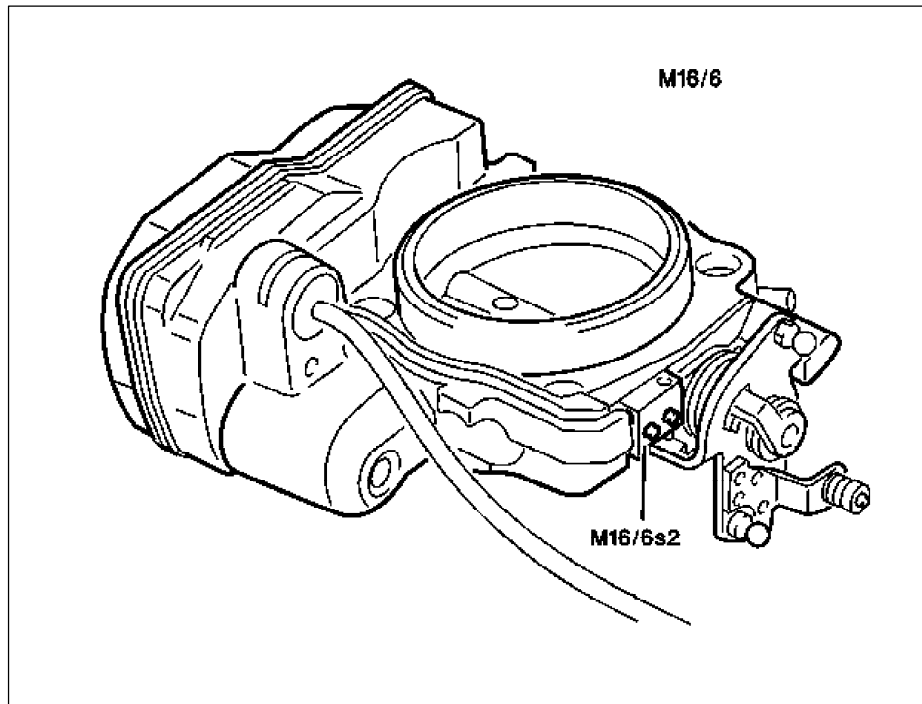


ENGINE 111.920 /940 /941

M16/6 Idle speed control actuator
M16/6s2 Idle speed contact switch

Task

Controlling idle speed under different engine loads (power steering turned to full lock, AC compressor engaged).



P07.51-0025-06

Design

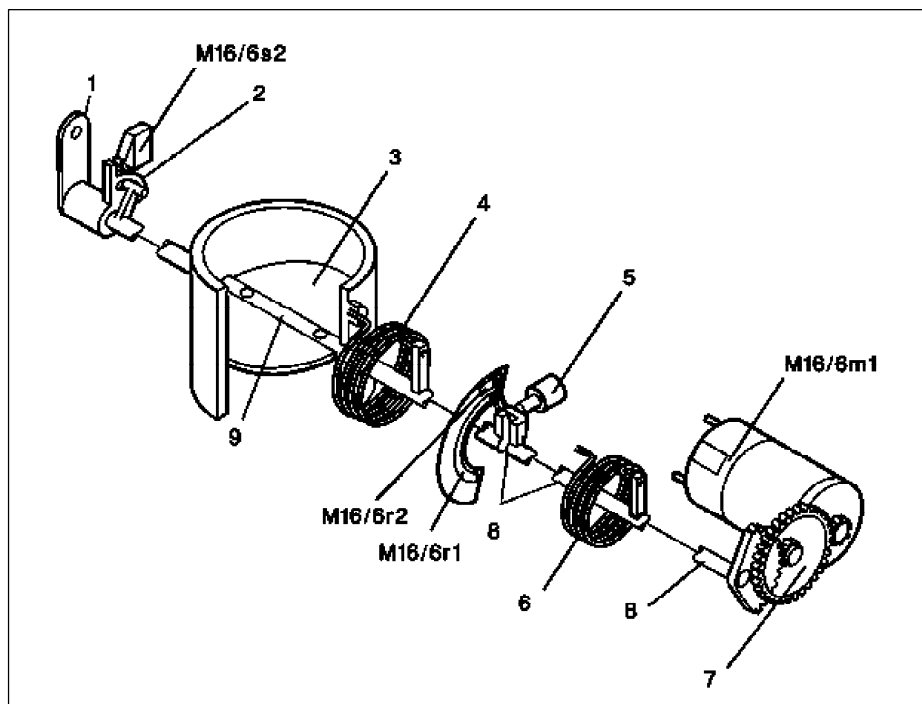
- | | |
|---|----------------------|
| 1 | Adjusting lever |
| 2 | Freewheel |
| 3 | Throttle valve |
| 4 | Spring |
| 5 | Spring capsule |
| 6 | Spring |
| 7 | Transmission |
| 8 | Drive shaft |
| 9 | Throttle valve shaft |

M16/6 r1 Throttle valve actual value potentiometer

M16/6 r2 Drive actual value potentiometer

M16/6s2 Idle speed contact switch

M16/6 m1 Actuator motor



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Function

Idle speed contact switch (M16/6s2)

transmits the information via actuated or not actuated adjusting lever (1) to the PEC control unit (N3/6) and serves as activation of various idle speed and ignition maps.

Throttle valve actual value potentiometer (M16/6r1)

advises the position of the throttle valve (3) (idle speed to full throttle) to the PEC control unit (N3/6) in order to detect the various load conditions.

Drive actual value potentiometer (M16/6r2)

advises the position of the drive shaft (8) (idle speed control range 0° to 10° opening angle) to the PEC control unit (N3/6), so that the drive shaft is placed in a definite location during the deceleration phase, in order to limit the intake manifold vacuum.

Ignition "OFF"

In the de-energized state the throttle valve position is determined by the spring capsule (5).

Ignition "ON"

When switching on the ignition, the actuator motor (M16/6m1) is actuated by the PEC control unit (N3/6) and the throttle valve (3) takes on one of the coolant temperature dependent position.

Idle speed

The actuator motor (M16/6m1) controls the engine speed in the idle speed range by opening the throttle valve further, depending on coolant temperature and engine load (increased mixture), or closing it further (reduced mixture).

Driving mode (partial/full load)

In the driving mode (partial/full load), the throttle valve position is controlled via the adjusting lever (1), which is connected with the acceleration pedal level via the Bowden cable. The actuator motor (M16/6m1) has no function in the partial/full load operation.

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