

Diagnosis - Diagnostic Trouble Code (DTC) Readout

Preparation for DTC Readout

- Connect impulse counter scan tool or Hand-Held Tester (HHT) to data link connector (X11/4) according to connection diagram (see section 0).
Yellow wire to socket 7.

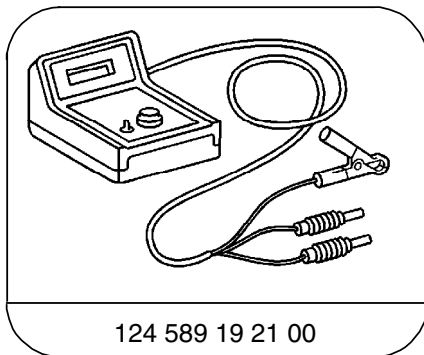
Note:

The Test Program is divided into two groups:

- Electronic accelerator with ISC
- Cruise control

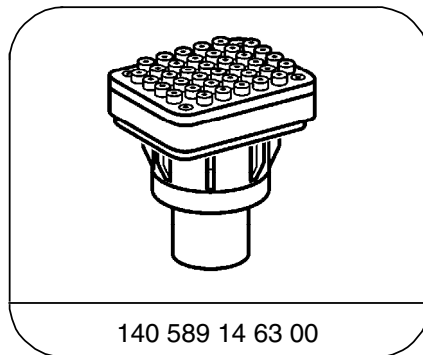
According to the diagnosis made, troubleshoot by performing only the related test steps in the particular group.

Special Tools



124 589 19 21 00

Pulse counter



140 589 14 63 00

Adapter



Equipment

Hand-Held Tester ¹⁾

see applicable Service Information in groups 58 and 99.


¹⁾ Available through the MBUSA Standard Equipment Program.

Diagnosis - Diagnostic Trouble Code (DTC) Readout

Diagnostic trouble code (DTC)  	Possible cause	Test step/Remedy ¹⁾
1 -	No fault in system	-
2 002 006 007 008 009 025	EA/CC/ISC control module (N4/1) Closed throttle position switch (M16/3s2) Stop lamp switch (S9/1) Safety contact switch (M16/3s1) Cruise control switch (S40) OFF EA/CC/ISC control module (N4/1) Actual value potentiometer (M16/1r2) Starter lock-out/back-up lamp switch (S16/3) (transmission range recognition) Closed throttle position switch (S29/3) Engine speed (TNA) signal Vehicle speed signal (VSS) Safety relay within EA/CC/ISC control module (N4/1) EA/CC/ISC control module (N4/1) Engine harness	EA/CC/ISC control module (N4/1) 23⇒ 6.0–8.0 24⇒ 2.0–3.0 23⇒ 7.0–8.0 24⇒ 1.0 (N4/1) 23⇒ 12.0, 13.0 23⇒ 17.0, 24⇒ 4.0 23⇒ 16.0 23⇒ 20.0 23⇒ 21.0, 22.0, 24⇒ 5.0 N4/1 N4/1 Check harness wire insulation.
- 037	Conditions for activation of EA/CC/ISC actuator (M16/1) not fulfilled.	Conditions: Engine: OFF Transmission range: P/N


¹⁾ Observe Preparation for Test, see 22.

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Diagnostic trouble code (DTC) 	Possible cause	Test step/Remedy ¹⁾
<p>3</p> <p>054, 056 057 048 049 050 051 052 053 055</p>	<p>Right EA/CC/ISC actuator (M16/3) Reference potentiometer (M16/3r1) (voltage supply) Reference potentiometer (M16/3r1) Actual value potentiometer (M16/3r2) Safety contact switch (M16/3s1) Closed throttle position switch (M16/3s2) Actuator motor (M16/3m1) Magnetic clutch (M16/3k1) Reset not accomplished (actuator adaptation)</p>	<p>23⇒ 2.0–10.0 23⇒ 2.0–11.0 23⇒ 3.0 23⇒ 4.0 23⇒ 7.0, 8.0 23⇒ 6.0, 8.0 23⇒ 9.0 23⇒ 10.0 Erase DTC: Ignition: OFF Ignition: ON (for at least 30 seconds). If DTC reappears: EA/CC/ISC actuator (M16/3)</p>
<p>4</p> <p>064</p>	<p>Cruise control switch (S40)</p>	<p>24⇒ 1.0</p>
<p>5</p> <p>080</p>	<p>Stop lamp switch (S9/1)</p>	<p>24⇒ 2.0, 3.0</p>
<p>6</p> <p>096</p>	<p>Starter lock-out/backup lamp switch (S16/3)</p>	<p>23⇒ 17.0, 24 ⇒ 4.0</p>



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7 112 113 114 115 116 117	CAN databus: Message from EA/CC/ISC control module (N4/1) faulty Message from ABS/ASR control module (N30/1) missing Message from left LH-SFI control module (N3/2) missing Message from right LH-SFI control module (N3/3) missing Reception from left ignition control module (knock sensor) (N1/4) faulty Reception from right ignition control module (knock sensor) (N1/5) fault	N4/1 23⇒ 27.0, 24 ⇒ 6.0
8 128-130	Left front axle vehicle speed signal from ABS/ASR control module (N30/1)	23⇒ 21.0, 24⇒ 5.0
9 144	Left rear axle vehicle speed signal from ABS/ASR control module (N30/1)	23⇒ 22.0
10 160	Engine speed signal (TNA) from base module (N16/1)	23⇒ 20.0
11 176, 177, 178, 182, 188, 189 180 181	Fuel safety shut-off signal to left LH-SFI control module (N3/2) Closed throttle recognition signal to left LH-SFI control module (N3/2) Fuel safety shut-off signal to right LH-SFI control module (N3/3)	23⇒ 23.0, 24.0 23⇒ 26.0 23⇒ 25.0

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12 192, 193	Voltage supply, circuit 87	23⇒ 1.0
13 212–215, 221 222 208 209 210 211	Left EA/CC/ISC actuator (M16/4) Actual value potentiometer (M16/4r1) Actual value potentiometer (M16/4r2) Actuator motor (M16/4m1) Magnetic clutch (M16/4k1)	23⇒ 11.0 – 15.0 23⇒ 13.0 23⇒ 12.0 23⇒ 14.0 23⇒ 15.0
14 224	Closed throttle position switch (S29/3)	23⇒ 16.0
15 240	Data exchange with ABS/ASR control module (N30/1) implausible	N30/1

¹⁾ Observe Preparation for Test, see 22.