

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 **WARNING!** on pages 11/1 and 11/2,
2. Review 11, 21, 22, 23, 24, 31, 33,
3. Review section 0,
4. Connect HHT and readout DTC memory, see 11,
5. Ignition: **OFF**
6. Connect test cable with socket box as per "Connection Diagram - Socket Box", see 22/5.


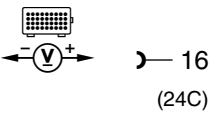
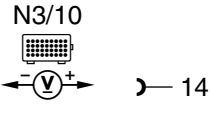
**i**

Connector with red marking is not required at this time since the engine control module has presently no function installed for it. When disconnecting the connectors on the engine control module remove center connector (D) first, when reconnecting connectors install center connector (D) last.




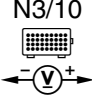
**Note regarding “Test Connection” column:**

The numbers indicated in parentheses, for example, ⇒ 1.0 (2A) signify:


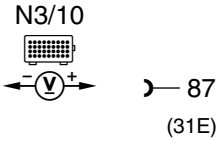

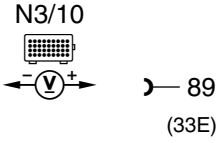

- 2 = Socket 2 on wiring diagram.
- A = Connector A on wiring diagram

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


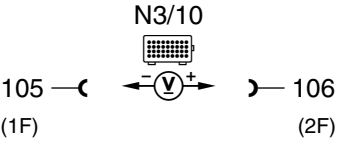
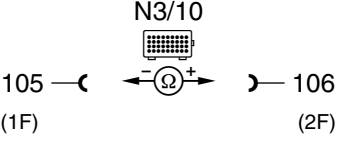
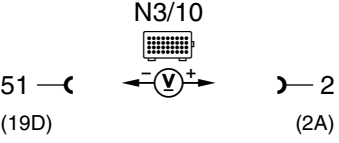
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⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/remedy
2.0	P1 542 P0 507	<b>Pedal value sensor (B37)</b> Signal 2	N3/10  18 — (26C)      17 — (25C)	Ignition: <b>ON</b> Accelerator pedal position: CTP WOT with kick-down	0.1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

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⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/remedy
3.0	PD 507 PD 120 PD 186 PI 580	<b>EA/CC/ISC actuator (M16/6)</b> Signal Actual value potentiometer 1   Actual value potentiometer 2	N3/10  88 —(32E) —  — 87 (31E)	Ignition: <b>ON</b>  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: <b>ON</b>	4.75 – 5.25 V	Wiring, N3/10

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⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/remedy
4.0	PI 186 PI 580	<b>EA/CC/ISC actuator (M16/6)</b> Activation of actuator motor  Resistance of actuator motor	<p>N3/10 </p> <p>N3/10 </p>	<p>Ignition: <b>ON</b></p> <p>Engine: <b>at Idle</b> ECT &gt; 70 °C</p> <p>Ignition: <b>OFF</b></p>	<p>0.8 – 2.3 V</p> <p>1.0 – 2.5 V Value oscillates.</p> <p>&lt; 10 Ω</p>	Wiring, M16/6, N3/10
5.0		<b>P/N recognition</b> <b>Model 202 with</b> <b>A-Transmission</b>	<p>N3/10 </p>	<p>Ignition: <b>ON</b></p> <p>Selector lever position: P/N</p> <p>R, D, 4, 3, 2, 1</p>	<p>11 – 14 V</p> <p>&lt; 2.0 V</p>	Wiring, See in WIS: AD27.19-P-1000AZ and AD27.19-P-3000AB