Airbag (AB) 16.2 Model 140

Electrical Test Program – Test (driver/passenger-side airbag)

\Rightarrow	**	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	8	Voltage supply Circuit 15R	X11/13 ⊥ - ••••••••••••••••••••••••••••••••••••	Ignition: OFF Disconnect and cover battery negative terminal. Disconnect SRS test connection (X11/13). Ignition key in position "1".	11 – 14 V	Wiring, Battery voltage, Ignition/starter switch (S2/1).
2.0	2	SRS control module (N2/2)		Ignition: ON Erase DTC ≥	DTC 2 erased.	SRS control module (N2/2), (SMS, Job No. 91-622).
3.0	3	Driver airbag squib (R12/3)	X11/13 3 — (Ignition: OFF Disconnect and cover battery negative terminal. Disconnect SRS test connection (X11/13). Connect test cable according to connection diagram. Turn steering wheel from full right to full left stop.	2–5 Ω	Wiring, $< 2 \Omega$ short circuit, $> 5 \Omega$ open circuit, Driver airbag squib connector (X28/4) not connected. Slip ring or Clock spring contact, Driver airbag (SMS, Job No. 91-660), $\Rightarrow 3.1$

16.2 AB 23/1

Electrical Test Program – Test (driver/passenger-side airbag)

\Rightarrow		Test scope	Test conne	ection		Test condition	Nominal value	Possible cause/Remedy
3.1	3	Isolation resistance	⊥	<u>-</u> -Ω+-	X11/13 → 3 → 3	Turn ignition key to position "1" and "2".	> 20 kΩ > 20 kΩ	Wiring, Short circuit to circuit 31. Wiring, Short circuit to circuits 15/15R/30, If nominal values are obtained but DTC \exists can not be erased, $32 \Rightarrow 1.0, 2.0,$ $23 \Rightarrow 9.0$
4.0	Ч	Front passenger airbag squib (R12/8)	5—(X11/13 	> — 6	Ignition: OFF Disconnect and cover battery negative terminal. Disconnect SRS test connection (X11/13).	2–5 Ω	Wiring, $< 2 \Omega$ short circuit, $> 5 \Omega$ open circuit, Passenger side airbag (SMS, Job No. 91-680), $\Rightarrow 4.1$

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Electrical Test Program – Test (driver/passenger-side airbag)

\Rightarrow	**	Test scope	Test connection		Test condition	Nominal value	Possible cause/Remedy
4.1	Ч	Isolation resistance		X11/13 		> 20 kΩ	Wiring, Short circuit to circuit 31.
			X11/13 5 — (——————————————————————————————————) — +	Turn ignition key to position "1" and "2".	> 20 kΩ	Wiring, Short circuit to circuits 15/15R/30, If nominal values are obtained but DTC \forall can not be erased, $32 \Rightarrow 1.0, 2.0$ $23 \Rightarrow 10.0$
5.0	5	Left front seat belt buckle switch (S68/3)	X55/3 1 _ _	_ _ 2 (D)	Ignition: OFF Disconnect and cover battery negative terminal. Disconnect SRS test connection (X11/13). Disconnect left seat contact strip (X55/3) connector D. Seat belt tongue in buckle: Not latched Latched	400 Ω±10 Ω 100 Ω±10 Ω	Wiring, open circuit, Short circuit or shorted to circuit 31, Ground (W26), Seat belt buckle (SMS, Job No. 91-502).

16.2 AB 23/3

Electrical Test Program – Test (driver/passenger-side airbag)

\Rightarrow		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
5.1	5		N2/2 12 — (Disconnect connector to control module (N2/2). Connect left seat contact strip (X55/3). Seat belt tongue in buckle: Not latched Latched	400 Ω±10 Ω 100 Ω±10 Ω	Wiring, Seat belt buckle.
6.0	6	Right front seat belt buckle switch (S68/4)	X55/4 1 2 (D) (D)	Ignition: OFF Disconnect and cover battery negative terminal. Disconnect SRS test connection (X11/13). Disconnect right seat contact strip (X55/4) connector D. Seat belt tongue in buckle: Not latched Latched	400 Ω±10 Ω 100 Ω±10 Ω	Wiring, open circuit, Short circuit or shorted to circuit 31, Ground (W26), Seat belt buckle (SMS, Job No. 91-502).

16.2 AB

Electrical Test Program – Test (driver/passenger-side airbag)

\Rightarrow		Test scope	Test conn	ection		Test condition	Nominal value	Possible cause/Remedy
6.1	6		12 — (N2/2 - -'Ω ⁺ -	> — 10	Disconnect connector to control module (N2/2). Connect right seat contact strip (X55/4). Seat belt tongue in buckle: Not latched Latched	400 Ω±10 Ω 100 Ω±10 Ω	Wiring, Seat belt buckle.
7.0	7	Front passenger airbag Resistance	12 — (N2/2	> — 15	Ignition: OFF Disconnect and cover battery negative terminal. Disconnect SRS test connection (X11/13). Disconnect control module (N2/2) connector.	100 Ω±10 Ω	Wiring, Ground (W26), Resistance in connector to control module (N2/2).
8.0	9	SRS MIL (A1e15)				Ignition key in position "1".	SRS MIL (A1e15) comes on and then goes out after approx. 4 seconds.	Wiring, F3-15, SRS MIL (A1e15), Intermittent short circuit to circuit 31 (X11/4 - A1e15), Time limit for DTC readout/erase exceeded.

16.2 AB

Electrical Test Program – Test (driver/passenger-side airbag)

\Rightarrow		Test scope	Test conne	ection		Test condition	Nominal value	Possible cause/Remedy
9.0	3	Wiring	X11/3 3— C 4— C	<u> </u>		Ignition: OFF Disconnect and cover battery negative terminal. Disconnect SRS test connection (X11/13). Disconnect control module	<1 Ω	Wiring.
				N2/2 -	> —6	(N2/2) connector.	>20 kΩ	Short circuit, ⇒ 9.1
9.1	3	Isolation resistance	→ →	<u></u>	X11/3		<20 k Ω	Short circuit to 31
			X11/3 4— c 3— c	- <u>-</u> @ <u>+</u> -)		Turn ignition key to position "1" and "2".	<20 k Ω	Short to circuits 15/15R/30

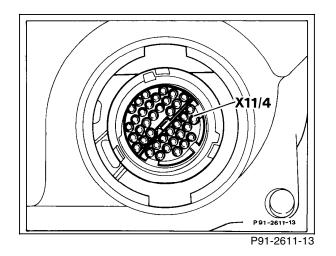
16.2 AB

Electrical Test Program – Test (driver/passenger-side airbag)

\Rightarrow		Test scope	Test conn	ection		Test condition	Nominal value	Possible cause/Remedy
10.0	Ч	Wiring	X11/3 5— (6— (<u>-</u> -@+ <u>-</u> -@+►		Ignition: OFF Disconnect and cover battery negative terminal. Disconnect SRS test connection (X11/13). Disconnect control module (N2/2) connector.	<1 Ω	Wiring.
			2—(N2/2 - Ω ⁺ →) —13		>20 kΩ	Short circuit, ⇒ 10.1
10.1	Ч	Isolation resistance			X11/3 		<20 k Ω	Short circuit to 31
			X11/3 5 — c 6 — c	<u>-</u> -@+ <u>-</u> -@+	├ + ├ +		<20 k Ω	Short to circuits 15/15R/30

16.2 AB 23/7

Electrical Test Program – Test (driver/passenger-side airbag)





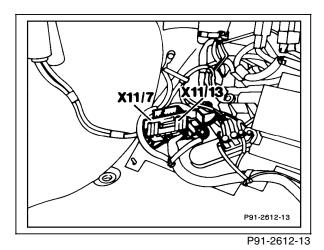


Figure 2

X11/7 ETR test connection (4-pole)

X11/13 SRS test connection (12-pole)

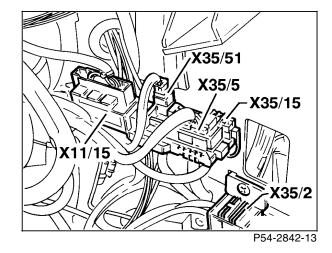
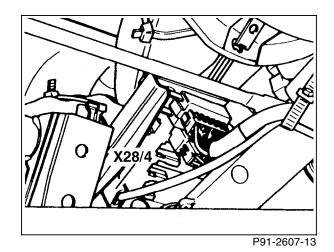


Figure 3

X11/15 Diagnostic connector (taillamp harness)

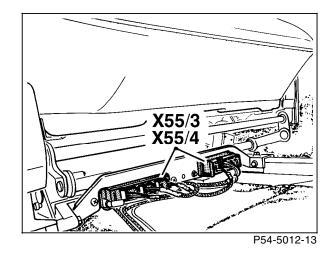
Electrical Test Program – Test (driver/passenger-side airbag)



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X28/5

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Figure 4

X28/4 Driver airbag squib connector

Figure 5

X28/5 Airbag squib slip ring (2-pole)

Figure 6

X55/3 Left seat contact strip

X55/4 Right seat contact strip

Electrical Test Program – Test (driver/passenger-side airbag)

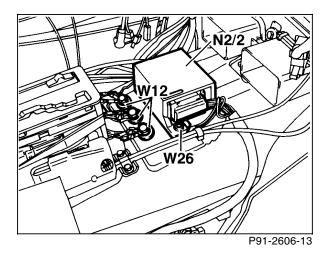


Figure 7

W26 Ground (SRS control module)

N2/2 SRS control module