

Title (en)

METHOD FOR CONTROLLING FUEL INJECTION VALVES

Title (de)

VERFAHREN ZUM STEUERN VON KRAFTSTOFFEINSPRITZVENTILEN

Title (fr)

PROCEDE PERMETTANT DE COMMANDER DES SOUPAPES D'INJECTION DE CARBURANT

Publication

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Application

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Abstract (en)

[origin: DE19939449A1] The invention relates to a method for controlling fuel injection valves, particularly for use in diesel internal combustion engines. The device used for carrying out the method has fuel injection valves (10) that are supplied with fuel by a high pressure fuel accumulator (24). Each fuel injection valve (10) has a needle-shaped injection valve mechanism (15) which is coupled with a control chamber (35), said control chamber being connected to the high pressure fuel accumulator by a supply throttle (36). The control chamber (35) is able to drain into a draining container (39) by means of a valve mechanism (44) that is actuated by a piezo actuator (57). According to the invention, the characteristic of the leading edge (a) of the stroke course (h) of the injection valve mechanism (15) is regulated by controlling the piezo actuator (57). A closed regulating circuit is formed with a stroke sensor (26) and a control device (58). The inventive method enables e.g. temperature-related leakage on a hydraulic transmission mechanism (53) to be compensated.

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