

Title (en)  
METHOD AND CONTROL UNIT FOR CALIBRATING A DRIVE OF A THROTTLE VALVE OF AN INTERNAL COMBUSTION ENGINE IN A MOTOR VEHICLE

Title (de)  
VERFAHREN UND STEUERGERÄT ZUM KALIBRIEREN EINES ANTRIEBS EINER DROSSELKLAPPE EINES VERBRENNUNGSMOTORS IN EINEM KRAFTFAHRZEUG

Title (fr)  
PROCÉDÉ ET APPAREIL DE COMMANDE SERVANT À ÉTALONNER UN ENTRAÎNEMENT D'UN VOLET D'ÉTRANGLEMENT D'UN MOTEUR À COMBUSTION INTERNE DANS UN VÉHICULE AUTOMOBILE

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Abstract (en)  
[origin: WO2014187593A1] The invention relates to a method and to a control unit for calibrating a drive (3) of a throttle valve (1) of an internal combustion engine (9) in a motor vehicle. The drive (3) can preferably have a brushless direct current motor for displacing the throttle valve (1). Since it can be necessary to know the rotor position of said direct current motor sufficiently accurately in order to control the direct current motor, but additional rotor position sensors should be avoided for cost reasons, it has been found advantageous to be able to know and also calibrate accurately the characteristic curve that represents a correlation between a rotor position of the drive (3) and an output voltage of a throttle valve angle sensor (7) that is provided on the throttle valve (1) in any case, in order for example to be able to track temperature- or wear-induced changes. According to the invention the characteristic curve should not or not only be calibrated when the internal combustion engine (9) is running, but in particular when the internal combustion engine (9) is off, since then the throttle valve (1) can be moved by the drive (3) into any desired position and the characteristic curve can be calibrated in said position.

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Cited by  
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