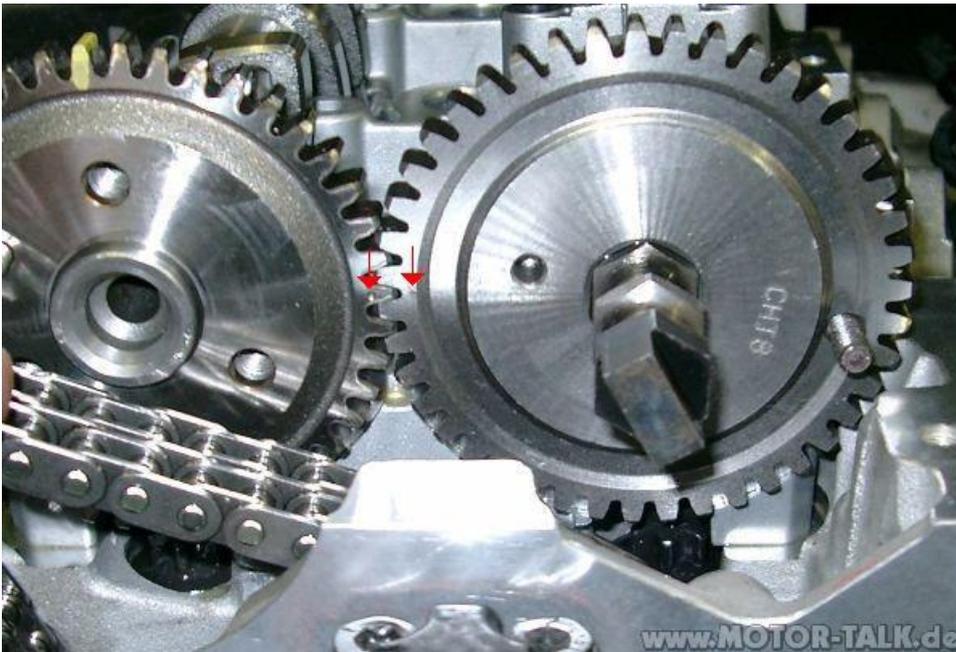




## AUTOMOBILE

### Application: Camshaft Control



The trend in internal combustion engines is to reduce consumption and air-polluting emissions.

One approach, which makes a major contribution to this aim, is to vary the overall angle of the camshaft, depending on the actual speed and power output of the engine.

### Project: Camshaft Actuator

An electric motor with simple mechanical reduction is ideally suited for this application. It is a compact solution and can be used to continuously and precisely position the whole camshaft mechanism.

### MACCON contribution:

For this application MACCON designed and manufactured a special motor for the continuous angular positioning of the camshaft. Commutation and position feedback are supported by a resolver.

This motor is designed to withstand the high temperatures within the engine compartment. It is also fitted with a special reluctance brake, which is able to hold the shaft position, when the motor is not energized and which requires no energy supply. The brake does not cause additional heat dissipation, when in the released state.

