

GRRF Informal Group on "ECE-R90 - Replacement Discs and Drums" (RD&D)

Status Report

1 General Information regarding the status of discussion within the RD&D Group

Since the last GRRF session in February 2008 the Informal RD&R Group had another meeting (11th) in Brussels. Two further meetings are scheduled this year in Spain (October) and in Germany (December) in order to hopefully finalise the discussions within the Informal RD&R Group of the substantial RD&R Regulation No. 90 amendment.

This amendment will add to the current ECE-Regulation No. 90 the following new annexes:

- Annex 1B - Communication concerning the approval or extension or refusal or withdrawal of approval or production definitely discontinued of a replacement brake drum or replacement brake disc pursuant to Regulation No. 90
- Annex 9 - Special additional procedures for conformity of production (new Part B)
- Annex 10 - Illustrations
- Annex 11 - Requirements for replacement brake discs/drums for vehicles of category M and N
- Annex 12 - Requirements for replacement brake discs/drums for vehicles of category O
- Annex 13 - Requirements for replacement brake discs/drums for vehicles of category L

Although, until now, time did not allow to start the discussion on the new proposed Annex 13, it is anticipated that the work of the *RD&R Working Document* (in the following abbreviated to *WD*) will be finalised in 2008 and the Group will present their consolidated proposal for an amendment of the current ECE-Regulation No. 90 at the 65th session of GRRF in February 2009.

At the moment, intense discussions are under way about an OICA proposal to increase the requirements on the crack resistance test (thermal fatigue) for brake discs.

2 Kind of replacement parts

After an extensive discussion and vote on the marking of replacement discs & drums, GRRF asked at its 61st session the Informal RD&R Group to submit a proposal for the type approval Regulations Nos. 13 and 13H in which it should be required that in Annex 2 (ECE-R13) and Annex 1 (ECE-R13H) a "Replacement Code" has to be specified in order to be in a position to distinguish between an original and aftermarket replacement part.

The Informal RD&R Group defined the following two categories of replacement parts:

1. **Original replacement part** (WD, paragraph 2.3.2); Original part intended for the servicing of the vehicle (provided by the vehicle manufacturer)

Note: In the meaning of the proposed amendment to Regulation No. 90 (WD, paragraph 2.3.1) an **original** disc or drum is a brake disc/drum having type approval in accordance with Regulation No. 13, 13H or 78 and which fulfils the conformity of production requirements of these regulations.

and

2. **Aftermarket replacement part** (WD, paragraph 2.3.4); a replacement part which is not an original replacement part (provided either by the aftermarket or the vehicle manufacturer)

The category of aftermarket replacement part comprises the following kinds of replacement parts:

- a) Identical parts: These are parts which are identical to the OE parts with the exception of the vehicle manufacturer's marking. Those parts bear the marking of the part manufacturer (WD, paragraphs 2.3.4.1 and 2.3.4.2).
- b) Equivalent parts: An equivalent aftermarket replacement part is identical in all dimensions with the OE part and falls in the same material family group as the OE part (WD, paragraphs 2.3.4.3 and 2.3.4.4).
- c) Interchangeable parts: An interchangeable aftermarket replacement part has the same interface dimensions as the OE part but may have a different design, a different material composition and/or different mechanical properties (WD, paragraphs 2.3.4.5 and 2.3.4.6).

3 **Special parts**

The purpose of such parts is not only to replace an original part but also to change the design of the brake. These parts are not covered by ECE Regulation No. 90 and remain subjected to national approval (WD, paragraph 2.3.5).

4 **Marking of the replacement parts**

There was no issue within the RD&D Group whether the replacement part of the aftermarket should be permanently marked or not. For the experts from the aftermarket industry it was always clear that the prescribed markings on the **aftermarket replacement part** have to be permanent.

The **original part is not covered** by the updating of ECE-Regulation No. 90 (WD, paragraph 1.2: **Original** brake discs and brake drums, fitted at time of manufacturing of the vehicle are not subject to this regulation.)

Thus, the only contentious point within the RD&D Group was whether the replacement code on the **original replacement part** had to be permanently marked or only to be affixed (e.g. by a paper label).

Since the RD&D Group could not come to a commonly agreed solution, a vote was taken during the 63rd GRRF session with regard to Informal Document No. GRRF-63-10. Although the vote was very clear in favour of "permanent marking" (voting result 13 : 1), it was obvious from the discussion that some delegates understood under replacement part only the part which is offered by the aftermarket.

Thus, the chairman of the RD&D Group asked the 13 delegates which voted in favour of the "permanent marking" by email whether their vote would still be "permanently marked" or whether they would change their vote to "affixed", knowing now that the real question only concerns the original replacement part (and not the aftermarket replacement part).

8 delegates responded to the email request. None was in favour of an affixed marking in the meaning of a non permanent nature. Although the majority of answers were in favour of the wording “permanently marked” some delegates answered that the wording “affixed” would be also acceptable as long it was clear that by “affixed” a permanent marking was understood.

At its last meeting, as a compromise solution the RD&D Group decided unanimously to amend the second sentence of **paragraph 1.2** in the RD&D Working Document to read:

“Original brake discs and brake drums intended for replacement and servicing of the vehicle are not subject to this regulation if the manufacturer has **affixed in such a way as to be indelible and clearly legible** at least a replacement code as defined in Para. 2.3.3.”

In the email survey some delegates were in favour of the principle that there should be marking on original (safety-related) parts to enable them to be identified as original parts.

However, two delegates who responded to the email survey asked if it would be the right place in Regulation No. 90 to have such a requirement for parts which are outside of its scope.

5 Summary

The RD&D Group has spent much time to discuss the disputed subject of marking with the compromise result as reported under paragraph 3 above.

The RD&D Group will now concentrate its work on the remaining outstanding items in the hope to finalize their Working Document by the end of this year.

The GRRF will then have the opportunity to have a thorough discussion on the whole document.
