

Checking cruise control, engine code AEB and AHA only

Required for troubleshooting:

- ◆ Electrical Circuit Tester VW1466
- ◆ Connector Test Kit VW1594
- ◆ Valid wiring diagram

Test conditions:

- ◆ Cruise control vacuum system OK
- ◆ S11 Fuse 11 (5A) OK
- ◆ S13 Fuse 13 (10A) OK
- ◆ S231 Fuse 31 (15A) OK
- ◆ Brake lights OK
- ◆ Back up light OK
- ◆ Speedometer OK

CAUTION!

DO NOT damage, enlarge or bend connector terminals or cavities by forcing probes into them when performing electrical checks. Always use connector test kit VW 1594 to make the necessary electrical connections.

Preparation:

- Switch ignition OFF
- Remove passenger's airbag to disconnecting 12-point connector from Cruise Control, Control Module (J213) ⇒ Repair Group 70
- Disconnect 12-point connector from Cruise Control, Control Module (J213)
- Connect Test adapter VW1466/8 to 12-point connector
- Connect Electrical Circuit Tester 1466 to test adapter 1466/8 and mount on steering wheel

Note for troubleshooting on vehicles with automatic transmission:

On vehicles with automatic transmission, the Cruise Control, Control Module (J213) is only supplied with voltage at speeds above 30 kmh (18mph). For troubleshooting, auxiliary power must be established. See below:

- Disconnect 10-point connectors T10i (blue) and T10m (brown), on connector station at right A pillar.
- Connect T10i (from fuse 31), terminal 5 to T10m (from cruise control switch), terminal 7, using auxiliary lead from connector Test Kit VW 1594 . **Refer to wiring diagram to confirm connections.**

Troubleshooting procedure:

- Perform steps according to table on page 15/2
- If specified value/test result is obtained, proceed to next step (test result OK)
- If specified value/test result is **not** obtained, use table for troubleshooting and repair
- Use valid wiring diagram for wire testing
- Disconnect test leads after each step

If malfunction has not been eliminated after performing steps 1 to 9, replace Cruise Control, Control Module (J213).

After repairing malfunction, perform test of cruise control system.

Troubleshooting starts on next page.

Test step	1	2	3	4
Check:	Power supply (Kl.15)+ Cruise Control Switch (E45)	Cruise Control Switch (E45)	Cruise Control Push Button "SET" (E227)	Vehicle Speed Sensor (VSS)
Connections VW1466				
red lead	from 8 to S+	from 10 to S+	from 4 to S+	from 9 to S+
black lead	from S- to L+	from S- to L+	from S- to L+	from S- to D+
blue lead	from L- to 5	from L- to 5	from L- to 5	from D- to 5
Auxiliary works	Switch ignition ON. Hold Cruise Control Switch (E45) in position "RES"; "ON" "OFF"	Shift left Cruise Control Switch (E45) in position "RES"	Depress Cruise Control Push Button "SET" (E227)	Lift vehicle front and turn left front wheel. Push vehicle, if necessary
Specified value / test result	Indicator lamp (L) lights up	Indicator lamp (L) lights up	Indicator lamp (L) lights up	LED (D) flashes

Possible causes if specified value / test result was **not** obtained :

Wiring relay panel / component or component / component	S31, resp. connection A70 to E45 or E45, terminal 7 to J213, terminal 12/8 or J213, contact 12/5 to ground	E45, terminal 2 to J213, terminal 12/10	E227, terminal 3 to J213, terminal 12/4	connection A27 to J213, terminal 12/9
or Cruise Control Switch (E45)	X	X	X	-----
or Cruise Control Push Button (E227)	-----	-----	X	-----
or Brake Vacuum Vent Valve Switch for cruise control (F47)	-----	-----	-----	-----
or Clutch Vacuum Vent Valve Switch (F36), manual transmission only	-----	-----	-----	-----
or Cruise Control Vacuum Pump (V18)	-----	-----	-----	-----

5	6	7	8	9
Cruise Control Switch (E45) and Brake Vacuum Vent Valve Switch for cruise control (F47)	Brake Vacuum Vent Valve Switch for cruise control (F47)	Clutch Vacuum Vent Valve Switch (F36), (manual transmission only)	Cruise Control Vacuum Pump (V18)	Cruise Control Vacuum Pump (V18)
from 11 to S+	from 11 to S+	from 11 to S+	from 8 to S+	from 12 to 9
from S- to L+	from S- to L+	from S- to L+	from S- to 6	from 7 to D+
from L- to 5	from L- to 5	from L- to 5	from 7 to 5	from D- to 5
Short brake light switch -F-, hold Cruise Control Switch (E45) in position "RES" and "ON"	apply brake	apply clutch	Ignition ON	Ignition ON
Indicator lamp (L) lights up	Indicator lamp (L) does not lights up	Indicator lamp (L) does not lights up	Clutch Vacuum Vent Valve Switch (F36) is running	LED (D) lights up

Possible causes if specified value / test result was **not** obtained :

Contact 12/11 to F47 or F47 to E45 or F47 via F36 to E45 (manual transmission only)	-----	-----	J213, contact 12/6 to V18 or J213, contact 12/7 to V18	J213, contact 12/12 to V18
X	-----	-----	-----	-----
-----	-----	-----	-----	-----
X	X	-----	-----	-----
X	-----	X	-----	-----
-----	-----	-----	X	X