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### Replacing switchable coolant pump CP 623 000P

*When replacing the coolant pump in EA 288-series 1.6 TDI and 2.0 TDI engines, various pump types can be installed.*

Starting in 2012, these engines were fitted with switchable coolant pumps during construction. To warm up the engine even faster, a shroud slides over the pump's rotating impeller on a cold start, preventing the coolant from circulating. In the event of a mechanical malfunction, the shroud does not return to its original position. If this happens, the coolant is prevented from circulating even when the operating temperature has been reached. This can cause the engine to overheat.

#### Better protection against overheating

This potential source of trouble can be eliminated by replacing the controlled pump with an uncontrolled pump without a sliding shroud. As a result, the proper functioning of the cooling circuit is ensured. When changing the pump, note that the actuator on the old coolant pump must be fitted to the new pump and the pump reconnected to the engine control unit.



Figure 1: Controlled coolant pump with jammed sliding shroud (no coolant circulation)



Figure 2: The actuator must be detached from the controlled pump, then reattached to the new pump.



Figure 3: The new, uncontrolled coolant pump with reattached actuator

#### IMPORTANT!

Coolant pumps must not be operated dry as this risks damaging the slide rings and seals. After work has been done on the cooling circuit, the system must be bled thoroughly to avoid malfunctions and air traps. Only use coolant that has been approved by the manufacturer. Always replace seals and coat them with clean coolant before fitting in order to prevent damage caused by dry assembly.