

Cruise control On Board Diagnostic (OBD)

Special tools, test equipment and auxiliary items

- ◆ VAS5051 Diagnostic Operation Center (DOC) and/or VAG1551 Scan Tool (ST).

- ◆ VAG1551/3 adapter cable

Gasoline engines with electronically-operated throttle valve only

Testing cruise control system

- Connect VAG1551 scan tool (⇒ [Page 01-241](#)) and use "Address word 01" to select engine control module.

The engine should be idling.

Except for the control lever, there are no system components for the cruise control system. All functions are carried out by the engine control module.

Initiating "Read Measuring Value Block" scan tool function 08



Indicated on display

- Press buttons -0- and -8- to select "Read Measuring Value Block" function 08.

Rapid data transfer

HELP

Select function XX

Rapid data transfer **Q**
08 - Read Measuring Value Block

- ⏪ Indicated on display
- Press -Q- button to confirm input.

Read Measuring Value Block **HELP**
Input display group number XXX

- ⏪ Indicated on display
- Enter display group number 066.
The engine should be idling.
 - Press -Q- button to confirm input.

The measured value block which has been selected will appear in the standard format.

Display group overview

Display group number	Display fields	
066	1 =	Actual vehicle speed km/h
	2 =	Switch positions of brake, clutch and cruise control (open or closed)
	3 =	Desired vehicle speed km/h
	4 =	Control lever switch positions

Display group 066

Read Measuring Value Block 66		→	◀ Indicated on display
km/h	X X X X	km/h	X X X X
			Control lever switch positions 0 0 0 0 = Cruise control off (switch engaged) 0 0 1 1 = Cruise control on 0 0 0 1 = Cruise control off before engagement position 0 1 1 1 = Fix button pushed 1 0 1 1 = Record button pulled
			Desired vehicle speed (speed last saved is displayed until): ◆ Cruise control is switched off at control lever, i.e. switch is engaged on "OFF" or ◆ Engine is stopped.
			Switch positions for brakes, clutch and cruise control released. 1 0 0 0 = Cruise control released 1 0 1 1 = Brake applied (brake pedal switch) 1 1 0 0 = Clutch applied
	Actual vehicle speed		



↖ Indicated on display

Checking displays in display fields 2 and 4

↖ Display check, display field 2

Test conditions	Display field 2
Cruise control released (activated)	1000
Brake applied (brake pedal switch)	1011
Clutch applied	1100

If the nominal value in display field 2 for "cruise control released" (1000) is not attained:

- Check engine control module identification.

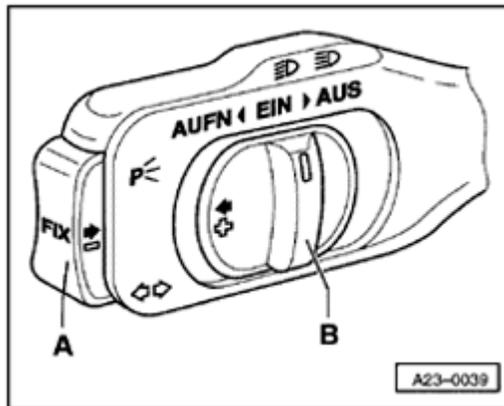
⇒ *Repair Manual, Fuel Injection & Ignition, Repair Group 01*

- If "G" is not displayed after component name, cruise control is not activated. Activate cruise control system ⇒ [Page 01-209](#) .



⚠ Display check, display field 4

Test conditions	Display field 4
Switch -B- in "OFF" (AUS) position	0000
Switch -B- to "ON" (EIN) position	0011
Memory set, switch -B- to "OFF" (AUS) before engaging	0001
Button -A- pressed, "SET" (FIX)	0111
Switch -B- to "RES" (AUFN)	1011



⚠ If the nominal values in display field 4 are not attained even though switch -B- is set to "ON" (0011):

- Connect VAG1598/31 breakout box to engine control module harness
⇒ [Page 01-210](#) .

Activating cruise control

- Connect VAG1551 scan tool (VAG1552) ⇒ [Page 01-241](#) .
- Insert "Address word 01" to select engine control module.

Rapid data transfer HELP
Select function XX

↖ Indicated on display

- Press button -1- twice for "Login procedure" function 11 and press -Q- button to confirm input.

Login procedure HELP
Input code number XXXXX

↖ Indicated on display

- Input code 11463 and press -Q- button to confirm input.

Deactivate cruise control

- Connect VAG1551 scan tool (VAG1552) ⇒ [Page 01-241](#) .
- Use "Address word 01" to select engine control module.

Rapid data transfer HELP
Select function XX

↖ Indicated on display

- Press button -1- twice for "Login procedure" function and press -Q- button to confirm input.

Login procedure HELP
Input code number XXXXX

↖ Indicated on display

- Input code 16167 and press -Q- button to confirm input.

Testing wiring and components using VAG1598/31 breakout box

Notes:

- ◆ *VAG1598/31 breakout box is designed to be connected to the engine control module harness and to the engine control module simultaneously.*
- ◆ *The effect of this design is that the electronic engine controls remain fully functional while the breakout box is connected (for e.g. measuring signal strengths while the engine is running).*
- ◆ *Look in the respective test descriptions to see if it is necessary to connect the engine control module to the breakout box.*
- ◆ *Use multimeter (Fluke 83 or equivalent) or VAG1715 Multimeter in addition to VAG1527B voltage tester.*
- ◆ *Always use test leads from VW1594 connector test kit when connecting test equipment to VAG1598/31 breakout box.*
- ◆ *Once the engine control module has been reconnected, adapt the engine control module*

to the throttle valve control module.

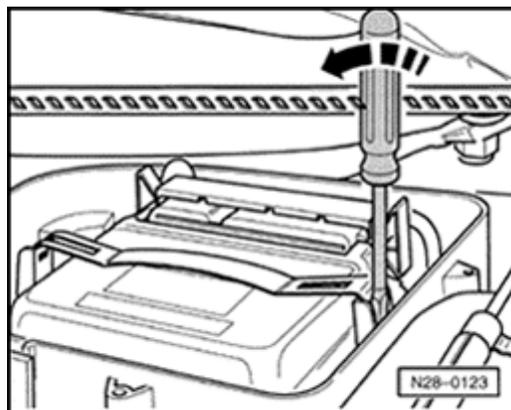
⇒ *Repair Manual, Fuel Injection & Ignition,
Repair Group 24*

CAUTION!

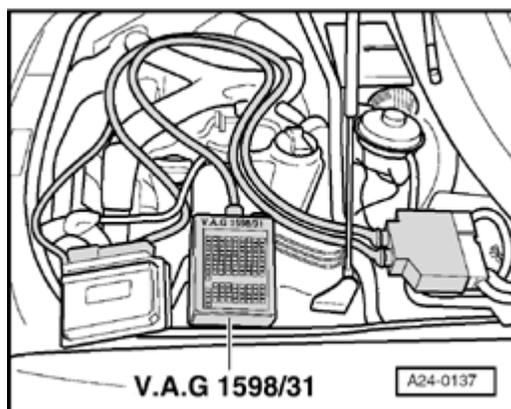
Before connecting the test leads, switch the test equipment to the appropriate measuring range and observe the test requirements to prevent damage to electronic components.

01-211

- Switch ignition off.
- Remove control module protective housing cover.



- A - Using screwdriver, carefully pry off retainer (arrow).
- Release and disconnect harness connectors from control module.



- A - Connect VAG1598/31 breakout box to harness connector. Connect breakout box Ground clip (not visible in illustration) to battery negative terminal. Check respective test descriptions to see if it is necessary to connect engine control module to breakout box.
- Perform tests as described in respective repair instructions.

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- Disconnect 15-pin harness connector for cruise control switch, clutch vacuum vent valve switch - F36- and to brake vacuum vent valve switch - F47- for cruise control.
- Check the following connections for a short to positive, short to Ground (GND) or an open circuit:

Gasoline engine: 2.7 liter/184 kW V6 twin-turbo

Terminals on 15-pin harness connector	VAG1598/31 breakout box, socket
7	76
8	75
9	57
10	38

- If necessary, repair open or short circuit.

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Terminals on 15-pin harness connector	VAG1598/31 breakout box, socket
13 to clutch vacuum vent valve switch -F36- (terminal 1)	39
11 to brake vacuum vent valve switch -F47- for cruise control (terminal 2)	56
12 to brake vacuum vent valve switch -F47- for cruise control (terminal 4)	55

- If necessary, repair open or short circuit.