

0 Connection and Use of Test Equipment

Connecting Hand-Held Tester or Impulse Counter Scan Tool, Reading and Erasing Diagnostic Trouble Code Memory



Observe all system specific instructions listed in the "Preparation for Test" section of each Test Program.

Diagnostic trouble codes (DTC's) which have been stored due to testing or the disconnection of lines must be erased from the diagnostic trouble code memory at the end of testing.

- **Connect Hand-Held Tester (HHT) according to connection diagram:**

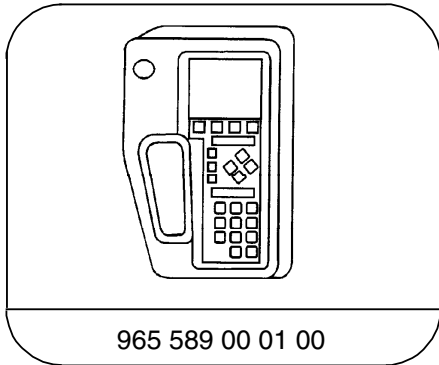
See 3/5, 6

The following functions can be performed according to the instructions on the display:

- a) Reading/erasing DTC memory
- b) Reading actual values

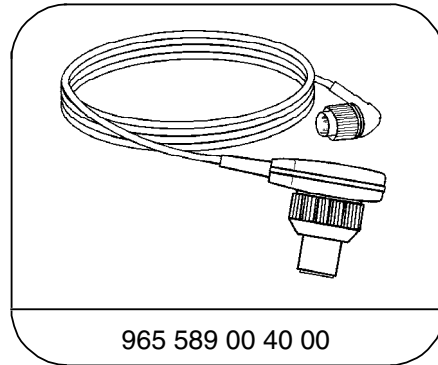
- c) Performing activations
- d) Programming control modules

Special Tools



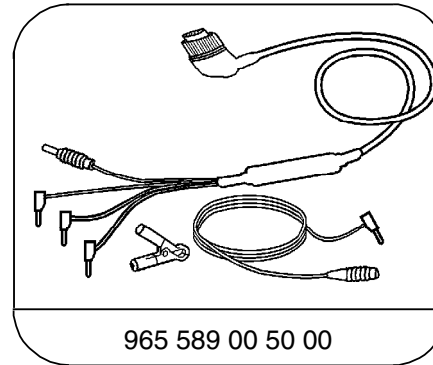
965 589 00 01 00

Hand-held tester



965 589 00 40 00

Test cable



965 589 00 50 00

Adapter cable

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- **Connect Impulse Counter Scan Tool (according to connection diagram).**

LED "U-Batt" must light up in the display.

If LED does not light up, check:

- a) Voltage supply.
- b) Impulse counter scan tool fuse.

1. Read Diagnostic Trouble Code Memory

- a) Ignition: **ON**
- b) Press start button for 2 to 4 seconds.
- c) Read and record diagnostic trouble code (DTC).
- d) Press start button again for 2 to 4 seconds.
- e) Read and record DTC.

Repeat steps d) and e) until the first DTC reappears.

- 1) Erasing of stored diagnostic trouble codes must begin within 20 seconds of reading the DTC. After 20 seconds, the DTC can no longer be erased. Erasing procedure can be restarted by performing DTC memory readout after the fault is again displayed.

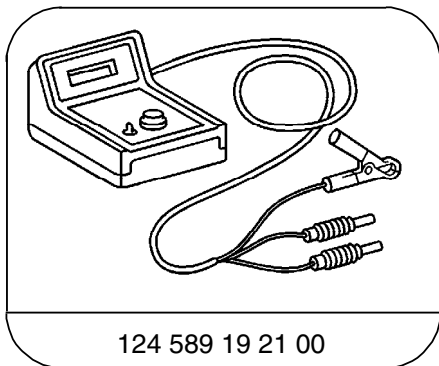


DTC readout is no longer possible using the impulse counter scan tool, with some systems, please review 12 in each system section prior to starting the DTC readout for the system being checked.

2. Clear Diagnostic Trouble Code Memory ¹⁾

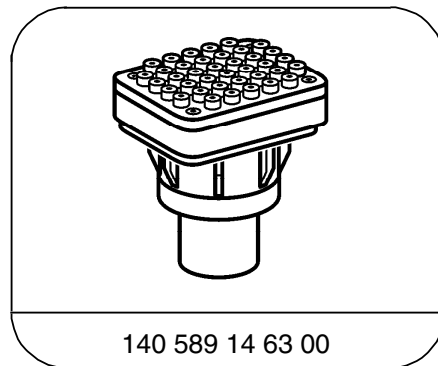
- a) Press start button for 2 to 4 seconds (DTC appears)
- b) Wait 3 seconds, then press start button for 6 to 8 seconds, thereby erasing the previously displayed DTC from memory.
- c) Each stored DTC must be erased individually.

Special Tools



124 589 19 21 00

Pulse counter



140 589 14 63 00

Adapter

0 Connection and Use of Test Equipment

Connecting Hand-Held Tester or Impulse Counter Scan Tool, Reading and Erasing Diagnostic Trouble Code Memory

38-pole Data Link Connector (X11/4)

Connect impulse counter scan tool as follows:

Red wire (circuit 30, voltage): socket 3

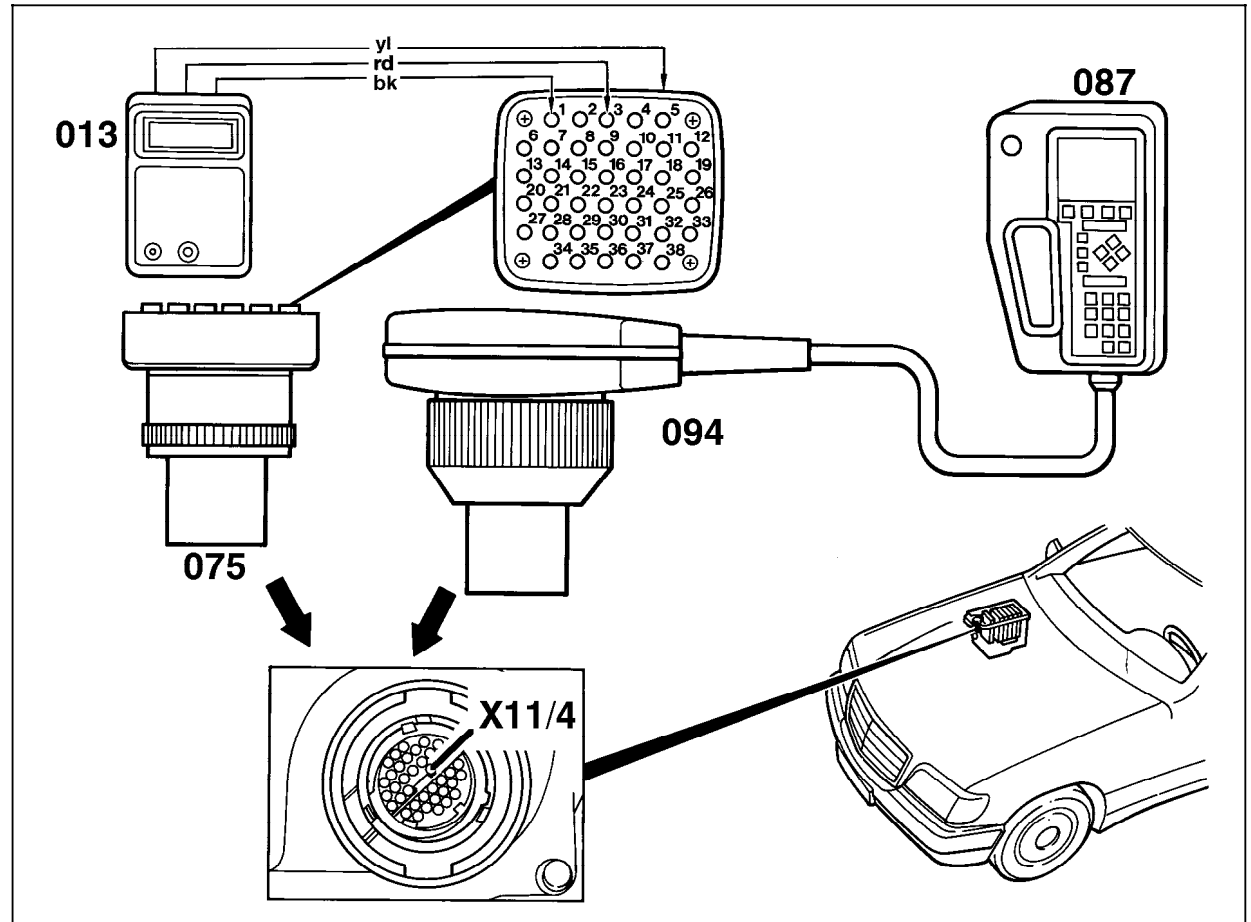
Black wire (circuit 31, ground): socket 1

Yellow wire to diagnostic output socket of the system being tested.



Please see 3/5-6 for connection and use of HHT.

- 013 Impulse counter scan tool
- 075 Adaptor for impulse counter scan tool
- 087 Hand-Held Tester (HHT)
- 094 Multiplexer, 965 589 00 40
- X11/4 Data link connector



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0 Connection and Use of Test Equipment

Connecting Hand-Held Tester or Impulse Counter Scan Tool, Reading and Erasing Diagnostic Trouble Code Memory

16-pole Data Link Connector (X11/4)

Connect HHT as follows:

Black wire (circuit 31, ground): socket 1
White wire (circuit 15, voltage): socket 16
Red wire (circuit 30): Battery +
or X4/10

Yellow wire to diagnostic output socket of the system being tested.

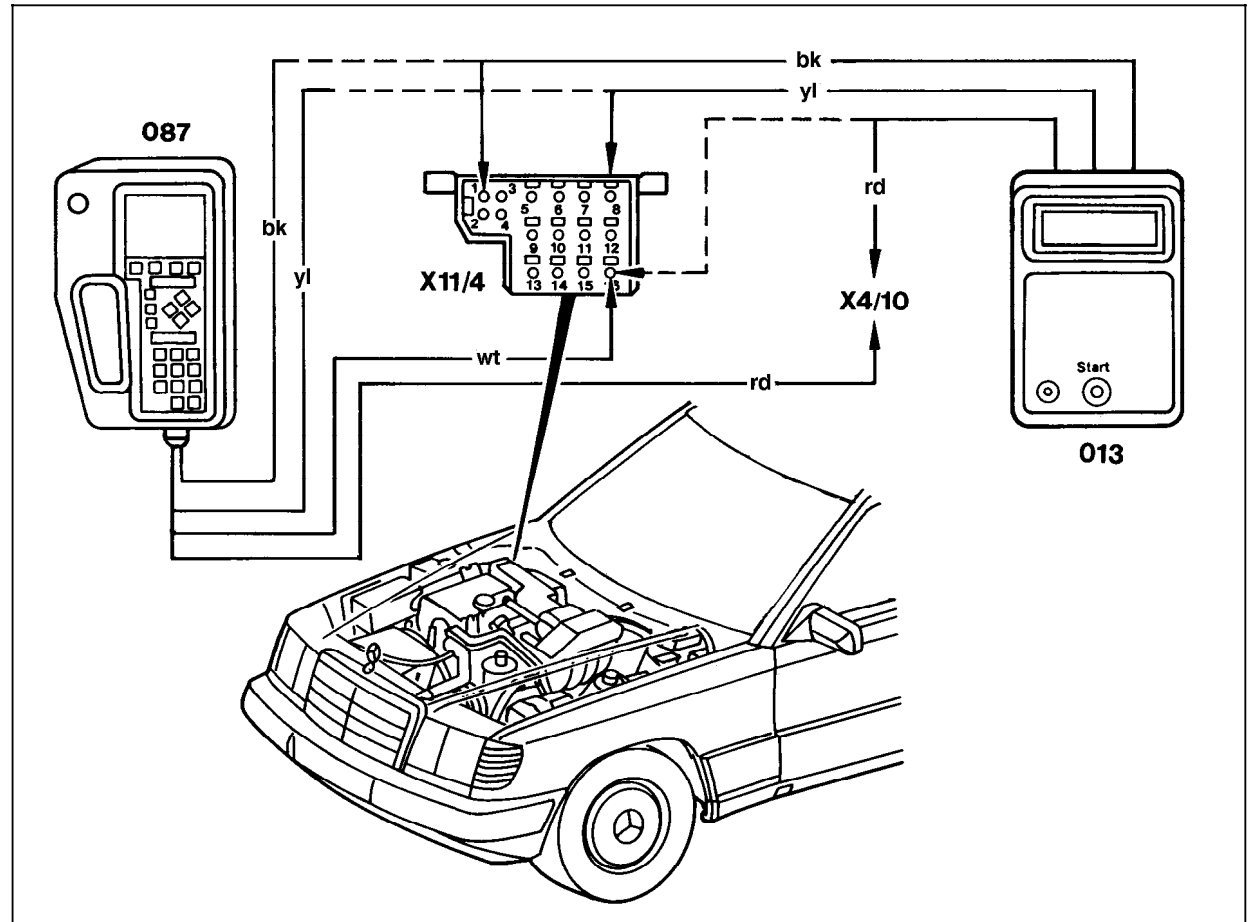
Connect impulse counter scan tool as follows:

Black wire (circuit 31, ground): socket 1
Red wire (circuit 15, ignition): socket 16

Yellow wire to diagnostic output socket of the system being tested.

- 013 Impulse counter scan tool (alternatively: Hand-Held Tester 087)
087 Hand-Held Tester (HHT) (alternatively: Impulse Counter Scan Tool)
X4/10 Terminal block, circuit 30
X11/4 Data link connector

Adapter cable, 965 589 00 50 00 (not shown)



U07-5730-57A

0 Connection and Use of Test Equipment

Connecting Hand-Held Tester, Reading and Erasing Diagnostic Trouble Code Memory

38-pole Data Link Connector (X11/4)

1. Connect HHT with Multiplexer (094) attached to Data link connector X11/4
2. Turn Ignition: **ON**
3. According to instructions in HHT display:
 - a) Readout DTC memory/erase
 - b) Readout Actual values
 - c) Perform Activations
 - d) Program control modules
4. Disconnect HHT.

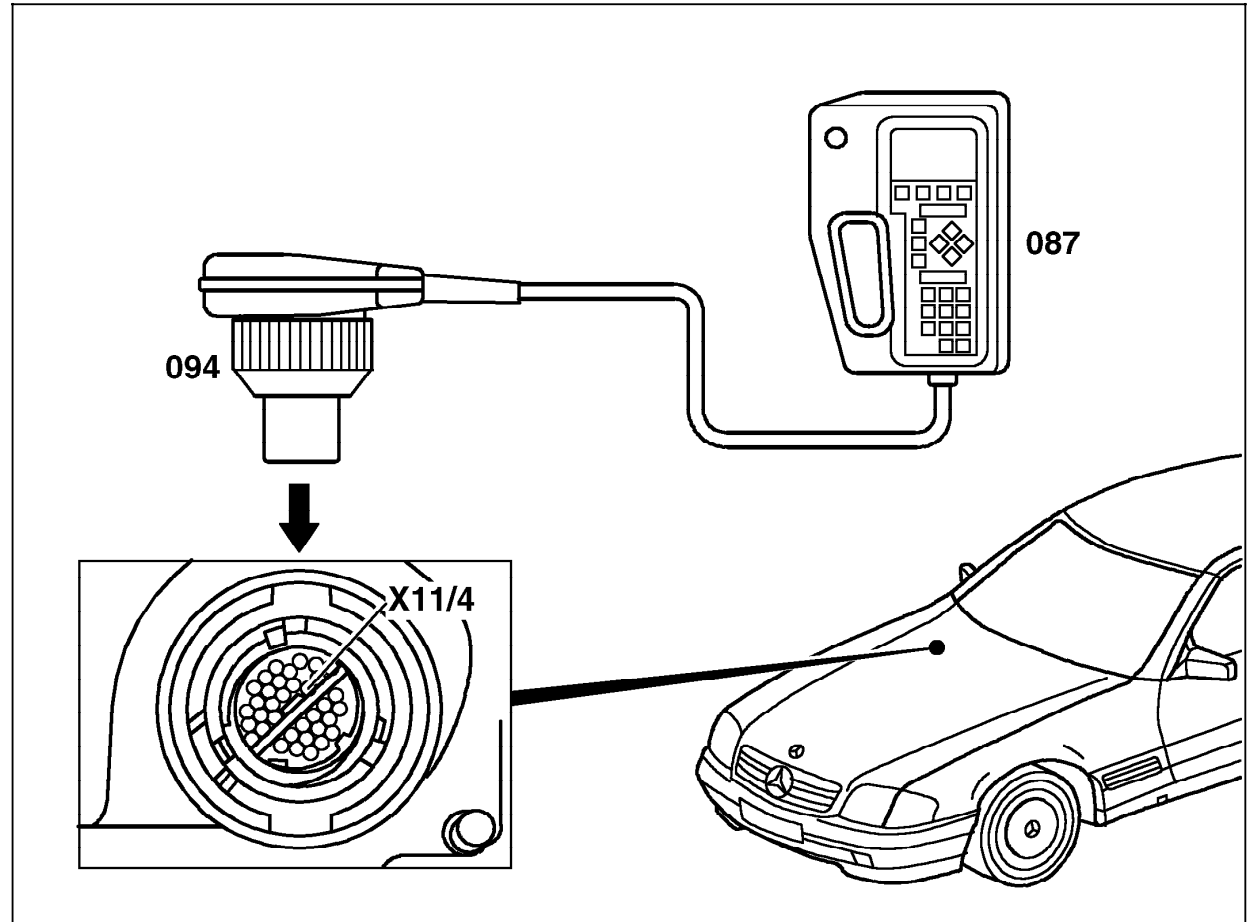


Observe all system specific instructions listed in the "Preparation for Test" section of each Test Program.

Diagnostic trouble codes (DTC's) which have been stored due to testing or the disconnection of lines must be erased from the diagnostic trouble code memory at the end of testing.

087 Hand-Held Tester (HHT)
094 Multiplexer, 965 589 00 40
X11/4 Data link connector

Adapter cable, 965 589 00 50 00 (not shown)



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Connecting Hand-Held Tester, Reading and Erasing Diagnostic Trouble Code Memory

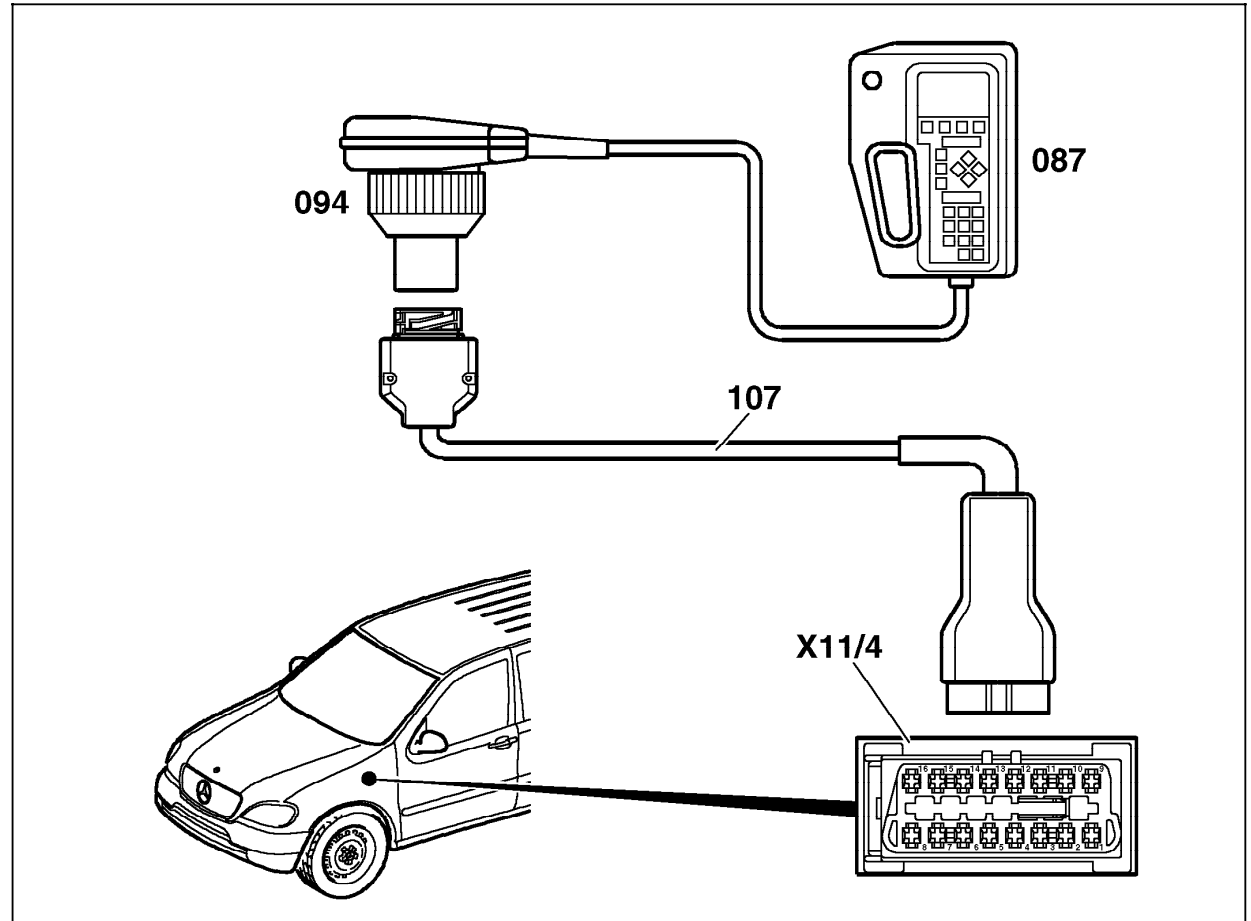
16-pole Data Link Connector (X11/4) Model 163

1. Connect HHT with Multiplexer (094) and Adapter cable (107) attached, to Data link connector X11/4 (located in passenger compartment).
2. Turn Ignition: **ON**
3. According to instructions in HHT display:
 - a) Readout DTC memory/erase
 - b) Readout Actual values
 - c) Perform Activations
 - d) Program control modules
4. Disconnect HHT.



Observe all system specific instructions listed in the "Preparation for Test" section of each Test Program.

Diagnostic trouble codes (DTC's) which have been stored due to testing or the disconnection of lines must be erased from the diagnostic trouble code memory at the end of testing.



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- 087 Hand-Held Tester (HHT)
094 Multiplexer, 965 589 00 40
107 Adapter cable (HHT) for X11/4, 16-pole connector
X11/4 Data link connector