

## Appendix 5 Rules on the Usage of Deterioration Factors

1. If the annual sales for each vehicle model within an engine family were over 200 units, then the on-road real world durability tests for that vehicle model shall be conducted in accordance with the Durability Test Methods and Procedures for Motorcycles to obtain its deterioration factors. After being reviewed and approved by the central competent authority, these deterioration factors can be used for the calculation of final results.
2. If the annual sales for each vehicle model within an engine family were less than 200 units, the following assigned deterioration factors may be used on the driving cycle test to get the final results.
  - 2.1 Carbon Monoxide (CO): 1.400;
  - 2.2 Hydrocarbons (HC): 1.400;
  - 2.3 Non-Methane Hydrocarbons (NMHC): 1.400;
  - 2.4 Nitrogen Oxides (NO<sub>x</sub>): 1.400;
  - 2.5 Particulate Matter (PM): 1.100.
3. For motorcycles applicable to the Emission Standards effective on and after January 1, 2017, when conducting the fuel tank and fuel supply system HC emissions test, may use 300 mg/test as the deterioration factor.
4. If the annual sales for each vehicle model within an engine family were less than 200 units and within which for an imported motorcycle model has already obtained the Certificate of Conformity issued by a foreign government, and the deterioration factor setting methods were recognized by the central competent authority, the deterioration factors applicable in Taiwan shall be set as follows:
  - 4.1. If the emission test method and durability test for that engine family with the Certificate of Conformity issued by a foreign government are the same as the calculation method for the deterioration factors stipulated in the domestic motorcycle durability test methods and procedures. The deterioration factors recognized by the foreign government may be adopted.
  - 4.2. If the durability test method for that engine family with Certificate of Conformity issued by a foreign government is different from the calculation method for the deterioration factors stipulated in domestic motorcycle durability test methods and procedures, but the emission test method is the same as the domestic ones, the applicant shall provide information documents on the accumulation mileage and emission tests data for each durability test point that recognized by the foreign government and calculate the deterioration factors in accordance with the calculation method stipulated in the domestic durability test regulation.

- 4.3. The deterioration factors that obtained in accordance with the US durability test regulation may use the following conversion formula to calculate the corresponding deterioration factors applicable in Taiwan.

$$\text{Deterioration Factor} = \frac{K + (DF - 1)(2D - K)}{K - (DF - 1)(K - 5000)}$$

K: The applicable US durability test mileage for that motorcycle (km).

DF: The deterioration factor for the US durability test for that motorcycle.

D: The applicable Taiwan durability test mileage for that motorcycle (km).

- 4.4. The deterioration factors that obtained in accordance with the Japanese durability test regulation may use the following conversion formula to calculate the corresponding deterioration factors applicable in Taiwan.

$$\text{Deterioration Factor} = \frac{10000 + DA}{10000 + 2500A}$$

D: The applicable Taiwan durability test mileage for that motorcycle (km).

A: The deterioration factor for the Japanese durability test for that motorcycle.

5. If the applicant is a motorcycle manufacturer or a motorcycle manufacturer designated representative, the Regulation of OBD family with its annual sales for each vehicle model were less than 200 units may use the assigned deterioration factors or the foreign government recognized deterioration factors for the calculation of final results as stipulated in this Appendix, the annual sales for each vehicle model may be extended to less than 600 units. In that case, the applicant shall increase the sampling ratio for its self-conducted COP test; the central competent authority may increase the test vehicle number for the new vehicle confirmatory selective test and listed the applicant as a priority object for the in-use vehicle recall and correction investigation test. If that engine family subsequently failed to comply with the new vehicle confirmatory selective test or failed to comply with the in-use vehicle emission standards, a recall and correction plan must be implemented. The applicant must complete the recall and correction plan being reviewed and approved by the central competent authority to be eligible in next year for that engine family with its annual sales for each vehicle model less than 600 units to use the assigned deterioration factors or the foreign government recognized deterioration factors for the calculation of final results as the extended stipulation.
6. If the applicant does not use vehicle model year and engine family as basis to apply for the Certificate of Conformity, the assigned deterioration factors specified in provision 2 of this appendix shall be directly used.
7. If the carry forward of the Certificate of Conformity of that engine family has been approved by the central competent authority, the same as the previous vehicle model year deterioration factors may be used.