

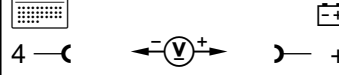
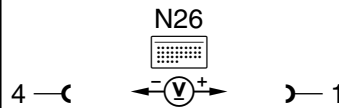
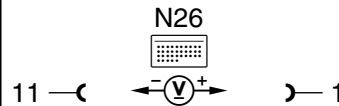




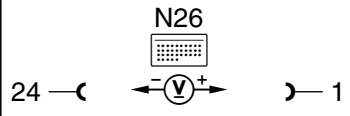
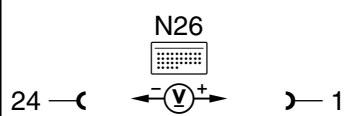



Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0		ATA control module (N26) Voltage supply Circuit 31	N26 		11 – 14 V	Wiring.
1.1		Circuit 30	N26 		11 – 14 V	Wiring.
2.0		Signal from CL Open/Close with IRCL up to 05/97	N26 	Unlock vehicle via IRCL	11 – 14 V	Wiring, IRCL control module.
3.0		Lock nut switch signal from CL Open Actual value (as of 06/97)		HHT actual value, Locknut switch 1 Unlock vehicle using IRCL or mechanical key (only USA)	NO YES	⇒ 3.2
3.1		Lock nut switch signal from CL Close Actual value		HHT actual value, Locknut switch 2 Unlock vehicle using IRCL or mechanical key (only USA)	NO YES	⇒ 3.3

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
5.0	004	Not applicable to U.S.A. vehicles				
6.0	006	Door contact switch Actual values		HHT actual values. Door contact switch LF/RF: Open left door Close left door Open right door Close right door	ON OFF ON OFF	⇒ 6.1
6.1		Left front door switch (S17/3) Contact	N26 	Open left door	11 – 14 V	Wiring, S17/3
6.2		Right front door switch (S17/4) Contact	N26 	Open right door	11 – 14 V	Wiring, S17/4
7.0	002	Rotary tumbler/trunk lid microswitch (S88/1) Actual values		HHT actual values Rotary tumbler/trunk lid microswitch (S88/1) lamp: ON (lamp illuminates) S88/1 OFF	ON OFF	⇒ 7.1



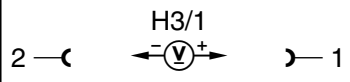


Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
7.1		Contact		S88/1 ON S88/1 OFF	11 – 14 V < 1 V	Wiring, S88/1
8.0		Engine hood switch (S62) Actual values		Engine hood closed: Engine hood open:	ON OFF	⇒ 8.1
8.1		Contact		Engine hood closed: Engine hood open:	< 1 V 11 – 14 V	Wiring, S62, N26
9.0		Stop lamp switch (S9/1) Actual values (up to 05/97)		Ignition: ON Service brake not pressed. Press service brake:	OFF ON	⇒ 9.1
9.1		Contact		Ignition: ON Press service brake	< 1 V 11 – 14 V	Wiring, S9/1




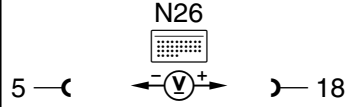
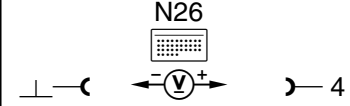
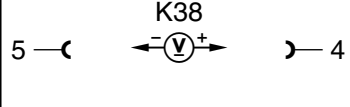
Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
10.0		Radio contact Actual values (only older radio generation up to 05/97)		HHT actual values Radio contact, vehicle with radio Vehicle without radio or contact not made.	ON OFF	⇒ 10.1
10.1		Contact		Vehicle with radio Vehicle without radio or contact not made.	11 – 14 V < 1 V	Wiring, radio contact (X42/13)
11.0		Ignition alarm circuit (up to 05/97)		Ignition: OFF Ignition: ON	< 1 V 11 – 14 V	Wiring, Ignition/starter switch (S2/1)
12.0		Alarm siren (H3) Activation (up to 05/98)		ON	Alarm sounds.	⇒ 12.1
12.1		Function		 Use bridges with 124 589 37 63 00 safety cables only.	Alarm sounds.	Wiring, H3


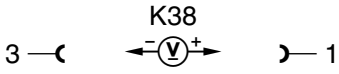

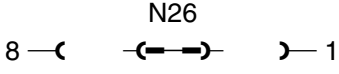


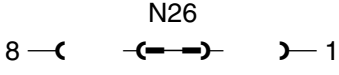

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
13.0		Alarm siren with auxiliary battery (H3/1) Function (as of 06/98)		HHT activation: Alarm siren test	Alarm siren sounds short acoustical signal (0.2 sec)	⇒ 13.1
13.1		Voltage supply		Disconnect connector at H3/1	11 – 14 V	Wiring.
13.2		Trigger alarm		Activate ATA. Wait 15 seconds. Disconnect connector at H3/1.  To stop alarm tone, reconnect connector at H3/1 and deactivate alarm.	There is both a acoustical and optical alarm actuation.	H3/1 Wiring, N26
14.0		Diagnostic Output Contact		Disconnect connector on N26	11 – 14 V	Wiring.
15.0		<i>Not applicable to U.S.A. vehicles</i>				
15.1		<i>Not applicable to U.S.A. vehicles</i>				

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
18.0		Starter lock-out circuit (K38) Activation (from 10/92 to 12/93 only)		HHT activation: Starter lock-out ON, Ignition/starter switch is in position 3 (circuit 50)	Engine does not start.	⇒ 18.1
18.1		Resistance		Ignition: OFF	50 – 60 Ω	Wiring, K38
18.2		Circuit 15		Ignition: ON	11 – 14 V	Wiring, Circuit 15
18.3		Ground		Ignition: ON	11 – 14 V	Wiring.
18.4		Circuit 31 from ATA control module (N26)		Ignition: ON	11 – 14 V	Wiring, N26



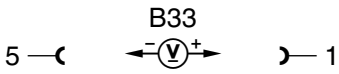
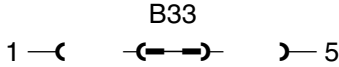

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
18.5		Starter lock-out relay module (K38) Circuit 50		Ignition: OFF	11 – 14 V	Wiring, K38, Ignition/starter switch (S2/1), Starter.
19.0		ATA status indicator (E33) Activation (without anti-tow protection)		HHT activation	E33 illuminates.	⇒ 19.1
19.1		Function		 Use bridges with 124 589 37 63 00 safety cables only.	E33 illuminates.	Wiring, E33, N26
20.0		ATA status/towing protection switch (S85/3) Activation of the status indication (with anti-tow protection)		HHT activation: ATA status indicator LED: ON	LED in switch illuminates.	⇒ 20.1
20.1		Function		 Use bridges with 124 589 37 63 00 safety cables only.	LED in switch illuminates.	Wiring, S85/3, N26



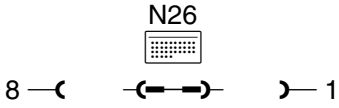

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
21.0		Model recognition Actual values (up to 05/97)		HHT actual values: Model 129	129	⇒ 19.1
21.1		Ground activation		 Socket 33 must be contacted.	11 – 14 V	Wiring.
22.0		Ant-tow control module (N27) Activation (up to 05/97)		HHT activation: Anti-tow Wait 15 seconds. Lift vehicle at lift point using vehicle jack.		⇒ 22.1
22.1		Voltage supply		Activate ATA, Wait 60 seconds, Lift vehicle at lift point using vehicle jack.	11 – 14 V	Wiring, N26 If values are OK: ⇒ 22.2
22.2		Trigger signal		Activate ATA, Wait 60 seconds, Lift vehicle at lift point using vehicle jack.	11 – 14 V, only briefly.	Wiring, N27

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
23.0		ATA tow sensor (B33) Activation (as of 06/97)		HHT actual values: Anti-tow 00 Wait 15seconds. Lift vehicle at lift point using vehicle jack.	00	⇒ 23.1
23.1		Voltage supply		Activate ATA	11 – 14 V	Wiring.
23.2		Simulate ATA triggering		Disconnect connector at B33, Activate ATA, Install bridge,  Use bridges with 124 589 37 63 00 safety cables only.	Alarm is activated.	Wiring, N26, If values are OK: B33

Electrical Test Program – Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
24.0		ATA status/towing protection switch (S85/3) Actual values (with anti-tow protection)		HHT actual values: ATA status/towing protection switch (S85/3) button not pressed : S85/3 button pressed :	OFF ON	⇒ 24.1
24.1		Function		 Use bridges with 124 589 37 63 00 safety cables only.	LED in switch illuminates.	Wiring, S85/3, If values are OK: N26