

Diagnosis - Diagnostic Trouble Code (DTC) Memory

Test Preparation for DTC Readout

Note:

A stored DTC is erased, if the connector of the 4MATIC control module (N30/3) is unplugged or if the battery is disconnected.

1. Connect impulse counter scan tool to data link connector (X11/4) as shown in Figure 1.

Note:

Connect yellow wire from impulse counter scan tool as follows:

4MATIC control module (N30/3)	socket 5
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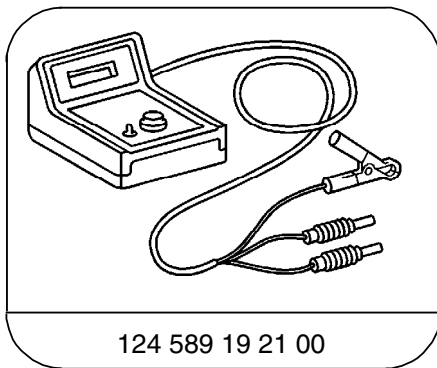
2. Engine: **At idle.**
3. Read DTC memory of 4MATIC control module (N30/3). See section 0.

Note:

After successful repair erase DTC memory with engine **running**. The following faults are **not** stored by the 4MATIC control module:

- 4MATIC function indicator lamp (A1e25) defective.
- 4MATIC MIL (A1e24) defective.
- Oil pressure switch (A7/2s1) defective.

Special Tools



Pulse counter

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Connection Diagram – Impulse Counter Scan Tool

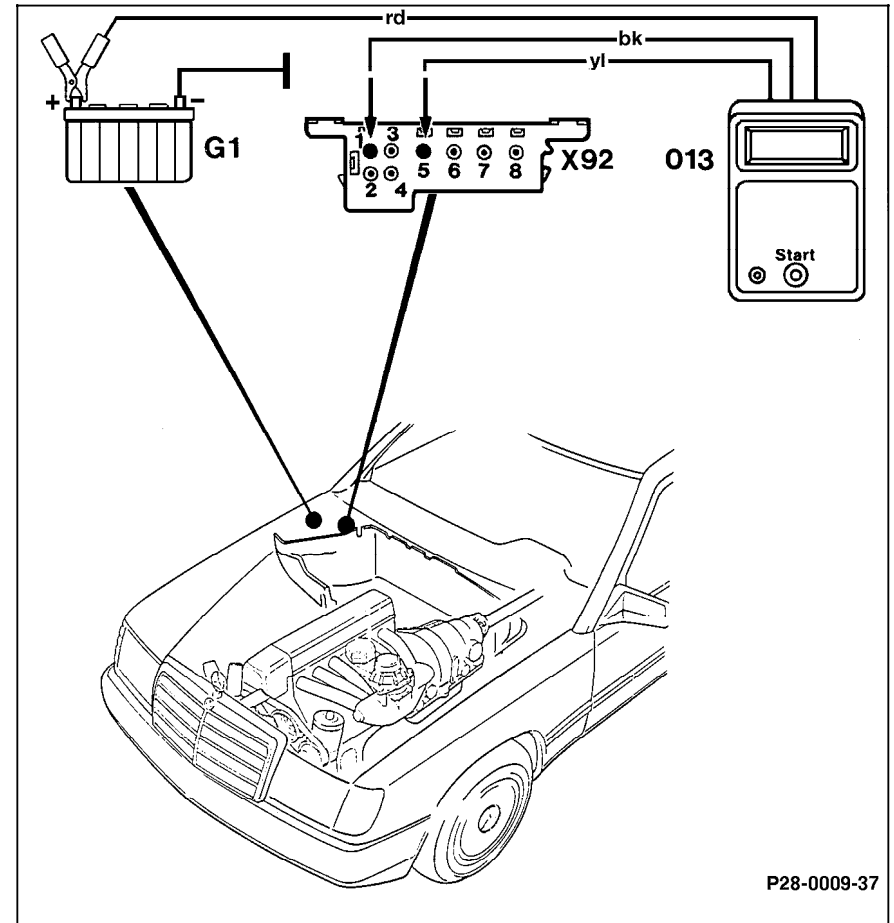


Figure 1

- 013 Impulse counter scan tool
- G1 Battery
- X11/4 Data link connector (16-pole)

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Diagnostic trouble code (DTC)	Possible cause	Test step/Remedy ¹⁾
1	No faults recognized. In case of complaint:	23 (entire test)
2	4MATIC control module (N30/3)	N30/3
3	Stop lamp switch (4-pole) (S9/1)	23 ⇒ 8.0, 9.0
4	Left front axle VSS sensor (L6/1)	23 ⇒ 13.0
5	Right front axle VSS sensor (L6/2)	23 ⇒ 14.0
6	Rear axle VSS sensor (L6)	23 ⇒ 15.0
7	Axle VSS sensors (L6, L6/1, L6/2) or ABS control module (N30)	Check wiring for open circuit, Check N30.
8	Overvoltage protection relay module (87E/87L/30a, 9-pole) (K1/2) or front axle drivetrain valve (A7/2y1) or central differential lock valve (A7/2y2)	23 ⇒ 1.0, 2.0, 16.0, 17.0, 19.0, 20.0
9	Overvoltage protection relay module (87E/87L/30a, 9-pole)(K1/2), central differential lock valve (A7/2y2) or rear axle differential lock valve (A7/2y3) or stop lamp switch (4-pole) (S9/1)	23 ⇒ 1.0, 2.0, 8.0, 9.0, 16.0, 17.0, 18.0, 19.0, 20.0
10	Overvoltage protection relay module (87E/87L/30a, 9-pole)(K1/2) or rear axle differential lock valve (A7/2y3) or stop lamp switch (4-pole) (S9/1)	23 ⇒ 1.0, 2.0, 8.0, 9.0, 18.0, 20.0
11	Overvoltage protection relay module (87E/87L/30a, 9-pole)(K1/2) or steering angle sensor (N49)	23 ⇒ 1.0, 2.0, 10.0, 11.0, 12.0

¹⁾ Observe Preparation for Test, see 22.