# Volkswagen > A4 > 1999-2006 2.0 Liter 4-Cyl. 2V Generic Scan Tool, Engine Code(s): AEG 20 - Electronic Engine Power Control

.

## **Closed Throttle Position Switch F60, Checking**

### Special tools, testers and auxiliary items required

- Multimeter .
- Wiring diagram

### **Test procedure**

 Perform a preliminary check to verify the customers complaint. Refer to ⇒ <u>Preliminary</u> <u>Check</u>

### **Test requirement**

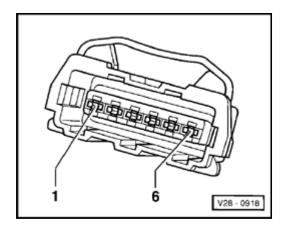
- The Motronic Engine Control Module (ECM) J220 fuses OK.
- Battery voltage at least 12.5 volts.
- All electrical consumers such as, lights and rear window defroster, switched off.
- Vehicles with automatic transmission, shift selector lever into position "P" or "N".
- A/C switched off.
- Ground (GND) connections between engine/transmission/chassis OK.

#### Note:

 Use only gold-plated terminals when servicing the electrical harness connector terminals in Closed Throttle Position (CTP) Switch F60.

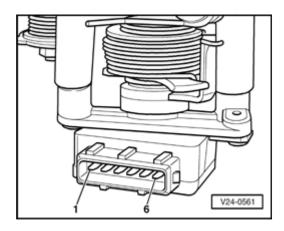
### **Test sequence**

- Remove the engine cover with air filter .



Disconnect the Closed Throttle Position (CTP) Switch F60 6-pin electrical harness connector.

## Checking internal resistance



Using a multimeter, check the Closed Throttle Position (CTP) Switch F60 electrical harness connector terminals 4 to 6 for resistance.

Specified value: 0 Ω

Open throttle slightly.

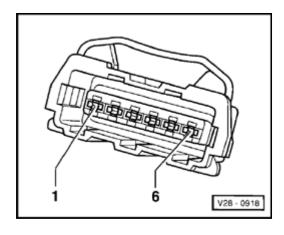
Specified value: ∞Ω

If the specification was not obtained:

- Replace the Closed Throttle Position (CTP) Switch F60.

## **Checking wiring**

Install the test box Adapter F/VAG1598 (68 Pin) VAG1598/22.



Using a Multimeter, check the following wiring connections for continuity.

Closed Throttle Position (CTP) Switch F60 electrical harness connector terminals	Motronic Engine Control Module (ECM) J220 electrical harness connector T80 test box sockets
4	62
8	74

Specified value:  $1\Omega$ 

If the specification was not obtained:

- Check the wiring for a short circuit to each other, Battery (+), and Ground (GND).
- Check the electrical harness connector for damage, corrosion, loose or broken terminals.
- If necessary, repair the faulty wiring connection.
- If the specification was obtained:
- = Erase the DTC memory. Refer to ⇒ <u>Diagnostic Mode 04 Reset/Delete Diagnostic Data</u>
- Perform a road test to verify repair.

If the DTC does not return:

Repair complete, Generate readiness code. Refer to ⇒ Readiness Code.

End diagnosis.

If the DTC does return and no malfunction is detected in the wiring and the voltage supply was OK:

 Replace the Motronic Engine Control Module (ECM) J220 . Refer to ⇒ Motronic Engine Control Module J220, Replacing .

- Assembly is performed in the reverse of the removal.
- Install the engine cover with air filter .

### **Final Procedures**

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

- 1. Check the DTC memory. Refer to .
- 2. If necessary, erase the DTC memory. Refer to .
- 3. If the DTC memory was erased, generate readiness code. Refer to .

## End of diagnosis.

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