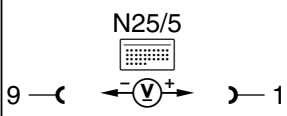
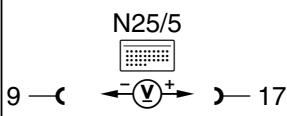
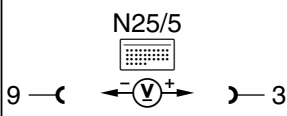
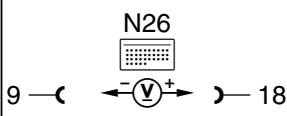
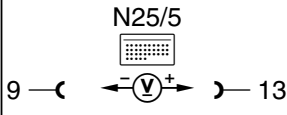
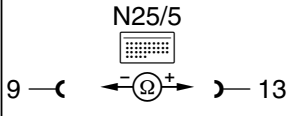











Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 1.0	Front seat heater control module (N25/5) Voltage supply Circuit 30 Circuit 15R Model 140 only: Circuit 15C	  	Ignition: OFF Ignition switch in position "1" Ignition switch in position "0" Ignition key inserted Ignition key removed	11 – 14 V 11 – 14 V 11 – 14 V 0 – 1 V	Wiring, Model 140 only: Combination relay module (N10/2).
⇒ 2.0	Front seat heater control module (N25/5) Voltage supply Circuit 58d		Parking lamps switched off Parking lamps switched on	0 – 1 V 11 – 14 V	Wiring.

Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 3.0	Left front seat heater switch (S51/1) Voltage supply		Ignition: ON S51/1 Stage II held in depressed position S51/1 Stage I held in depressed position	6-8 V 0 – 1 V 2 – 4 V	⇒ 3.1 N25/5.
⇒ 3.1	S51/1 Resistance		Ignition: OFF Disconnect test cable from N25/5. S51/1 Stage II held in depressed position S51/1 Stage I held in depressed position	>20 kΩ 0 – 2 Ω approx. 165 Ω	Wiring, S51/1.

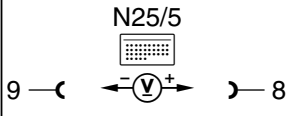
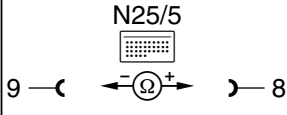
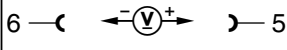
Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 4.0 Model 140 only	Left front seat cushion heater element (R13/1) Left front backrest heater element (R13/2) Voltage supply	 9 —  — 8 19 —  — 8  9 —  — 8 9 —  — 19	Ignition: ON. Left front seat heater switch (S51/1) Stage II switched on S51/1 Stage I switched on	0 – 1 V 9 – 14 V 9 – 14 V 9 – 14 V 9 – 14 V	⇒ 4.1 N25/5
⇒ 4.1	Resistance	 19 —  — 8 19 —  — 9	Ignition: OFF. Disconnect test cable from N25/5 Leather upholstery Leather upholstery	2.0 – 3.0 Ω 2.0 – 3.0 Ω	Wiring, R13/1, R13/2.

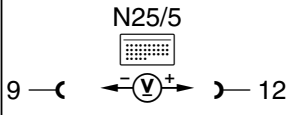
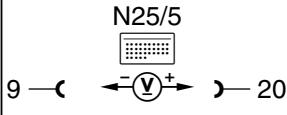
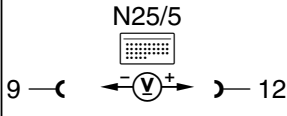
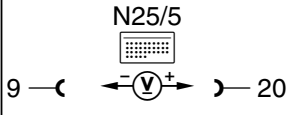
Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 5.0 Model 140 only	Right front seat cushion heater element (R13/3) Right front backrest heater element (R13/4) Voltage supply	<p>N25/5</p> <p>9 —(V)— 2</p> <p>4 —(V)— 2</p> <p>N25/5</p> <p>9 —(V)— 2</p> <p>9 —(V)— 4</p>	Ignition: ON Right front seat heater switch (S51/2) Stage II switched on	0 – 1 V 9 – 14 V 9 – 14 V	⇒ 5.1 N25/5.
⇒ 5.1	Resistance	<p>N25/5</p> <p>2 —(Ω)— 4</p> <p>9 —(Ω)— 4</p>	Ignition: OFF Disconnect test cable from N25/5	Leather upholstery 2.0 – 3.0 Ω	Leather upholstery 2.0 – 3.0 Ω

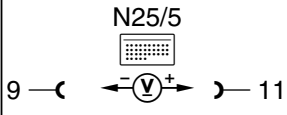
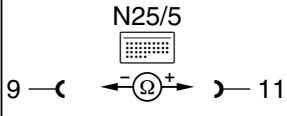
Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 6.0 Model 202 only	Left front seat cushion heater element (R13/1) Left front backrest heater element (R13/2) Voltage supply	N25/5 	Ignition: ON Left front seat heater switch (S51/1) Stage II switched on S51/1 Stage I switched on	0 – 1 V 9 – 14 V Intermittent display on Multimeter	⇒ 6.1 N25/5.
⇒ 6.1	R13/1, R13/2 Resistance	N25/5 	Ignition: OFF Disconnect test cable from N25/5	1.6 – 2.3 Ω	Wiring, R13/1, R13/2.
⇒ 7.0	Left front seat heater switch (S51/1), lighting Voltage supply	S51/1 	S51/1 connector pulled off. Parking lamps switched on.	11 – 14 V	Wiring.

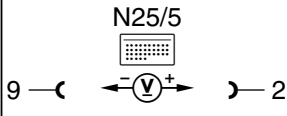
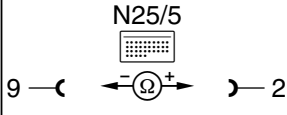
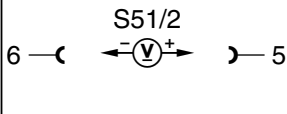
Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 8.0	Left front seat heater switch (S51/1), indicator lamps Voltage supply	 	Ignition: ON S51/1 Stage I switched on S51/1 Stage II switched on S51/1 Stage I switched on S51/1 Stage II switched on	0 – 1 V 8 – 13 V 8 – 13 V 0 – 1 V 8 – 13 V	Wiring, S51/1, N25/5.
⇒ 9.0	Left front seat heater switch (S51/1), dimming Voltage supply	 	Ignition: ON S51/1 Stage I switched on Parking lamps switched on Parking lamps switched off. S51/1 Stage II switched on Parking lamps switched on	0 – 1 V 8 – 13 V 2.0 – 2.8 V 8 – 13 V 2.0 – 2.8 V	Wiring, S51/1, N25/5.

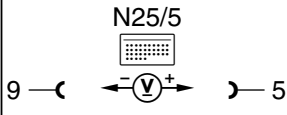
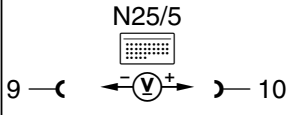
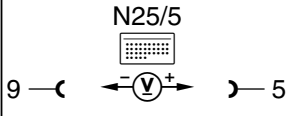
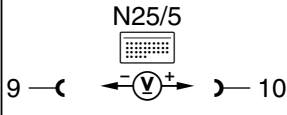
Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 10.0	Left front seat heater switch (S51/2) Voltage supply		Ignition: ON S51/2 Stage II held in depressed position S51/2 Stage I held in depressed position	6 – 8 V 0 – 1 V 2 – 4 V	⇒ 10.1 N25/5.
⇒ 10.1	S51/2 Resistance		Ignition: OFF Disconnect test cable from N25/5 S51/2 Stage II held in depressed position S51/2 Stage I held in depressed position	>20 kΩ 0 – 2 Ω approx. 165 Ω	Wiring, S51/2.

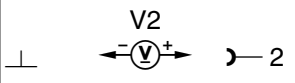
Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 11.0 Model 202 only	Right front seat cushion heater element (R13/3) Right front backrest heater element (R13/4) Voltage supply	N25/5 	Ignition: ON Left front seat heater switch (S51/2) Stage II switched on S51/2 Stage I switched on	0 – 1 V 9 – 14 V Intermittent display on Multimeter	⇒ 11.1 N25/5.
⇒ 11.1	R13/3, R13/4 Resistance	N25/5 	Ignition: OFF Disconnect test cable from N25/5	1.6 – 2.3 Ω	Wiring, R13/3, R13/4.
⇒ 12.0	Right front seat heater switch (S51/2), lighting Voltage supply	S51/2 	S51/2 connector pulled off Parking lamps switched on	11 – 14 V	Wiring.

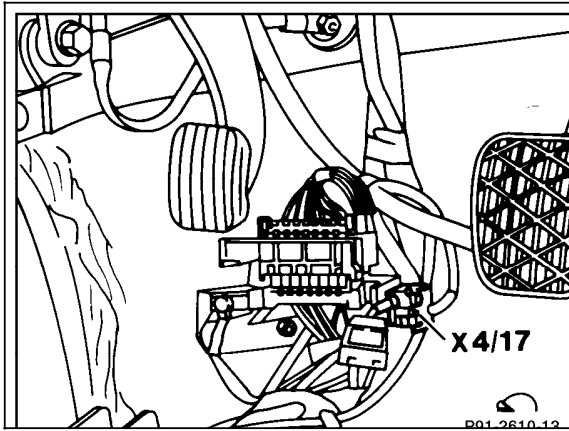
Electrical Test Program - Test

Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 13.0	Right front seat heater switch (S51/2), indicator lamps Voltage supply	 	Ignition: ON S51/1 Stage I switched on S51/1 Stage II switched on S51/1 Stage I switched on S51/1 Stage II switched on	0 – 1 V 8 – 13 V 8 – 13 V 0 – 1 V 8 – 13 V	Wiring, S51/2, N25/5.
⇒ 14.0	Right front seat heater switch (S51/2), dimming Voltage supply	 	Ignition: ON S51/2 Stage I switched on Parking lamps switched on Parking lamps switched off S51/2 Stage II switched on Parking lamps switched on	0 – 1 V 8 – 13 V 2.0 – 2.8 V 8 – 13 V 2.0 – 2.8 V	Wiring, S51/2, N25/5.

Electrical Test Program - Test

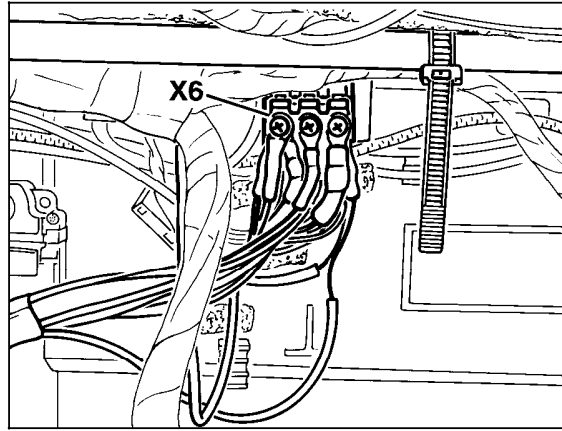
Test step DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 15.0 Only model 140 with 8 or 12 cylinder engine	Idle rpm increase with seat heater operating in stage II		Pull off connector (2) from engine rpm increase diode matrix (V2)0. Seat heater stage II switched on.	11 – 14 V	Wiring, N25/5, ⇒ 3.0 or 10.0 respectively. Values O.K.: Diagnostic Manual Engines Vol. 3 6.2 or 6.3 Electronic Accelerator, Engine rpm increase diode matrix test

Electrical Test Program - Test



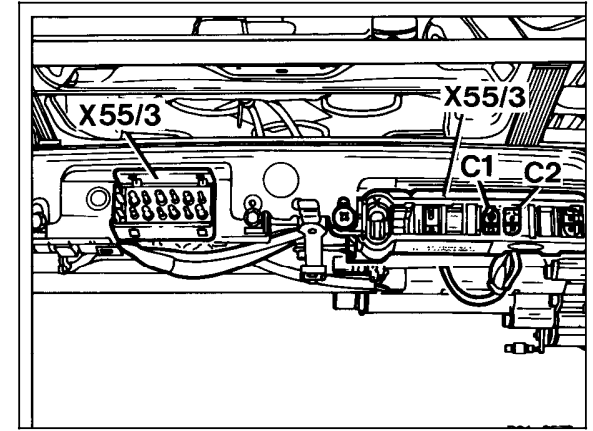
P91-2610-13

Figure 1
Model 140
X4/17 Terminal block (terminal 15C)



P82-3066-13

Figure 2
Model 140
X6 Terminal block (terminal 58d) (2-pole)



P91-2578-13

Figure 3
Model 140
X55/3 Left seat contact strip

Electrical Test Program - Test

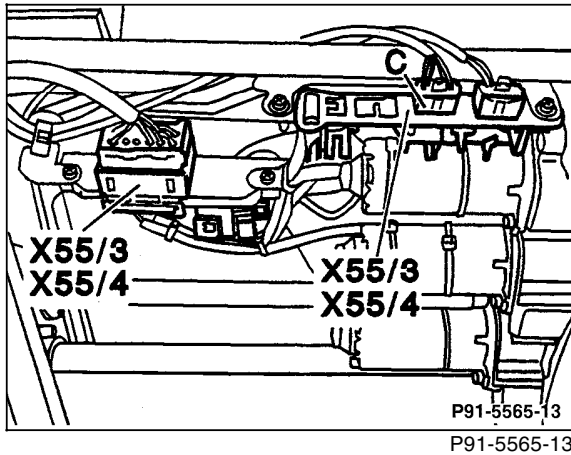


Figure 4
Model 202
C Interior/tail lamp harness connector
X55/3 Left seat contact strip
X55/4 Right seat contact strip

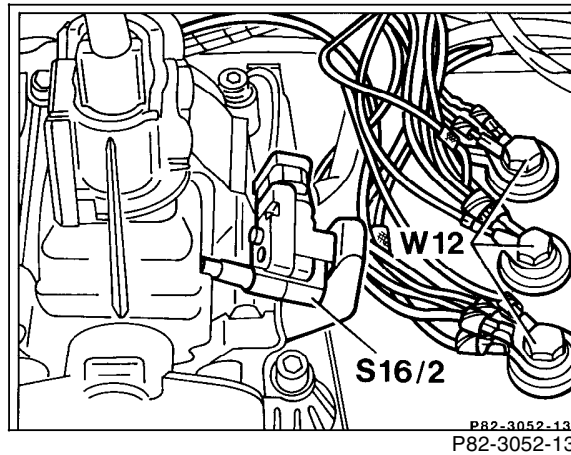


Figure 5
Model 140
W12 Ground (center console)
S16/2

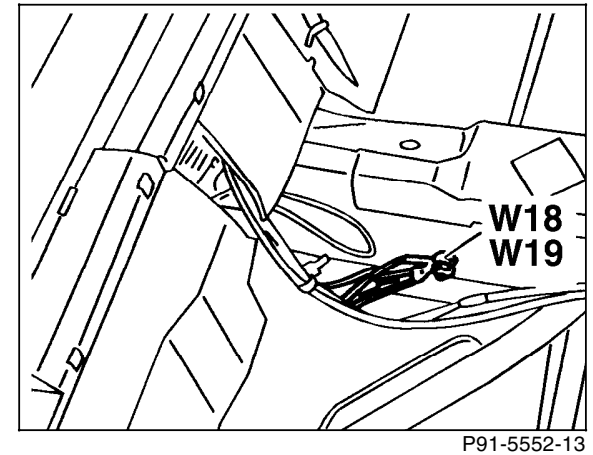


Figure 6
Model 202
W18 Ground (left front seat crossmember)
W19 Ground (right front seat crossmember)