

Title (en)

Abnormality diagnosis device and abnormality diagnosis method for exhaust gas recirculation unit

Title (de)

Fehlerdiagnosevorrichtung und -methode für Abgasrückführungssystem

Title (fr)

Procédé et dispositif de diagnostic de l'état de fonctionnement d'une vanne de recirculation de gaz d'échappement d'un moteur à combustion interne

Publication

EP 1394400 B1 20100616 (EN)

Application

EP 03018994 A 20030821

Priority

JP 2002243556 A 20020823

Abstract (en)

[origin: EP1394400A1] An electronic control unit (ECU) calculates a reference value relating to an opening of an exhaust gas recirculation (EGR) valve on the basis of an output value of a lift sensor at the time when a command signal for fully closing the EGR valve is output, and stores and updates the reference value. The ECU corrects a relationship between sensor output value and opening of the EGR valve on the basis of this reference value (step 330 and step 360). The ECU calculates a difference between a target opening of the EGR valve corresponding to an operational state of an engine and a post-correction opening of the EGR valve, and determines on the basis of a result of comparison between an absolute value of the difference and a criterial value whether there is an abnormality occurring in an EGR unit (from step 330 to step 370). In making this determination, the criterial value is switched depending on whether an initial value of the reference value has been stored (YES in step 320) or not (NO in step 320) (step 330 and step 360). <IMAGE>

IPC 8 full level

F02M 25/07 (2006.01); **F02D 45/00** (2006.01)

CPC (source: EP)

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Cited by

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