

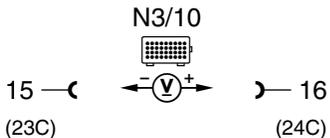
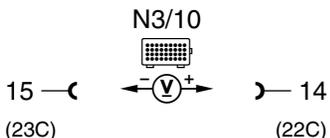
Electrical Test Program – Electronic Accelerator (EA) Test

⚠ WARNING!

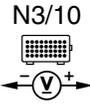
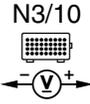
Risk of severe injury when touching ignition parts which produce high voltages. Do not touch ignition components.

Persons with heart pacemakers are not to perform repairs on this type of ignition system.

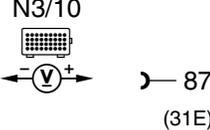
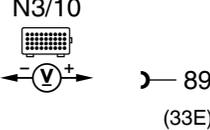
1. Review 22 entirely, prior to performing this test section.

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/remedy
1.0	P1 542 P0 507	Pedal value sensor (B37) Signal Nominal value potentiometer 1	N3/10 	Ignition: ON Accelerator pedal position: CTP WOT or kick-down	0.2 – 0.5 V 4.3 – 4.8 V	⇒ 1.1, Wiring, B37
1.1		Voltage supply Nominal value potentiometer 1	N3/10 	Ignition: ON	4.75 – 5.25 V	Wiring N3/10

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/remedy
2.0	P1 542 P0 507	Pedal value sensor (B37) Signal Nominal value potentiometer 2	N3/10  18 — (26C) 17 — (25C)	Ignition: ON Accelerator pedal position: CTP WOT and kick-down	0.1 – 0.4 V 2.1 – 2.5 V	⇒ 2.1, Wiring, B37
2.1		Voltage supply Nominal value potentiometer 2  Test step not valid for pedal value sensor with hall effect.	N3/10  18 — (26C) 19 — (27C)	Ignition: ON	2.25 – 2.75 V	Wiring N3/10

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/remedy
3.0	PD 507 PD 120 PI 186 PI 580	EA/CC/ISC actuator (M16/6) Signal Actual value potentiometer 1 Actual value potentiometer 2	N3/10  88 —(32E) —  — 87 (31E)	Ignition: ON Accelerator pedal position: CTP WOT or kick-down	4.0 – 4.6 V < CTP value	⇒ 3.1, Wiring, M16/6
3.1		Voltage supply Actual value potentiometers 1 and 2	N3/10  88 —(32E) —  — 89 (33E)	Ignition: ON	4.75 – 5.25 V	Wiring, N3/10

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/remedy
4.0	PI 186 PI 580	EA/CC/ISC actuator (M16/6) Activation of actuator motor Resistance of actuator motor	<p>N3/10 </p> <p>N3/10 </p>	<p>Ignition: ON</p> <p>Engine: at Idle ECT > 70 °C</p> <p>Ignition: OFF</p>	<p>0.8 – 2.3 V</p> <p>1.0 – 2.5 V Value oscillates.</p> <p>< 10 Ω</p>	Wiring, M16/6 N3/10
5.0		P/N recognition Transmission: 722.4/6	<p>N3/10 </p>	<p>Ignition: ON</p> <p>Selector lever position: P/N</p> <p>R, D, 4, 3, 2, 1</p>	<p>11 – 14 V</p> <p>< 1.5 V</p>	Wiring, See DM, Chassis and Drivetrain, Vol. 1, section 2.3
6.0		Manual Transmission only Clutch engage/release switch (S40/2) Signal	<p>N3/10 </p>	<p>Ignition: ON</p> <p>Clutch pedal not depressed:</p> <p>Clutch pedal depressed:</p>	<p>< 1.0 V</p> <p>11 – 14 V</p>	Wiring, S40/2

Electrical Test Program – Electronic Accelerator (EA) Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/remedy
7.0		Manual Transmission only Backup lampswitch (S16/2) Signal	<p style="text-align: center;">N3/10 </p> <p style="text-align: center;">  </p> <p>3 — ◀ (3A) ▶ — 46 (14D)</p>	Ignition: ON Reverse gear not engaged: Reverse gear engaged:	 < 1.0 V 11 – 14 V	Wiring, S16/2