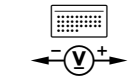
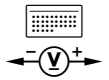
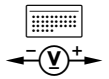
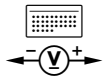
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	B1011	**Voltage supply** **Circuit 30E, 31E**	N10-1 N10-3 61 —  — 75		11 – 14 V	Wiring, ⇒ 1.1
1.1		Voltage supply Circuit 30E	N10-1 N10-3 ⊥  — 75		11 – 14 V	Wiring.
2.0	B1013	**Voltage supply** **Circuit 15**	N10-1 N10-3 ⊥  — 58	Ignition: **ON**	11 – 14 V	Wiring.
3.0	B1013	**Voltage supply** **Circuit 15R**	N10-1 N10-3 ⊥  — 3	Ignition: **ON**	11 – 14 V	Wiring.

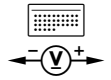
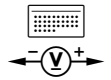
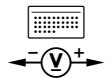
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
4.0		**Voltage supply** **Circuit 30C** **Driver, mirror, steering column memory**	N10-1 ⊥ V — 6		11 – 14 V	Wiring.
5.0		**Voltage supply** **Circuit 30A, 31A** **Front window motor**	N10-1 N10-3 5 V — 44	Ignition: **OFF**	11 – 14 V	Wiring, ⇒ 5.1
5.1		Voltage supply Circuit 30A, Front window motor	N10-1 N10-3 ⊥ V — 44	Ignition: **OFF**	11 – 14 V	Wiring.
6.0		**Voltage supply** **Circuit 30B, 31B** Rear window motor	N10-1 N10-3 43 V — 4	Ignition: **OFF**	11 – 14 V	Wiring, ⇒ 6.1

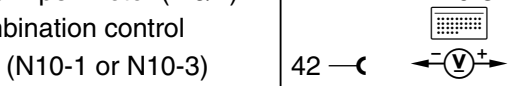
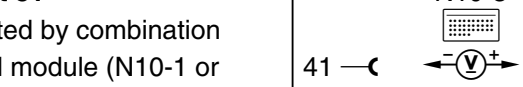
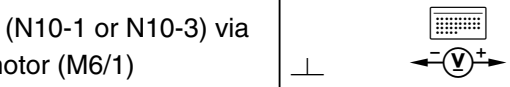
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
6.1		Voltage supply Circuit 30B Rear window motor	N10-1 N10-3 ⊥ V — 4	Ignition: **OFF**	11 – 14 V	Wiring.
7.0		**Vehicle speed signal (VSS)** Activated by combination control module (N10-1 or N10-3)	N10-1 N10-3 ⊥ V — 74	Ignition: **ON** Rotate left front wheel (approx. 1 turn/second).	5 V	Wiring Traction systems control module (N47)
8.0		**Voltage supply** **Circuit 31** **Wiper**	N10-1 N10-3 42 — V — 75		11 – 14 V	Wiring.
9.0		**Combination switch (S4)** Activated by combination control module (N10-1 or N10-3)	N10-1 N10-3 42 — V — 65	Ignition: **ON** Touch wipe Interval wipe Stage 1 Stage 2	 6.8 – 8.6 V 3.3 – 4.2 V 6.8 – 8.6 V 11 – 14 V	Wiring, Combination switch (S4).

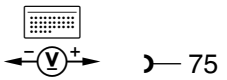
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
10.0		**Combination switch (S4)** **Wash function** Activated by combination control module (N10-1 or N10-3)	N10-1 N10-3  42 — 63	Ignition: **ON** Combination switch (S4) perform: wash function	11 – 14 V	Wiring, Combination switch (S4).
11.0		**Wiper system** **Interval wipe** Activate wiper motor (M6/1) via combination control module (N10-1 or N10-3)	N10-1 N10-3  42 — 2	Ignition: **ON** Combination switch (S4) set at: Interval wipe.	Stepped voltage 11 – 14 V	⇒ 9.0, N10-1 or N10-3
12.0		**Wiper system stage 1** Activate wiper motor (M6/1) via combination control module (N10-1 or N10-3)	N10-1 N10-3  42 — 2	Ignition: **ON** Combination switch (S4) set at: stage 1	11 – 14 V	⇒ 9.0, N10-1 or N10-3

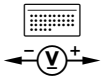
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
13.0		**Wiper system stage 2** Activate wiper motor (M6/1) via combination control module (N10-1 or N10-3)	N10-1 N10-3  42 — 1	Ignition: **ON** Combination switch (S4) set at: stage 2	11 – 14 V	⇒ 9.0, N10-1 or N10-3
14.0		**Wiper motor (M6/1)** **Circuit 31** Activated by combination control module (N10-1 or N10-3)	N10-1 N10-3  41 — 75	Ignition: **OFF**	11 – 14 V	⇒ 8.0, N10-1 or N10-3
15.0		**Wipe system circuit 31b** Activate combination control module (N10-1 or N10-3) via wiper motor (M6/1)	N10-1 N10-3  ⊥ — 40	Ignition: **ON** Wiper arm “parked“.	< 1 V	Wiring, Wiper motor (M6/1).
16.0		***Non-USA vehicles only, continue to next test step.***				

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
17.0	B1407	**Entrance/exit lamps** Activated by combination control module (N10-1)	N10-1  27 — 75	Ignition: **OFF** Door: open Door: closed	 11 – 14 V < 1 V	Wiring, Left/right front door switches (S17/3, S17/4), Left/right rear door switches (S17/5, S17/6), D.M. Body and Accessories, Vol. 2, 5.3, 23 ⇒ 5.0–8.0, CAN-data lines, D.M. Body and Accessories, Vol. 2, 5.3, 23 ⇒ 9.0, 10.0, N10-1, PSE control module (A37).

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
18.0		**Front dome lamp (E15/1 or E15/2)** Activated by combination control module (N10-1 or N10-3)	N10-1 N10-3  18 — 75	Ignition: **OFF** **Both switches of E15/ 1 or E15/2 in center position.** Door: open Door: closed, after approx. 8 seconds delay (soft dim). **Model 170 only** Trunk lid open Trunk lid: closed, after approx. 8 seconds delay (soft dim)	 11 – 14 V < 1 V 11 – 14 V < 1 V	Wiring, Left/right front door switches (S17/3, S17/4), Left/right rear door switches (S17/5, S17/6), D.M. Body and Accessories, Vol. 2, 5.3, 23 ⇒ 5.0–8.0, CAN-data lines, D.M. Body and Accessories, Vol. 2, 5.3, 23 ⇒ 9.0, 10.0, N10-1 or N10-3, PSE control module (A37). **Model 170 only** Rotary latch selector switch, trunk lock/trunk illumination (S69/12)

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
19.0		**Front dome lamp delayed shut-off after approx. 5 minutes** Activated by combination control module (N10-1 or N10-3)	N10-1 N10-3 18 — V — 75	Ignition: **OFF** Door: open After approx. 5 minutes.	 11 – 14 V < 1 V	⇒ 18.0, N10-1 or N10-3
20.0		**Entrance/exit lamp delayed shut-off after approx. 5 minutes** Activated by combination control module (N10-1)	N10-1 27 — V — 75	Ignition: **OFF** Door: open After approx. 5 minutes.	 11 – 14 V < 1 V	⇒ 17.0, N10-1
21.0		**Rear dome lamp (E15/3)** Wire from front dome lamp (E15/2) to rear dome lamp (E15/3)	E15/3 2 — V — 1	Switch in **front** dome lamp set to rear dome lamp **ON.**	11 – 14 V	Wiring, Front dome lamp (E15/2), Rear dome lamp (E15/3).
22.0		**Heated rear window** Activate combination control module (N10-1 or N10-3) via defrost switch in A/C pushbutton control module (N19/1or N22)	N10-1 N10-3 ⊥ — V — 47	Ignition: **ON** Heated rear window: ON, Defrost switched pressed Defrost switch in rest position. Heated rear window OFF, Defrost switch in rest position.	6.2 – 8.0 V < 1 V 6.2 – 8.0 V	Wiring, Defrost switch (N19/1 or N22).

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
23.0		**Heated rear window, voltage supply** from PSE control module (A37)	A37 3 (2) — 2 (2)	Ignition: **OFF**	11 – 14 V	Wiring.
24.0		**Heated rear window relays within PSE control module (A37)**	A37 ⊥ — 4 (2)	Ignition: **ON** Heated rear window: ON Connector 2 connected.	11 – 14 V	⇒ 22.0, CAN-data lines, D.M. Body and Accessories, Vol. 2, 5.3, 23 ⇒ 9.0, 10.0 Combination control module (N10-1 or N10-3), PSE control module (A37).
25.0	B1115	**Heated rear window switch LED indicator**	N10-1 N10-3 42 — 48	Ignition: **ON** Heated rear window: ON Model 170: Retractable hardtop: closed	7.2 – 9.2 V	Wiring, N10-1 or N10-3
26.0	B1014	**Turn signal system Circuit 49** Activated by combination control module (N10-1 or N10-3)	N10-1 N10-3 ⊥ — 46	Ignition: **ON** Disconnect connector A from combination control module (N10-1 or N10-3).	11 – 14 V	Wiring, Cockpit switch group (S6/1).

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
27.0		**Turn signal system** **Circuit 49a** Output from combination control module (N10-1 or N10-3)	N10-1 N10-3 ⊥ – V + — 45	Ignition: **ON**	11 – 14 V	Cockpit switch group (S6/1), N10-1 or N10-3
28.0		**Module box blower motor (M2/2)** voltage supply from combination control module (N10-1 or N10-3)	N10-1 N10-3 67 — – V + — 50	Ignition: **ON**	11 – 14 V	⇒ 28.1, N10-1 or N10-3
28.1		Module box blower motor (M2/2)	N10-1 N10-3 44 — — 50 67 — — 5	Ignition: **OFF** Disconnect coupling A from combination control module (N10-1 or N10-3). Bridge sockets 44 and 50 with fused jumper wire (124 589 37 63 00).	M2/2 runs.	Wiring, M2/2