

Principles of Revision of ECE
Regulation No. 59

Submitted by CLEPA

1. CRITERIA FOR ACCEPTANCE OF TEST VEHICLE

Test vehicle must be in line with requirements for conformity of production (§ 4.1. of Annex 7)

Justification :

This is the only limit the car manufacturer can be forced to meet with any vehicle type.

From a juridical point of view any other requirement would lead to inconsistencies within the regulation framework.

N.B. :

- **If the laboratory is aware of the availability of vehicles with lower drive-by values, they may ask for such a vehicle to be obtained.**
- **Also if the laboratory has some suspicion about the state of the test vehicle, it may ask for replacement of certain parts by parts conform to the type approval OE parts.**

2. DRIVE-BY TEST NEW Regulation No. 51 PROCEDURE

Car + AM part -> Lower or equal than car + OE parts

or

-> Lower or equal to type approval values.

Justification :

Graph showing some “sensitivity” of new method and old method.

The “Delta” is the same.

3. PROXIMITY TEST : deleted.

Justification

- **OE measured values do not correlate with OE type approval values (see graph)**
- **Many modern vehicles do not allow this test. RPM at stand still is often limited to approx. 2,000 RPM.**
- **Repeatability is poor**
- **No correlation with real life conditions (p/a urban use)**

4. Taking into account the comparative character of the test, the following deviations may have to be allowed for in the Regulation No. 51 driving-by procedure.

- **Environmental conditions : minimum environmental temperature is 0°C**
- **Specification of tyres : same tyres should be used for OE and AM**
- **Gear selection for OE (acceleration $< 2 \text{ m/s}^2$) is also used for the replacement part**
- **Automatic gear box : if gear can not be locked, test will be done at default settings**
- **Rounding-off procedure : see proposal below**

Proposal :

AM & OE are measured and an exact mean value is made of both series of measurements (to 0.1 dB).

If the difference between these two figures is less than or equal to 1 dB, the replacement system is accepted.

The integer that is written down in the report is the integer value closest to the average between the OE and AM measured values.

If the difference between the measured values is larger than 1 dB, the replacement system is refused.

In the report, the integer closest to every result will be noted.

5. Redactional details

- Definitions

- ✓ Regulation No. 51 speaks about “sound reduction system”
- ✓ Regulation No. 59 speaks about
 - “silencing system”
 - “replacement of silencing system
 - “exhaust system”

This must be unified.

- § 3.3.3.

A vehicle of the type ... (not “representative” of ...)