

Title (en)

METHOD FOR THE DIAGNOSIS OF THE VOLTAGE CONTROL FOR A PIEZOELECTRIC ACTUATOR OF AN INJECTION VALVE

Title (de)

VERFAHREN ZUR DIAGNOSE DER SPANNUNGSANSTEUERUNG FÜR EINEN PIEZOELEKTRISCHEN AKTOR EINES EINSPRITZVENTILS

Title (fr)

PROCEDE DE DIAGNOSTIC DE LA COMMANDE DE TENSION POUR ACTIONNEUR PIEZO-ELECTRIQUE D'UNE SOUPAPE D'INJECTION

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Application

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Abstract (en)

[origin: WO0175289A1] The invention relates to a method for the diagnosis of a control voltage for a piezoelectric actuator of an injection valve. The control voltage is measured for the individual phases of the injection procedure. A corresponding tolerance band (B1 ... B4) is provided for each control phase. Said band is placed above the desired value of the control voltage (Ua). The tolerance regions (B1 ... B4) are determined according to operating and/or environmental conditions. When the corresponding tolerance regions are not obtained for the individual control cycles, said measuring errors are counted in repeated measurements. A permanent error is diagnosed when a predetermined number of the measuring errors is exceeded. The counter is set back when the number has not been exceeded after a while. The error memory can be set back during service by means of a service plug when an error occurs.

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