

Title (en)

METHOD FOR CALIBRATION OF A POSITIONAL SENSOR ON A ROTATIONAL ACTUATOR DEVICE FOR CONTROL OF A GAS EXCHANGE VALVE IN AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUR KALIBRIERUNG EINES WEGSENSORS EINER DREHAKTUATORVORRICHTUNG ZUR ANSTEUERUNG EINES GASWECHSELVENTILS EINER BRENNKRAFTMASCHINE

Title (fr)

PROCÉDÉ POUR ÉTALONNER UN CAPTEUR DE TRAJECTOIRE D'UN DISPOSITIF D'ACTIONNEMENT ROTATIF SERVANT À COMMANDER UNE SOUPAPE DE CHANGEMENT DES GAZ D'UN MOTEUR À COMBUSTION INTERNE

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Application

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Abstract (en)

[origin: WO2006050796A1] The invention relates to a method for calibration of a positional sensor on a rotational actuator device for control of a gas exchange valve in an internal combustion engine. The rotational actuator device thus comprises a controlled electric motor, with an operating element for operating the gas exchange valve, two energy storage means, acting in opposing drive directions on the gas exchange valve and a controller, for controlling the electric motor. The controller controls the electric motor such that the gas exchange valve may be displaced from a first end position, in which the operating element driven by the electric motor by means of the rotor and hence the rotor, is in a metastable instantaneously-neutral position, corresponding to the first end position, into a second end position in which the operating element (6, 6a, 6b) and the rotor are in a metastable instantaneously-neutral position, corresponding to the second end position and vice versa. According to the invention, the electric motor is controlled from an instantaneously-neutral position, such that the rotor is displaced in at least one direction about a path run from the instantaneously-neutral position, the current draw for the electric motor arising therefrom is recorded and, depending on the obtained current values for the current draw of the electric motor, a new rotor position for calibration of the positional sensor is determined.

IPC 8 full level

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Citation (search report)

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