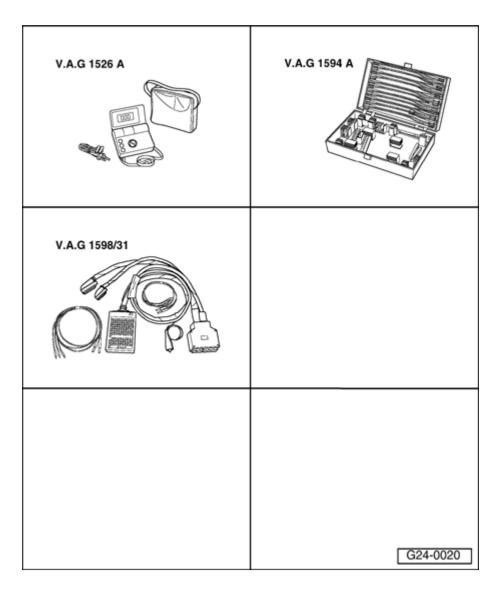
Audi > C5 > 1998-2005 3.0 Liter V6 5V Generic Scan Tool Engine Code(s): AVK 24 - Components, Checking

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Engine Speed Sensor, Checking



Special tools, testers and auxiliary items required

- * multimeter VAG1526A
- * connector test kit VAG1594A
- * VAG1598/31 test box

Note:

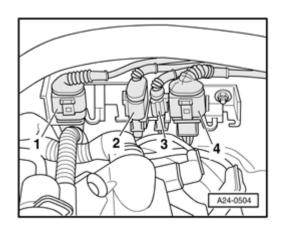
• The engine speed (RPM) sensor detects RPM and reference marks. The engine cannot be started without a signal from the engine speed (RPM) sensor G28. If the engine speed (RPM) sensor G28 signal fails while the engine is running, the engine will stop immediately.

Test requirement:

* Ignition switched off.

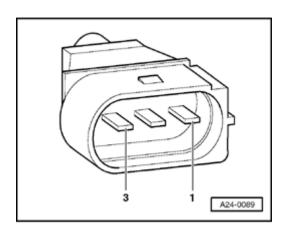
Procedure

= Before performing test, check sensor for proper installation and proper fitting.



- Disconnect electrical harness connector - 2 - from Engine Speed (RPM) sensor.

Checking internal resistance



Connect multimeter between terminal 2 and 3 for resistance measurement.

* Specified value: 730 to 1000 Ω

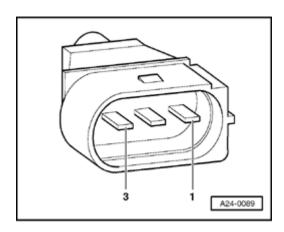
Note:

 Resistance value of the engine speed (RPM) sensor is based on a temperature of 20 degree C. Resistance increases as temperature increases.

If specified value is not obtained:

= Replace Engine Speed (RPM) sensor - -, .

If specified value is obtained:



- Connect multimeter to terminals 2 and 1 (shielding) and to terminals 3 and 1 (shielding) for resistance measurement.
- * Specified value: each ∞ Ω (no continuity)

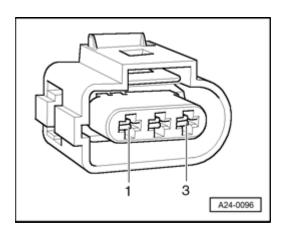
If specified value is not obtained:

= Replace Engine Speed (RPM) sensor - -, .

If specified value is obtained:

Checking wire connections

Connect test box to wiring harness of Engine Control Module (ECM) ⇒ Engine Control Module, Connecting Test Box to Wiring Harness; ECM is not connected.



Check the following wire connections for open circuit according to wiring diagram:

Harness connector Terminal	Test box Socket
1 (shielding)	108
2 (Ground (GND))	90
3 (signal)	82

Specified value: Wire resistance max 1.5 Ω

Check wires for short circuit to each other as well as to B+ and Ground (GND).

Specified value: ∞ Ω (no continuity)

= If necessary, repair wire connection.

If no malfunctions are detected:

Replace Engine Control Module (ECM).

Final procedures

After repair work, the following work steps must be performed in the mentioned sequence:

- 1. Check DTC memory Mode 3: Check DTC memory \square .
- 2. If necessary, erase DTC memory Mode 4: Reset/erase diagnostic data

 .
- 3. If DTC memory was erased, generate readiness code.
- End diagnosis and switch ignition off.

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