





## 15.2 Electric Seat Adjustment (ESA)

Model 140

### Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 1.0	<b>Left front power seat control module (N32/1)</b> Voltage supply	<p>N32/1</p> <p>11 —( — ⊖ ⊕ — )— 2 (1) (1)</p> <p>11 —( — ⊖ ⊕ — )— 3 (1) (1)</p> <p>N32/1</p> <p>11 —( — ⊖ ⊕ — )— 9 (1) (1)</p>	<p>Ignition: <b>ON</b> Connector (1) from N32/1 disconnected.</p> <p>Ignition: <b>OFF</b> Connector (1) from N32/1 disconnected. Door open</p>	<p>11 – 14 V</p> <p>11 – 14 V</p>	Wiring.
⇒ 2.0	<b>Left front power seat switch group (S91)</b> Voltage supply	<p>S91</p> <p>6 —( — ⊖ ⊕ — )— 1 6 —( — ⊖ ⊕ — )— 8 6 —( — ⊖ ⊕ — )— 3 6 —( — ⊖ ⊕ — )— 5</p>	<p>Ignition: <b>ON</b> Connector (1) from N32/1 disconnected.</p>	approx. 5 V	Wiring, N32/1.
⇒ 3.0	<b>Fore/aft switch (S91s1)</b> Resistance	<p>N32/1</p> <p>5 —( — ⊖ ⊕ — )— 12 (1) (1)</p>	<p>Connector (1) from N32/1 disconnected.</p> <p>Press switch (S91s1): forward backward</p>	<p>approx. 2.2 kΩ</p> <p>approx. 42 Ω approx. 16 Ω</p>	Wiring, S91.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 4.0	<b>Fore/aft motor (M27m1)</b> Voltage supply	<p>N32/1</p> <p>2 —  — 1</p> <p>(5) (5)</p> <p>N32/1</p> <p>3 —  — 1</p> <p>(5) (5)</p> <p>Convenience feature <b>Coupé only</b> <b>(if applicable)</b></p> <p>N32/1</p> <p>4 —  — 6</p> <p>5 —  — 6</p> <p>(5) (5)</p>	<p>Ignition: <b>ON</b></p> <p>Connector (5 VZ) from N32/1 disconnected.</p> <p>Press switch (S91s1):</p> <p style="padding-left: 40px;">forward</p> <p style="padding-left: 40px;">backward</p> <p>Fold left front seat backrest:</p> <p style="padding-left: 40px;">forward</p> <p style="padding-left: 40px;">backward</p>	<p>&lt; 1 V</p> <p>11 – 14 V</p> <p>-11 to -14 V</p> <p>&lt; 1 V</p> <p>11 – 14 V</p> <p>-11 to -14 V</p> <p>approx. 5 V</p>	<p>S91s1, N32/1, Left front seatback microswitch (S91/1) (Coupé only, if applicable).</p>

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 5.0	<b>Fore/aft motor (M27m1)</b> Resistance	<p style="text-align: center;">N32/1</p> <p>6 —( ← ⊖ ⊕ → )— 5 (5) (5)</p> <p style="text-align: center;">N32/1</p> <p>4 —( ← ⊖ ⊕ → )— 5 6 —( ← ⊖ ⊕ → )— 4 (5) (5)</p> <p style="text-align: center;">N32/1</p> <p>1 —( ← ⊖ ⊕ → )— 2 (5) (5)</p> <p>Convenience feature <b>Coupé only</b> <b>(if applicable)</b></p> <p style="text-align: center;">N32/1</p> <p>1 —( ← ⊖ ⊕ → )— 3 (5) (5)</p>	<p>Connector (5 VZ) from N32/1 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p> <p>0.5 – 15 Ω</p>	M27m1.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 6.0	<b>Front raise/lower switch (S91s3)</b> Resistance	<p style="text-align: center;">N32/1</p> <p>4 —( ←⊖⊕→ )— 12 (1) (1)</p>	Connector (1) from N32/1 disconnected.  Press switch (S91s3): raise front lower front	approx. 2.2 kΩ  approx. 42 Ω approx. 16 Ω	Wiring, S91.
⇒ 7.0	<b>Front raise/lower motor (M27m3)</b> Voltage supply	<p style="text-align: center;">N32/1</p> <p>2 — — ←⊖⊕→ — — 1 (6) (6)</p> <p style="text-align: center;">N32/1</p> <p>4 — — ←⊖⊕→ — — 6 5 — — ←⊖⊕→ — — 6 (6) (6)</p>	Ignition: <b>ON</b> Connector (6 HV) from N32/1 disconnected.  Press switch (S91s3): raise front lower front	< 1 V  11 – 14 V -11 to -14 V  approx. 5 V	N32/1.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 8.0	<b>Front raise/lower motor (M27m3)</b> Resistance	<p style="text-align: center;">N32/1</p> <p>6 — ( ← ⊖ Ω ⊕ → ) — 5 (6) (6)</p> <p style="text-align: center;">N32/1</p> <p>4 — ( ← ⊖ Ω ⊕ → ) — 5 6 — ( ← ⊖ Ω ⊕ → ) — 4 (6) (6)</p> <p style="text-align: center;">N32/1</p> <p>1 — ( ← ⊖ Ω ⊕ → ) — 2 (6) (6)</p>	<p>Connector (6 HV) from N32/1 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M27m3.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 9.0	<b>Rear raise/lower switch (S91s2)</b> Resistance		Connector (1) from N32/1 disconnected.  Press switch (S91s2): raise rear lower rear	approx. 2.2 kΩ  approx. 156 Ω approx. 72 Ω	Wiring, S91.
⇒ 10.0	<b>Rear raise/lower motor (M27m2)</b> Voltage supply		Ignition: <b>ON</b> Connector (4 HH) from N32/1 disconnected.  Press switch (S91s2): raise rear lower rear	< 1 V  11 – 14 V -11 to -14 V  approx. 5 V	N32/1.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 11.0	<b>Rear raise/lower motor (M27m2)</b> Resistance	<p style="text-align: center;">N32/1</p> <p>6 — ( ← ⊖ ⊕ → ) — 5 (4) (4)</p> <p style="text-align: center;">N32/1</p> <p>4 — ( ← ⊖ ⊕ → ) — 5 4 — ( ← ⊖ ⊕ → ) — 6 (4) (4)</p> <p style="text-align: center;">N32/1</p> <p>1 — ( ← ⊖ ⊕ → ) — 2 (4) (4)</p>	<p>Connector (4 HH) from N32/1 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M27m2.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 12.0	<b>Backrest fore/aft switch (S91s5)</b> Resistance		Connector (1) from N32/1 disconnected.  Press switch (S91s5): forward backward	approx. 2.2 kΩ  approx. 42 Ω approx. 16 Ω	Wiring, S91.
⇒ 13.0	<b>Backrest fore/aft motor (M27m5)</b> Voltage supply		Ignition: <b>ON</b> Connector (7) from N32/1 disconnected.  Press switch (S91s5): forward backward	< 1 V  11 – 14 V -11 to -14 V  approx. 5 V	N32/1.



Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 14.0	<b>Backrest fore/aft motor (M27m5)</b> Resistance	<p style="text-align: center;">N32/1</p> <p>6 —( ← ⊖ ⊕ → )— 5 (7) (7)</p> <p style="text-align: center;">N32/1</p> <p>4 —( ← ⊖ ⊕ → )— 5 6 —( ← ⊖ ⊕ → )— 4 (7) (7)</p> <p style="text-align: center;">N32/1</p> <p>1 —( ← ⊖ ⊕ → )— 2 (7) (7)</p>	<p>Connector (7) from N32/1 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M27m5.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 15.0	<b>Head restraint raise/lower switch (S91s4)</b> Resistance		Connector (1) from N32/1 disconnected.  Press switch (S91s4): raise lower	approx. 2.2 kΩ  approx. 156 Ω approx. 72 Ω	Wiring, S91.
⇒ 16.0	<b>Head restraint raise/lower motor (M27m4)</b> Voltage supply		Ignition: <b>ON</b> Connector (8) from N32/1 disconnected.  Press switch (S91s4): raise lower	< 1 V  -11 to -14 V 11 – 14 V  approx. 5 V	N32/1.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 17.0	<b>Head restraint raise/lower motor (M27m4)</b> Resistance	<p style="text-align: center;">N32/1</p> <p>6 — ( ← ⊖ ⊕ → ) — 5 (8) (8)</p> <p style="text-align: center;">N32/1</p> <p>5 — ( ← ⊖ ⊕ → ) — 4 6 — ( ← ⊖ ⊕ → ) — 4 (8) (8)</p> <p style="text-align: center;">N32/1</p> <p>2 — ( ← ⊖ ⊕ → ) — 1 (8) (8)</p>	<p>Connector (8) from N32/1 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M27m4.





Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 18.0	<b>Seat cushion fore/aft switch (S91s10)</b> Resistance		Connector (1) from N32/1 disconnected.  Press switch (S91s10): forward backward	approx. 2.2 kΩ  approx. 43 Ω approx. 16 Ω	Wiring, S91.
⇒ 19.0	<b>Seat cushion fore/aft motor (M27m6)</b> Voltage supply		Ignition: <b>ON</b> Connector (3) from module N32/1 disconnected.  Press switch (S91s10): forward backward	< 1 V  11 – 14 V -11 to -14 V  approx. 5 V	N32/1.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 20.0	<b>Seat cushion fore/aft motor (M27m6)</b> Resistance	<p style="text-align: center;">N32/1</p> <p>5 —( ← ⊖ Ω ⊕ → )— 6 (3) (3)</p> <p style="text-align: center;">N32/1</p> <p>5 —( ← ⊖ Ω ⊕ → )— 4 6 —( ← ⊖ Ω ⊕ → )— 4 (3) (3)</p> <p style="text-align: center;">N32/1</p> <p>2 —( ← ⊖ Ω ⊕ → )— 1 (3) (3)</p>	<p>Connector (3) from N32/1 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M27m6.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 21.0	<b>Memory button switch (S91s9)</b> Resistance	<p style="text-align: center;">N32/1</p> <p>5 —( ←  → )— 12 (1) (1)</p> <p style="text-align: center;">N32/1</p> <p>4 —( ←  → )— 12 (1) (1)</p> <p style="text-align: center;">N32/1</p> <p>1 —( ←  → )— 12 (1) (1)</p> <p style="text-align: center;">N32/1</p> <p>1 —( ←  → )— 12 (1) (1)</p>	<p>Connector (1) from N32/1 disconnected.</p> <p>Memory button 1 switch: Rest position: 2.2 kΩ Push button: approx. 290 Ω</p> <p>Memory button 2 switch: Rest position: 2.2 kΩ Push button: approx. 290 Ω</p> <p>Memory button 3 switch: Rest position: 2.2 kΩ Push button: approx. 156 Ω</p> <p>Green memory button switch: Rest position: 2.2 kΩ Push button: approx. 290 Ω</p>		Wiring, S91.

Electrical Test Program - Test (left seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 22.0	<b>Illumination (S91e1)</b> Voltage supply	<p>4 —  — 2</p>	Connector disconnected. Parking lamps: <b>ON</b>	11 – 14 V	Wiring.
⇒ 23.0	<b>Illumination (S91e1)</b> Resistance	<p>4 —  — 2</p>	Connector (1) at seat switch group (S92) disconnected.	approx. 10 Ω	Lamp, S91.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 24.0	<b>Right front power seat control module (N32/2)</b> Voltage supply	<p>N32/2</p> <p>11 —( — ⊖ ⊕ — )— 3 (1) (1)</p> <p>N32/2</p> <p>11 —( — ⊖ ⊕ — )— 9 (1) (1)</p>	<p>Ignition: <b>ON</b></p> <p>Connector (1) from N32/2 disconnected.</p> <p>Ignition: <b>OFF</b></p> <p>Connector (1) from N32/2 disconnected.</p> <p>Door open.</p>	<p>11 – 14 V</p> <p>11 – 14 V</p>	Wiring.
⇒ 25.0	<b>Right front power seat switch group (S92)</b> Voltage supply	<p>S92</p> <p>5 —( — ⊖ ⊕ — )— 2</p> <p>5 —( — ⊖ ⊕ — )— 7</p> <p>5 —( — ⊖ ⊕ — )— 4</p> <p>5 —( — ⊖ ⊕ — )— 6</p>	<p>Ignition: <b>ON</b></p> <p>Connector (1) from N32/2 disconnected.</p>	approx. 5 V	Wiring, N32/2.
⇒ 26.0	<b>Fore/aft switch (S92s1)</b> Resistance	<p>N32/2</p> <p>5 —( — ⊖ ⊕ — )— 12</p>	<p>Connector (1) from N32/2 disconnected.</p> <p>Press switch (S92s1):</p> <p style="padding-left: 40px;">forward</p> <p style="padding-left: 40px;">backward</p>	<p>approx. 2.2 kΩ</p> <p>approx. 42 Ω</p> <p>approx. 16 Ω</p>	Wiring, S92.



Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 27.0	<b>Fore/aft motor (M28m1)</b> Voltage supply	<p>N32/2</p> <p>2 — (5) ← ⊖ ⊕ → — 1 (5)</p> <p>N32/2</p> <p>3 — (5) ← ⊖ ⊕ → — 1 (5)</p>	<p>Ignition: <b>ON</b></p> <p>Connector (5 VZ) from N32/2 disconnected.</p> <p>Press switch (S92s1):</p> <p style="padding-left: 40px;">forward</p> <p style="padding-left: 40px;">backward</p> <p>Fold right front seat backrest:</p> <p style="padding-left: 40px;">forward</p> <p style="padding-left: 40px;">backward</p>	<p>&lt; 1 V</p> <p>11 – 14 V</p> <p>-11 to -14 V</p> <p>&lt; 1 V</p> <p>11 – 14 V</p> <p>-11 to -14 V</p>	<p>Fore/aft switch (S92s1), Left front power seat control module (N32/2), Right front seatback microswitch (S92/1) (Coupé only, if applicable).</p>
		<p>Convenience feature</p> <p><b>Coupé only</b></p> <p><b>(if applicable)</b></p> <p>N32/2</p> <p>4 — (5) ← ⊖ ⊕ → — 6 (5)</p> <p>5 — (5) ← ⊖ ⊕ → — 6 (5)</p>		<p>approx. 5 V</p>	

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 28.0	<b>Fore/aft motor (M28m1)</b> Resistance	<p style="text-align: center;">N32/2</p> <p>6 — ( ← ⊖ Ω ⊕ → ) — 5 (5) (5)</p> <p style="text-align: center;">N32/2</p> <p>4 — ( ← ⊖ Ω ⊕ → ) — 5 6 — ( ← ⊖ Ω ⊕ → ) — 4 (5) (5)</p> <p style="text-align: center;">N32/2</p> <p>1 — ( ← ⊖ Ω ⊕ → ) — 2 (5) (5)</p> <p>Convenience feature <b>Coupé only</b> <b>(if applicable)</b></p> <p style="text-align: center;">N32/2</p> <p>1 — ( ← ⊖ Ω ⊕ → ) — 3 (5) (5)</p>	<p>Connector (5 VZ) from N32/2 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p> <p>0.5 – 15 Ω</p>	M28m1.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 29.0	<b>Front raise/lower switch (S92s3)</b> Resistance	<p>N32/2 4 — (1) — Ω — 12 (1)</p>	Disconnect connector (1) from N32/2.  Press switch (S92s3): raise front lower front	approx. 2.2 kΩ  approx. 42 Ω approx. 16 Ω	Wiring, S92.
⇒ 30.0	<b>Front raise/lower motor (M28m3)</b> Voltage supply	<p>N32/2 2 — (6) — V — 1 (6)</p> <p>N32/2 4 — (6) — V — 6 (6) 5 — (6) — V — 6 (6)</p>	Ignition: <b>ON</b> Connector (6 HV) from N32/2 disconnected.  Press switch (S92s3): raise front lower front	< 1 V  11 – 14 V -11 to -14 V  approx. 5 V	N32/2.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 31.0	<b>Front raise/lower motor (M28m3)</b> Resistance	<p style="text-align: center;">N32/2</p> <p>6 — ( ← ⊖ Ω ⊕ → ) — 5 (6) (6)</p> <p style="text-align: center;">N32/2</p> <p>4 — ( ← ⊖ Ω ⊕ → ) — 5 6 — ( ← ⊖ Ω ⊕ → ) — 4 (6) (6)</p> <p style="text-align: center;">N32/2</p> <p>1 — ( ← ⊖ Ω ⊕ → ) — 2 (6) (6)</p>	<p>Connector (6 HV) from N32/2 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M28m3.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 32.0	<b>Rear raise/lower switch (S92s2)</b> Resistance	<p style="text-align: center;">N32/2</p> <p>5 (1) ← ⊖ ⊕ → 12 (1)</p>	<p>Connector (1) from N32/2 disconnected.</p> <p>Press switch (S92s2):                      raise rear                      lower rear</p>	<p>approx. 2.2 kΩ</p> <p>approx. 156 Ω</p> <p>approx. 72 Ω</p>	Wiring, S92.
⇒ 33.0	<b>Rear raise/lower motor (M28m2)</b> Voltage supply	<p style="text-align: center;">N32/2</p> <p>2 (4) ← ⊖ ⊕ → 1 (4)</p> <p style="text-align: center;">N32/2</p> <p>4 (4) ← ⊖ ⊕ → 6 (4)</p> <p>5 (4) ← ⊖ ⊕ → 6 (4)</p>	<p>Ignition: <b>ON</b></p> <p>Connector (4 HH) from N32/2 disconnected.</p> <p>Press switch (S92s2):                      raise rear                      lower rear</p>	<p>&lt; 1 V</p> <p>11 – 14 V</p> <p>-11 to -14 V</p> <p>approx. 5 V</p>	N32/2.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 34.0	<b>Rear raise/lower motor (M28m2)</b> Resistance	<p style="text-align: center;">N32/2</p> <p>6 — ( ← ⊖ ⊕ → ) — 5 (4) (4)</p> <p style="text-align: center;">N32/2</p> <p>4 — ( ← ⊖ ⊕ → ) — 5 6 — ( ← ⊖ ⊕ → ) — 4 (4) (4)</p> <p style="text-align: center;">N32/2</p> <p>1 — ( ← ⊖ ⊕ → ) — 2 (4) (4)</p>	<p>Connector (4 HH) from N32/2 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M28m2.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 35.0	<b>Backrest fore/aft switch (S92s5)</b> Resistance	<p>N32/2 1 —( — Ω —) 12 (1) (1)</p>	Connector (1) from N32/2 disconnected.  Press switch (S92s5): forward backward	approx. 2.2 kΩ  approx. 42 Ω approx. 16 Ω	Wiring, S92.
⇒ 36.0	<b>Backrest fore/aft motor (M28m5)</b> Voltage supply	<p>N32/2 2 — — — — — 1 (7) (7)</p> <p>N32/2 4 — — — — — 6 5 — — — — — 6 (7) (7)</p>	Ignition: <b>ON</b> Connector (7) from N32/2 disconnected.  Press switch (S92s5): forward backward	< 1 V  11 – 14 V -11 to -14 V  approx. 5 V	N32/2.

Electrical Test Program - Test (right seat)





Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 37.0	<b>Backrest fore/aft motor (M28m5)</b> Resistance	<p style="text-align: center;">N32/2</p> <p>6 — ( — ← ⊖ ⊕ → ) — 5 (7) (7)</p> <p style="text-align: center;">N32/2</p> <p>4 — ( — ← ⊖ ⊕ → ) — 5 6 — ( — ← ⊖ ⊕ → ) — 4 (7) (7)</p> <p style="text-align: center;">N32/2</p> <p>1 — ( — ← ⊖ ⊕ → ) — 2 (7) (7)</p>	<p>Connector (7) from N32/2 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M28m5.



Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 38.0	<b>Head restraint raise/lower switch (S92s4)</b> Resistance		Connector (1) from N32/2 disconnected.  Press switch (S92s4): raise lower	approx. 2.2 kΩ  approx. 156 Ω approx. 72 Ω	Wiring, S92.
⇒ 39.0	<b>Head restraint raise/lower motor (M28m4)</b> Voltage supply		Ignition: <b>ON</b> Connector (8) from module (N32/2) disconnected.  Press switch (S92s4): raise lower	< 1 V  -11 to -14 V 11 – 14 V  approx. 5 V	N32/2.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 40.0	<b>Head restraint raise/lower motor (M28m4)</b> Resistance	<p style="text-align: center;">N32/2</p> <p>5 —( ←  → )— 6 (8) (8)</p> <p style="text-align: center;">N32/2</p> <p>5 —( ←  → )— 4 (8) (8)</p> <p>6 —( ←  → )— 4 (8) (8)</p> <p style="text-align: center;">N32/2</p> <p>1 —( ←  → )— 2 (8) (8)</p>	<p>Connector (8) from N32/2 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M28m4.





Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 41.0	<b>Seat cushion fore/aft switch (S92s10)</b> Resistance	<p style="text-align: center;">N32/2 8 — (1) — Ω — (1) — 12</p>	Connector (1) from N32/2 disconnected.  Press switch (S92s10): forward backward	approx. 2.2 kΩ  approx. 43 Ω approx. 16 Ω	Wiring, S92.
⇒ 42.0	<b>Seat cushion fore/aft motor (M28m6)</b> Voltage supply	<p style="text-align: center;">N32/2 1 — (3) — V — (3) — 2</p> <p style="text-align: center;">N32/2 4 — (3) — V — (3) — 6 5 — (3) — V — (3) — 6</p>	Ignition: <b>ON</b> Connector (3) from module (N32/2) disconnected.  Press switch (S92s10): forward backward	< 1 V  11 – 14 V -11 to -14 V  approx. 5 V	N32/2.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 43.0	<b>Seat cushion fore/aft motor (M28m6)</b> Resistance	<p style="text-align: center;">N32/2</p> <p>6 —( ← ⊖ Ω ⊕ → )— 5 (3) (3)</p> <p style="text-align: center;">N32/2</p> <p>5 —( ← ⊖ Ω ⊕ → )— 4 6 —( ← ⊖ Ω ⊕ → )— 4 (3) (3)</p> <p style="text-align: center;">N32/2</p> <p>1 —( ← ⊖ Ω ⊕ → )— 2 (3) (3)</p>	<p>Connector (3) from N32/2 disconnected.</p> <p>Note value.</p> <p>Note value.</p> <p>Total of two values:</p>	<p>approx. 2.2 kΩ</p> <p>approx. 2.2 – 2.4 kΩ</p> <p>0.5 – 15 Ω</p>	M28m6.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 44.0	<b>Memory button switch (S92s9)</b> Resistance	<p style="text-align: center;">N32/2</p> <p>5 —( ←  → )— 12 (1) (1)</p> <p style="text-align: center;">N32/2</p> <p>4 —( ←  → )— 12 (1) (1)</p> <p style="text-align: center;">N32/2</p> <p>1 —( ←  → )— 12 (1) (1)</p> <p style="text-align: center;">N32/2</p> <p>1 —( ←  → )— 12 (1) (1)</p>	<p>Connector (1) from N32/2 disconnected.</p> <p>Memory button 1 switch: Rest position: 2.2 kΩ Push button: approx. 290 Ω</p> <p>Memory button 2 switch: Rest position: 2.2 kΩ Push button: approx. 290 Ω</p> <p>Memory button 3 switch: Rest position: 2.2 kΩ Push button: approx. 156 Ω</p> <p>Green memory button switch: Rest position: 2.2 kΩ Push button: approx. 290 Ω</p>		Wiring, S92.

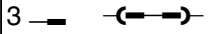
### Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 45.0	<b>Illumination (S92e1)</b> Voltage supply		Connector disconnected. Parking lamps: <b>ON</b>	11 – 14 V	Wiring.
⇒ 46.0	<b>Illumination (S92e1)</b> Resistance		Connector (1) disconnected at seat switch group (S92).	approx. 10 Ω	Lamp, S92.
⇒ 47.0 <b>Coupé only</b> <b>(if applicable)</b>	<b>Left front seatback</b> <b>microswitch (S91/1)</b> Resistance		Connector (9) disconnected N32/2. Left front seatback: forward backward	0 – 2 Ω >20 kΩ	Wiring, S91/1.
⇒ 48.0 <b>Coupé only</b> <b>(if applicable)</b>	<b>Right front seatback</b> <b>microswitch (S92/1)</b> Resistance		Connector (9) disconnected N32/2. Right front seatback: forward backward	0 – 2 Ω >20 kΩ	Wiring, S92/1.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 49.0 <b>Coupé only</b> <b>(if applicable)</b>	<b>Left/right front door switch (S17/3, S17/4)</b> Voltage supply	N32/1 11 —( )— 10 (5) ←(V)+→ (5)	Remove fuse (F3-17). Connector (1) disconnected. Ignition: <b>OFF</b> Front doors: <b>CLOSED</b>  Drivers door: <b>OPEN</b>  Right front door: <b>OPEN</b>	11 – 14 V  <2 V  <2 V	Wiring, S17/3, S17/4, Convenience control module (N57), ATA control module (N26), PSE control module (A37), N32/2.
⇒ 50.0 <b>Coupé only</b> <b>(if applicable)</b>	<b>Left front power seat control module (N32/1)</b> Programming	N32/1 3 —( )— + (2) ←( )→	Connector (2) disconnected. Press memory button 1 on left front power seat switch group.  Contact connector (2). Using S91 operate head restraint to upper and lower stops.	Front seat travels automatically to front and rear stops.  Head restraint travels up and down.	N32/1.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 51.0 <b>Coupé only</b> <b>(if applicable)</b>	<b>Left front power seat control module (N32/2)</b> Programming	N32/1 3  (2)	Connector (2) disconnected Press memory switch 2 on S92.  Contact connector (2) Using S92 operate head restraint to upper and lower stops.	Front seat travels automatically to front and rear stops.  Head restraint travels up and down.	N32/2.



Electrical Test Program - Test

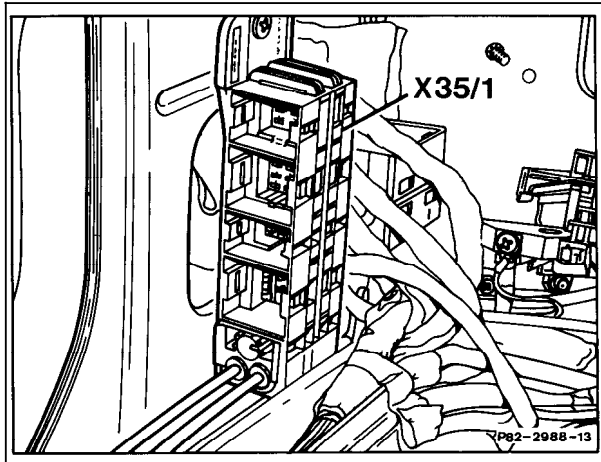


Figure 1  
X35/1 Left front door plug connection

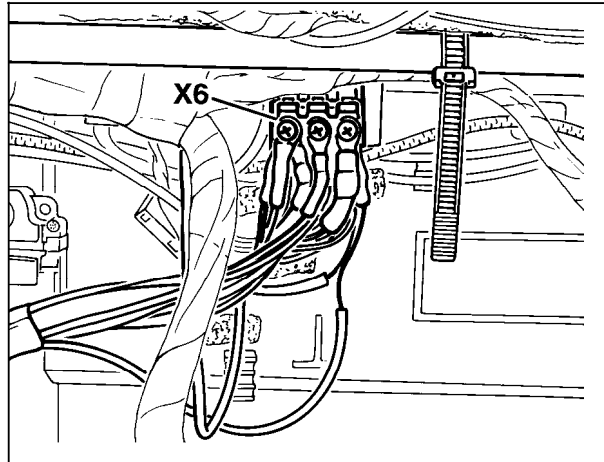


Figure 2  
X6 Terminal block (terminal 58d) (3 or 4-pole)

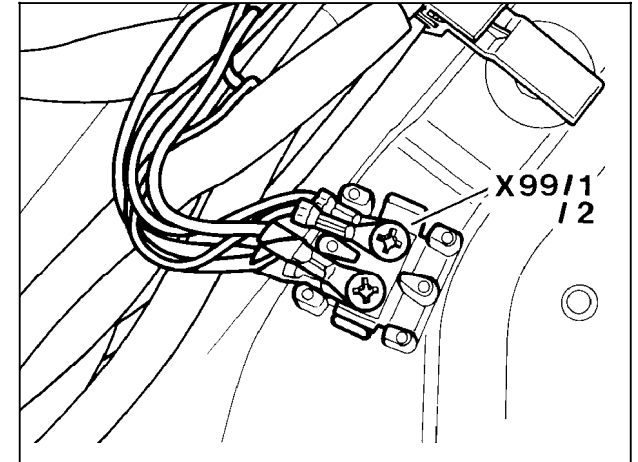


Figure 3  
X99/1 Engine/chassis harness connector

Electrical Test Program - Test

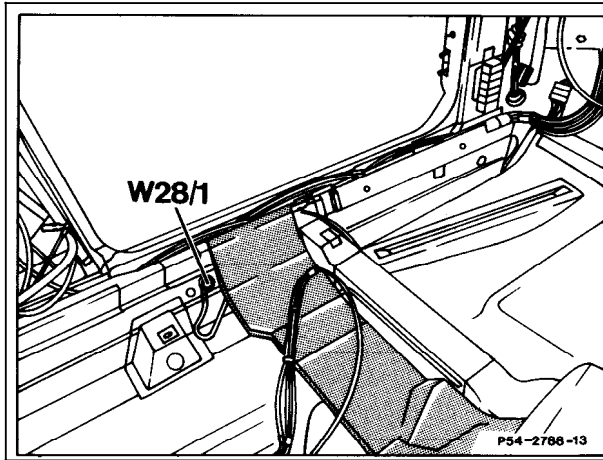


Figure 4

P54-2788-13

W28/1 Ground (inside left rocker panel)