

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION NO.85

Submitted by the experts from Japan

A. PROPOSAL

1. Para. 5.4. amend to read,

5.4 The net power and the maximum 30 minutes power for electric drive trains indicated by the manufacturer for the type of drive train shall be accepted if it does not differ by more than +/- 2 % for maximum power and more than +/- 4 % at the other measurement points on the curve with a tolerance of +/- 2 % for engine or motor speed, **or within the engine or motor speed range (X1rpm+2%) to (X2rpm-2%) (X1<X2)** from the values measured by the technical service on the drive train submitted for testing.

2. Annex 5, para.3.8 amend to read;

3.8. The temperature of ..... measured in the oil pump **or within the oil sump** or at the outlet from the oil cooler, if fitted, shall be .....

3. Annex 5, para.4.5., amend to read;

4.5. Engine inlet air temperature: +/- **1K**

4. Annex 6, Table 1, amend the No. 1 AUXILIARIES in the Table, as "DC voltage source"

5. Annex 6, para. 2.5.6., "2.5.5. and 2.5.6." amend to read, "2.5.4. and 2.5.5."

2.5.6. An auxiliary regulating system may be used, if necessary, to maintain the temperature within the limits specified in paragraphs **2.5.4. and 2.5.5.**

6. Annex 6, para. 3.2, "Engine speed" amend to read, "Motor speed".

3.2. **Motor** speed: 0.5 % of measured speed.

## B. JUSTIFICATION

1. This addition is to cope with the cases that the maximum power or torque turn flat at the certain range of engine speed. Concerning the tolerance, +/- 2% is proposed aligning with the ISO1585-1992 paras. 9.3.1.1. and 9.3.1.2.

2. The measurement in the oil pan makes little difference in temperature, and it is easier to modify for the measurement, furthermore, it requires less preparation. With this modification, the regulation also aligns with EEC Directive.

In the original text, "coil" seems to be an editorial error of "oil".

3. More accurate measurement is necessary because it cannot be ignored that 2K makes the engine output value change by 0.4 % in comparison to the 2% of tolerance. Because of the accuracy improvement of the measurement devices, 1K is sufficient.

4. This is supposed to signify the same with the paragraph 5.3 in the main text, "DC voltage source" therefore the same terms should be used. "DC voltage source" as in the main text has a broader meaning and it enables more choices of voltage source. Especially for the heavy-duty vehicles, which requires larger voltage source, it is desirable that variety of sources is using the battery as the auxiliary source.

5. Judging from the context, this must be an editorial error.

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