

Transmitted by the expert from IMMA

Proposal for amendment to GRE/2012/15. IMMA proposal for collective amendments to Regulations Nos. 53 and 113 on bend lighting for motorcycles

1. BACKGROUND

IMMA has submitted to GRE proposals to amend Regulations Nos. 53 and R113 (GRE-2012-15), which permit, as an option, the fitting of bend lighting in the low beam head lamps of motorcycles.

In Regulation No. 53 the following condition for prohibiting such actions is given.

"6.2.6.1. However, the additional light source(s) or additional lighting unit(s) shall not be activated when the bank angle is less than 5 degrees."

2. PROPOSAL

To reduce the bank angle at which the additional light source(s) or additional lighting unit(s) shall not be activated

Paragraph 6.2.6.1., amend to read

"6.2.6.1. However, the additional light source(s) or additional lighting unit(s) shall not be activated when the bank angle is less than 5 3 degrees."

3. JUSTIFICATION

The bottom figure illustrates the bank angle of motorcycles measured under the following conditions.

Test conditions
- Test vehicle 400ml-class scooter
- Load 2 passengers

Measurements were taken immediately after the vehicle took off when it is the most unstable, in addition to the following conditions, in which "wobbling" by a motorcycle was thought to be the greatest.

From the results, it is clear that the bank angle of a motorcycle when it is running at low speed is small enough so that it is appropriate to add the "less than 5 degrees" as a prohibitive condition, in order to prohibit the unintended use of bend lighting.

Due to the characteristics of motorcycles, the rider will necessarily shift its weight and use steering to maintain the vehicle's balance. This is because for a motorcycle running at low speed, any tilting will lead immediately to a fall.

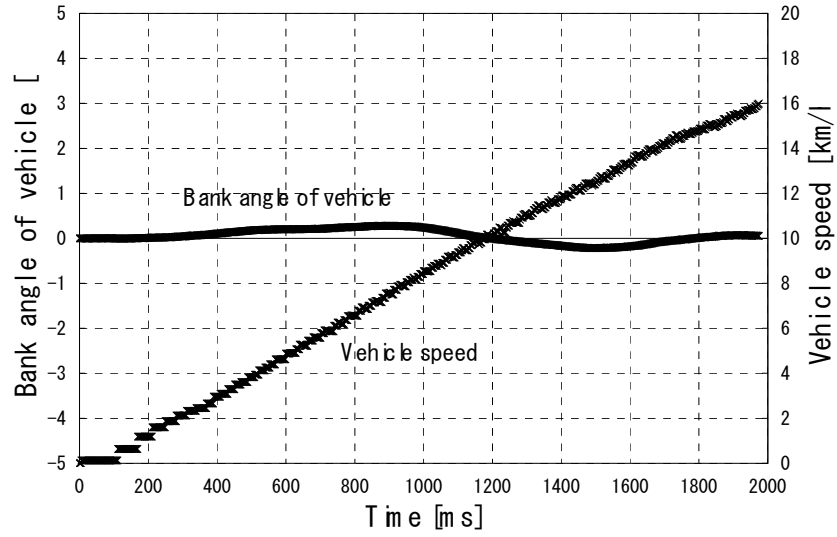


Figure: Vehicle bank angle at the time the motorcycle takes off
