

Title (en)

DEVICE FOR ADJUSTING A CAMSHAFT OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VORRICHTUNG ZUR NOCKENWELLENVERSTELLUNG EINER BRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF DE DÉPHASAGE DE L'ARBRE À CAMES D'UN MOTEUR À COMBUSTION INTERNE

Publication

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Application

EP 10743029 A 20100730

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Abstract (en)

[origin: WO2011026545A2] The invention relates to a device for adjusting the camshaft of an internal combustion engine, having a lift profile element (12) which is provided on an axially movably mounted camshaft for conjoint rotation therewith and which provides a control groove, and having a control unit for generating a predetermined axial movement of the camshaft, wherein the control unit has a tappet unit (17) which is movable preferably radially with respect to the camshaft along a movement direction and which is designed for controllable engagement into the lift profile element, and wherein the lift profile element forms a first control groove (16) which is designed to interact with the tappet unit at a first penetration depth so as to describe a first axial movement of the camshaft, and the lift profile element forms a second control groove (18, 22) which is designed to interact with the tappet unit at a second penetration depth, which differs from the first penetration depth, so as to describe a second axial movement, which differs from the first axial movement, of the camshaft. According to the invention, the tappet element (17) has a constant outer diameter at the engagement end at the first penetration depth and at the second penetration depth, and is driven along the movement direction by an electromagnetic actuating device which provides a first stable actuating position for the first penetration depth, a second stable actuating position for the second penetration depth, and a third actuating position for a state in which the tappet element does not engage into the first and second control groove.

IPC 8 full level

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