

Title (en)

Emergency cut-out device for an internal combustion engine.

Title (de)

Notabstellvorrichtung für eine Brennkraftmaschine.

Title (fr)

Dispositif de sécurité pour arrêter un moteur à combustion interne.

Publication

EP 0509261 B1 19940817 (DE)

Application

EP 92104730 A 19920319

Priority

DE 4112689 A 19910418

Abstract (en)

[origin: EP0509261A2] The invention relates to an emergency cut-out device for internal combustion engines for returning the control rods (7) of injection pumps (6) to zero delivery when, due to a defect, filling control by the means provided is no longer possible. For this purpose a shaft (3) with two shaft sections (4, 5) is provided in the linkage between control element (1) and control rod (7), which shaft sections in normal operation are connected to one another by a torsionally rigid coupling (9) and are set in rotational movement by the control pulses of the control element (1). In the event of a fault, the coupling (9) is detached by axial separation of the coupling halves assigned to the two shaft sections (4, 5). An axial piston (20), to which pressure medium can be admitted and which is movable against the force of a spring (17) acting on the coupling (9) in the longitudinal direction of the shaft (3), serves for this purpose. In addition the shaft section (5) on the control rod side is equipped with a rotary piston (24) to which, in order to return the control rod (7) to zero delivery, pressure medium can be admitted. It is especially advantageous that the installation of the emergency cut-out device in the transmission path between control element (1) and control rod (7) does not increase the power received from the control element (1) in normal operation, which gives a good control capability. The design of the device with a shaft (3) and hydraulically actuated elements permits a simple construction with a single coupling (9) for low-backlash transmission of the control pulses. <IMAGE>

IPC 1-7

F02D 17/04

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