INDIVIDUALIZATION OF THE EXIT THRIVES (SPEED)

Daniel Hoppe
Bertrandt Ingenieurbüro GmbH

Follow this and additional works at: http://www.tdcommons.org/dpubs_series

Recommended Citation
Hoppe, Daniel, "INDIVIDUALIZATION OF THE EXIT THRIVES (SPEED)", Technical Disclosure Commons, (February 08, 2018)
http://www.tdcommons.org/dpubs_series/1039
INDIVIDUALIZATION OF THE EXIT THRIVES (SPEED LIMITS) OF AERODYNAMIC VEHICLE ELEMENTS BY THE CUSTOMER

Technical task:
The task of the technical innovation is to further customize the vehicle.

Initial situation:
Aerodynamic adjustable vehicle elements (such as, for example, an adjustable rear spoiler) are generally controlled by vehicle speed in today’s vehicles. For example, there are adjustable rear spoilers, which are automatically extended at about 120km / h and retracted at about 80km / h.

Usually, such vehicles additionally have a switch or push-button to retract the spoiler manually off or below an aerodynamically necessary speed.

Even if the rear spoiler was extended manually at a speed below 120Km / h, this setting will be overwritten by the vehicle logic after exceeding 120Km / h and then falling below 80Km / h again and the rear spoiler will automatically retract.

Solution:
Implementation of a way to influence the behavior of aerodynamic elements in the vehicle by the customer.

Characteristic: The customer can, for example, B. the speed thresholds for the process of aerodynamic components (eg., Retraction and extension of adjustable rear spoilers) influence.

This happens for the next drive cycle or generally for all future drive cycles. The adjustability takes place by means of a menu in the vehicle settings (eg on-board computer) or with the aid of an app via wearables (eg smartphone or mobile devices) for vehicle individualization.

The illustration shows one of the possible implementations of the procedure.

An operable arithmetic unit (eg, Main Unit) is connected to the arithmetic unit (ECU) for an adjustment unit and receives access to the setting parameters of the arithmetic unit. Thus, the behavior of the adjustment, controlled by the arithmetic unit, (taking into account legal and safety-related restrictions and with the help of reasonable intervention limits) are individually adapted to the customer requirements.

In addition, these parameters of the arithmetic unit can be changed via a (i.v., existing, wireless) connection of the mobile terminal to the main unit (taking into account legal and security-relevant restrictions and with the aid of sensible intervention limits).

Advantages:
- Customers have the opportunity to customize their vehicle and the design of the vehicle according to their personal usage and sensibility.

Possible application:
- For all vehicles with aerodynamic vehicle elements, such. B. rear spoiler.