

## P0336

### 110 Engine Speed Sensor Signal - Open Circuit

#### Diagnosis conditions

- Engine running

#### Possible fault cause

- ◆ Corrosion in the connector
- ◆ Open circuit or short circuit in the wiring harness
- ◆ Rpm/crankshaft position sensor faulty.
- ◆ DME control module faulty

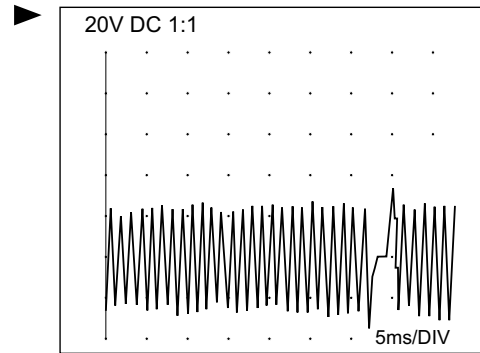
#### Affected terminals

III/32, III/45 and III/46

#### Diagnosis/troubleshooting

Work instruction		Display OK	If not OK
1	Remove connector		
2	Check for corrosion		Clean contacts
3	Check rpm/crankshaft position sensor	◆ Measure resistance between pins 1 and 2	Replace rpm/crankshaft position sensor
		◆ Measure resistance between pins 1 and 3	
4	Check signal with engine tester	◆ Connect special tool 9637 ◆ Connect engine tester. Use special input, connect positive cable to pin III/32, negative cable to pin III/46 ◆ Start engine or crank engine with starter motor	The following display should appear on the oscilloscope

Figure:



Work instruction		Display OK	If not OK	
5	Check wiring from rpm/crankshaft position sensor to DME control module for open circuit and short circuit	<ul style="list-style-type: none"> <li>◆ Connect special tool 9637 to wiring harness</li> <li>◆ Remove connector of rpm/crankshaft position sensor</li> <li>◆ Measure resistance between special tool 9637 pin III/32 and plug connection pin 1</li> <li>◆ Measure resistance between special tool 9637 pin III/46 and plug connection pin 2</li> <li>◆ Measure resistance between ohmmeter on special tool 9637 pin III/45 and plug connection pin 3</li> </ul>	0 - 5 Ω	
		<ul style="list-style-type: none"> <li>◆ Measure resistance between special tool 9637 pin III/32 and ground.</li> <li>◆ Measure resistance between pin III/46 and ground</li> </ul>	∞ Ω	