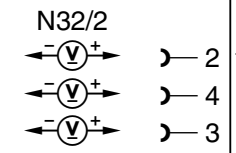
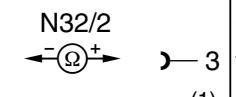
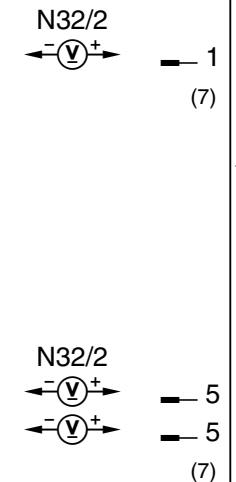
Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 1.0	**Right ESA control module (N32/2)** Voltage supply		Connector (2) unplugged from N32/2.	11 – 14 V 11 – 14 V 11 – 14 V	Wiring, CF relay module (K24).
⇒ 2.0	**Fore/aft switch (S92s1)** Resistance		Connector (1) unplugged from N32/2. Press switch (S92s1): forward backward	approx. 2.2 kΩ approx. 43 Ω approx. 16 Ω	Wiring, S92
⇒ 3.0	**Fore/aft motor (M28m1)** Voltage supply **Up to 11/96**		Connector (1) plugged at N32/1. Set backrest vertical. Connector (7) unplugged from N32/1. Press switch (S92s1): forward backward	 < 1 V 11 – 14 V –11 to –14 V approx. 5 V approx. 5 V	Wiring, S92, N32/2

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒[3.0]	**Fore/aft motor (M28m1)** Voltage supply Hall sensor **As of 12/96**	N32/2 2 (7) – V – 1 (7)	Connector (1) plugged at N32/1. Set backrest vertical. Connector (7) unplugged from N32/2. Press switch (S92s1): forward backward	 < 1 V for 1 second: 11 – 14 V for 1 second: –11 to –14 V	Wiring, S92, N32/2
		N32/2 5 (7) – V – 4 (7)		11 – 14 V	N32/2
		N32/2 5 (7) – V – 4 (7)	Open connector (7) and connect to N32/2	7.7 – 8.8 V or 11.3 – 12.7 V	Wiring, M28m1

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 4.0	**Fore/aft motor (M28m1)** Resistance	N32/2 4 (2) — 1 (7) 1 (2) — 2 (7)	Connector (7) unplugged from N32/2. ⚠ Danger of being wedged in. Bridge sockets 4 and 1 with fused jumper wire 124 589 37 63 00	Motor (M28m1) runs.	Wiring, M28m1
⇒ 5.0	**Front raise/lower switch (S92s3)** Resistance	N32/2 4 (1) — 2 (1)	Connector (1) unplugged from N32/2. Press switch (S92s3): raise front lower front	approx. 2.2 kΩ approx. 43 Ω approx. 16 Ω	Wiring, S92

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 6.0	**Front raise/lower motor (M28m3)** Voltage supply **Up to 11/96**	N32/2 2 (6) – V – 1 (6) N32/2 3 (6) – V – 5 (6) N32/2 4 (6) – V – 5 (6)	Connector (1) plugged in at N32/2. Connector (6) unplugged from N32/2. Press switch (S92s3): raise front lower front	< 1 V 11 – 14 V –11 to –14 V approx. 5 V approx. 5 V	Wiring, S92, N32/2

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ [6.0]	**Front raise/lower motor (M28m3)** Voltage supply Hall sensor **As of 12/96**	N32/2 2 (6) – V – 1 (6)	Connector (1) plugged in at N32/2. Connector (6) unplugged from N32/2. Press switch (S92s3): raise front	 < 1 V for 1 second: 11 – 14 V for 1 second: –11 to –14 V	Wiring, S92, N32/2
		N32/2 5 (6) – V – 4 (6)		11 – 14 V	N32/2
		N32/2 5 (6) – V – 4 (6)	Open connector (6) and connect to N32/2	7.7 – 8.8 V or 11.3 – 12.7 V	Wiring, M28m3

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 7.0	**Front raise/lower motor (M28m3)** Resistance	N32/2 4 (2) — 1 (6) 1 (2) — 2 (6)	Connectors (6) and (2) unplugged from N32/2. ⚠ Danger of being wedged in. Bridge sockets 4 and 1 with fused jumper wire 124 589 37 63 00	Motor (M28m3) runs.	M28m3
⇒ 8.0	**Rear raise/lower switch (S92s2)** Resistance	N32/2 4 (1) — 3 (1)	Connector (1) unplugged in N32/2. Press switch (S92s2): raise rear lower rear	approx. 2.2 kΩ approx. 160 Ω approx. 75 Ω	Wiring, S92

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 9.0	**Rear raise/lower motor (M28m2)** Voltage supply **Up to 11/96**	N32/2 2 (5) – V – 1 (5)	Connector (1) plugged in N32/1. Connector (5) unplugged from N32/2. Press switch (S92s2): raise rear lower rear	 < 1 V 11 – 14 V –11 to –14 V	Wiring, S92, N32/2
		N32/2 4 (5) – V – 5 (5)		approx. 5 V	
		N32/2 3 (5) – V – 5 (5)		approx. 5 V	

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ [9.0]	**Rear raise/lower motor (M28m2)** Voltage supply Hall sensor **As of 12/96**	N32/2 2 (5) — V — 1 (5)	Connector (1) plugged in at N32/1. Connector (5) unplugged from N32/2. Press switch (S92s2): raise front lower front	 < 1 V for 1 second: 11 – 14 V for 1 second: –11 to –14 V	Wiring, S92, N32/2
		N32/2 5 (5) — V — 4 (5)		11 – 14 V	N32/2
		N32/2 5 (5) — V — 4 (5)	Open connector (5) and connect to N32/2	7.7 – 8.8 V or 11.3 – 12.7 V	Wiring, M28m2

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 10.0	**Rear raise/lower motor (M28m2)** Resistance	N32/2 4 (2) — 1 (5) 1 (2) — 2 (5)	Connector (5) unplugged from N32/2 ⚠ Danger of being wedged in. Bridge sockets 4 and 1 with fused jumper wire 124 589 37 63 00.	Motor (M28m2) runs.	M28m2
⇒ 11.0	**Backrest fore/aft switch (S92s5)** Resistance	N32/2 4 (1) — 1 (1)	Connector (1) unplugged from N32/2. Press switch (S92s5): forward rearward	approx. 2.2 kΩ approx. 43 Ω approx. 16 Ω	Wiring, S92

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 12.0	**Backrest fore/aft motor (M28m5)** Voltage supply **Up to 11/96**	N32/2 2 (8) – V – 1 (8)	Connector (1) plugged in at N32/2. Connector (8) unplugged from N32/2. Press switch (S92s5): forward rearward	 < 1 V 11 – 14 V –11 to –14 V	Wiring, S92, N32/2
		N32/2 5 (8) – V – 4 (8)		approx. 5 V	
		N32/2 3 (8) – V – 4 (8)		approx. 5 V	

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ [12.0]	**Rear raise/lower motor (M28m5)** Voltage supply Hall sensor **As of 12/96**	N32/2 2 (8) — V — 1 (8)	Connector (1) plugged in at N32/1. Connector (8) unplugged from N32/2. Press switch (S92s5): raise front lower front	< 1 V for 1 second: 11 – 14 V for 1 second: –11 to –14 V	Wiring, S92, N32/2
		N32/2 4 (8) — V — 5 (8)		11 – 14 V	N32/2
		N32/2 4 (8) — V — 5 (8)	Open connector (8) and connect to N32/2.	7.7 – 8.8 V or 11.3 – 12.7 V	Wiring, M28m5

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 13.0	**Backrest fore/aft motor (M28m5)**	N32/2 4 (2) — 1 (8) 1 (2) — 2 (8)	Connector (2) and (8) unplugged from N32/2. ⚠ Danger of being wedged in. Bridge sockets 4 and 1 with fused jumper wire 124 589 37 63 00	Motor (M28m5) runs.	M28m5, Wiring.
⇒ 14.0	**Head restraint raise/lower switch (S92s4)** Resistance	N32/2 4 (1) — 2 (1)	Connector (1) unplugged from N32/2. Press switch (S92s4): raise lower	approx. 2.2 kΩ approx. 156 Ω approx. 75 Ω	Wiring, S92

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 15.0	**Head restraint raise/lower motor (M28m4)** Voltage supply **Up to 11/96**	N32/2 4 (9) – V – 1 (9)	Connector (1) plugged in at N32/2. Connector (9) unplugged from N32/2. Press switch (S92s4): raise lower	 < 1 V –11 to –14 V 11 – 14 V	Wiring, S92, N32/2
		N32/2 5 (9) – V – 2 (9)		approx. 5 V	
		N32/2 3 (9) – V – 2 (9)		approx. 5 V	

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ [15.0]	**Head restraint raise/lower motor (M28m4)** Voltage supply Hall sensor **As of 12/96**	N32/2 4 (9) — V — 1 (9)	Connector (1) plugged in at N32/1. Connector (9) unplugged from N32/2. Press switch (S92s4): raise lower	< 1 V for 1 second: –11 to –14 V for 1 second: 11 – 14 V	Wiring, S92, N32/2
		N32/2 2 (9) — V — 5 (9)		11 – 14 V	N32/2
		N32/2 2 (9) — V — 5 (9)	Open connector (9) and connect to N32/2	7.7 – 8.8 V or 11.3 – 12.7 V	Wiring, M28m4

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 16.0	**Head restraint raise/lower motor (M28m4)** Resistance	N32/2 2 (2) — 1 (9) 1 (2) — 4 (9)	Connector (9) unplugged from N32/2. ⚠ Danger of being wedged in. Bridge sockets 2 and 1 with fused jumper wire 124 589 37 63 00	Motor (M28m4) runs.	Wiring, M28m4

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 17.0	**Right front power seat switch group (S92), position memory** Resistance	S92 1 (1) — Ω — 4 (1)	Connector (1) unplugged from N32/2. Memory button 1 switch: Rest position: Push button:	 approx. 2.2 kΩ approx. 167 Ω	S92
		S92 1 (1) — Ω — 2 (1)	Memory button 2 switch: Rest position: Push button:	 approx. 2.2 kΩ approx. 330 Ω	
		S92 1 (1) — Ω — 5 (1)	Memory button 3 switch: Rest position: Push button:	 approx. 2.2 kΩ approx. 330 Ω	
		S92 1 (1) — Ω — 4 (1)	Green memory button switch: Rest position: Push button:	 approx. 2.2 kΩ approx. 330 Ω	

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 18.0	**Right front power seat switch group (S92)** Voltage supply	N32/2 4 — V — 1 4 — V — 2 4 — V — 3 (1) (1)	Connector (1) unplugged from N32/2.	approx. 5 V approx. 5 V approx. 5 V	N32/2
⇒19.0	**Right seat proximity control module (N32/6)** Voltage supply	N32/2 4 — V — 2 1 — V — 2 (4) (4)	Connector (4) unplugged from N32/2.	11 – 14 V 11 – 14 V	N32/2

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 20.0	**Right seat proximity control module (N32/6)** Voltage supply	N32/2 ⊥ (V) 4 (4)	Move backrest backward until it rests against soft top compartment wall. Unplug connector (4) from N32/2. Open connector and remove the wiring. Plug the connector in again at N32/2.	> 4 V	Wiring, N32/6
⇒ 21.0	**Right front power seat switch group illumination (S92e1)** Voltage supply	S92 5 (V) 4 (1) (1)	S92 removed. Connector (1) unplugged from S92. Parking lamps turned on.	11 – 14 V	Wiring.

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 22.0	**Left backrest lock switch (S52/3) (right seat)** **Right backrest lock switch (S52/4) (right seat)** Resistance	N32/8 4 — (Ω) — 6	Left backrest lock safety package (N32/8) unplugged. Backrest latched. Backrest unlatched. Backrest latched. N32/8 4 — (Ω) — 8 Backrest unlatched.	 < 1 Ω > 20 kΩ < 1 Ω > 20 kΩ	Wiring, S52/3, S52/4
⇒ 23.0	**Right front power seat switch group (S92)** Resistance	N32/2 4 — (Ω) — 1 (1) 4 — (Ω) — 2 4 — (Ω) — 3 (1)	Connector (1) disconnected from N32/2.	approx. 2.2 kΩ approx. 2.2 kΩ approx. 2.2 kΩ	Wiring, S92

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 24.0	**Right backrest lock safety package (N32/8)** Voltage supply	N32/8 1 — (V) — 4	N32/8 disconnected. Ignition: **ON** **Note:** If N32/8 is unplugged, the acoustical warning from the left backrest lock safety package (N32/7) sounds for approx. 20 seconds.	11 – 14 V	Wiring, ⇒ 24.1
⇒ 24.1	Wiring between the left and right backrest lock safety package	N32/8 — N32/7 5 — (Ω) — 7	Left and right backrest lock safety packages unplugged.	< 1 Ω	Wiring.
⇒ 25.0	**Right backrest lock safety package (N32/8)** Signal output for automatic latch	N32/2 ⊥ — (V) — 3 (4)	Connector (4) unplugged from N32/2. Backrest unlatched. Both doors closed. Ignition: **ON**	> 4 V	Wiring, N32/8

Electrical Test Program - Test (right seat)

Test step	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 26.0	**Seat belt/backrest lock reminder lamp (A1e9)**		Ignition: **ON** Start engine. Right backrest unlatched. Both doors closed.	Reminder lamp must illuminate.	If the nominal value is obtained: N32/8, Wiring. If the nominal value is **not** obtained: A1e9, Wiring.
⇒ 27.0	**Warning signal from left backrest lock safety package (N32/7) and from right backrest lock safety package (N32/8)**		N32/8 unplugged. Connector N32/8 removed. Open connector and remove socket 3. Plug N32/8 into connector again. Ignition: **ON** Start engine Left and right backrest latched. Both doors closed.	Reminder lamp goes out.	If the nominal value is **not** obtained: N32/7, Wiring. If the nominal value is obtained: N32/8