

Service adjustments

Fuel system

Intake system

Ignition system

Engine sensors

- Engine coolant temperature (ECT) sensor
- Crankshaft position (CKP) sensor
- Knock sensor (KS)

Emission control system

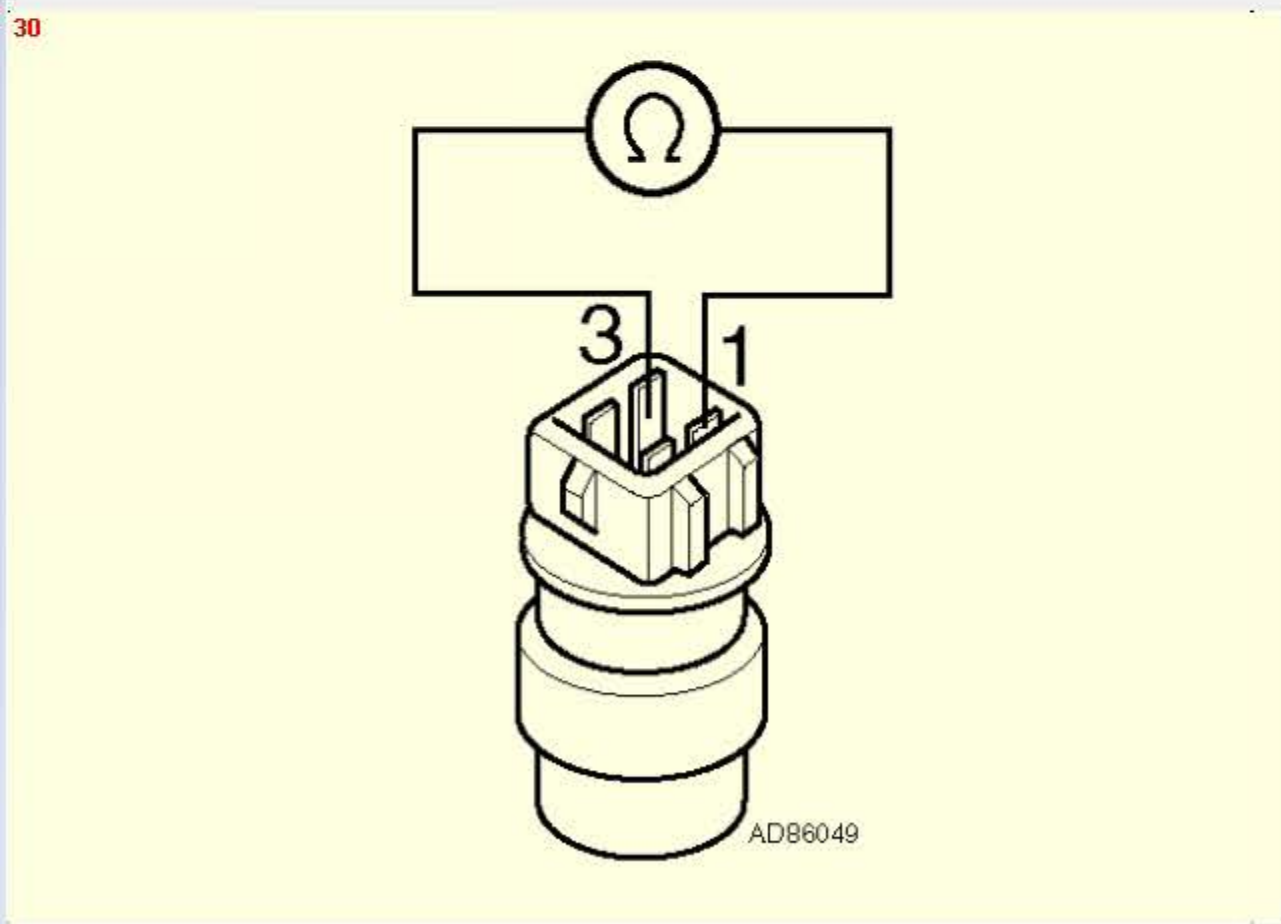
Control system

Engine coolant temperature (ECT) sensor

Checking - Fig. 30

Technical Data		
Terminals	Temperature	Resistance
1 & 3	0°C	5000-6500 Ω
1 & 3	10°C	3250-4500 Ω
1 & 3	20°C	2200-3000 Ω
1 & 3	30°C	1500-2000 Ω
1 & 3	40°C	1000-1400 Ω
1 & 3	50°C	725-925 Ω
1 & 3	60°C	535-675 Ω
1 & 3	70°C	400-500 Ω
1 & 3	80°C	275-375 Ω
1 & 3	90°C	200-285 Ω
1 & 3	100°C	160-225 Ω

- Ensure ignition switched OFF.
- Disconnect ECT sensor multi-plug.
- Relieve residual pressure in cooling system.
- Remove ECT sensor from engine.
- Immerse ECT sensor probe in coolant of specified temperature.
- Check resistance between ECT sensor terminals.
- ECT sensor may be checked in situ if engine temperature and resistance readings are compared.



Volkswagen Passat (88-96) 2,0 1990-93
Engine code: 2E

System type: VAG Digifant

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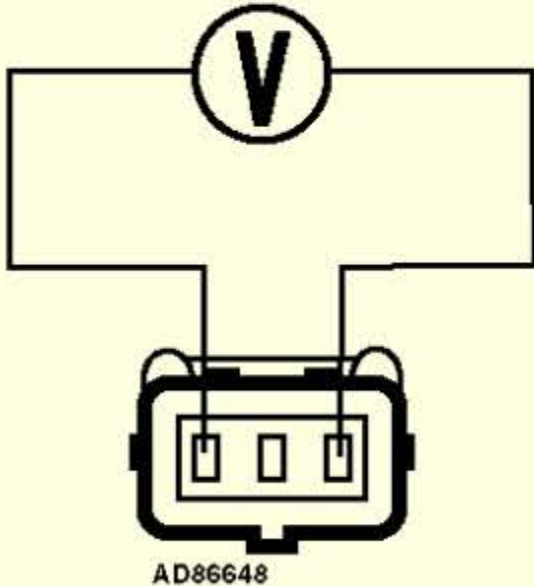
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Emission control system

Control system

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AD86648

Crankshaft position (CKP) sensor

NOTE: Incorporated in distributor.

Checking supply voltage - Fig. 31

Technical Data	
Terminals	Voltage
1 & 3	10 V min.

- Ensure ignition switched OFF.
- Disconnect CKP sensor multi-plug.
- Switch ignition ON.
- Check voltage between harness multi-plug terminals.

Checking signal - Fig. 32

Technical Data	
Terminals	LED
2 & 3	Flashing

NOTE: Disconnect injector harness multi-plug before cranking tests, to prevent engine from starting.

- Ensure ignition switched OFF.
- Do not disconnect multi-plug. Access CKP sensor multi-plug terminals.
- Connect LED test lamp between harness multi-plug terminals.
- Briefly crank engine.
- Check that LED flashes.

F1

F2

F3

F4

F5

F6

F7

F9

F11

Ctrl+F4

Ctrl+F8

vw_b3 - NetBeans...

Output - Editor

Autodata CD3 - [...]

engine_coolant.jp...

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Knock sensor (KS)

Checking

Technical Data	
Tightening torque	20 Nm

- Ensure ignition switched OFF.
- Disconnect KS multi-plug.
- Remove KS.
- Ensure cylinder block and KS mating faces are free from corrosion and clean.
- Refit KS.
- Tighten fixing to specified torque.

F1

F2

F3

F4

F5

F6

F7

F9

F11

Ctrl+F4

Ctrl+F8

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engine

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Output - Editor

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