

Diagnosis – Diagnostic Trouble Code (DTC) Memory

Preliminary work:

Function test 11

Preparation for Test:

1. Fuses OK.
2. Battery voltage >11 V.
3. Unlock vehicle using infrared remote control.
4. Ignition ON.
5. Connect Hand-Held Tester (HHT) to 38-pole data link connector (X11/4) according to connection diagram shown in section 0.

Electrical wiring diagrams :

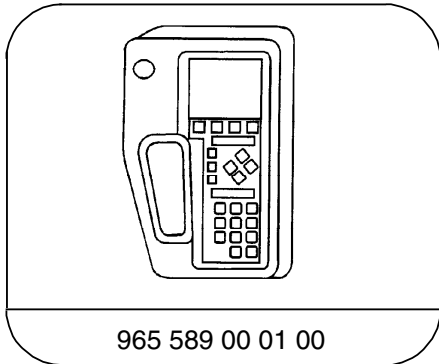
Electrical Troubleshooting Manual, Model 129, Volume 2, group 80,
 Model 140, Volume 2, group 80,
 Model 202, Volume 2, group 80.

Note:

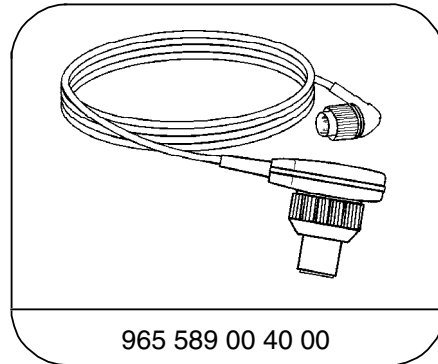
The diagnostic trouble codes (DTC's) can only be read out and erased using the Hand-Held Tester (HHT).

RCL control modules as of part numbers 210 820 21 26 and 210 820 22 26 can be de-synchronized only with the Hand-Held Tester (HHT) (see 11/1).

Special Tools



Hand-Held-Tester



Test Cable

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Note regarding Diagnostic Trouble Codes (DTC's):

Current diagnostic trouble codes are highlighted in black on the display. Additional detailed fault information based on fault type is displayed with nearly all diagnostic codes (DTC's) such as:

> Ω	Resistance too great
< Ω	Resistance too low
ΓΓ-	Short circuit to ground (GND)
ΓΓ+	Short circuit to positive (POS)
-//-	Open circuit

Additionally, further diagnostic info. such as fault frequency is displayed with some of the diagnostic trouble codes.

Fault frequency:

Frequency of the displayed diagnostic trouble code:
4 = periodic fault, appeared 4 times.

Notes regarding the Drive Authorization System (DAS):


- Vehicles equipped with infrared remote central locking (RCL) are also equipped with a Drive Authorization System (DAS).

- The disabling of the engine management system is accomplished via a CAN connection from the RCL control module. Upon disabling the engine management system (vehicle has been locked via RCL), the engine control module interrupts the fuel injection system.
- The drive authorization system (DAS) and anti-theft alarm (ATA) can only be activated or de-activated using either the IR transmitter or the mechanical key.
- The RCL control module and engine control module are “married” together via an identification code. This identification code can not be erased, thus this code remains with the vehicle for its service life. Troubleshooting of an RCL control module (N54) or the engine control module by swapping control modules from another vehicle is no longer possible.

4.5 Infrared Remote Central Locking (RCL)

Models 129, 140, 202 as of M.Y. 1996, 210 up to 06/96

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DTC 	Possible cause	Test step/Remedy ¹⁾
B1000	RCL control module (N54)	Replace N54
B1100	Control line deactivation, (PSE/CL, CF, ATA), Γ1+ or Γ1-	23 ⇒ 13.0, 14.0, 17.0 – 20.0
B1101	Control line activation, (PSE/CL, CF, ATA), Γ1+ or Γ1-	23 ⇒ 15.0 – 20.0
B1102	Drive Authorization System (DAS) control line, Γ1+ or Γ1-	23 ⇒ 21.0, 22.0
B1103	Red indicator lamp, Γ1+ or Γ1-	23 ⇒ 5.0
B1104	Green indicator lamp, Γ1+ or Γ1-	23 ⇒ 6.0
B1701	Incorrect authorization code, right cylinder bank, (4-6 cylinder) (CAN)	11 ⇒ 6.0
B1702	Incorrect authorization code, left cylinder bank, (8-12 cylinder) (CAN)	11 ⇒ 6.0
B1703	Attempt was made to start vehicle locked via RCL	11 ⇒ 6.0, erase DTC memory

1) Observe Preparation for Test, see 22.