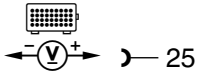
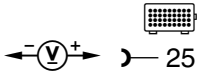
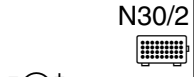
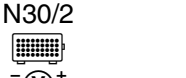
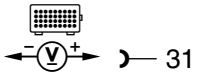
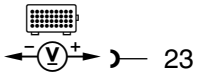
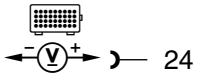
Electrical Test Program - Test

Test step **DTC**	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 1.0	**ASD control module (N30/2)** Voltage supply Circuit 87	N30/2  2 — V — 25	Ignition: **ON**	11 – 14 V	⇒ 1.1
⇒ 1.1	Voltage supply from base module (N16/1)	N30/2  ⊥ — V — 25	Ignition: **ON**	11 – 14 V	Fuse (F1) on base module (N16/1), Wiring, ⇒ 1.2, DM, Body & Accessories, Vol. 1, section 1.4 23.
⇒ 1.2	Ground wire	N30/2  W15 W27 — Ω — 2	Ignition: **OFF**	< 1 Ω	Wiring, Ground (W15).
⇒ 2.0	**Circuit 61 voltage**	N30/2  2 — V — 29	Ignition: **ON** Engine: **at Idle**	< 2 V 11 – 14 V	Wiring, Generator (G2).

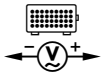
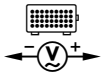
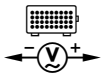
Electrical Test Program - Test

Test step **DTC**	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 3.0	**Diagnosis output**	N30/2  2 — 31	Ignition: **ON**	10 – 14 V	Wiring, Data link connector (X11/4).
⇒ 4.0	**ASD warning lamp (A1e25)**	N30/2  2 — 23	Ignition: **ON** Engine: **at Idle**	< 1 V A1e25: **ON** 11 – 14 V A1e25: **OFF**	Wiring, DM, Body & Accessories, Vol. 1, 1.4 23. Wiring, N30/2.
⇒ 5.0	**ASD MIL (A1e24)**	N30/2  2 — 24	Ignition: **ON** Engine: **at Idle**	< 1 V A1e24: **ON** 11 – 14 V A1e24: **OFF**	Wiring, A1e24. Wiring, N30/2.

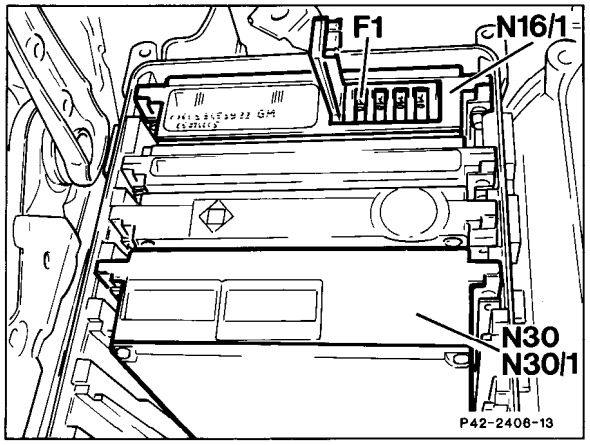
Electrical Test Program - Test

Test step / DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 6.0	**Stop lamp switch (S9/1)** N.O. contact	N30/2 2 — V — 10	Ignition: **OFF** Brake pedal not depressed. Depress brake pedal.	 < 1 V 11 – 14 V	Wiring, S9/1.
⇒ 7.0	**Stop lamp switch (S9/1)** N.C. contact	N30/2 27 — V — 25	Ignition: **ON** Brake pedal not depressed. Depress brake pedal.	 < 1 V 11 – 14 V	Wiring, S9/1, ⇒ 8.0, N30/2
⇒ 8.0	**ASD valve (Y38)** Function	N30/2 2 — — — 27	Ignition: **ON** Depress brake pedal.	ASD valve switches on. ASD valve switches off.	⇒ 8.1, Wiring.
⇒ 8.1	Coil resistance	N30/2 27 — Ω — 25	Ignition: **OFF** Disconnect N30/2. Brake pedal not depressed.	 5 – 7 Ω	Wiring, Y38.

Electrical Test Program - Test

Test step / DTC	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
⇒ 9.0 DTC 57	**Right front VSS**	N30/2  2 — 26	Raise front of vehicle. Ignition: **ON** Rotate right front wheel (approx. 1 rev./sec.).	> 3 V~	Wiring, DM, Chassis & Drivetrain, Vol. 2, section 6.2 23
⇒ 10.0 DTC 47	**Left front VSS**	N30/2  2 — 28	Raise front of vehicle. Ignition: **ON** Rotate left front wheel (approx. 1 rev./sec.).	> 3 V~	Wiring, DM, Chassis & Drivetrain, Vol. 2, section 6.2 23
⇒ 11.0 DTC 67	**Rear axle VSS**	N30/2  2 — 30	Raise front of vehicle. Ignition: **ON** Rotate either rear wheel (approx. 1 rev./sec.).	> 3 V~	Wiring, DM, Chassis & Drivetrain, Vol. 2, section 6.2 23

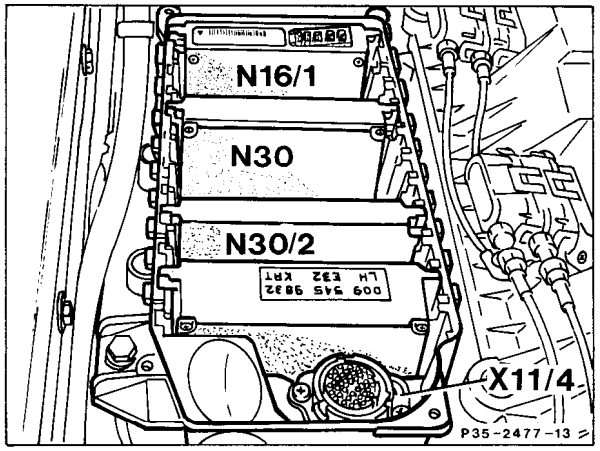
Electrical Test Program - Test



P42-2406-13

Figure 1

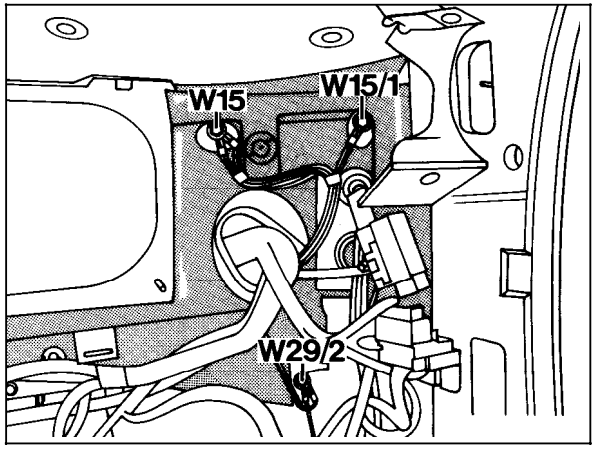
F1	Fuse and relay box
N16/1	Base module (BM)
N30	ABS control module
N30/1	ABS/ASR control module



P35-2477-13

Figure 2

N16/1	Base module (BM)
N30	ABS control module
N30/2	ASD control module
X11/4	Data link connector (DTC readout)

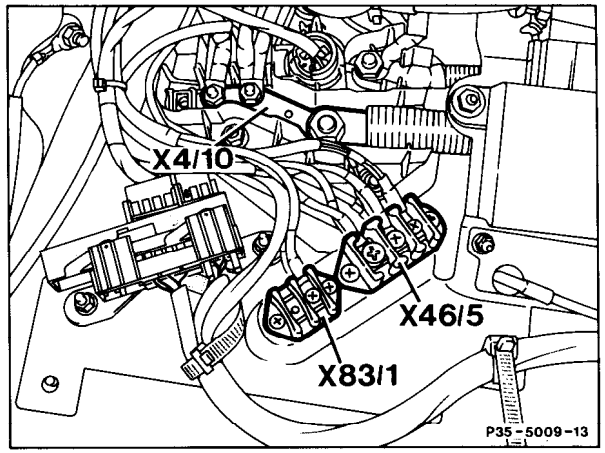


P54-2796-13

Figure 3

W15	Ground (electronics output ground - right footwell)

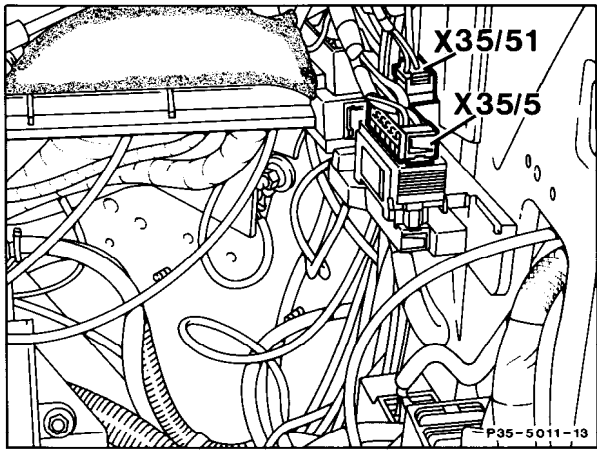
Electrical Test Program - Test



P35-5009-13

Figure 4

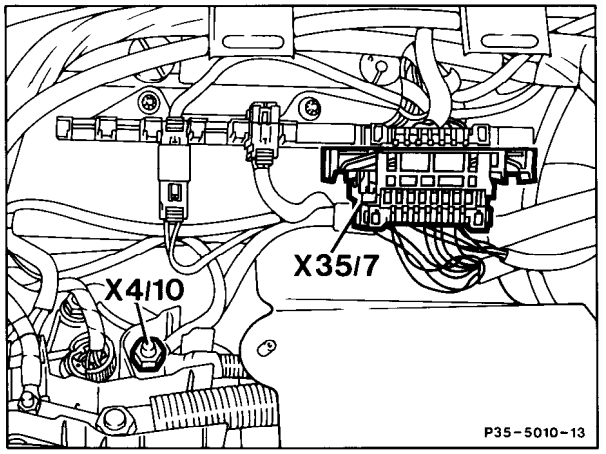
X4/10	Terminal block (circuit 30/circuit 61 battery) (3-pole)
X46/5	Terminal block (VSS/ABS MIL) (3-pole)
X83/1	Instrument cluster connector (ASD function indicator lamp) (2-pole)



P35-5011-13

Figure 5

X35/5	Module box/taillamp harness separation point (ASD) (12-pole)
X35/51	Module box/taillamp harness separation point (ASD) (4-pole)

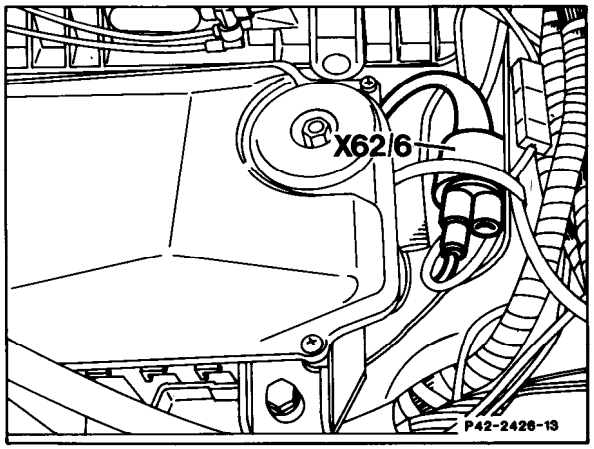


P35-5010-13

Figure 6

X4/10	Terminal block (circuit 30/circuit 61 battery) (3-pole)
X35/7	Cockpit/module box separation point (18 pole)

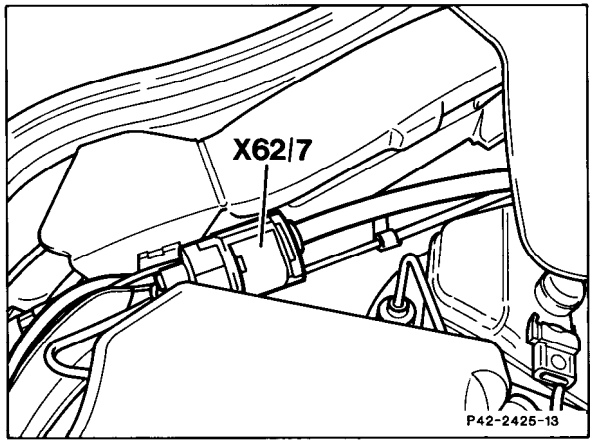
Electrical Test Program - Test



P42-2426-13

Figure 7

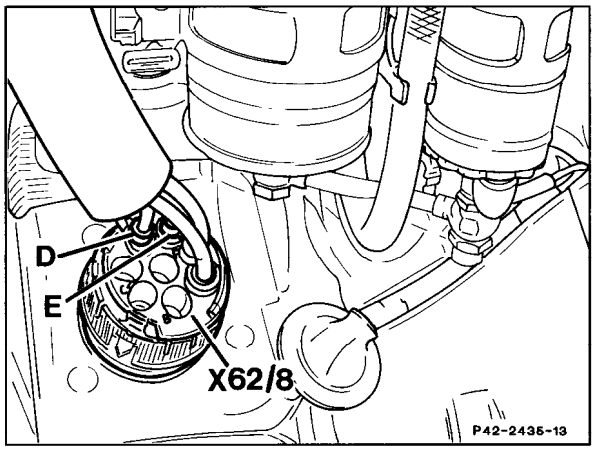
X62/6 Right front axle VSS sensor connector (component compartment)



P42-2425-13

Figure 8

X62/7 Left front axle VSS sensor connector (component compartment)

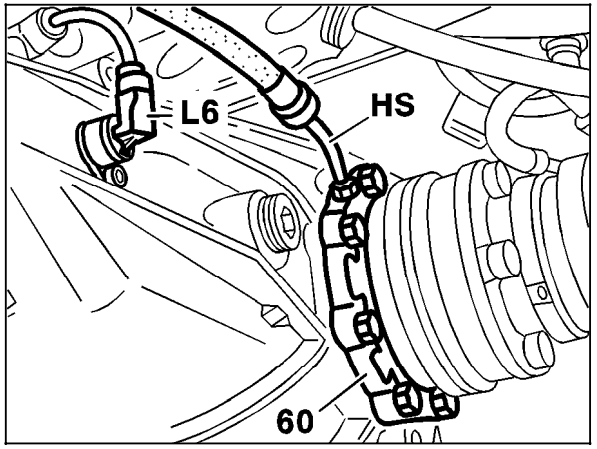


P42-2435-13

Figure 9

X62/8 Rear axle multiple circuit junction connector
E Rear axle VSS (L6) harness connector

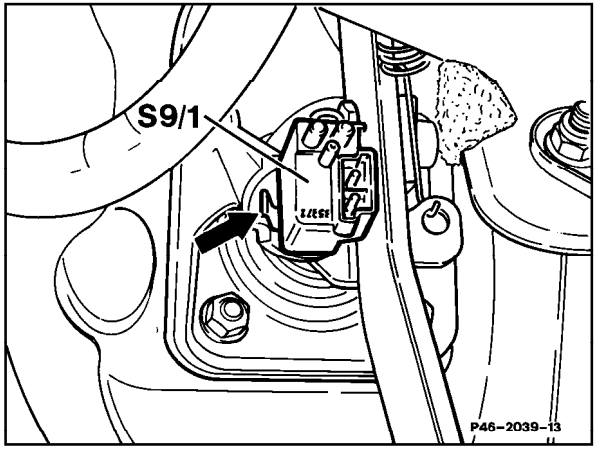
Electrical Test Program - Test



P35-2480-13

Figure 10

L6 Rear axle VSS sensor

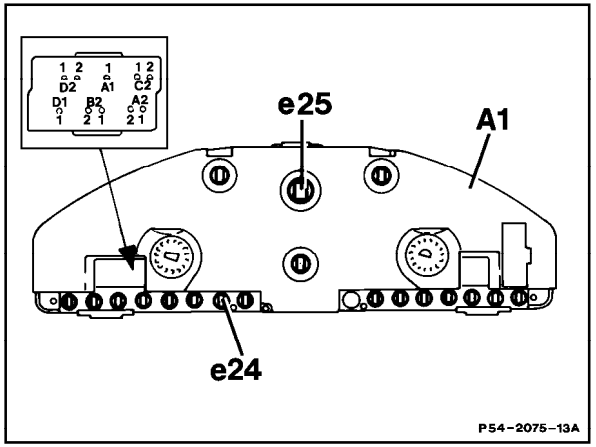


P46-2039-13

Figure 11

Pedal cluster

S9/1 Stop lamp switch (4-pole)

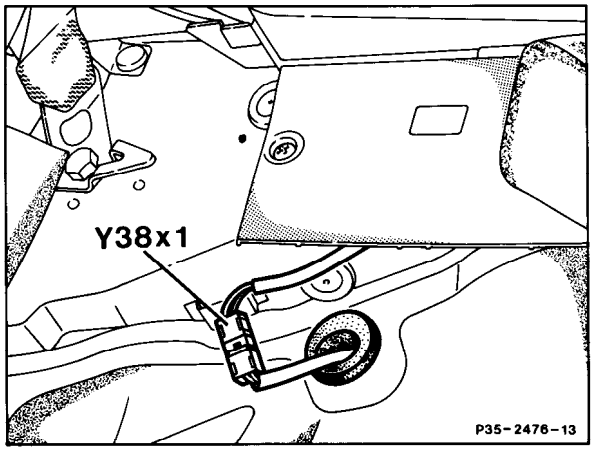


P54-2075-13A

Figure 12

A1 Instrument cluster
A1e24 ASD MIL
A1e25 ASD warning lamp

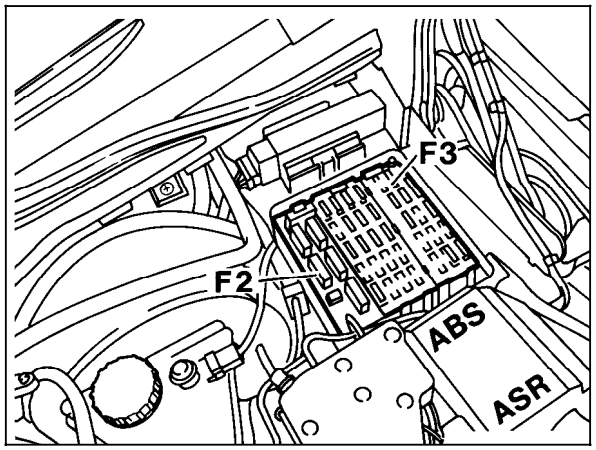
Electrical Test Program - Test



P35-2476-13

Figure 13

Y38x1 ASD solenoid valve connector



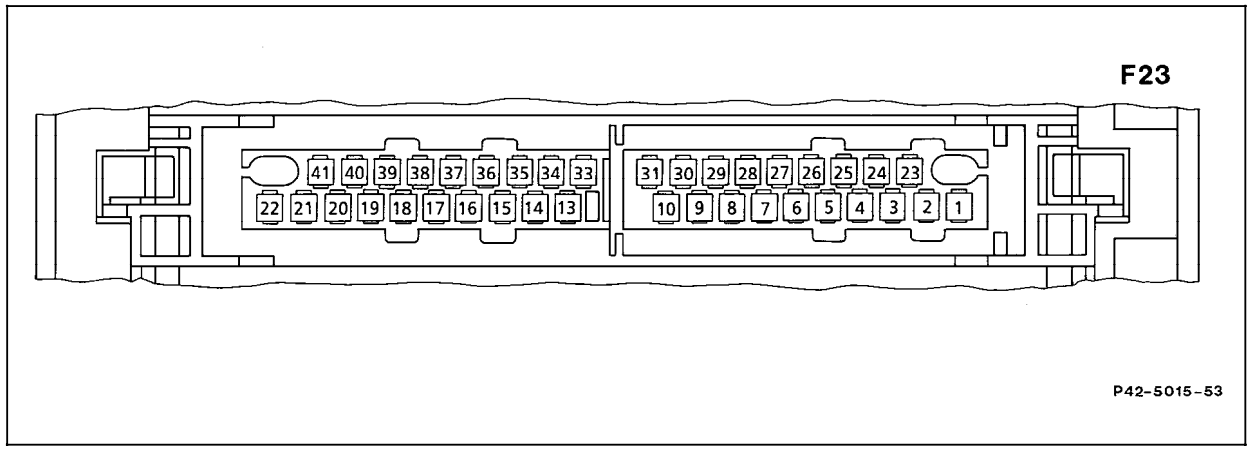
P54-2806-13

Figure 14

F3 Fuse box (35-fuse, cockpit /taillamp harness)

Electrical Test Program - Test

ASD control module (N30/2) connector layout



P42-5015-53

Figure 15

F23	Module box
1	Not used
2	**Model 129:** Ground (W27) **Model 140:** Ground (W15)
3-9	Not used
10	Stop lamp switch (S9/1) N.O. contact
11-22	Not used
23	ASD warning lamp (A1e25)
24	ASD MIL (A1e24)
25	Voltage supply circuit 87
26	Right front axle VSS sensor (L6/2)
27	ASD valve (Y38) (–)
28	Left front axle VSS sensor (L6/1)
29	Voltage circuit 61e
30	Rear axle VSS sensor (L6)
31	Diagnosis (output)
33-41	Not used