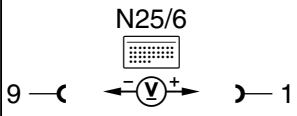
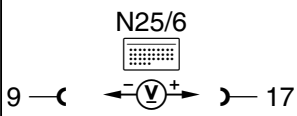
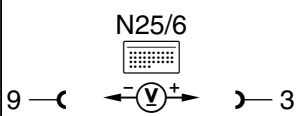
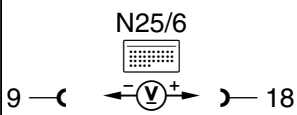
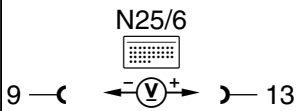



Electrical Test Program - Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 1.0	Rear HS control module (N25/6) Voltage supply Circuit 30 Circuit 15 Circuit 15C	  	Ignition: OFF Ignition: ON Ignition/starter switch in position "0" Ignition key inserted Ignition key removed	11 – 14 V 11 – 14 V 11 – 14 V 0 – 1 V	Wiring, Combination relay module (N10/2).
⇒ 2.0	Rear HS control module (N25/6) Voltage supply Circuit 58d		Parking lamps turned off Parking lamps turned on	0 – 1 V 11 – 14 V	Wiring.

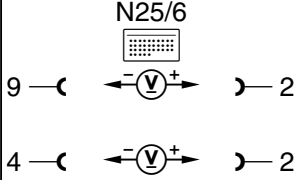
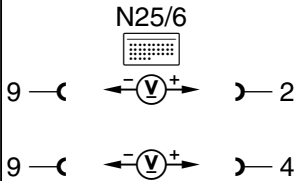
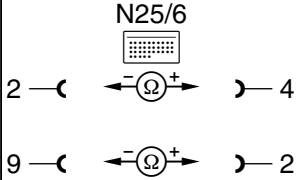
Electrical Test Program - Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 3.0	Left rear seat heater switch (S51/3) Voltage supply		Ignition: ON S51/3 Stage II held in depressed position S51/3 Stage I held in depressed position	6 – 8 V 0 – 1 V 2 – 4 V	⇒ 3.1, Rear HS control module (N25/6).
⇒ 3.1	Left rear seat heater switch (S51/3) Resistance		Ignition: OFF Disconnect test cable from N25/6. S51/3 Stage II held in depressed position S51/3 Stage I held in depressed position	>20 kΩ 0 – 2 Ω Approx. 165 Ω	Wiring, Left rear seat heater switch (S51/3).






Electrical Test Program - Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 4.0	<p>Left rear seat cushion heater element (R13/5) and left rear backrest heater element (R13/6) Voltage supply</p>	<p>N25/6</p>	<p>Ignition: ON</p> <p>Left rear seat heater switch (S51/3) stage II switched on.</p> <p>S51/3 stage I switched on</p>	<p>0 – 1 V</p> <p>9 – 14 V</p> <p>9 – 14 V</p> <p>5 – 7 V</p> <p>9 – 14 V</p>	<p>⇒ 4.1</p> <p>Rear HS control module (N25/6).</p>
⇒ 4.1	Resistance	<p>N25/6</p>	<p>Ignition: OFF</p> <p>Disconnect test cable from N25/6.</p>	<p>2.0 – 3.0 Ω</p> <p>2.0 – 3.0 Ω</p>	<p>Wiring,</p> <p>Left rear seat cushion heater element (R13/5),</p> <p>Left rear backrest heater element (R13/6).</p>

Electrical Test Program - Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 5.0	<p>Right rear seat cushion heater element (R13/7) and right rear backrest heater element (R13/8) Voltage supply</p>	<p>N25/6</p>  <p>9 —(←(V)→)— 2 4 —(←(V)→)— 2</p> <p>N25/6</p>  <p>9 —(←(V)→)— 2 9 —(←(V)→)— 4</p>	<p>Ignition: ON</p> <p>Right rear seat heater switch (S51/4) stage II switched on.</p> <p>S51/4 stage I switched on</p>	<p>0 – 1 V</p> <p>9 – 14 V</p> <p>9 – 14 V</p> <p>5 – 7 V</p> <p>9 – 14 V</p>	<p>⇒ 5.1 Rear HS control module (N25/6).</p>
⇒ 5.1	Resistance	<p>N25/6</p>  <p>2 —(←(Ω)→)— 4 9 —(←(Ω)→)— 2</p>	<p>Ignition: OFF</p> <p>Disconnect test cable from N25/6.</p>	<p>2.0 – 3.0 Ω</p> <p>2.0 – 3.0 Ω</p>	<p>Wiring, Right rear seat cushion heater element (R13/7), Right rear backrest heater element (R13/8).</p>

Electrical Test Program - Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 6.0	Left rear seat heater switch (S51/3), illumination Voltage supply	S51/3 6 —  — 5	Disconnect plug on S51/3 Turn on parking lamps	11 – 14 V	Wiring,
⇒ 7.0	Left rear seat heater switch (S51/3), indicator lamps Voltage supply	N25/6  9 —  — 12	Ignition: ON	0 – 1 V	Wiring, Left rear seat heater switch (S51/3), Rear HS control module (N25/6).
			S51/3 Stage I turned on	8 – 13 V	
		S51/3 Stage II turned on	8 – 13 V		
		N25/6  9 —  — 20	S51/3 Stage I turned on	0 – 1 V	
S51/3 Stage II turned on	8 – 13 V				

Electrical Test Program - Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 8.0	Left rear seat heater switch (S51/3), dimming Voltage supply	<p>N25/6 9 —(←(V)→)— 12 N25/6 9 —(←(V)→)— 20</p>	Ignition: ON S51/3 Stage I turned on Parking lamps turned on Parking lamps turned off S51/3 Stage II turned on Parking lamps turned on	0 – 1 V 8 – 13 V 2.0 – 2.8 V 8 – 13 V 2.0 – 2.8 V	Wiring, Left front seat heater switch (S51/3) Rear HS control module (N25/6).
⇒ 9.0	Right rear seat heater switch (S51/4) Voltage supply	<p>N25/6 9 —(←(V)→)— 11</p>	Ignition: ON S51/4 Stage II held in depressed position S51/4 Stage I held in depressed position	6 – 8 V 0 – 1 V 2 – 4 V	⇒ 9.1, Rear HS control module (N25/6).

Electrical Test Program - Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 9.1	Right rear seat heater switch (S51/4) Resistance	<p>N25/6 9 —(Ω)— 11</p>	Ignition: OFF Disconnect test cable from N25/6. S51/4 Stage II held in depressed position S51/4 Stage I held in depressed position	>20 kΩ 0 – 2 Ω Approx. 165 Ω	Wiring, Right rear seat heater switch (S51/4).
⇒ 10.0	Right rear seat heater switch (S51/4), illumination Voltage supply	<p>S51/4 6 —(V)— 5</p>	Disconnect plug on S51/4 Turn on parking lamps	11 – 14 V	Wiring.
⇒ 11.0 Only 8 and 12 cylinder engines	Increased CTP (idle) RPM with seat heating in stage II.	<p>V2 ⊥ —(V)— 2</p>	Unplug connector on engine speed increase diode matrix (V2). Seat heater stage II switched on	11 – 14 V	Wiring, Rear HS control module (N25/6), ⇒ 3.0 or 9.0. Values O.K.: See DM, Engines, Volume 3, section 6.2 or 6.3 EA, Engine Speed Increase Diode Matrix Test.

Electrical Test Program - Test

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 12.0	Right rear seat heater switch (S51/4), indicator lamps Voltage supply	<p>N25/6 9 —(—(←(V)→ —(—) 5</p>	Ignition: ON	0 – 1 V	Wiring, Right rear seat heater switch (S51/4), Rear HS control module (N25/6).
			S51/4 Stage I turned on	8 – 13 V	
		S51/4 Stage II turned on	8 – 13 V		
		<p>N25/6 9 —(—(←(V)→ —(—) 10</p>	S51/4 Stage I turned on	0 – 1 V	
S51/4 Stage II turned on	8 – 13 V				
⇒ 13.0	Right rear seat heater switch (S51/4), dimming Voltage supply	<p>N25/6 9 —(—(←(V)→ —(—) 5</p>	Ignition: ON	0 – 1 V	Wiring, Left front seat heater switch (S51/4) Rear HS control module (N25/6).
			S51/4 Stage I turned on	8 – 13 V	
		Parking lamps turned on	2.0 – 2.8 V		
		<p>N25/6 9 —(—(←(V)→ —(—) 10</p>	Parking lamps turned off	8 – 13 V	
S51/4 Stage II turned on					
Parking lamps turned on	2.0 – 2.8 V				

Electrical Test Program - Test

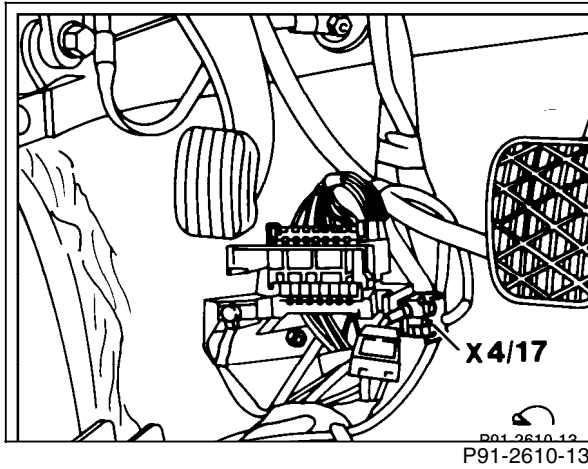


Figure 1

X4/17 Terminal block (circuit 15C)

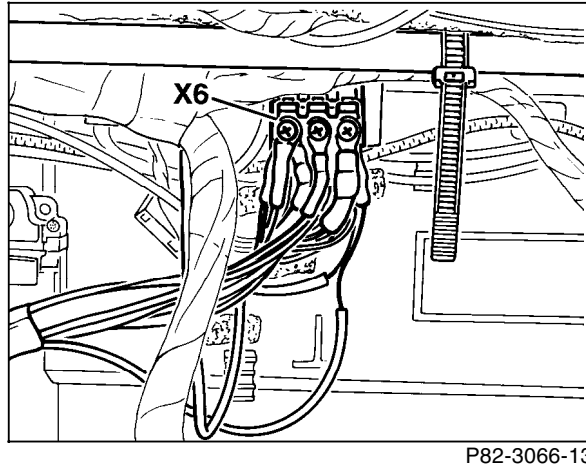


Figure 2

X6 Terminal block (circuit 58d) (3- or 4-pole)

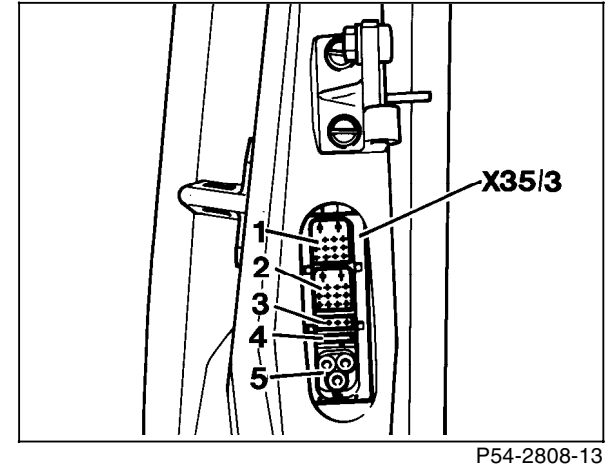
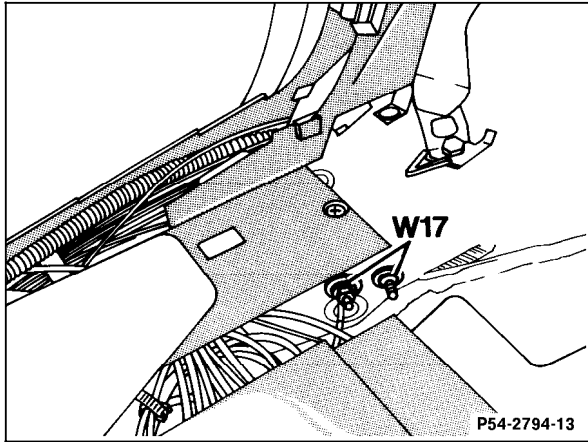


Figure 3

X35/3 (2) Left rear door separation point

Electrical Test Program - Test



P54-2794-13
P54-2794-13

Figure 4

W17 Ground (right rear seat)