drum supplied and fitted as original equipment and included in the vehicle type approval to Regulation No. 13 or Regulation No. 13-H with the exception of the vehicle/brake assembly manufacturers mark and the identification code which are omitted."

*Insert new paragraph 5.1.3.*, to read (inserting also a reference to and a new footnote):

- "5.1.3. Identical replacement brake lining assemblies and identical drum brake linings do not need to be tested according to the requirements of paragraph 5.2.1, provided the following conditions are fulfilled:
- (a) That the applicant for approval demonstrates that they produce and supplies the submitted brake lining assemblies or drum brake linings to the vehicle or brake manufacturer as original equipment for the specific vehicle models, axles and brakes mentioned under Annex 1A point 6, for which approval is being sought.
  - (b) That the Technical Service and/or Type Approval Authority verify that the applicant is producing and supplying the relevant part mentioned in Appendix 1 to Annex 2 to Regulation No. 13 approval or the Appendix of Annex 1 to Regulation No. 13-H approval, in paragraph related to "Make and type of brake linings".\*
  - (c) The applicant for approval continues to produce the original and identical parts:
    - (i) From the same raw material mixture;
    - (ii) With the same manufacturing process;

- (iii) On the same production line;
- (iv) With the same quality assurance system; and
- (v) With the same results of the conformity of production tests referenced in paragraph 8.4.1., as for the original parts.

The demonstration of compliance to requirements specified in this paragraph shall be supported by an onsite audit, conducted by the Technical Services in charge of the approval. To support the audit the manufacturer shall provide access to the process flow chart and control plan.

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\* At the request of (an) applicant(s) for Regulation No. 90 approval, the information shall be provided by the Type Approval Authority as contained in Appendix 1 to Annex 2 to Regulation No. 13 approval or the Appendix to Annex 1 to Regulation No. 13-H approval. However, this information shall not be provided for purposes other than Regulation No. 90 approvals."

*Paragraph 5.3.2.1.*, amend to read:

"5.3.2.1. The applicant for approval shall demonstrate to the Technical Service and/or approval authority that they produce and supply the submitted brake discs or drums to the vehicle manufacturer as original equipment for the specific model/models, axles, mentioned under Annex 1B point 4 for which approval is being sought. This demonstration shall include verifiable evidence that the brake discs or drums are produced under the same production and quality assurance systems as for the Original parts pursuant to paragraph 2.3.1. Specifically it is required that the applicant for approval continues to produce the original and identical parts:

- (a) From the same raw material, composition and microstructure;
- (b) With the same manufacturing process;
- (c) On the same production line;
- (d) With the same quality assurance system; and
- (e) With the same results of the conformity of production tests referenced in paragraph 8.4.2., as for the original parts.

The demonstration of compliance to requirements specified in this paragraph shall be supported by an onsite audit, conducted by the technical services in charge of the approval. To support the audit the manufacturer shall provide access to the process flow chart and control plan."

*Annex 1B*

*Point 4.*, amend to read:

"4. Vehicles/axles for which the replacement brake disc or a replacement brake drum is approved: ....." "

*Annex 11,*

*Paragraph 3.2.1.2.*, amend to read:

- "(c) When testing brake discs and drums for vehicles with more than 2 axles:

$$m = 0.55 m_{\text{axle}} \quad m_{\text{axle}}: \text{maximum technically permitted mass of the axle}"$$

*Annex 12,*

*Paragraph 3.2.1.2., amend to read:*

"3.2.1.2. Test mass

The test mass for calculating the inertia mass shall be as follows:

$$m = 0.55 m_{\text{axle}} \quad m_{\text{axle}}: \text{maximum technically permitted mass of the axle}$$

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