

Title (en)

METHOD OF DIAGNOSING MALFUNCTIONING OF THE HIGH-PRESSURE CIRCUIT OF INTERNAL COMBUSTION ENGINE HIGH-PRESSURE INJECTION SYSTEMS

Title (de)

VERFAHREN ZUR FESTSTELLUNG VON STÖRUNGEN IM HOCHDRUCKKREIS EINES HOCHDRUCK-KRAFTSTOFFEINSPRITZ-SYSTEMS EINER BRENNKRAFTMASCHINE

Title (fr)

METHODE DE DIAGNOSTIC DE DEFAILLANCES D'UN CIRCUIT A HAUTE PRESSION D'UN SYSTEME D'INJECTION A HAUTE PRESSION D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 0668966 B1 19980325 (EN)

Application

EP 94927543 A 19940902

Priority

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- IT TO930646 A 19930903

Abstract (en)

[origin: WO9506814A1] A method of diagnosing malfunctioning of a high-pressure circuit including a pump (6) for supplying fuel at a pressure value controlled by a pressure regulating solenoid valve (7) supplied with current whose duty cycle is controlled in periodic control cycles. The method consists in monitoring quantities correlated to the pressure generated by the pump (6) in successive control cycles; comparing the pattern of the quantities with reference values; and generating fault signals in the event the determined pattern fails to present a predetermined relationship with the reference values. In particular, a check is made to determine whether fuel supply pressure remains above or below maximum and minimum values; whether the duty cycle of the current supply to the solenoid valve (7) remains above or below predetermined limits; and to determine the congruency of a measured pressure value and a reference value calculated on the basis of the duty cycle.

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