

Title (en)

PUMP-NOZZLE UNIT AND METHOD FOR REGULATING THE OPENING PRESSURE OF THE SAME

Title (de)

PUMPE-DÜSE-EINHEIT UND VERFAHREN ZUR EINSTELLUNG DES ÖFFNUNGSDRUCKES DERSELBEN

Title (fr)

UNITE D'INJECTEUR-POMPE ET PROCEDE POUR REGLER LA PRESSION D'OUVERTURE DE CELLE-CI

Publication

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Application

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Abstract (en)

[origin: WO2004057181A1] The invention relates to a method for regulating the nozzle opening pressure of a pump-nozzle unit (10) for supplying fuel (12) into a combustion chamber (14) of an internal combustion engine. Said pump-nozzle unit (10) comprises: a fuel injection nozzle (16) comprising a nozzle needle (18) which can be displaced back and forth between a closing position and an opening position; a spring (20) which exerts a closing force on the nozzle needle (18), the intensity of said force depending on a pre-tensioning force exerted on the spring (20); and a first pressure chamber (22) which can be subjected to a first pressure (p22) which causes an opening force to be exerted on the nozzle needle (18). According to the invention, the method comprises the following simultaneously executed steps: the first pressure chamber (22) is subjected to a first pressure (p22), and the pre-tensioning force (F) exerted on the spring (20) is varied until a selected pre-tensioning force (FS) is reached, whereby the nozzle needle (20) moves into the opening position or the closing position at the desired intensity of the first pressure (p22). The invention also relates to a pump-nozzle unit (10), wherein the nozzle opening pressure is regulated by means of a pre-tensioning element (26) which is blocked in a selected position (YS) in the pump-nozzle unit (10).

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