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agenda item 1.3)

INDUSTRY STATEMENT RELATING TO THE PROPOSALS CONCERNING PERIODIC TECHNICAL INSPECTION

Official Document GRRF/2001/2

Paragraph 5.1.4.6:

When the group was convened one of the objectives was to define provisions which would make available brake performance data that could be utilised by an undefined method of brake performance assessment. The justification for the introduction of “reference braking forces” states that by utilising the declared values irrespective of the load at which the vehicle is presented “guarantees” the laden brake performance will be fulfilled. This can only be the case when a vehicle is tested at or close to its laden condition.

Paragraph 5.1.4.7.1:

Paragraph 5.1.4.7.1 of the above document requires that a system such as ABS or EBS be protected to prevent “simple unauthorised modification”. The reason given for introducing this paragraph envisages low technology tampering typical of which may be that disconnection of the warning signal could be effected to make it appear that the system is without defect.

There is concern that the current wording is very much open to interpretation as there are no specific provisions or indications as to the intent, which will result in non-uniform application of the requirement. It is considered by industry that the proposed revision to the PTI requirements is unnecessary and should be deleted. This can be justified by the special requirements within Annex 18 where it is required that the manufacturer declares the means by which the system may be checked at the time of PTI.

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At the 9th meeting of the PTI Working Group the main topic of discussion was that related to the provisions of paragraph 5.1.4.1 of the Regulation and its application, in particular to the inspection of drums and discs. In the above document paragraph 5.1.4.1 is amended to make it clear that the parts of the braking system that would be subject to inspection were those of the friction components of the brake that are subject to wear. This clarifies that other elements of the braking system such as actuators are not subject to this requirement.

Paragraph 5.1.4.1.1 was developed to define how the above requirement could be realised. As no common approach could be agreed due to the wide variety of number of brake designs and installations, it is appropriate that the vehicle manufacturer should define how the wear condition may be assessed. This is reflected in the text of the proposed paragraph by the words “visually or by other means”.

The understanding of the group was that “other means” could be as follows:

Friction materials:

It is considered that the requirements of paragraphs 5.2.1.11.2 and 5.2.2.8.2 already define methods of assessment, which are satisfactory for purposes of PTI.

Drums and Discs:

Some installations allow access to brake discs for visual inspection but brake drums and enclosed brake discs can only be properly assessed for wear by the removal of wheels or some level of disassembly, as would be the case during a change of the friction material. Currently the technology does not exist whereby the degree of surface wear may be remotely measured and an external indication provided when a limit is reached. Therefore to fulfil the provision of the proposal the “other means” of assessment is understood to permit a certified service record with respect to distance covered and the actual wear against limits defined by the manufacturer. Therefore the following amendment is proposed:

Paragraph 5.1.4.1.1 amend to read:

5.1.4.1.1 The above requirement is deemed to be fulfilled when the wear condition of the friction components is confirmed visually or by other means. In the case of inaccessible drums and discs other means may include reference to a certified service record relating actual wear to the distance covered by the vehicle. The manufacturer shall, at the time of Type Approval, define the wear limit and the method by which assessment of the wear condition can be made. This information shall be made freely available (e.g. vehicle handbook, electronic data record etc).