© Hella KGaA Hueck & Co., Lippstadt

14. April 2005



1-1

## Audi A6 model year 1997 to 2004 Automatic vehicles with 1.9 I pump injector and 2.5 I TDI engines

## **Poor power transmission**

If there are complaints about the above-mentioned complaint, the cause could be a faulty coolant temperature sensor. The sensor recognises a temperature that is far to low (e.g. 5°C instead of 65°C). Due to this false signal, the engine control unit calculates an engine torque that is also far too small (e.g. calculated: 25 Nm, actual: 180 Nm) and transmits this to the transmission control unit. The clutches in the automatic transmission are then kept closed with too little pressure. This means that mainly the clutch for 4<sup>th</sup> and 5<sup>th</sup> gear "burns". Since an interruption or short-circuit to plus is necessary before the engine control unit recognises the faulty sensor, however, the clutch could already been damaged. This can be recognised by the characteristic "scorching smell" of clutches or by problems with positive engagement. If these symptoms occur, the coolant temperature sensor should be checked and replaced if necessary. If the fault "sensor for coolant temperature" has already been stored in the engine control unit, and the fault "gear monitoring, false transmission ratio" has already been stored in the transmission control unit, the temperature sensor must be replaced and the transmission tested for positive engagement. To do this, separate the transmission control unit from the vehicle cable assembly and carry out a fixed speed test in gear "D" for approx. 5 seconds. If the engine speed increases to more than 2800 rpm, assume the clutch is slipping. Reconnect the transmission control unit and delete the fault memory.

