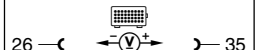
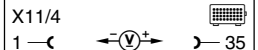
Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	P0 560	**Engine control module (N3/10)** Voltage supply Circuit 30	N3/10  26 (1.26) — 35 (1.35)	Ignition: **ON**	11 – 14 V	⇒ 1.1
1.1		Ground wire	N3/10  26 (1.26) — X11/4 2 39 (1.39) — X11/4 2	Ignition: **ON**	11 – 14 V	Wiring, **Model 129:** Ground (W27), module box bracket. **Model 140:** Output ground (W15), right footwell. **Model 210:** Electronic ground (W16/6), right component compartment, ⇒ 1.2
1.2		Voltage supply Circuit 30	X11/4 1 — N3/10  35 (1.35)	Ignition: **ON**	11 – 14 V	Wiring, **Model 129, 140:** Base module (N16/1) or fuse on base module. **Model 210:** Relay module (K40).

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
2.0	P0 560	**Engine control module (N3/10)** Voltage supply Circuit 87M	N3/10 38 (1.38) — V — 25 (1.25)	Ignition: **ON**	11 – 14 V	⇒ 2.1
2.1		Electronic ground	N3/10 38 (1.38) — V — X11/4 2	Ignition: **ON**	11 – 14 V	Wiring, **Model 129, 140:** Electronic ground (W15), right footwell. **Model 210:** Electronic ground (W16/6), right component compartment, ⇒ 2.2
2.2		Voltage supply Circuit 87M	X11/4 1 — V — N3/10 25 (1.25)	Ignition: **ON**	11 – 14 V	Wiring, **Model 129, 140:** Base module (N16/1) or fuse on base module. **Model 210:** Relay module (K40).

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
3.0	P0 560	**Engine control module (N3/10)** Voltage supply Circuit 87E	N3/10 39 (1.39) — 36 (1.36)	Ignition: **ON**	11 – 14 V	Wiring, **Model 129, 140:** Base module (N16/1) or fuse on base module. **Model 210:** Relay module (K40).
4.0	P1 542 P0 507	**Pedal value sensor (B37)** Signal Nominal value potentiometer 1	N3/10 18 (1.18) — 19 (1.19)	Ignition: **ON** Accelerator pedal position: CTP WOT	 0.2 – 0.5 V 4.3 – 4.8 V	⇒ 4.1, Wiring, B37
4.1		Voltage supply Nominal value potentiometer 1	N3/10 18 (1.18) — 17 (1.17)	Ignition: **ON**	4.75 – 5.25 V	N3/10

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
5.0	P1 542 P0 507	**Pedal value sensor (B37)** Signal Nominal value potentiometer 2	N3/10  5 (1.5) — 6 (1.6)	Ignition: **ON** Accelerator pedal position: CTP WOT	 0.1 – 0.4 V 2.1 – 2.5 V	Wiring, ⇒ 5.1, B37
5.1		Voltage supply Nominal value potentiometer 2	N3/10  5 (1.5) — 4 (1.4)	Ignition: **ON**	2.25 – 2.75 V	N3/10
6.0	P0 507 P0 120 P0 186	**EA/CC/ISC actuator (M16/1)** Signal Actual value potentiometer 1 Actual value potentiometer 2	N3/10  98 (2.98) — 97 (2.97) N3/10  98 (2.98) — 107 (2.107)	Ignition: **ON** Accelerator pedal position: CTP WOT Accelerator pedal position: CTP WOT	 4.0 – 4.6 V < CTP value 0.3 – 0.9 V > CTP value	Wiring, ⇒ 6.1, M16/1

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
6.1		Voltage supply Actual value potentiometers 1 and 2	N3/10 98 (2.98) — V — 106 (2.106)	Ignition: **ON**	4.75 – 5.25 V	N3/10
7.0	P0 186 P1 580	**EA/CC/ISC actuator (M16/1)** Activation of actuator motor	N3/10 74 (2.74) — V — 75 (2.75)	Ignition: **ON** Engine: **at Idle** ECT > 70 °C	1.0 – 2.3 V 1.0 – 2.5 V Value oscillates.	Wiring, M16/1, N3/10
		Resistance (actuator motor)	N3/10 74 (2.74) — Ω — 75 (2.75)	Ignition: **OFF**	< 10 Ω	
8.0	P0 500	**Left front axle VSS sensor (L6/1)**	N3/10 38 (1.38) — V — 9 (1.9)	Raise front of vehicle. Ignition: **ON** Spin left front wheel by hand.	 4 – 8 V	Wiring, ASR or ESP see DM, Chassis & Drivetrain, Vol. 3, section 9 (ASR, ETS, ESP).

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
9.0	P0 500	**Left rear axle VSS sensor (L6/3)**	N3/10  38 (1.38) — 22 (1.22)	Raise rear of vehicle. Ignition: **ON** Spin left rear wheel by hand.	4 – 8 V	Wiring, ASR or ESP see DM, Chassis & Drivetrain, Vol. 3, section 9 (ASR, ETS, ESP).
10.0		**(only until 05/96, as of 06/96 via CAN)** **A/C compressor signal**	N3/10  38 (1.38) — 8 (1.8)	Engine: **at Idle** **Turn A/C system: ON** Move temperature selector wheel to MIN, blower: **ON**.	< 1.0 V 11 – 14 V	Wiring, A/C pushbutton control module (N22).
11.0		**EPC MIL (A1e43)** Activation	N3/10  21 (1.21) — 35 (1.35)	Ignition: **ON** Engine: **at Idle**	11 – 14 V < 1 V	Wiring, Malfunction in actuator or pedal value sensor, N3/10