

Title (en)

An injector nozzle and a nozzle retaining nut with a reduced effective head friction diameter

Title (de)

Einspritzdüse mit einem reduzierten effektiven Reibungsdurchmesser des Kopfes der Spannmutter

Title (fr)

Nez d'injection avec un écrou de serrage avec une tête avec un diamètre de friction effectif réduit

Publication

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Application

EP 08105797 A 20081114

Priority

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Abstract (en)

The invention relates to the field of fuel injectors and specifically to the nozzle retaining nut and the nozzle of the injector. The injector typically consists of a nozzle and an injector body, both fixed together with a nozzle retaining nut. During the mounting process, to fix the nozzle (106, 108) to the injector body (100, 103), a torque 112 is applied at the base of the nozzle retaining nut 116. The torque 112 generates an axial force which will press the parts 100, 103, 106 and 108 together to fit with each other and hold tightly with the help of positioning pins 104. The invention proposes a measure to increase the axial pre-load force by reduction of the effective friction diameter at the screw head (110) by means of a defined angle difference between the nozzle retaining nut 116 and the surface of the nozzle 109. This difference angle can be set at both the components alternatively by means of a variation in the angles at the surface of the nozzle or the head of the nozzle retaining nut.

IPC 8 full level

F02M 61/16 (2006.01)

CPC (source: EP)

F02M 61/16 (2013.01); **F02M 61/168** (2013.01); **F02M 2200/8076** (2013.01)

Citation (search report)

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