Title (en)

Adjustable valve spring retainer for internal combustion engine.

Title (de

Verstellbarer Ventilfederteller für eine Brennkraftmaschine.

Title (fr)

Cuvette du ressort de soupape réglable pour un moteur à combustion interne.

Publication

EP 0375792 B1 19950118 (EN)

Application

EP 88121323 A 19820329

Priority

- EP 88121323 A 19820329
- EP 82301647 A 19820329

Abstract (en)

[origin: EP0375792A1] An adjustor to compensate for thermal expansion between a valve stem and its operation means within an internal combustion engine. The adjustor comprises a valve spring retainer member (60; Fig 3) having at one end a valve stem receipt aperture (76; 101), said valve spring retainer member (60; Fig 3) being removably retained upon said valve stem by a keeper key. A cap member (66; 191) is located to the other end of said valve spring retainer member (60; Fig 3) and is longitudinally adjustable in position with respect thereto. Hydraulically operable restoration permitting means (78,84; 100, 102, 104, 106, 108, 110, 112) are provided to permit either (a) the restoration of a first longitudinal positional relationship between said cap member (66; 191) and said operation means and, as a result, corresponding restoration in an opposite direction of a second longitudinal positional relationship between said cap member (66; 191) and said valve stem, or (b) the restoration of said second longitudinal positional relationship and, as a result, corresponding restoration in an opposite direction of said first longitudinal positional relationship. The said adjustment means (78,84; 100,102,104,106,108, 110, 112) includes means (80,81,90; 96; 106,108) to vary the longitudinal distance between said cap member (66; 191) and said valve spring retainer member (60; Fig 3), said cap member (66; 191) being arranged neither to be directly attached to said valve stem in normal operation nor to have direct contact with said valve stem.

IPC 1-7

F01L 1/20

IPC 8 full level

F01L 1/20 (2006.01); F01L 1/25 (2006.01)

CPC (source: FP)

F01L 1/20 (2013.01); F01L 1/25 (2013.01)

Citation (examination)

- CH 322762 A 19570630 SULZER AG [CH]
- FR 2370858 A1 19780609 MOTOMAK [DE]
- FR 2476740 A1 19810828 MOTOMAK [DE]

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0375792 A1 19900704; EP 0375792 B1 19950118; DE 3280067 D1 19900125; EP 0090105 A1 19831005; EP 0090105 B1 19891220

DOCDB simple family (application)

EP 88121323 A 19820329; DE 3280067 T 19820329; EP 82301647 A 19820329