



**Economic and Social  
Council**

Distr.  
GENERAL

TRANS/WP.29/GRRF/2005/16  
8 July 2005

Original: ENGLISH  
ENGLISH AND FRENCH ONLY

---

**ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Brakes and Running Gear (GRRF)  
(Fifty-eighth session, 20-23 September 2005,  
agenda item 3.)

**PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 90**

(Replacement brake linings)

Transmitted by the GRRF Ad Hoc Working Group on Replacement Brake Linings

Note: The text reproduced below was prepared by the secretariat of the Ad Hoc Working Group on Replacement Brake Linings in order to establish particular technical prescriptions for the brake lining used specifically for parking brake systems and being different of the service brake ones. The text is based on Supplement 5 to 01 series of amendments to Regulation No. 90 (E/ECE/TRANS/505/Rev.1/Add.89/Rev.1/Amend.1). The modifications to the existing text of the Regulation are marked in **bold** characters.

**A. PROPOSAL**

Paragraph 1.1., delete the word "service".

Insert a new paragraph 1.3., to read:

**"1.3. The replacement brake lining assemblies used for separate parking brake systems being independent of the vehicle service brake system will be subject only to the technical prescriptions defined in Annex 8 of this Regulation."**

Insert a new paragraph 2.12., to read:

**"2.12. "Parking Brake Lining Assembly" means a pad assembly or shoe assembly belonging to a parking brake system separate and independent from the service brake system."**

Paragraph 2.12. (former), renumber as paragraph 2.13.

Paragraph 5.3.1.2., amend to read (adding a sentence at the end):

**"5.3.1.2. Replacement brake linings ....  
....  
.... at 200 °C for shoe assemblies. This requirement does not apply to parking brake lining assemblies."**

Paragraph 8.4.1., amend to read (adding a sentence at the end):

**"8.4.1. ensure that for each ....  
.... quality assurance procedure. For parking brake lining assemblies only the shear strength described in paragraph 5.3. is applicable."**

Throughout the whole text of the Regulation, substitute "Annex 8" by "Annex 9".

Annex 8 (former), renumber as Annex 9.

Insert a new Annex 8, to read:

**"Annex 8**

**TECHNICAL PRESCRIPTIONS FOR REPLACEMENT BRAKE LINING ASSEMBLIES INTENDED FOR THE USE IN SEPARATE PARKING BRAKE SYSTEMS BEING INDEPENDENT OF THE VEHICLE SERVICE BRAKE SYSTEM.**

**1. COMPLIANCE WITH REGULATION No. 13**

**Compliance with the requirements of Regulation No.13 shall be demonstrated in a vehicle test.**

**1.1 Test vehicle**

**A vehicle which is representative of the type(s) for which the replacement brake lining assembly approval is required shall be equipped with the replacement brake lining assemblies of the type for which approval is requested and instrumented for brake testing as required by Regulation No. 13. The vehicle shall be fully laden. Brake linings submitted for test shall be fitted to the relevant brakes and, shall not be burnished.**

**1.2. The parking braking system of the vehicle shall be tested according to all relevant requirements in Regulation No. 13, Annex 4, paragraph 2.3."**

**B. JUSTIFICATION**

The existing version of Regulation No. 90 includes in the scope only the brake linings being part of the service brake system.

On the other hand, the scope of Annex XV of the European Union Directive 98/12/EC includes any replacement brake lining, not only the ones included in the service brake system, but does not prescribe any particular requirement for the brake linings belonging to separate parking brake systems.

The ad hoc Working Group was of the opinion that all types of brake linings for the braking systems of motor vehicles should be included in the homologation regulation.

Therefore, this document proposes a test procedure for parking brake linings based on the relevant requirements of Regulation No. 13. A reference to the Original Equipment brake lining is not part of this requirement, because it was regarded as sufficient that the legal requirements are fulfilled.

-----