

Electrical Test Program - Preparation for Test

Preliminary work: Diagnosis – Diagnostic Trouble Code Memory 11

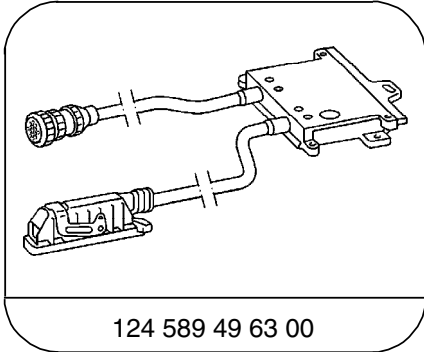
1. Ignition: **OFF**.
2. Connect socket box according to connection diagram (Figure 1 to 3).

Electrical wiring diagrams:

Electrical Troubleshooting Manual, Model 124
Electrical Troubleshooting Manual, Model 129
Electrical Troubleshooting Manual, Model 140
Electrical Troubleshooting Manual, Model 202
Electrical Troubleshooting Manual, Model 210

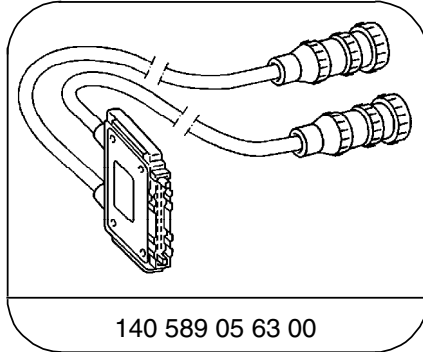
Electrical Test Program - Preparation for Test

Special Tools



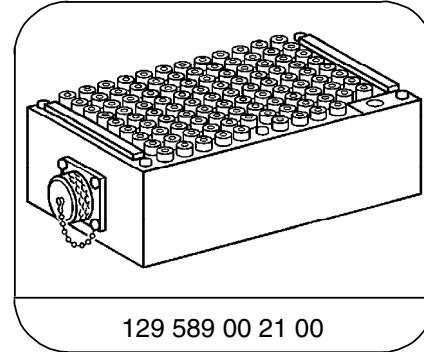
124 589 49 63 00

38-pin test cable



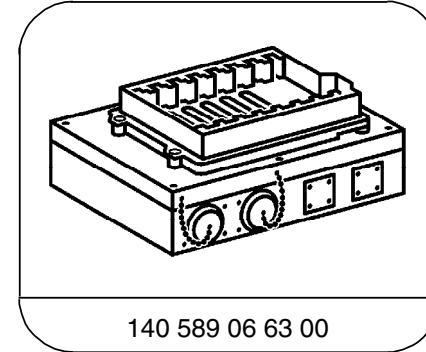
140 589 05 63 00

Contacting module 5



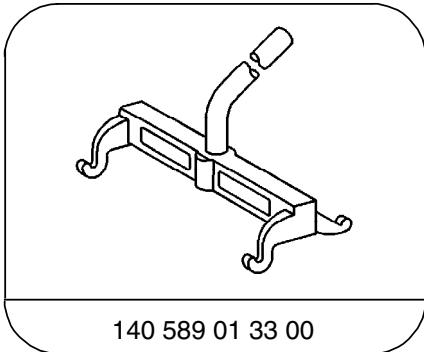
129 589 00 21 00

126-pin socket box



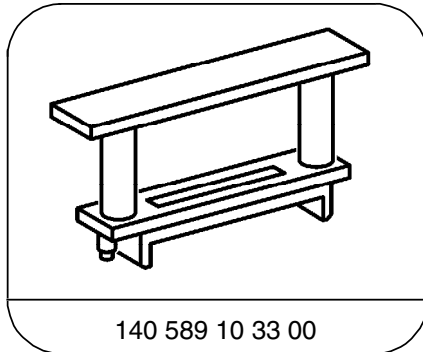
140 589 06 63 00

Contacting box



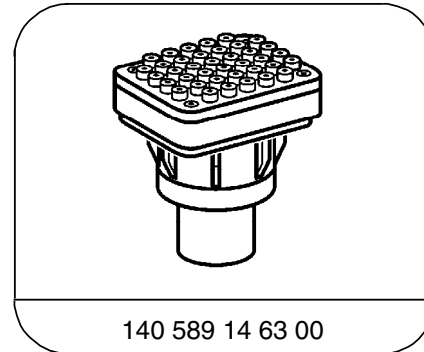
140 589 01 33 00

Mounting lever



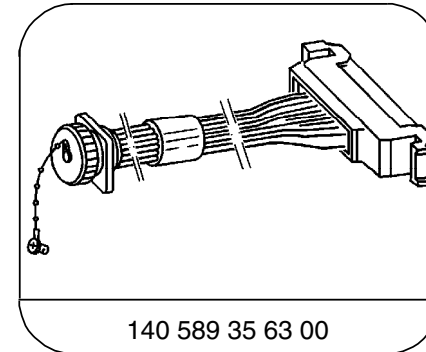
140 589 10 33 00

Spacer



140 589 14 63 00

Adapter



140 589 35 63 00

Retrofitting kit for contacting box

Conventional tools, test equipment

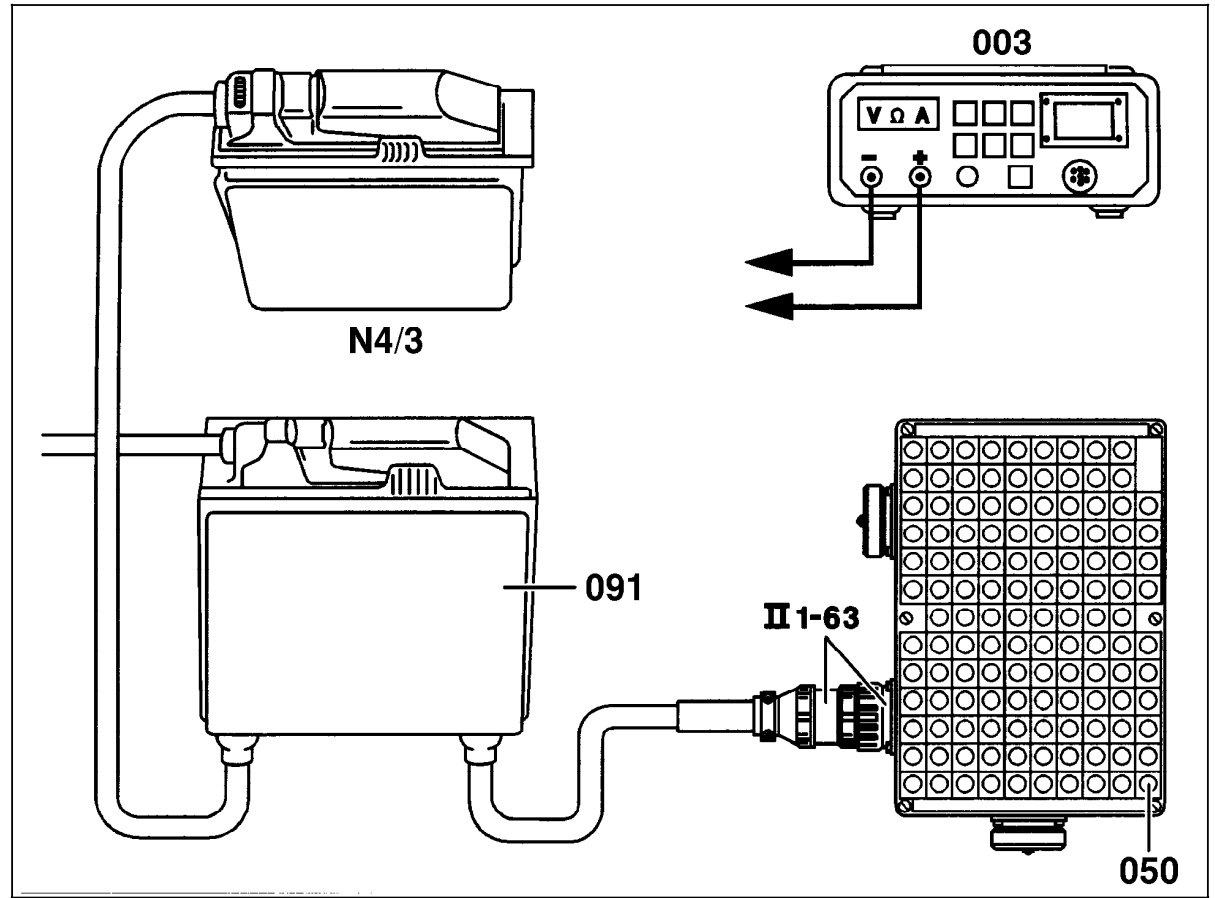
Description	Brand, model, etc.
Multimeter ¹⁾	Fluke models 23, 83, 85, 87
Signal generator ^{1) 2)}	Sun DTR 8416

¹⁾ Available through the MBUSA Standard Equipment Program.

²⁾ Two signal generators are required for testing the potentiometer and cruise control.

Electrical Test Program – Component Locations

Connection Diagram – Socket Box
Models 124, 202, 210



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Figure 1

- 003 Digital multimeter
- 050 Socket box, 126-pole
- 091 Diagnostic test cable
- N4/3 CC/ISC control module

Electrical Test Program – Component Locations

Connection Diagram – Socket Box
Model 129

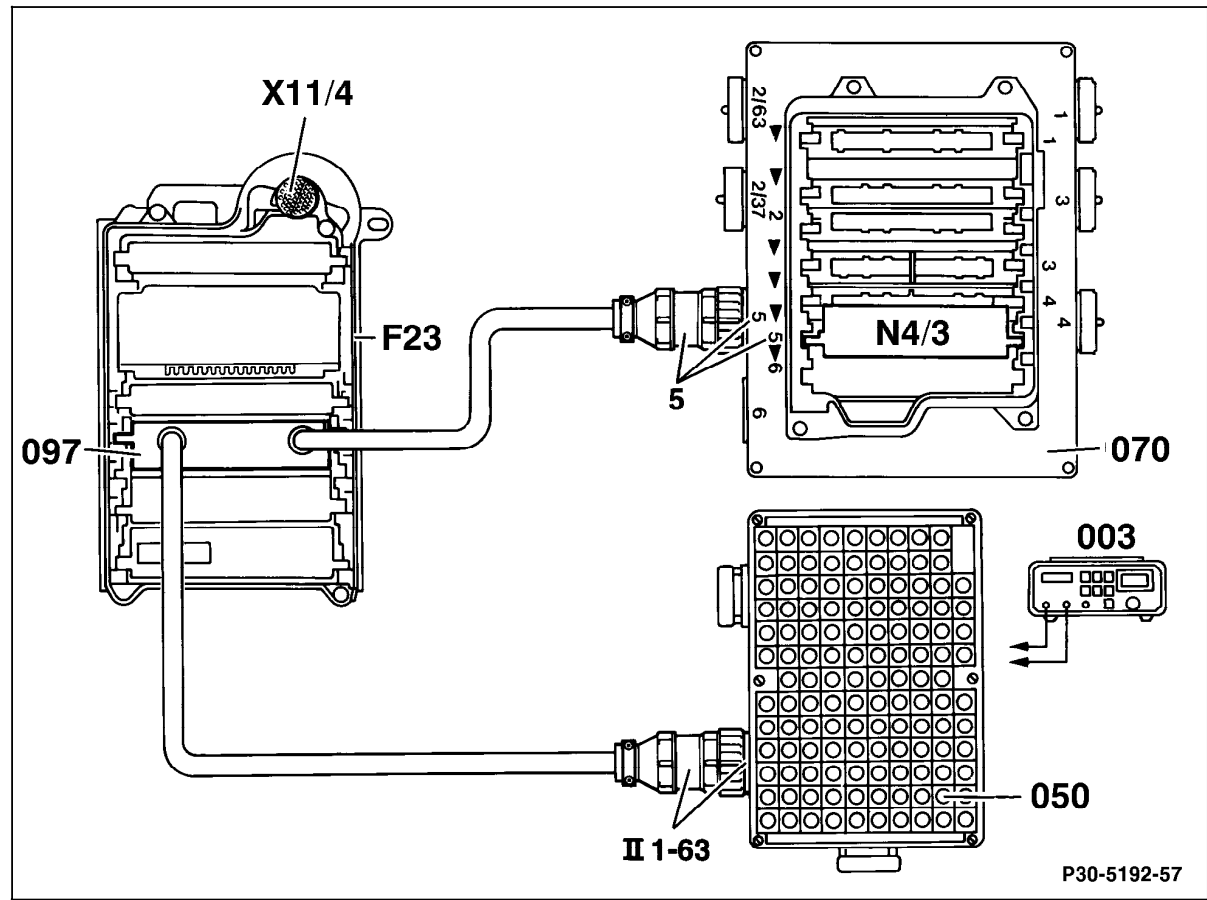


Figure 2

- 003 Digital multimeter
- 050 Socket box, 126-pole
- 070 Contact box
- 097 Contact module 5
- F23 Module box
- N4/3 CC/ISC control module
- X11/4 Data link connector (DTC readout)

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Electrical Test Program – Component Locations

Connection Diagram – Socket Box
Model 140

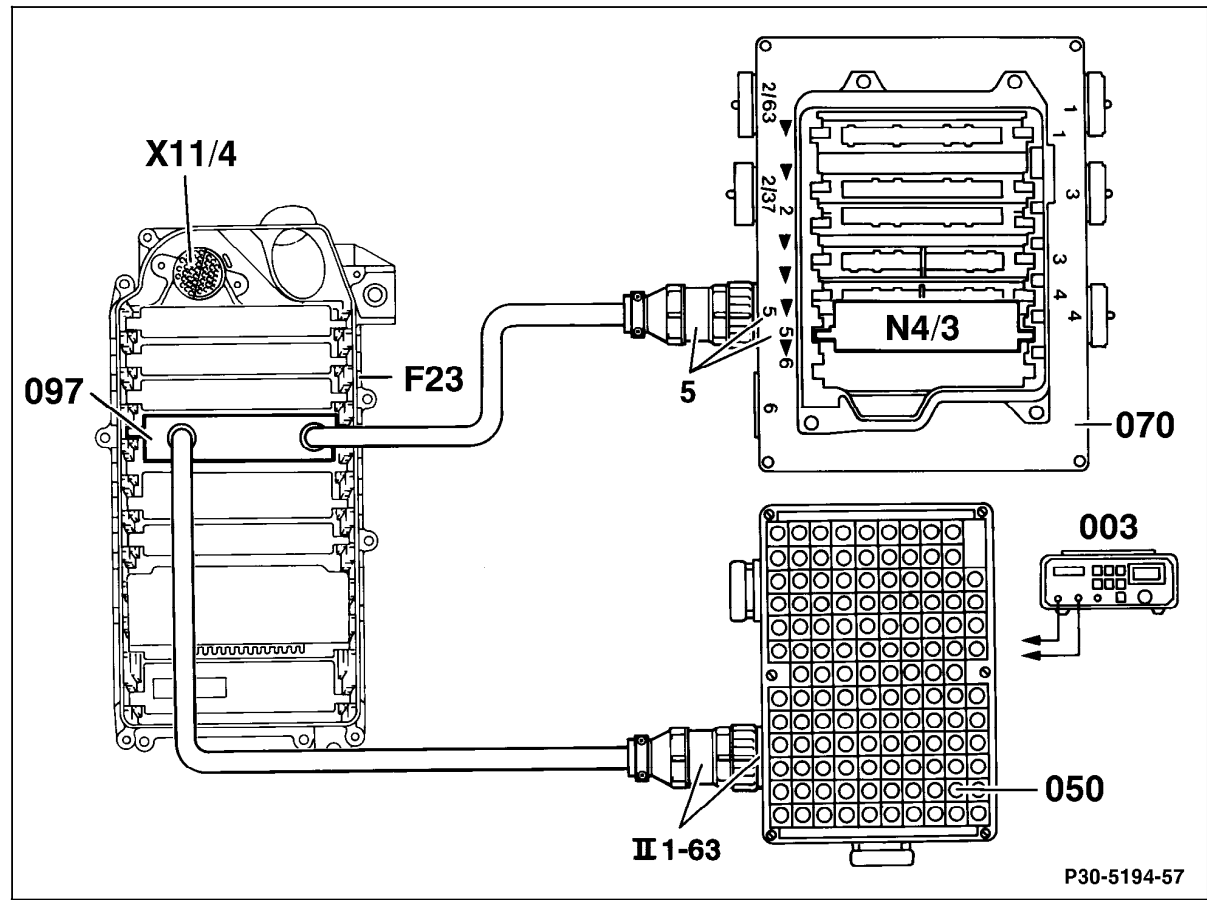


Figure 3

- 003 Digital multimeter
- 050 Socket box, 126-pole
- 070 Contact box
- 097 Contact module 5
- F23 Module box
- N4/3 CC/ISC control module
- X11/4 Data link connector (DTC readout)

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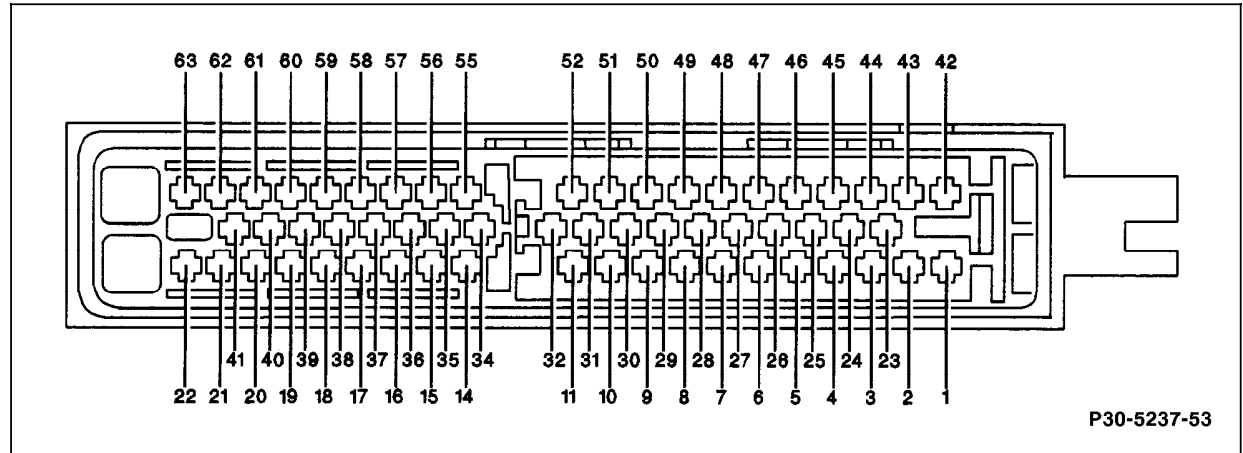
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Layout of CC/ISC Control Module Connector

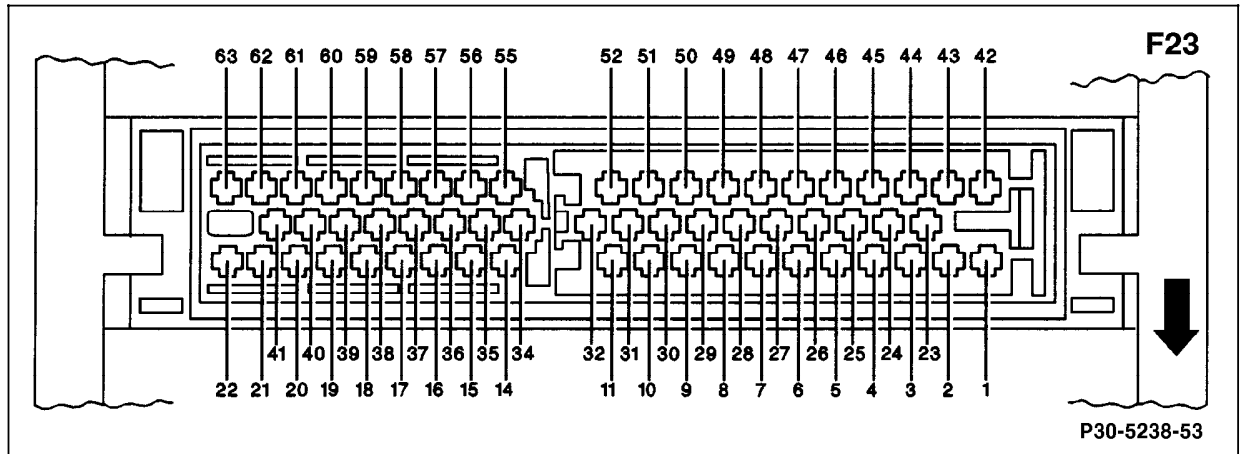
Figures 4 and 5

- 1 Data link connector
Model 124: socket 14
All other models: socket 7
- 2 -
- 3-4 Ground
Model 124: W1
Models 129, 140: W15
Model 202: W16/4
Model 210: W15/1
- 5 Left front axle VSS (from ABS control module)
- 6 ETS signal (from ETS/SPS control module)
- 7 TN signal
Models 124, 202, 210: Engine control module
Models 129, 140: Base module
- 8 -
- 9 Rear axle VSS (from ABS control module)
- 10 -
- 11 CC switch, safety switch
- 12-14 -
- 15-16 CC/ISC actuator, motor (-)
- 17-18 CC/ISC actuator, motor (+)
- 19 -
- 20 CC/ISC actuator, safety and CTP switch (+)
- 21-22 -
- 23 Stop lamp switch
- 24 Stop lamp switch
- 25 CTP recognition (for Engine control module)
- 26 Ground via circuit 50 (selector lever position recognition P/N)
- 27 A/C compressor ON/OFF signal
- 28-32 -



Models 124, 202, 210

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Models 129, 140

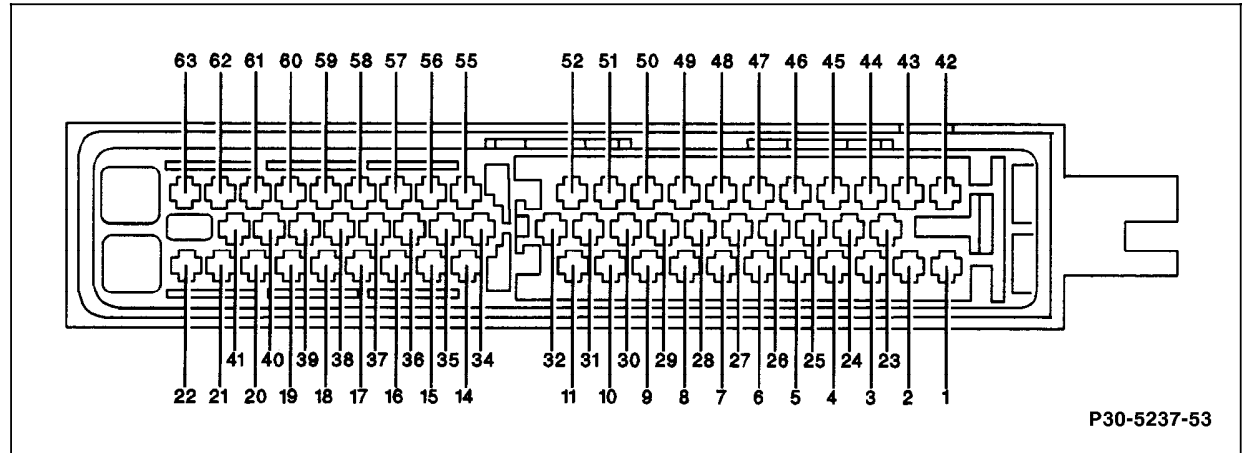
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Electrical Test Program - Preparation for Test

Layout of CC/ISC Control Module Connector

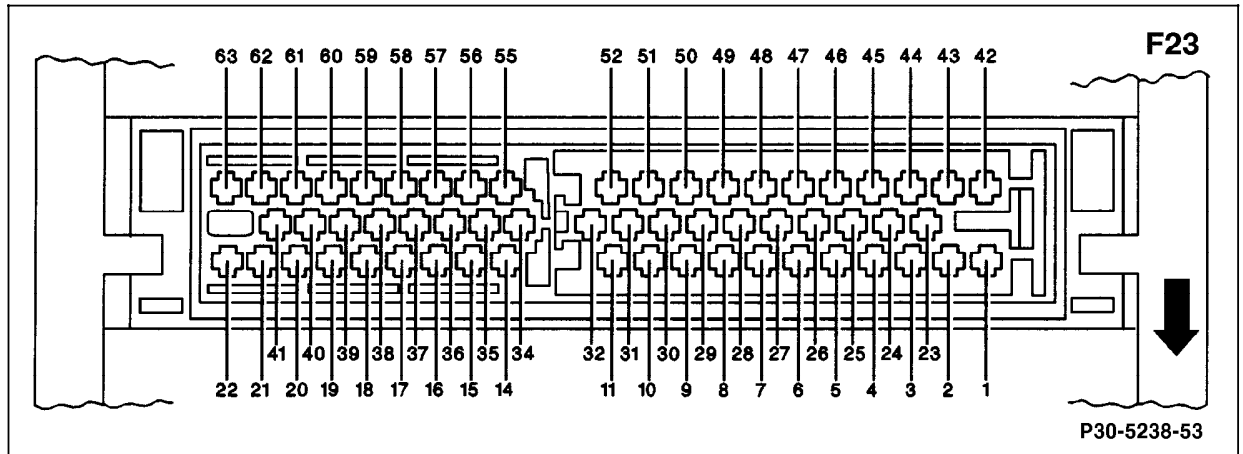
Figures 6 and 7

- 34 CC/ISC actuator, magnetic clutch (+)
- 35-36 -
- 37 CC/ISC actuator, CTP recognition switch (-)
- 38-39 -
- 40 CC/ISC, throttle valve and drive actual value potentiometer (+)
- 41 CC/ISC, throttle valve and drive actual value potentiometer (-)
- 42-43 -
- 44 H data line (CAN)
- 45 L data line (CAN)
- 46 -
- 47 CC switch, resume
- 48 CC switch, off
- 49 CC switch, accelerate/set
- 50 CC switch, decelerate/set
- 51-52 CC/ISC control module voltage supply, unfused
- Models 124, 202:** Overvoltage protection relay module (K1/2)
- Models 129, 140:** Base module (N16/1)
- Model 210:** Relay module (K40)
- 53-55 -
- 56 CC/ISC actuator, magnetic clutch (-)
- 57-58 -
- 59 CC/ISC actuator, safety contact switch (-)
- 60 -
- 61 CC/ISC actuator, drive value potentiometer (actual value)
- 62 -
- 63 CC/ISC actuator, throttle valve actual value potentiometer



Models 124, 202, 210

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Models 129, 140

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