13.4 Model 202

Note:

- Universal ATA control modules (such as used in models 129, 140, and 202) must be programmed according to menu point 5 on the HHT's display.

ATA control modules manufacturers:

Becker
Temic

Diagnosis – Technical Changes

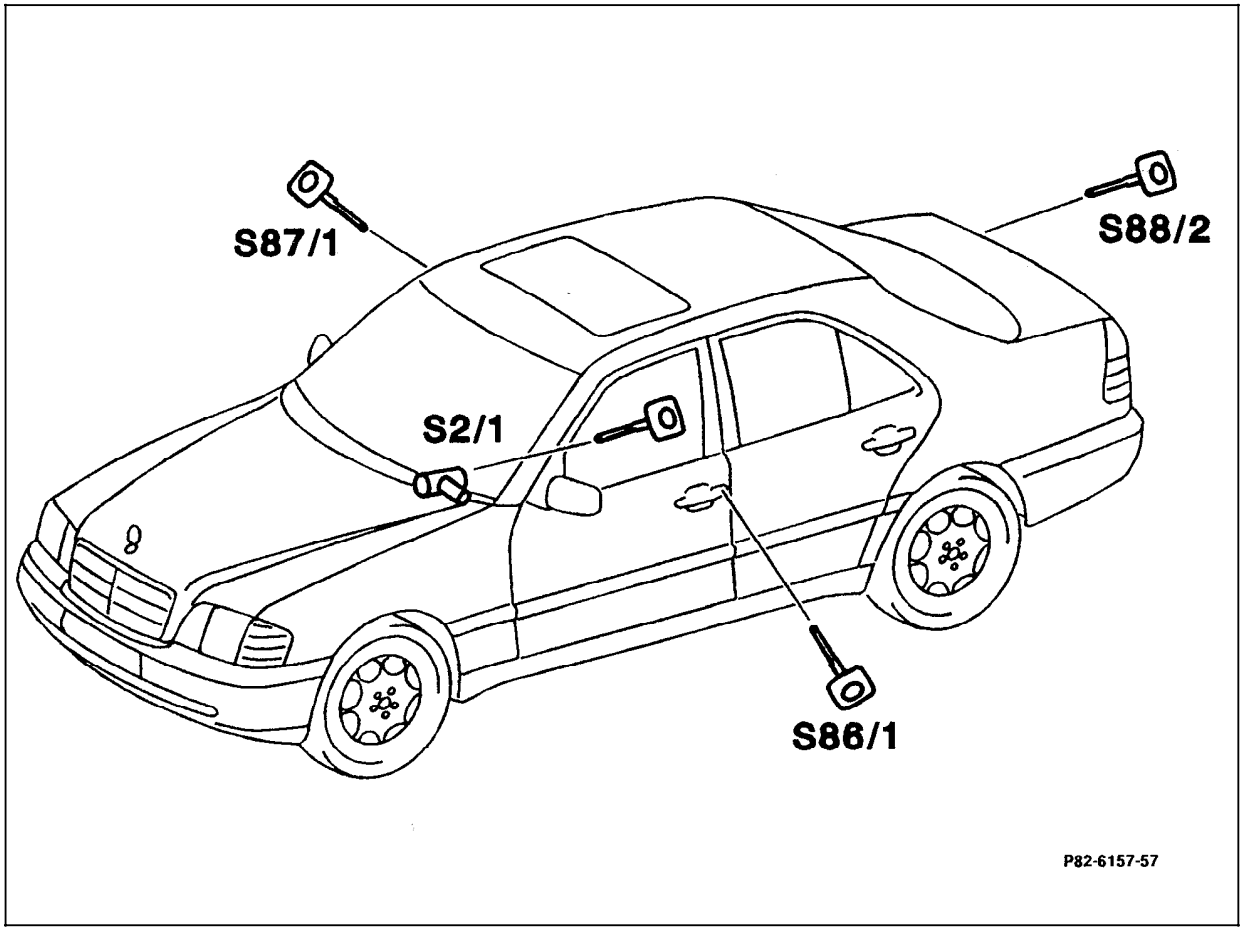
Prod. code	Model	LL[1] RL[1]	Manuf. plant	As of chassis number	Up to chassis number	As of production date	Up to production date	Type and reason for change	Reference/Remarks
WDB	202						12/93	Location of starter lock-out relay module (K38): On lower left A-pillar. Activation of (K38): via ATA control module (N26)	
WDB	202					01/94		Location of starter lock-out relay module (K38): On left cross member of instrument cluster. Activation of (K38): via PSE control module (A37)	
WDB	202					01/94		Radio contact deleted with later radio versions (running change during M.Y. 1996)	

1) LL: Left hand drive
RL: Right hand drive

Diagnosis – Function Test

Component Locations
Up to M.Y. 1997

Note:
M.Y. 1996 only:
Right front door lock switch deleted.



P82-6157-57

Figure 1

S2/1 Ignition/starter switch
S86/1 Left front door lock switch
S871 Right front door lock switch
S88/2 Trunk lid lock switch

Diagnosis – Function Test

Component Locations
Up to M.Y. 1997
with RCL receiver (interior rear view mirror) (A26/7)

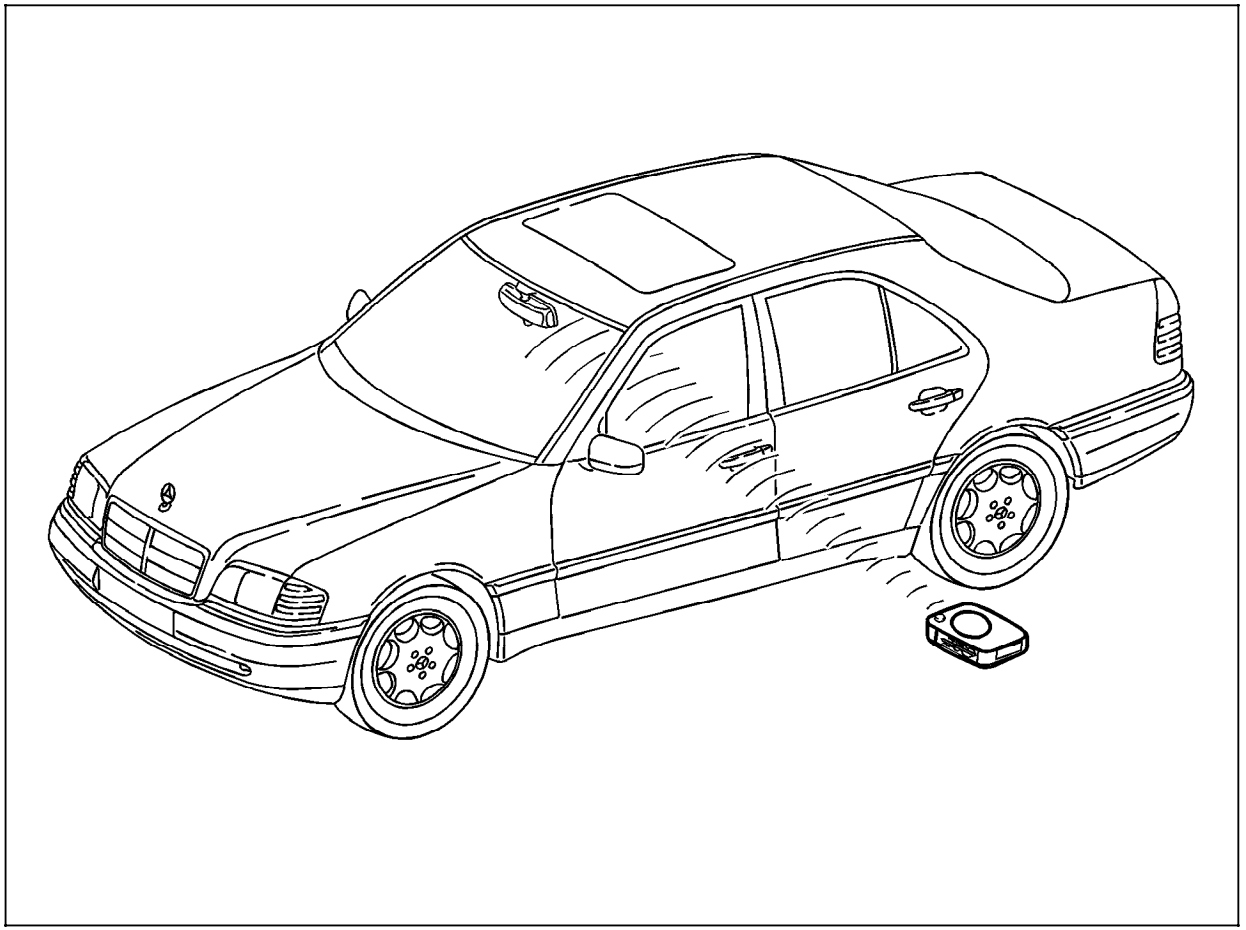


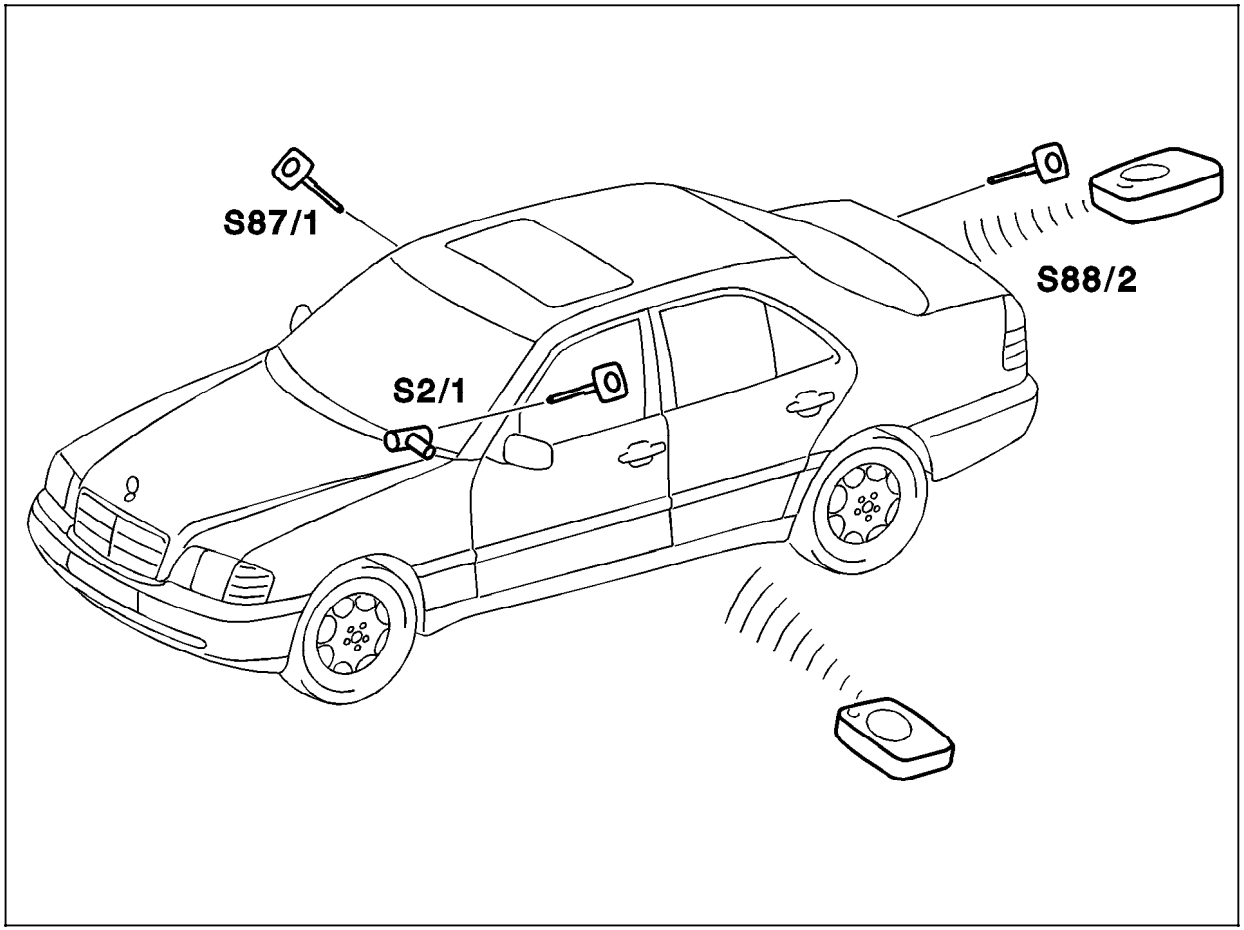
Figure 2

P80.30-0219-57

Diagnosis – Function Test

Component Locations

As of M.Y. 1997:
IR receivers added in left front door and trunk lid.
Left front door lock switch deleted.
Right front door lock switch added.



P82-6156-57

Figure 3

S2/1 Ignition/starter switch
S871 Right front door lock switch
S88/2 Trunk lid lock switch

Diagnosis – Function Test

⚠

After performing the Function Test, erase any stored DTC‘s (see section 0).

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy [1]
⇒ 1.0 Activate ATA via left front door	• Open driver’s window. • Lock driver’s door with key. (up to M.Y. 1997) • After approximately 15 seconds open door from inside. • Deactivate ATA.	Alarm horn sounds, lights flash.	23 ⇒ 6.0
⇒ 2.0 Activate ATA via right front door	• Open passenger window. • Lock passenger door with key. (as of M.Y. 1997) • After approximately 15 seconds open door from inside. • Deactivate ATA.	Alarm horn sounds, lights flash.	23 ⇒ 6.0
⇒ 3.0 Activate ATA via left or right rear door	• Open rear passenger window. • Lock driver’s door with key. (up to M. Y. 1997) • Lock passenger door with key. (as of M. Y. 1997) • After approximately 15 seconds open rear door from inside. • Deactivate ATA.	Alarm horn sounds, lights flash.	23 ⇒ 5.0

[1] Observe Preparation for Test, see 22.

Diagnosis – Function Test

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy [1]
⇒ 4.0 Activate ATA via engine hood	• Open driver's window. • Lock driver's door with key. (up to M. Y. 1997) • Lock passenger door with key. (as of M. Y. 1997) • Wait approximately 15 seconds. • Release engine hood through open window. • Open engine hood. • Deactivate ATA.	Alarm horn sounds, lights flash.	23 ⇒ 8.0
⇒ 5.0 Activate ATA via trunk lid	• Open trunk lid. • Lock driver's door with key. (up to M. Y. 1997) • Lock passenger door with key. (as of M. Y. 1997) • Turn off trunk lamp (rotary tumbler switch open). • Wait approximately 15 seconds. • Turn on trunk lamp. (rotary tumbler switch closed) • Deactivate ATA.	Alarm horn sounds, lights flash.	23 ⇒ 7.0

[1] Observe Preparation for Test, see 22.

Diagnosis – Function Test

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy [1]
⇒ 6.0 Activate ATA via ignition	• Sit in driver's seat. • Open driver's door window (up to M. Y. 1997). • Open passenger door window (as of M. Y. 1997). • Lock vehicle with key from driver's door by reaching through open window (up to M. Y. 1997). • Lock vehicle with key from passenger door by reaching through open window (as of M. Y. 1997). • Wait approximately 15 seconds. • Turn ignition ON. • Measure duration of alarm (approx. 30 sec). • Deactivate ATA.	Alarm horn sounds, lights flash.	23 ⇒ 11.0

[1] Observe Preparation for Test, see 22.

Diagnosis – Function Test

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy [1]
⇒ 7.0 Activate ATA via service brake	• Sit in driver's seat. • Open driver's door window (up to M. Y. 1997). • Open passenger door window (as of M. Y. 1997). • Lock vehicle with key from driver's door by reaching through open window (up to M. Y. 1997). • Lock vehicle with key from passenger door by reaching through open window (as of M. Y. 1997). • Wait approximately 15 seconds. • Turn ignition ON. • Measure duration of alarm (approx. 30 seconds). • When cycle ends, with ignition ON, step on service brake. • Deactivate ATA.	Alarm horn sounds, lights flash. Alarm horn sounds, lights flash.	23 ⇒ 9.0

[1] Observe Preparation for Test, see 22.

Diagnosis – Function Test

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy [1]
⇒ 8.0 Activate ATA via Radio (running change during M. Y. 1996)	• Sit in driver's seat. • Open driver's door window (up to M. Y. 1997). • Open passenger door window (as of M. Y. 1997). • Lock vehicle with key from driver's door by reaching through open window (up to M. Y. 1997). • Lock vehicle with key from passenger door by reaching through open window (as of M. Y. 1997). • Wait approximately 15 seconds. • Remove radio. • Deactivate ATA. Note: After Function Test radio must be recoded.	Alarm horn sounds, lights flash.	23 ⇒ 10.0 Radio contact separated.

[1] Observe Preparation for Test, see 22.

Diagnosis – Function Test

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy [1]
⇒ 9.0 *Not applicable for U.S.A. vehicles*	–	–	–
⇒ 10.0 *Not applicable for U.S.A. vehicles*	–	–	–
⇒ 11.0 *Not applicable for U.S.A. vehicles*	–	–	–
⇒ 12.0 ATA Status indicator (E33)	• Lock vehicle. • Wait approximately 15 seconds.	LED in ATA status indicator (center console) blinks.	23 ⇒ 26.0
⇒ 13.0 Starter lock-out [2]	• Sit in driver's seat. • Open driver's door window (up to M. Y. 1997). • Open passenger door window (as of M. Y. 1997). • Lock vehicle with key from driver's door by reaching through open window (up to M. Y. 1997). • Lock vehicle with key from passenger door by reaching through open window (as of M. Y. 1997). • Wait approximately 15 seconds. • Start engine. • Deactivate ATA. • Start engine.	 Alarm sounds, engine **will not** crank. Engine starts.	23 ⇒ 25.0

[1] Observe Preparation for Test, see 22.

[2] As of 01/94, starter lock-out function controlled by central locking system (PSE control module).

Diagnosis – Function Test

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy [1]
⇒ 14.0 *Not applicable for U.S.A. vehicles*	–	–	–
⇒ 15.0 *Not applicable for U.S.A. vehicles*	–	–	–

[1] Observe Preparation for Test, see 22.

Diagnosis – Diagnostic Trouble Code (DTC) Memory

Preparation for Test

1. Connect impulse counter scan tool or Hand-Held Tester (HHT) according to connection diagram (see section 0).

Note:

ATA deactivated.

Connect yellow wire to socket 23 of 38-pole data link connector (X11/4).

DTC readout begins with the most current fault and ends with the oldest (logic: last in, first out).

Electrical wiring diagrams:

Electrical Troubleshooting Manual, Model 202, Volume 2, groups 80 and 82.

Diagnosis – Diagnostic Trouble Code (DTC) Memory

DTC  	Possible cause	Test step/Remedy [1]
1 001	No DTC stored in system.	
2 002	ATA activated via rotary tumbler/trunk lid microswitch (S88/1)	23⇒ 7.0
3 003	ATA activated via engine hood switch (S62)	23⇒ 8.0
5 005	ATA activated via left/right rear door switch (S17/5, S17/6)	23⇒ 5.0
6 006	ATA activated via left/right door switch (S17/3, S17/4)	23⇒ 6.0
7 007	*Not applicable for U.S.A. vehicles*	–
8 008	*Not applicable for U.S.A. vehicles*	–
10 010	ATA activated via radio (A2) (running change during M. Y. 1996)	23⇒ 10.0
12 012	ATA activated via ignition (S2/1)	23⇒ 11.0
14 014	ATA activated via brake switch (S9/1)	23⇒ 9.0
15 015	*Not applicable for U.S.A. vehicles*	–
16 016	*Not applicable for U.S.A. vehicles*	–
17 017	*Not applicable for U.S.A. vehicles*	–
18 018	*Not applicable for U.S.A. vehicles*	–
19 019	ATA control module (N26)	N26

[1] Observe Preparation for Test, see 22.

Diagnosis – Diagnostic Trouble Code (DTC) Memory

DTC  	Possible cause	Test step/Remedy [1]
20 020	Left front door actuator (S47), no ground	23⇒ 12.0
21 021	**Temic control modules only** Starter lock-out relay module (K38) shorted to circuit 30 in armed status	23⇒ 25.0
22 022	**Becker control modules only** Starter lock-out relay module (K38) shorted to circuit 30 in armed status	23⇒ 25.0
22 022	**Temic control modules only** Open circuit to circuit 30 in armed status	23⇒ 1.0
23 023	**Becker control modules only** Open circuit to circuit 30 in armed status	23⇒ 1.0
24 024	*Not applicable for U.S.A. vehicles*	–
25 025	*Not applicable for U.S.A. vehicles*	–

[1] Observe Preparation for Test, see 22.

Diagnosis – Nominal Values

The following tests and component activations are possible using the HHT.

Nominal values (function status)

- All door contacts including engine hood and trunk lid.
- Left front door lock switch (S86/1), right front door lock switch (S87/1), and trunk lid lock switch (S88/2) (arm/disarm ATA) (up to 01/94).
- Ignition.
- Service brake.
- Radio contact (running change during M.Y. 1996).
- Left front door actuator (S47).

Diagnosis – Nominal Values

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	01	Circuit 15		Ignition: **OFF** Ignition: **ON**	OFF ON	23 ⇒ 1.0
2.0	02	Stop lamp switch (S9/1)		Ignition: **ON** Service brake applied not applied	 ON OFF	22 ⇒ 9.0
3.0	03	ATA contact connector (radio) (X42/13) (running change during M.Y. 1996)		Radio installed, X42/13 connected Radio removed or X42/13 disconnected	ON OFF	23 ⇒ 10.0
4.0	04 05	Activation/deactivation of ATA via RCL on driver‘s door, passenger door or trunk lid or IR receiver in interior rear view mirror		IR transmitter pointed at vehicle: lock vehicle unlock vehicle	 ON ON	23 ⇒ 2.0, 3.0, 4.0
5.0	04 05	Activation/deactivation of ATA via rotary tumbler lock on driver‘s door, passenger door or trunk lid (up to 01/94)		Using mechanical key at: passenger door (as of M. Y. 1997) lock vehicle unlock vehicle	 ON ON	Vehicle uncoupled 23 ⇒ 2.0, 3.0, 4.0
6.0	06	Engine hood switch (S62)		Open engine hood Close engine hood	ON OFF	23 ⇒ 8.0

Diagnosis – Nominal Values

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
7.0	07	Left front door actuator (S47)		Vehicle unlocked Vehicle locked	OFF ON	23 ⇒ 12.0
8.0	08	Left/right door switch (S17/3, S17/4)		Both front doors closed Open driver‘s door Close driver‘s door Open passenger door	OFF ON OFF ON	23 ⇒ 6.0
9.0	09	Left/right rear door switch (S17/5, S17/6)		Both rear doors closed Open left rear door Close left rear door Open right rear door	OFF ON OFF ON	23 ⇒ 5.0
10.0	10	Trunk lid switch (S17/8)		Trunk lid closed open	 OFF ON	23 ⇒ 7.0
11.0	11	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
12.0	12	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
13.0	13	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
14.0	14	*Not applicable for U.S.A. vehicles*	– – –	–	–	–

Diagnosis – Activation

The following components can be activated via the HHT:

- Alarm horn (H3).
- Headlamps and/or hazard lamps.
- Starter lock-out relay module (K38) (up to 01/94).
- ATA status indicator (E33).
- Backup lamps.

Diagnosis – Activation

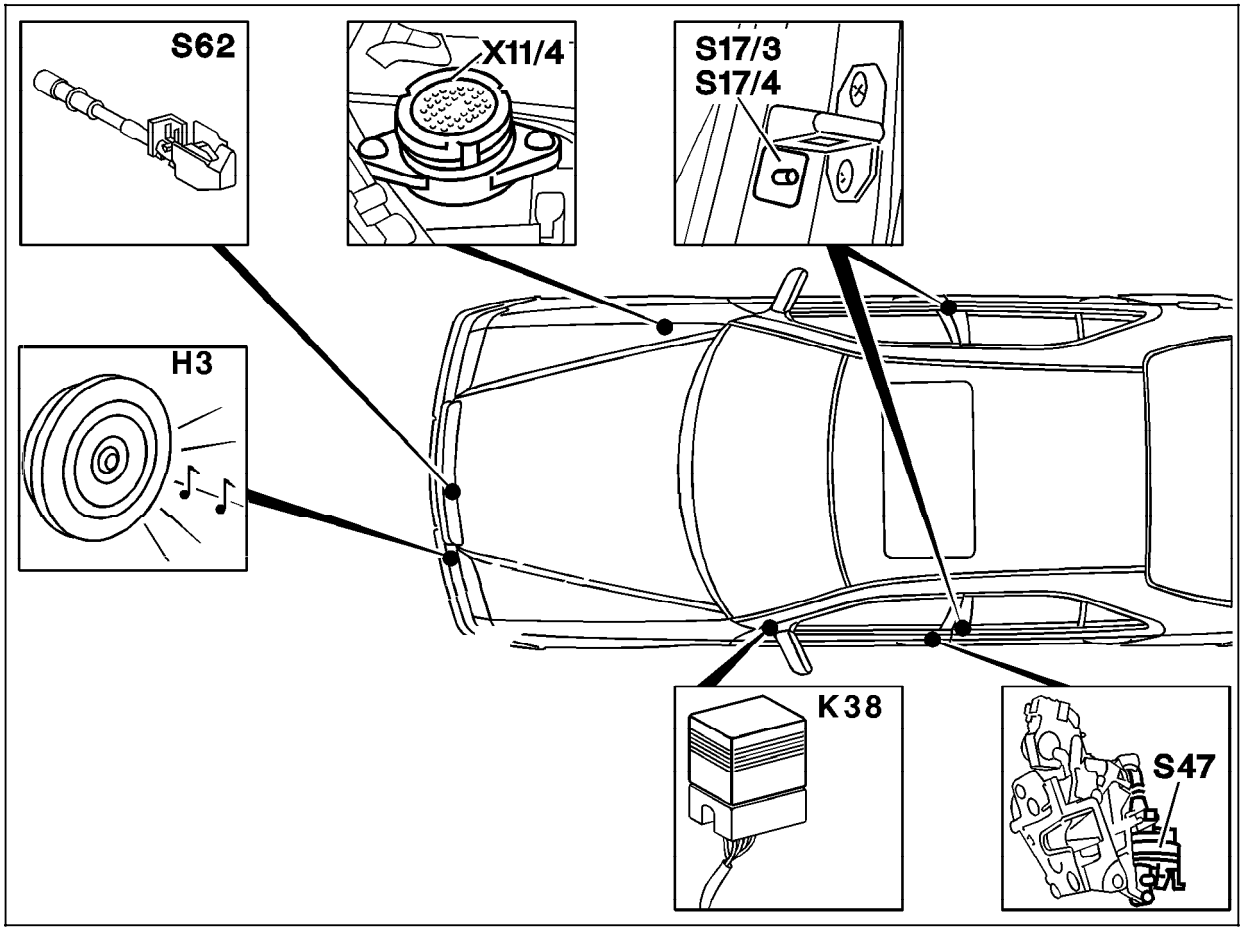
⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	1	Alarm horn (H3)		Press F2 Press F3	ON, Horn signals OFF	23 ⇒ 13.0
2.0	2	ATA status indicator (E33)		Press F2 Press F3	ON OFF, ATA indicator illuminates	23 ⇒ 26.0
3.0	3	Starter lock-out relay module (K38) [1)] Vehicles with E33		Press F2 Turn ignition key to position “3” (circuit 50) Press F3	ON Engine will not start OFF Engine starts	23 ⇒ 25.0
4.0	4 5 6	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
5.0	4	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
6.0	4 5	Headlamps		Press F2	ON Headlamps illuminate	23 ⇒ 16.0

1) As of 01/94, the starter lock-out function is controlled by the central locking system (PSE control module).

Diagnosis – Activation

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
7.0	4 5	Backup lamps		Press F2	ON Backup lamps illuminate	23 ⇒ 17.0, 18.0
8.0	6 7	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
9.0	6 7	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
10.0	6 7	*Not applicable for U.S.A. vehicles*	– – –	–	–	–

Electrical Test Program – Component Locations



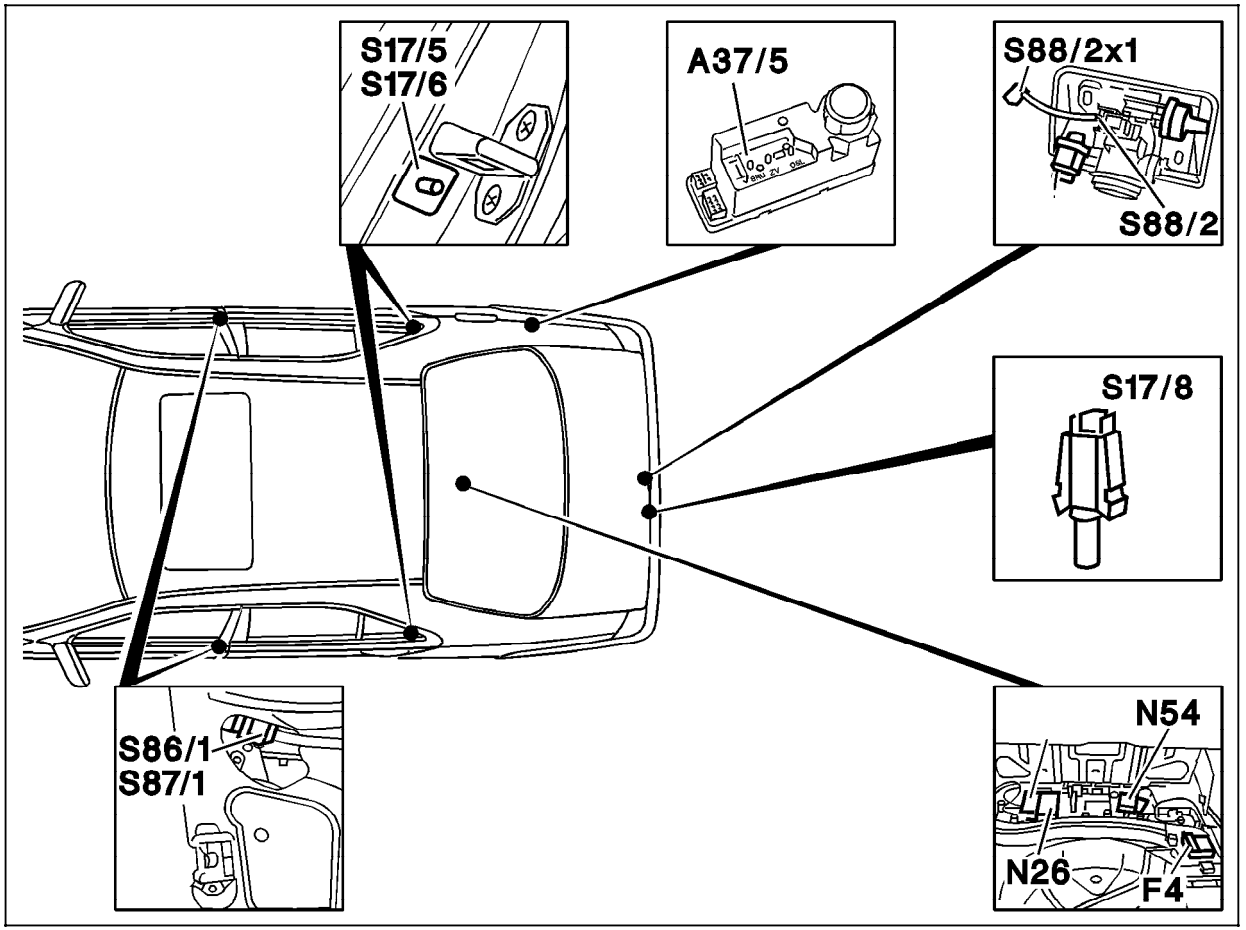
U82-7221-57

Figure 1

H3	Alarm horn
K38	Starter lock-out relay module (up to 01/94, lower A-pillar)
S17/3	Left door switch
S17/4	Right door switch
S47	Left door actuator
S62	Hood switch
S85	Interior CL switch
X11/4	Data link connector

Electrical Test Program – Component Locations

Up to 08/96



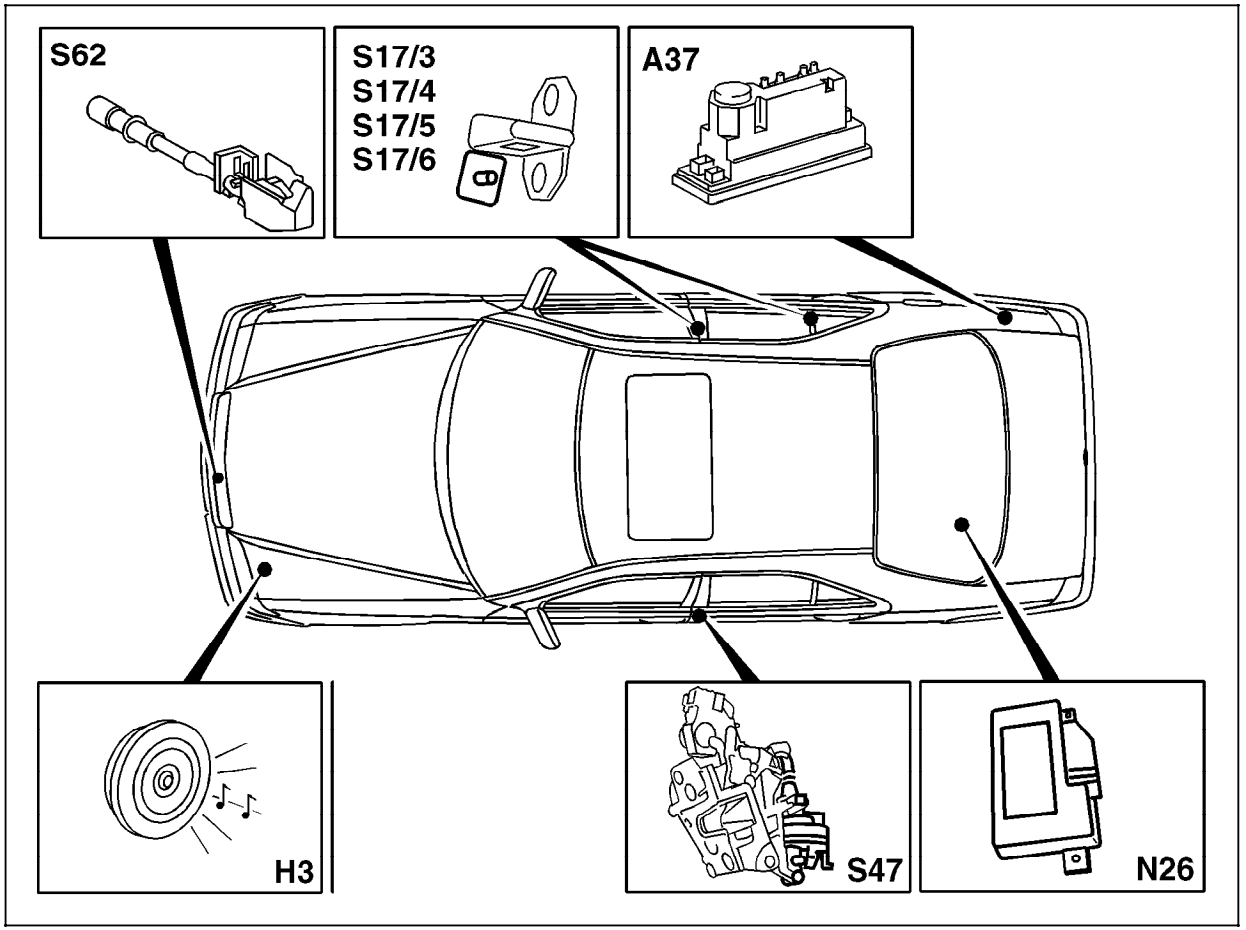
U82-7222-57

Figure 2

A37	PSE control module
F4	Fuse box in trunk
N26	ATA control module
N54	RCL control module
S17/5	Left rear door switch
S17/6	Right rear door switch
S17/8	Trunk lamp switch
S87/1	Right front door lock switch (CF)
S88/2	Trunk lid lock switch
S88/2x1	Trunk lid lamp switch connector

Electrical Test Program – Component Locations

As of 09/96



U82.50-0510-57

Figure 3

A37	PSE control module
H3	Alarm horn
N26	ATA control module
S17/3	Left font door switch
S17/4	Right front door switch
S17/5	Left rear door switch
S17/6	Right rear door switch
S47	Left front door actuator
S62	Engine hood switch (ATA)

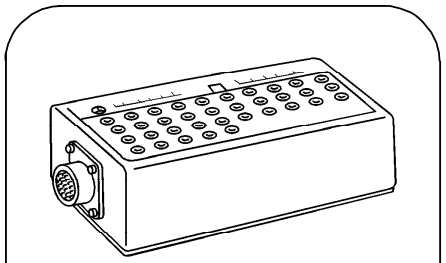
Electrical Test Program – Preparation for Test

1. Battery voltage 11–14 V.
2. Fuses F1/1-1, F1/1-7 okay.
3. Central locking system okay.
4. RCL system okay.
5. Parking lamps, headlamps and brake lamps okay.

Electrical wiring diagrams:

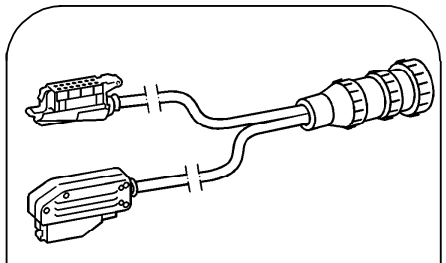
Electrical Troubleshooting Manual, Model 202, Volume 2, groups 80 and 82.

Special Tools



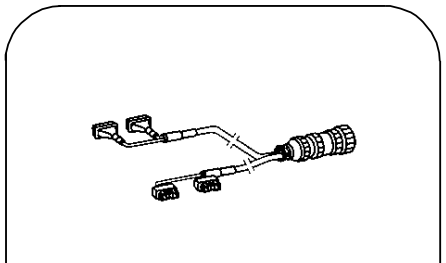
124 589 00 21 00

35-pin socket box



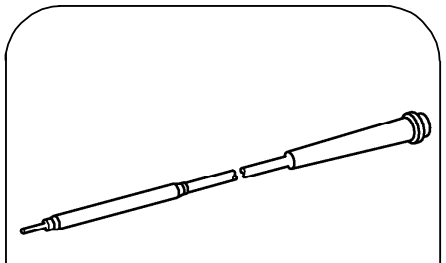
129 589 04 63 00

33-pin test cable



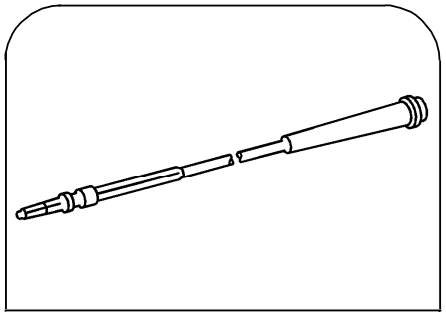
202 589 06 63 00

Test cable, 20 pin



210 589 06 63 00

Adapter cable



140 589 22 63 00

Adapter cable

13.4 Anti–Theft Alarm (ATA)

Electrical Test Program – Preparation for Test

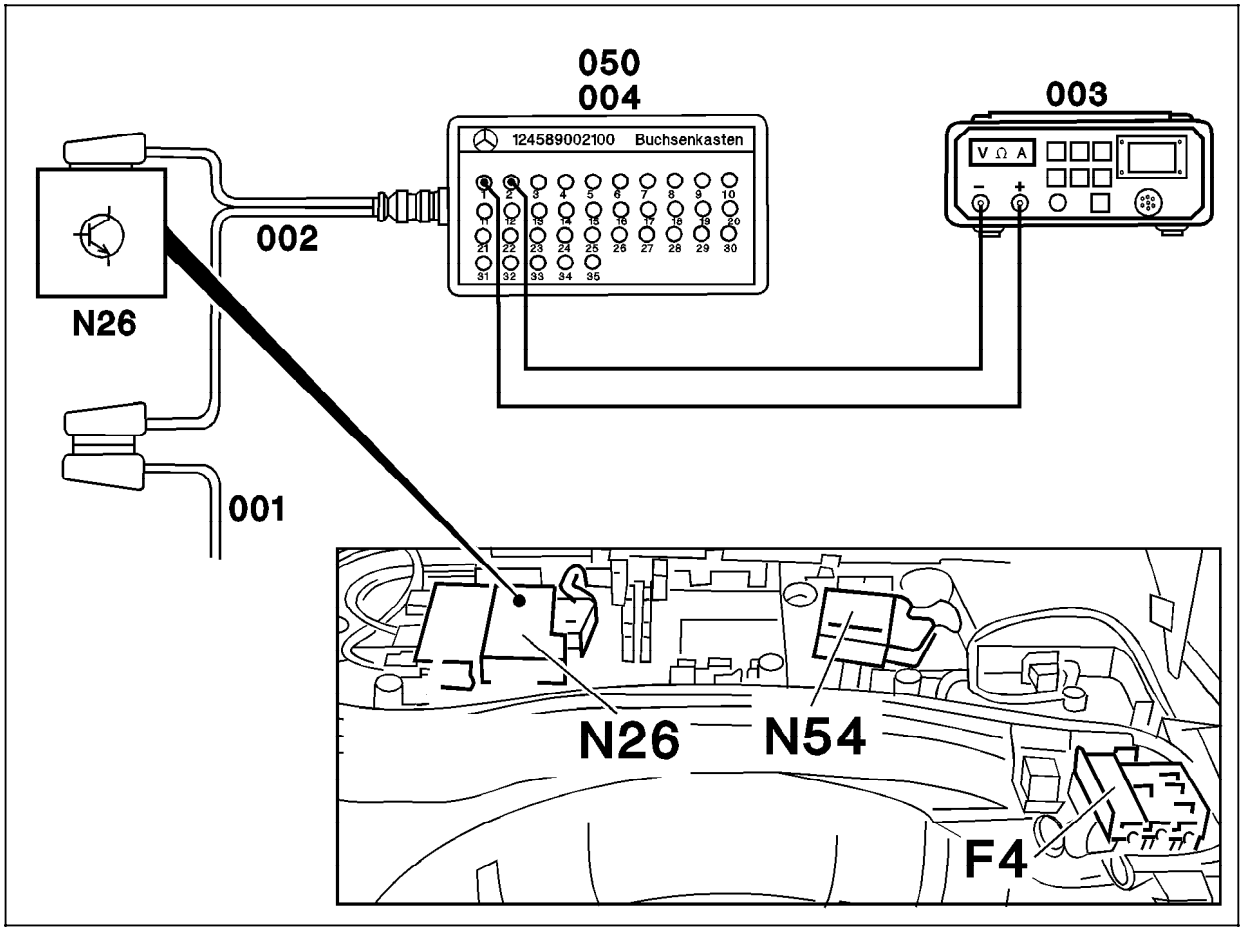
Conventional tools, test equipment

Description	Brand, model, etc.
Digital multimeter [1)]	Fluke models 23, 83, 85, 87

1) Available through the MBUSA Standard Equipment Program.

Electrical Test Program – Preparation for Test

Connection Diagram – Socket Box



U82-6158-57

Figure 1

001	ATA control module connector
002	Test cable
003	Digital multimeter
004/050	Socket box
F4	Fuse box in trunk
N26	ATA control module
N54	RCL control module

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	022 023	**ATA control module (N26)** Voltage supply	N26			Wiring, ⇒ 1.1
		Circuit 30	4 — (V) — 1		11 – 14 V	
		Circuit 15	4 — (V) — 2		11 – 14 V	
		(up to 08/96) Circuit 15	4 — (V) — 18	Ignition: **ON**		
		(as of 09/96) Circuit 15	4 — (V) — 30			
2.0		**Left front door lock switch (S86/1) (up to 01/94)** or **Activation via RCL**	N26 11 — (V) — 2	Ignition: **OFF** Hold key in unlock position or press IR transmitter button.	< 1 V 11 – 14 V	Wiring, PSE control module (A37), see D.M., Body and Accessories, Vol. 1, section 3.2 PSE/CL 23 Remote Central Locking (RCL), see D.M., Body and Accessories, Vol. 1, 4.5 RCL, 23
			N26 19 — (V) — 2	Hold key in lock position or press IR transmitter button.	11 – 14 V	

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
3.0		**Right front door lock switch (S87/1) (up to 01/94)** or **Activation via RCL**	N26 11 — (V) — 2	Ignition: **OFF**	< 1 V	Wiring, PSE control module (A37), see D.M., Body and Accessories, Vol. 1, 23
				Hold key in unlock position or press IR transmitter button.	11 – 14 V	
			N26 19 — (V) — 2	Hold key in lock positionor press IR transmitter button.	11 – 14 V	Remote Central Locking (RCL), see D.M., Body and Accessories, Vol. 1, 4.5 RCL, 23
4.0		**Trunk lid lock switch (S88/2) (up to 01/94)** or **Activation via RCL**	N26 11 — (V) — 2	Ignition: **OFF**	< 1 V	Wiring, PSE control module (A37), see D.M., Body and Accessories, Vol. 1, section 3.2 23
				Hold key in unlock position or press IR transmitter button.	11 – 14 V	
			N26 19 — (V) — 2	Hold key in lock position or press IR transmitter button.	11 – 14 V	Remote Central Locking (RCL), see D.M., Body and Accessories, Vol. 1, 4.5 RCL, 23).

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
5.0	005	**Left/right rear door switch (S17/5, S17/6) alarm circuit (except coupé)**	N26 25 — (V) — 2	Close left and right rear doors. Open close left and right rear doors and then close.	< 1 V 11 – 14 V	Wiring, S17/5, S17/6. PSE control module (A37), see D.M., Body and Accessories, Vol. 1, 3.2, 23
6.0	006	**Left/right front door switch (S17/3, S17/4) alarm circuit**	N26 24 — (V) — 2	Close left and right front doors. Open left and right front doors and then close.	< 1 V 11 – 14 V	Wiring, S17/3, S17/4, see D.M., Body and Accessories, Vol. 1, PSE/CL, 3.2, 23
7.0	002	**Trunk lid switch (S17/8) alarm circuit**	N26 26 — (V) — 2	Close trunk lid rotary catch by hand. Open trunk lid rotary catch by hand.	< 1 V 11 – 14 V	Wiring, A37, see D.M., Body and Accessories, Vol. 1, PSE/RTR, 3.2, 23
8.0	003	**Engine hood switch (S62) alarm circuit**	N26 27 — (V) — 2	Engine hood closed. Engine hood open.	< 1 V 11 – 14 V	Wiring, S62, Switch misadjusted, N26

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
9.0	014	**Stop lamp switch alarm circuit**	N26 4 — (V) — 23	Ignition: **ON** Apply service brakes.	< 1 V 11 – 14 V	Wiring, Stop lamp switch (S9/1).
10.0	010	**ATA contact connector (radio) alarm circuit (running change during M.Y. 1996)**	N26 17 — (V) — 2	Radio installed and connector connected. Radio removed.	11 – 14 V < 1 V	Wiring, ATA contact connector (X42/13), Radio ground.
11.0	012	**Ignition alarm circuit**	N26 4 — (V) — 18	Ignition: **OFF** Ignition: **ON**	< 1 V 11 – 14 V	Wiring, Ignition/starter switch (S2/1).
12.0	020	**Left front door actuator (S47)**	N26 32 — (V) — 2	Disconnect RCL control module (N54) connector (vehicles up to 01/94). Unlock vehicle at driver‘s door or via IR transmitter Lock vehicle from driver‘s door or via IR transmitter.	 < 1 V 11 – 14 V	Wiring, S47

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
13.0		**Alarm horn (H3)** [1]	N26 2 — 13	Connect alarm horn to circuit 30	Horn sounds	Wiring, H3
14.0		**Diagnosis output**	N26 22 — 2	Ignition: **OFF** Disconnect N26 connector. Coonect adapter for impluse counter. Disconnect N26.	11 – 14 V	Wiring, ATA control module (N26).
15.0		*Not applicable for U.S.A. vehicles*	– – –	–	–	–
16.0		**Headlamp alarm circuit** [1]	N26 2 — 12		Headlamps illuminate (low beam).	Wiring, Headlamp unit.

[1] Can be activated using HHT.

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
17.0		**Left taillamp unit, backup lamp (E3e3)**	N26 2 — 14		Left backup lamp illuminates	Wiring, E3e3
18.0		**Right taillamp unit, backup lamp (E4e3)**	N26 2 — 3		Right backup lamp illuminates	Wiring, E4e3
19.0	015 016 017 018	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
20.0		**ATA control module (N26)** Voltage supply Circuit 30 output	N26 15 — 1	Connect to N26	11 – 14 V	⇒ 1.0, N26
21.0	008 016 017	*Not applicable for U.S.A. vehicles*	– – –	–	–	–

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
22.0	008 016 017 018	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
23.0	015 016 017 018	*Not applicable for U.S.A. vehicles*	– – –	–	–	–
24.0		*Not applicable for U.S.A. vehicles*	– – –	–	–	–
25.0	021 022	**Starter lock-out relay module (K38)** [1) 2)] Resistance (up to 01/94)	N26 5 — (–Ω+) — 18	Ignition: **OFF** Disconnect N26 connector.	50 – 60 Ω	Wiring, K38, ⇒ 25.1
25.1		Circuit 15	N26 4 — (–V+) — 18	Ignition: **ON**	11 – 14 V	Wiring, Circuit 15, ⇒ 25.2
25.2		Circuit 15	K38 ⊥ (–V+) — 4	Ignition: **ON**	11 – 14 V	Wiring, ⇒ 25.3

1) Can be activated using HHT.

2) As of 01/94, starter lock-out function controlled by central locking system (PSE control module).

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
25.3		Control signal (Circuit 31) from N26	K38 5 — ◄ –V+ ► — 4	Ignition: **ON**	11 – 14 V	Wiring, N26, ⇒ 25.4
25.4		K38 circuit 50	K38 3 — ◄ ▬▬ ► — 1	Disconnect K38. Using a 2.5mm wire (12 AWG) , bridge K38, ignition switch to position “3” (start).	Engine starts	Wiring, K38, Ignition/starter switch (S2/1), Starter (M1).
26.0		**ATA status indicator (E33) in Interior CL switch (S85)**	N26 8 — ◄ ▬▬ ► — 2		Indicator illuminates	Wiring, ⇒ 2.0, 3.0, 4.0, 12.0, S85, N26

Hand-Held Tester – Programming

Menu item 5 on the HHT allows programming of those ATA control modules which require programming. Only upon completion of the programming is the control module operable. The programming is menu driven.

Follow the instructions shown on the HHT display screen.

Possible version coding

Version	Model 202
Country version	X