

OICA, GTR Informal Group Meeting, July, 11-13, 2005

Action 10 of INF GR/PS/112

Clarification of values in §6.3.1.2.1 (upper legform / bumper)

$$V = \sqrt{1170 / M}$$

This test should be done at 40km/h with an impactor mass of 9.5kg which results in an energy of 585J.

$$E = 0.5 * m * v^2 \quad \rightarrow \quad E = 0.5 * 9.5 * 11.1^2 \quad \rightarrow \quad E = 585J$$

In case that the mass of the impactor can not exactly adjusted to 9.5kg, other masses close to 9.5kg are allowed when the velocity is adjusted too while keeping the energy of 585J.

This explains the formula:

$$585 = 0.5 * M * V^2 \quad \rightarrow \quad 2*585 / M = V^2 \quad \rightarrow \quad V = \sqrt{1170 / M}$$