

### Diagnosis - Diagnostic Trouble Code (DTC) Memory

#### Preparation for recalling diagnostic trouble code (DTC) memory

1. Connect impulse counter scan tool and adaptor for impulse counter scan tool to diagnostic connector (X11/4) according to connection diagram (see section 0).

**Note:**

Connect impulse counter scan tool as follows:

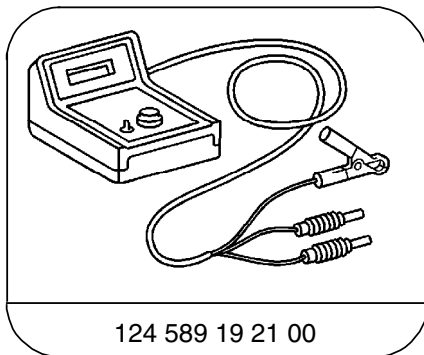
red wire to socket 3,  
black wire to socket 1 and  
yellow wire to:

Diagnostic module	socket 19
Base module	socket 8

LH-SFI control module	socket 4
Ignition control module	socket 17
EA/CC/ISC control module	socket 7

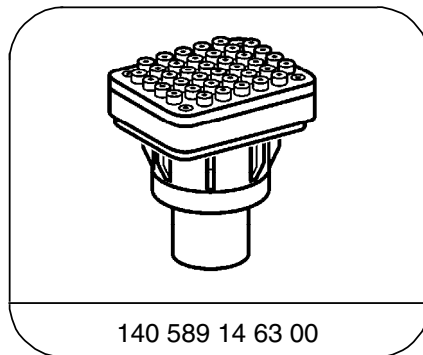
2. Recall control modules' diagnostic trouble code memory and clear stored trouble codes (see section 0).

#### Special Tools



124 589 19 21 00

Pulse counter



140 589 14 63 00

Adapter

## Diagnosis - Diagnostic Trouble Code (DTC) Memory

## Diagnostic Trouble Code (DTC) Readout, Diagnostic Module

Diagnostic Trouble Code (DTC)	Possible Cause	Remedy/Test Step <sup>1)</sup>
1	No malfunction in systems monitored	–
2	Heated oxygen sensor inoperative	Test LH-SFI, section 3.1.
3	Lambda control inoperative	Test LH-SFI, section 3.1.
4	Air injection inoperative	Test LH-SFI, section 3.1.
5	Exhaust gas recirculation inoperative	Test LH-SFI, section 3.1.
6	Idle speed control inoperative	Test electronic accelerator, section 6.2.
7	Ignition system defective	Test distributor ignition system, section 5.2.
8	Engine coolant temperature sensor, open/short circuit	Test LH-SFI, section 3.1.
9	Intake air temperature sensor, open/short circuit	Test LH-SFI, section 3.1.
10	Voltage at mass air flow sensor too high/low	Test LH-SFI, section 3.1.
11	TN-signal (rpm) at LH-SFI control module (N3/1) defective	Test LH-SFI, section 3.1.
12	Heated oxygen sensor heater, open/short circuit	Test LH-SFI, section 3.1.
13	Camshaft position sensor signal of ignition control module defective.	Test LH-SFI, section 3.1.
14	Intake manifold pressure at start (in ignition control module - N1/3) too low/high	Vacuum supply to N1/3, test distributor ignition system, section 5.2.

<sup>1)</sup> Observe Preparation for Test, see 22.

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Diagnostic Trouble Code (DTC)	Possible Cause	Remedy/Test Step <sup>1)</sup>
15	Wide open throttle information defective	Test electronic accelerator, section 6.2.
16	Closed throttle position information defective	Test electronic accelerator, section 6.2.
17	Data exchange malfunction between individual control modules	23 ⇒ 7.0.
18	Adjustable camshaft timing solenoid, open/short circuit	Test LH-SFI, section 3.1.
19	Fuel injectors open/short circuit or emission control system adaptation in LH-SFI control module (N3/1) at limit	Test LH-SFI and reset LH-SFI control module adaptation to mean value, section 3.1.
20	Speed signal not present	Test electronic accelerator, section 6.2.
21	Purge switchover valve, open/short circuit	Test LH-SFI, section 3.1.
22	Camshaft position sensor signal defective	Test distributor ignition system, section 5.2.
23	Intake manifold pressure (in ignition control module - N1/3) with engine running too low/high	Vacuum supply to N1/3, test distributor ignition system, section 5.2.
24	Starter ring gear segments and/or crankshaft position sensor defective	Test distributor ignition system, section 5.2.
25	Knock sensors or ignition control module defective	Test distributor ignition system, section 5.2.
26	Upshift delay switchover valve, open/short circuit	Test LH-SFI, section 3.1.
27	Engine coolant temperature sensor deviation between sensor circuit 1 and sensor circuit 2	Test LH-SFI, section 3.1.
28	Engine coolant temperature sensor (engine coolant temperature change monitor)	Test LH-SFI, section 3.1.

<sup>1)</sup> Observe Preparation for Test, see 22.