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Road vehicles — Passenger-car and trailer combinations — Lateral stability test

Véhicules routiers — Ensembles voiture particulière et remorque — Essai de stabilité latérale

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This document was prepared by Technical Committee ISO/TC *22*, *Road vehicles*, Subcommittee SC 33, *Vehicle dynamics, chassis components and driving automation systems testing*.

This fourth edition cancels and replaces the third edition (ISO 9815:2010), which has been technically revised.

The main changes are as follows:

— additions have been made to 6.2.1, 6.2.2 and 6.2.3;

— additions have been made to 7.2.1, 7.2.2, 7.2.3 and 7.2.4;

— references have been updated to ISO 4138:2021 and ISO 15037-1:2019.

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The main purpose of this document is to provide repeatable and discriminatory test results.

The dynamic behaviour of a road vehicle is a very important aspect of active vehicle safety. Any given vehicle, together with its driver and the prevailing environment, constitutes a closed-loop system that is unique. The task of evaluating the dynamic behaviour is therefore very difficult since the significant interaction of these driver-vehicle-environment elements are each complex in themselves. A complete and accurate description of the behaviour of the road vehicle must necessarily involve information obtained from a number of different tests.

Since this test method quantifies only one small part of the complete vehicle handling characteristics, the results of these tests can only be considered significant for a correspondingly small part of the overall dynamic behaviour.

Moreover, insufficient knowledge is available concerning the relationship between overall vehicle dynamic properties and accident avoidance. A substantial amount of work is necessary to acquire sufficient and reliable data on the correlation between accident avoidance and vehicle dynamic properties in general and the results of these tests in particular. Consequently, any application of this test method for regulation purposes requires proven correlation between test results and accident statistics.