

Electrical Test Program - Preparation for Test

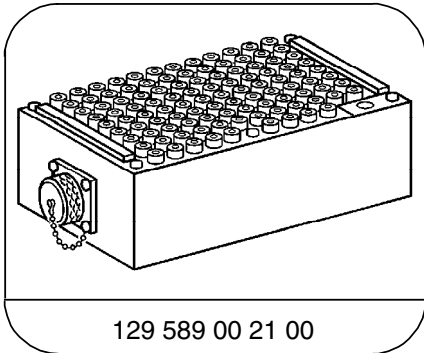
Preliminary work: Diagnosis – Diagnostic Trouble Code Memory 11

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

Electrical wiring diagrams :

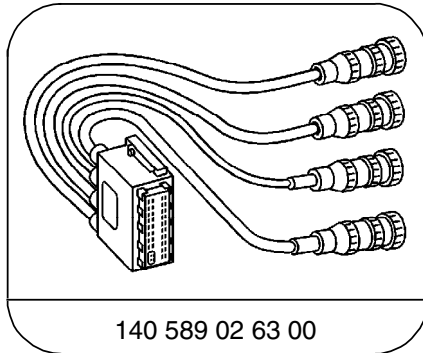
- Electrical Troubleshooting Manual, Model 124
- Electrical Troubleshooting Manual, Model 129
- Electrical Troubleshooting Manual, Model 140
- Electrical Troubleshooting Manual, Model 202
- Electrical Troubleshooting Manual, Model 210.

Special Tools



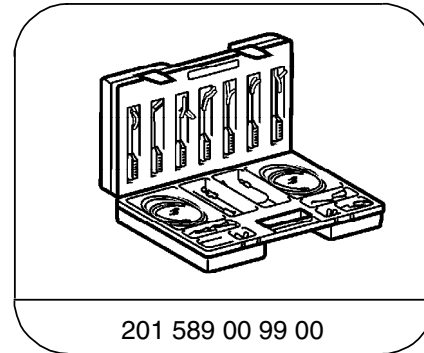
129 589 00 21 00

126-pin socket box



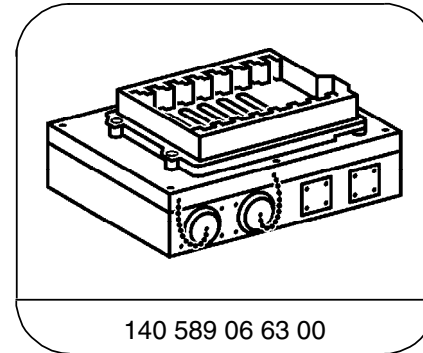
140 589 02 63 00

Contacting module 2



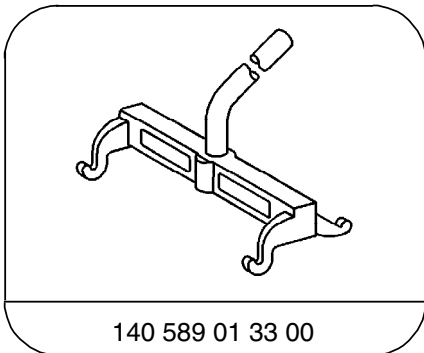
201 589 00 99 00

Electrical connecting set



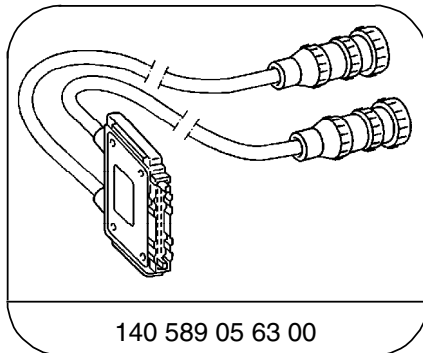
140 589 06 63 00

Contacting box



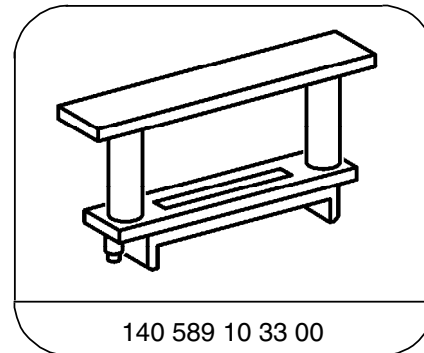
140 589 01 33 00

Mounting lever



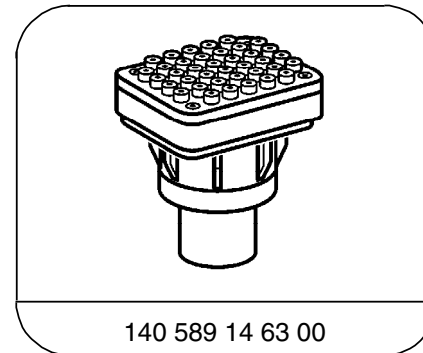
140 589 05 63 00

Contacting module 5



140 589 10 33 00

Spacer



140 589 14 63 00

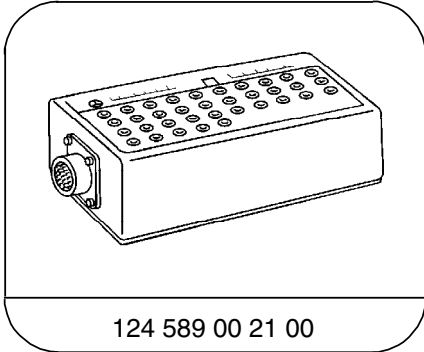
Adapter

6.4 Electronic Accelerator (EA)

Engine 104 HFM-SFI

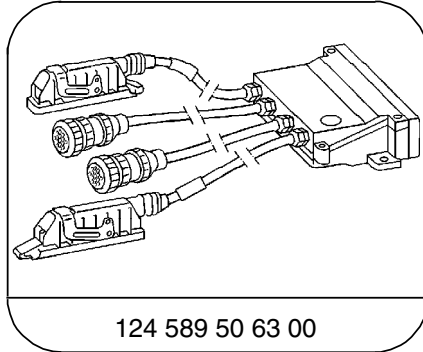
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Special Tools



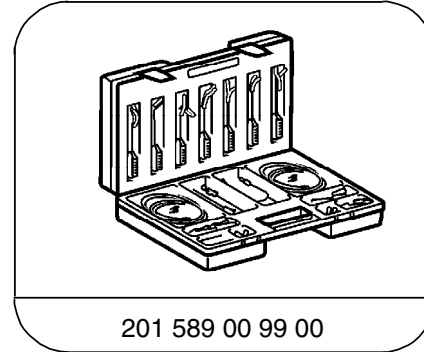
124 589 00 21 00

35-pin socket box



124 589 50 63 00

43-pin test cable



201 589 00 99 00

Electrical connecting set

Conventional tools, test equipment

Description	Brand, model, etc.
Multimeter ¹⁾	Fluke models 23, 83, 85, 87

¹⁾ Available through the MBUSA Standard Equipment Program.

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Connection Diagram – Socket Box
Models 124, 202, 210

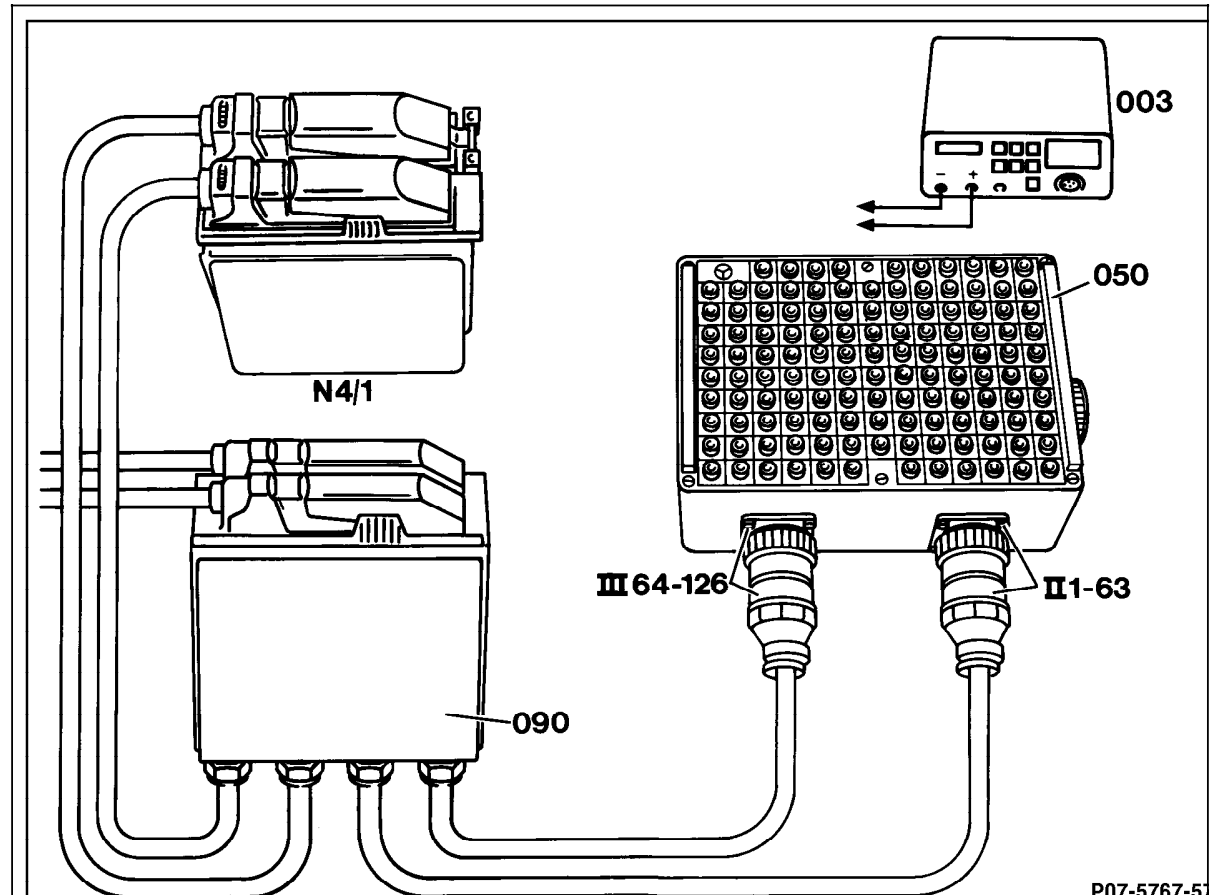


Figure 1

- N4/1 EA/CC/ISC control module
- 003 Digital multimeter
- 050 Socket box, 126-pole
- 090 Diagnostic test cable

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P07-5767-57

6.4 Electronic Accelerator (EA)

Engine 104 HFM-SFI

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Connection Diagram – Socket Box
Model 129

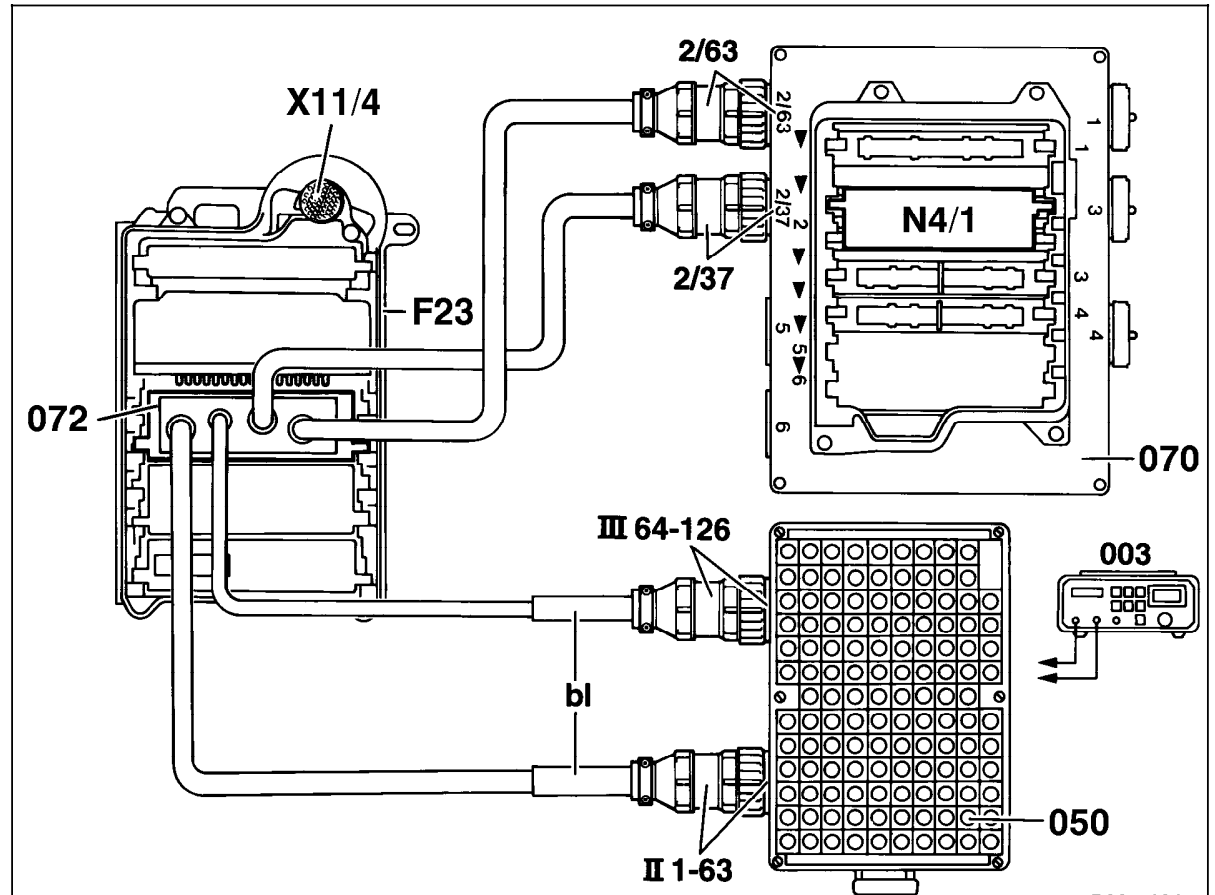


Figure 2

- F23 Module box
- N4/1 EA/CC/ISC control module
- X11/4 Data link connector (DTC readout)
- 003 Digital multimeter
- 050 Socket box, 126-pole
- 070 Contact box
- 072 Contact module 2
- bl blue

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Connection Diagram – Socket Box
Model 140

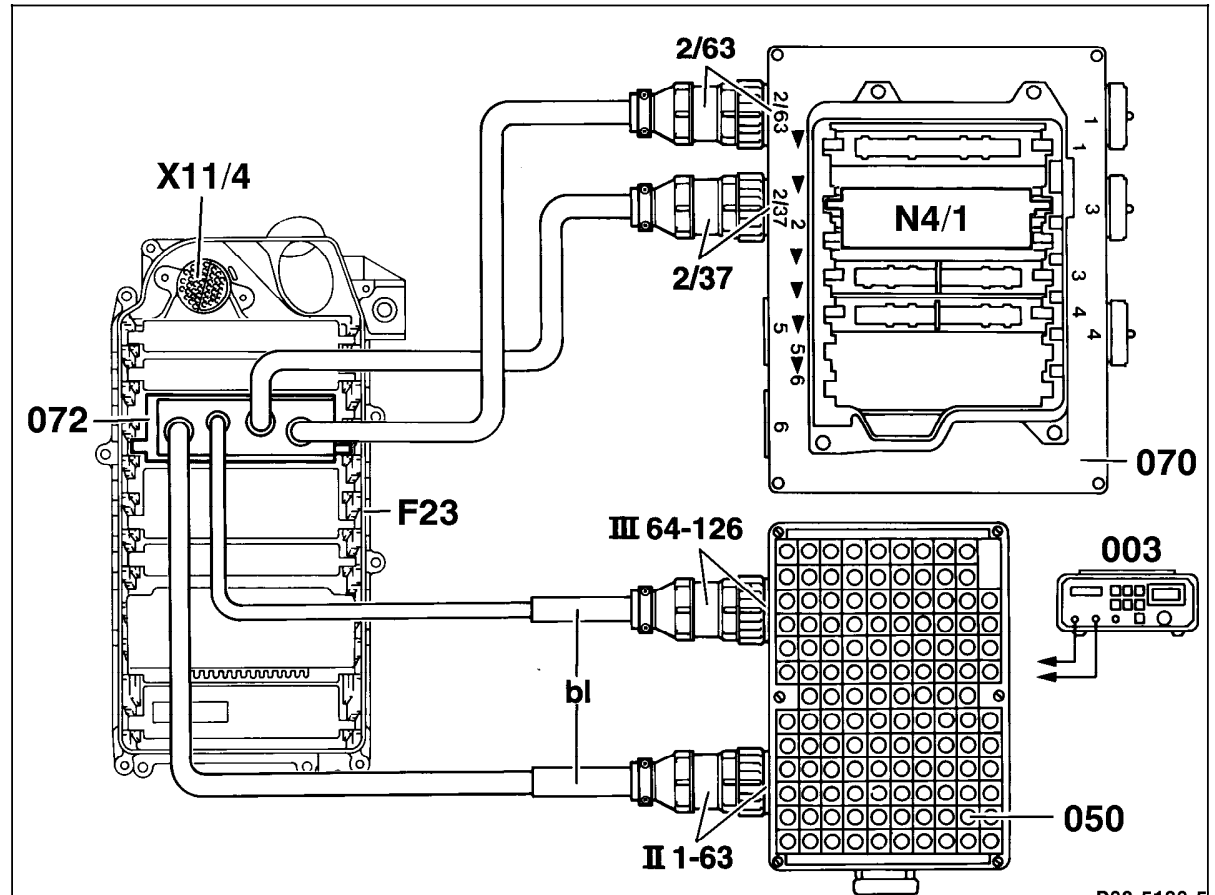
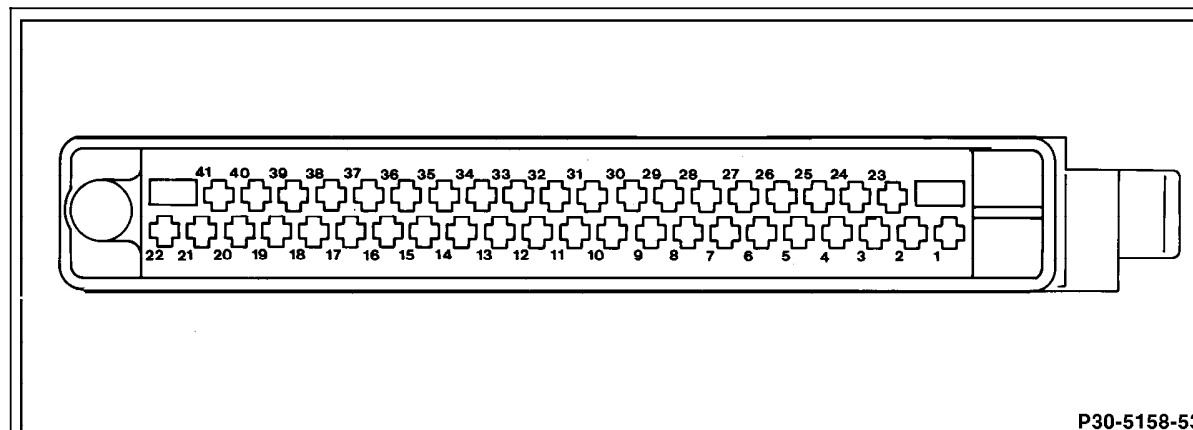


Figure 3

- F23 Module box
- N4/1 EA/CC/ISC control module
- X11/4 Data link connector (DTC readout)
- 003 Digital multimeter
- 050 Socket box, 126-pole
- 070 Contact box
- 072 Contact module 2
- bl blue

Electrical Test Program - Preparation for Test

Layout of EA/CC/ISC Control Module Connector "1" Models 124, 202, 210



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P30-5158-53

Figure 4

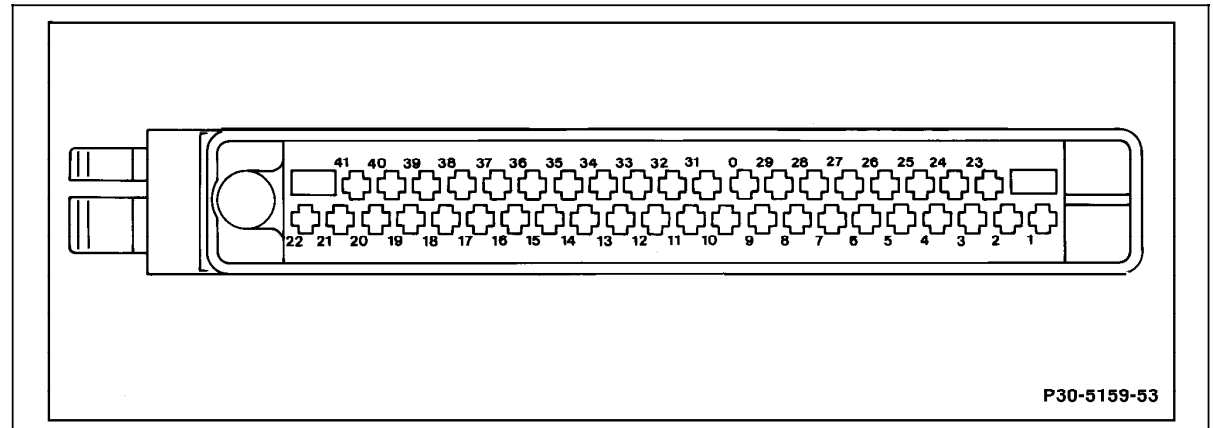
1	–	13	Stop lamp switch (brake application)	27–28	–
2	Control contact (CC switch)	14	Model 124 only: ASR control module (throttle position reference value, without CAN)	29	Starter lock-out/backup lamp switch (transmission range "R")
3	–	15	Left front axle VSS (via ASR control module)	30	Stop lamp switch (brake application)
4	Ignition/starter switch (circuit 50) ground (selector lever position P/N recognition)	16	Model 124: A/C compressor control module (compressor ON/OFF)	31	CC switch (resumption of set speed)
5	Data link connector signal Model 124: socket 14 Model 202, 210: socket 7		Model 202, 210: A/C pushbutton control module (ON/OFF)	32	–
6	–	17–19	–	33	CC switch (Off)
7	Fuel safety shut-off (to engine control module)	20	L data line (CAN)	34	Engine control module (engine speed)
8	–	21	H data line (CAN)	35/36	Voltage supply for EA/CC/ISC control module, unfused (from K1/2)
9	CTP switch (ground)	22–23	–	37/38	Ground:
10	CC switch (decelerate/set)	24	Closed throttle recognition (to engine control module)		Model 124: W1
11	CC switch (accelerate/set)				Model 202: W16/4
12	Model 124: VSS, rear axle (from electronic speedometer) Model 202, 210: VSS via ASR control module	25	CTP switch (positive)	39–41	Model 210: W16/4
		26	Model 124: Throttle valve nominal value (to ASR control module) Model 202, 210: –		–

6.4 Electronic Accelerator (EA)

Engine 104 HFM-SFI

Electrical Test Program - Preparation for Test

Layout of EA/CC/ISC Control Module
 Connector "2"
 Models 124, 202, 210



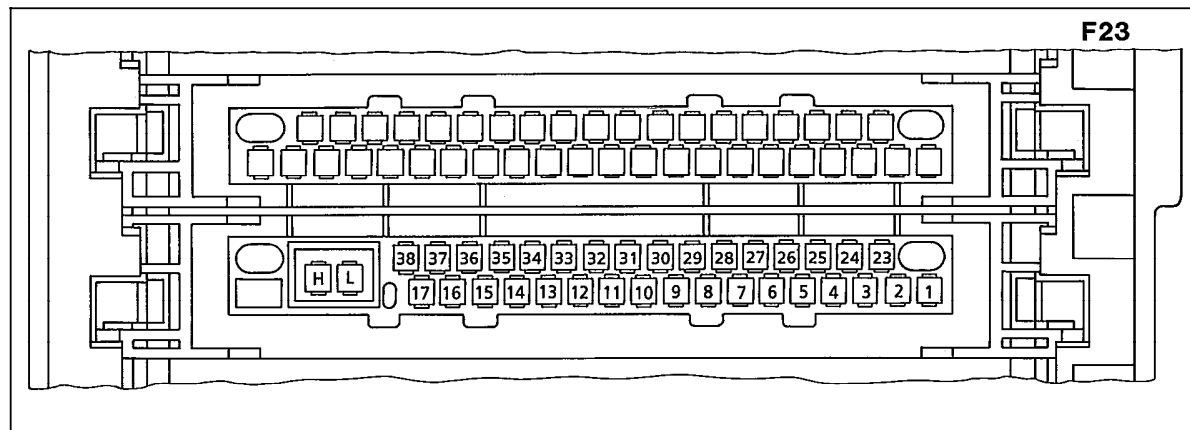
P30-5159-53

Figure 6

1-7	-	20	EA/CC/ISC actuator (actuator motor positive)
8	EA/CC/ISC actuator (reference potentiometer)	21/22	EA/CC/ISC actuator (actuator motor ground)
9	EA/CC/ISC actuator (actual value potentiometer)	23-34	-
10	EA/CC/ISC actuator (ground)	35	EA/CC/ISC actuator (safety contact switch ground)
11	-	36-37	-
12	EA/CC/ISC actuator (positive)	38	EA/CC/ISC actuator (CTP switch ground)
13-15	-	39	-
16	EA/CC/ISC actuator (CTP switch)	40	EA/CC/ISC actuator (magnetic clutch positive)
17-18	-	41	EA/CC/ISC actuator (actuator motor positive)
19	EA/CC/ISC actuator (magnetic clutch ground)		

Electrical Test Program - Preparation for Test

Layout of EA/CC/ISC Control Module
Connector "1"
Models 129, 140



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Figure 7

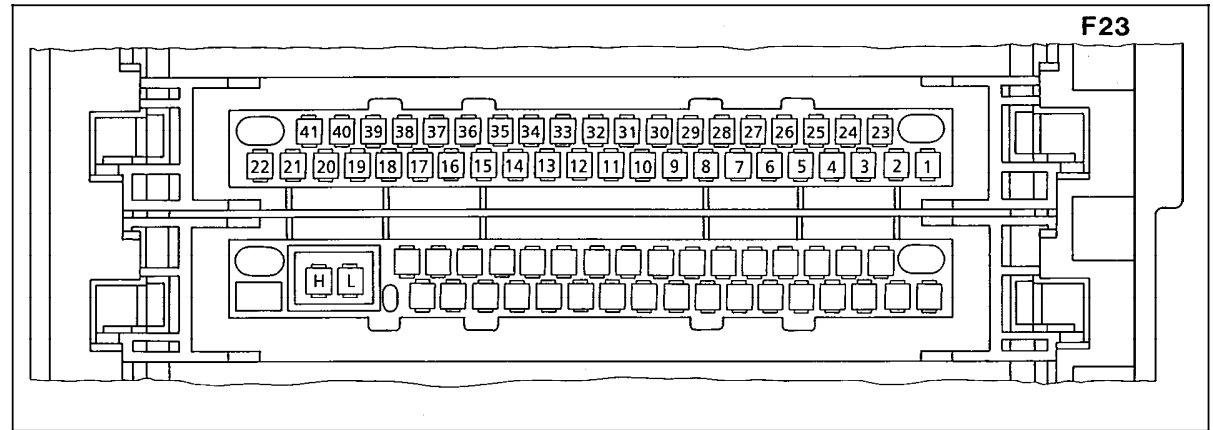
1	–	13	Stop lamp switch (brake application)	33	CC switch (Off)
2	CC switch	14	–	34	Engine rpm (from engine control module)
3	–	15	Left front axle VSS signal from ASR control module	35/36	EA control module voltage supply, unfused (from base module)
4	Ignition/starter switch (circuit 50) ground (selector lever position P/N recognition)	16	Base module (compressor ON/OFF)		
5	Data link connector (socket 7)	17–23	–	37/38	Ground:
6	–	24	Engine control module (closed throttle recognition)		Model 129: W27
7	Engine control module, fuel safety shut-off	25	CTP switch (positive)		Model 140: W15
8	–	26–28	–	L	Data line (CAN)
9	CTP switch (ground)	29	Starter lock-out/backup lamp switch (transmission range "R")	H	Data line (CAN)
10	CC switch (decelerate/set)	30	Brake application (from stop lamp switch)	F23	Modulbox
11	CC switch (accelerate/set)	31	Resumption of stored speed (from CC switch)		
12	Left rear axle VSS signal from ASR control module	32	–		

6.4 Electronic Accelerator (EA)

Engine 104 HFM-SFI

Electrical Test Program - Preparation for Test

Layout of EA/CC/ISC Control Module
Connector "2"
Models 129, 140



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Figure 7

1-7	-	21/22	EA/CC/ISC actuator (actuator motor ground)
8	EA/CC/ISC actuator (reference potentiometer)	23-34	-
9	EA/CC/ISC actuator (actual value potentiometer)	35	EA/CC/ISC actuator (safety contact switch ground)
10	EA/CC/ISC actuator (ground)	36-37	-
11	-	38	EA/CC/ISC actuator (CTP switch ground)
12	EA/CC/ISC actuator (positive)	39	-
13-15	-	40	EA/CC/ISC actuator (magnetic clutch positive)
16	EA/CC/ISC actuator (CTP switch, positive)	41	EA/CC/ISC actuator (actuator motor positive)
17-18	-	L	Data line (CAN)
19	EA/CC/ISC actuator (magnetic clutch ground)	H	Data line (CAN)
20	EA/CC/ISC actuator (actuator motor positive)	F23	Modulbox