OBD1 Diagnostic Codes 1988-1995

Instructions For Online Use

1. Press Ctrl-F (PC) or Cmd-F (Mac) to open the search box.

2. In the search box enter ‘socket’ and your number, e.g “Socket 4”.

3. Keep pressing Enter until you find the relevant model and model year.

4. Match the fault codes on your scanner with the numbers in the DTC Readout column.

Mercedes System With Abbreviations

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Mercedes Acronyms

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ELECTRONIC IDLE SPEED CONTROL (ELR)

Model	Model Year
201.126	1989

Connect wires of Scanner as follows:

Scanner	Data Link Connector 8-pin
Yellow	Socket 4
Black	Socket 1
Red	Battery (+)

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Speed sensor signal
3	Coolant temperature sensor signal
4	ELR control unit or Idle speed control (ISC) system

ELECTRONIC DIESEL SYSTEM (EDS)

Model	Model Year
124.128	1990-91
126.134 126.135	1990-91

Connect wires of Scanner as follows:

Scanner	Data Link Connector 8-pin
Yellow	Socket 4
Black	Socket 1
Red	Battery (+)

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Fuel rack position sensor (L7)
3	Air flow sensor (B2/1)
4	EDS control unit (N39), atmospheric pressure sensor
5	EGR valve vacuum transducer (Y31/1) or malfunction in EGR control circuit
6	EDS control unit (N39), internal voltage supply
7	Starter ring gear speed sensor (L3)
8	Coolant temperature sensor (B11/4)
9	Intake air temperature sensor (B2/1a)
10	Voltage supply insufficient
11	Electronic idle speed control actuator or exhaust gas recirculation (EGR) valve vacuum transducer
12	Not used
13	Electronic diesel system control unit (n39), faulty (internal fault memory)
14	Electronic diesel system pressure sensor (B5/1), defective
15	Intake manifold air pressure control valve vacuum transducer (Y31/2), wastage vacuum transducer (Y31/3), or malfunction Intake manifold air pressure circuit

ELECTRONIC DIESEL SYSTEM (EDS)

Model	Model Year
124.128	1992-93
140.134	1992-93

Connect wires of Scanner as follows (124)

Scanner	Data Link Connector 8-pin
Yellow	Socket 4
Black	Socket 1
Red	Battery (+)

Connect wires of Scanner as follows (140)

Scanner	Data Link Connector 38-pin
Yellow	Socket 4
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Fuel rack position sensor (L7)
3	Air flow sensor signal (B2/1)
4	Electronic diesel system (EDS) control unit (N39) or atmospheric pressure sensor
5	Exhaust gas recirculation valve vacuum transducer (Y31/1) or fault in exhaust gas recirculation (EGR) control circuit
6	Electronic diesel system (EDS) control unit (N39), internal voltage supply
7	Starter ring gear speed sensor (L3)
8	Engine coolant temperature sensor (B11/4)
9	Intake air temperature sensor (B2/1a)
10	Voltage supply insufficient
11	Electronic idle speed control actuator (Y22) or exhaust gas recirculation (EGR) valve vacuum transducer (Y31/1) or Boost pressure cut-out switchover valve
12	Not used
13	Electronic diesel system control unit (N39), faulty (internal fault memory)
14	Electronic diesel system pressure sensor (B5/1), defective
15	Boost pressure control/ pressure control flap vacuum transducer (Y31/5) , or defect in Boost pressure control circuit.

Continuous Fuel Injection System (CFI)

Model	Model Year
107.048	1988-91 (California version only)
124.026 124.030 124.050 124.090	1988-89 (California version only)
126.024 126.025	1988-89 (California version only)
126.035 126.039 126.045	1988-91 (California version only)
201.028 (1988-93) 201.029	1988-89 (California version only)

Connect wires of Scanner as follows:

Scanner	Data Link Connector 8-pin
Yellow	Socket 3
Black	Socket 1
Red	Battery (+)

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Throttle position switch - wide open throttle fault
3	Engine coolant temperature sensor
4	Air flow sensor position indicator
5	Oxygen sensor
6	Not used
7	TD-signal (rpm)
8	Altitude correction capsule
9	Electronic hydraulic actuator (EHA)
10	Throttle position switch - closed throttle position fault (idle)
12	Exhaust gas recirculation temperature sensor

Continuous Fuel Injection System (CFI)

Models	Model Years
124.026 124.030 124.090 124.230 124.290	1990-93
126.024 126.025	1990-93
201.029	1990-93

Connect Wires of Scanner as Follows:

Scanner	Data Link Connector 8 & 16-pin
Yellow	Socket 3
Black	Socket 1
Red	Battery (+)

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Throttle position switch - wide open throttle (WOT), signal faulty
3	Engine coolant temperature signal read by CFI control module
4	Potentiometer voltage illogical
5	Oxygen sensor signal illogical
6	Not used
7	TNA signal(rpm) read by CFI control module
8	Altitude pressure signal from ignition control module illogical
9	Current to EHA is illogical
10	Throttle position switch - closed throttle position fault (idle)
11	Air injection system
12	Absolute pressure values from EZL ignition control module are illogical
13	Intake air temperature reading is illogical
14	Vehicle speed signal read by CFI control module is illogical
15	Not used
16	Exhaust gas recirculation
17	Oxygen sensor is shorted to positive or ground
18	Current to idle control valve is illogical
19	Not used

DTC Readout	Possible Cause of Failure
20	Not used
21	Not used
22	Oxygen sensor heating current illogical
23	Short circuit to positive in purge switchover valve circuit
24	Not used
25	Short circuit to positive in start valve circuit
26	Short circuit to positive in upshift delay solenoid valve circuit
27	Data exchange between CFI control module and ignition control module interrupted
28	Intermittent contact in engine coolant temperature sensor circuit
29	CFI and ignition control module reading different engine coolant temperature
30	Not used
31	Intermittent contact in engine coolant temperature sensor circuit
32	Not used
33	Not used
34	Engine coolant temperature read from ignition control module illogical

Continuous Fuel Injection System (CFI)

Models	Model Years
124.051 129.061	1990-93
129.066	1990-92

Connect wires of Scanner as follows:

Scanner	Data Link Connector 16-pin
Yellow	Socket 3
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Throttle position switch - wide open throttle fault (WOT), signal faulty
3	Engine coolant temperature in CFI control module illogical
4	Air flow sensor position indicator potentiometer current illogical
5	Oxygen sensor signal illogical
6	Not used
7	TNA- signal (rpm) at CFI control module illogical
8	Altitude correction signal from ignition control module
9	Current to EHA is illogical
10	Throttle position switch - closed throttle position fault (idle)
11	Air injection system, open or short circuit
12	Absolute pressure values from ignition control module illogical
13	Intake air temperature illogical
14	Speed signal at CFI control module illogical
15	Not used
16	Exhaust gas recirculation switchover valve, open or short circuit
17	Oxygen sensor signal wire shorted to positive or ground
18	Current to idle control valve is illogical

DTC Readout	Possible Cause of Failure
19	Not used
20	Not used
21	Not used
22	Oxygen sensor heater voltage illogical
23	Short to positive in purge switchover valve circuit
24	Not used
25	Short circuit to positive in start valve circuit
26	Short circuit to positive in upshift delay solenoid valve circuit
27	Data exchange between CFI control module and ignition control module
28	Intermittent contact in engine coolant temperature sensor circuit
29	CFI and ignition control module reading different engine coolant temperature
30	Not used
31	Intermittent contact in engine coolant temperature sensor circuit
32	Not used
33	Not used
34	Engine coolant temperature read from ignition control module illogical

Continuous Fuel Injection System (MAS CONTROLLER)

Models	Model Years
124.026 124.030 124.090 124.230 124.290 129.066 201.029	1990-92

Connect wires of Scanner as follows

Scanner	Data Link Connector 16-pin
Yellow	Socket 14
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Fuel pump relay (circuit 87) not functioning
3	TN/TD signal (RPM) interrupted
4	Output for oxygen sensor heater control defective
5	Output for air injection pump control defective
6	Output for kickdown switch control defective
7	Not used
8	Engine coolant temperature sensor signal out of range
9	Circuit 50 failure
10	Output failure of the start valve
11	A/C compressor engagement signal missing (87Z)
12	Output for A/C compressor control defective
13	Excessive A/C compressor clutch slippage
14	Vehicle speed signal illogical
15	Short circuit detected in fuel primp circuit

LH Sequential Multiport Fuel Injection System (LH-SFI)

Models	Model Years
140.032 140.057 140.076	1992-93
124.034 124.036	1992-93
129.067	1992-95
140.042 140.043 140.051	1992-95

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 4
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Engine coolant temperature sensor circuit 1, open or short circuit.
3	Engine coolant temperature sensor circuit 2, open or short circuit.
4	Voltage at mass air sensor with hot wire circuit. Open or short circuit.
5	Not used
6	Not used
7	TNA-signal (rpm signal) incorrect or open or short circuit.
8	Camshaft position sensor signal. Open or short circuit.
9	Starter signal (circuit 50) missing, open or short circuit.
10	Closed throttle position recognition from electronic accelerator control unit, short circuit.
11	Secondary air injection system, open or short circuit.
12	Burn-off control for mass air sensor with hot-wire, open or short circuit.
13	Intake air temperature sensor, open or short circuit.
14	Not used
15	Not used
16	Exhaust gas recirculation (EGR) switchover valve, open or short circuit.

DTC Readout	Possible Cause of Failure
17	CAN data: Electronic accelerator control module - no data transmission
18	CAN data: Ignition control module - no data transmission from DI module
19	Left LH-SFI control module no data transmission to right LH-SFI control module
20	LH-SFI control module - no data transmission
21	Oxygen sensor open circuit.
22	Oxygen sensor heater, open or short circuit.
23	Purge switchover valve, open or short circuit.
24	Left adjustable camshaft timing solenoid (Y49/1), open or short circuit
25	Adjustable camshaft timing solenoid, open or short circuit.
27	Injectors, open or short circuit.
29	I GR Start relay module (K29/1), open or short circuit

HFM Sequential Multiport Fuel Injection System

Engines	Model Year
104 111	1993-97

Connect wires of Scanner as follows (124)

Scanner	Data Link Connector 16-pin
Yellow	Socket 8
Black	Socket 1
Red	Socket 16

Connect wires of Scanner as follows (202 129 140)

Scanner	Data Link Connector 38-pin
Yellow	Socket 4
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Engine Coolant temperature sensor
3	Intake air temperature sensor
4	Hot film mass air flow sensor
5	CTP switch
6	Not used
7	Not used
8	Idle speed control (ISC) system at upper or lower control stop or CC or EA indicates "limp home" mode.
9	O2S 1 (before TWC) - voltage too high, circuit open or voltage implausible
10	O2S 2 (after TWC)voltage too high, circuit open or voltage implausible
11	O2S 1 heater (before TWC) - Current too high/low or short circuit.
12	O2S 2 heater (after TWC) - Current too high/low or short circuit.
13	O2S (Lambda) control system operating at rich or lean limit
14	Injector, cylinder 1

DTC Readout	Possible Cause of Failure
15	Injector, cylinder 2
16	Injector, cylinder 3
17	Injector, cylinder 4
18	Injector, cylinder 5
19	Injector, cylinder 6
20	Self-adaptation at idle speed or upper/lower partial load at rich or lean limit
21	Ignition output 3 or ignition coil for cylinder 1 and 6
22	Ignition output 1 or ignition coil for cylinder 2 and 5 (Engine 111, cylinder 1 and 4)
23	Ignition output 2 or ignition coil for cylinder 3 and 4 (Engine 111, cylinder 2 and 3)
24	CKP sensor or magnet for position sensor not recognized
25	CMP sensor not recognized or implausible
26	Not used
27	TN-signal (rpm signal) - open or short to ground
28	VSS - open circuit
29	Not used
30	Fuel pump relay module - open or short circuit
31	Not used
32	Knock sensors 1 and /or 2
33	Maximum retard setting on at least one cylinder has been reached or the ignition angle deviation between the individual cylinders is greater than 6 degrees crankshaft angle
34	Knock control-output switch in engine control module faulty Momentary fault in self-adaptation closed throttle speed/partial load
35	Model 124,129 and 140 AIR pump switchover valve and/or electromagnetic AIR pump clutch. Model 202 AIR pump switchover valve and/or AIR relay module
36	Purge control valve - open/short to ground or B+
37	Upshift delay switchover valve
38	Adjustable camshaft timing solenoid - open/short to ground or B+
39	Exhaust gas recirculation switchover valve - open/short to ground or B+
40	Transmission overload protection switch - open/short to ground or B+ or open or closed or implausible

DTC Readout	Possible Cause of Failure
41	CAN communication from engine control module faulty
42	CAN communication from ASR, EA/CC/ISC module or diagnostic module (OBD II) faulty
43	Starter signal (circuit 50) not present
44	Not used
45	Fuel safety shut-off of electronic accelerator or cruise control active
46	Resonance intake manifold switchover valve - open/short to ground or B+
48	O2S 2 (after TWC) heating circuit relay module - open/short to ground or B+
49	Voltage supply at engine control module implausible/low volts
50	Engine control module faulty or not coded.

Base Module (BM)

Models	Model Years
124.034 124.036	1992-93
129.067	1992-95
140.032 140.042 140.043 140.051 140.057 140.076	1992-95

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 8
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2, 3, 4	Not used
5	Maximum permissible temperature in module box exceeded
6	Electromagnetic a/c compressor clutch blocked
7	Poly v-belt slipping
8	Voltage supply for LH-SFI control module interrupted
9	Voltage supply for LH-SFI control module interrupted
10	Voltage supply for LH-SFI control module interrupted Voltage supply for fuel injectors interrupted
11	Voltage supply for accessory equipment control module interrupted
12	Voltage supply for ABS control module, ABS/ASR control module or ASD control module interrupted
13, 14	Not used
15	Voltage supply for kickdown valve interrupted
16	Voltage supply for electromagnetic a/c compressor clutch interrupted
17	Voltage supply for module box blower motor interrupted

Diagnostic Module (DM)

Models	Model Years
124.034 124.036	1992-1993
119.067	1992-1995
140.032 140.042 140.043 140.051	1992-1995

Connect wires of Scanner as follows

Scanner	Data link connector 38-pin
Yellow	Socket 19
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Oxygen sensor faulty
3	Lambda control faulty
4	Air injection system faulty
5	Exhaust gas recirculation faulty
6	Idle speed control faulty
7	Ignition system faulty
8	Engine coolant temperature sensor. Circuit open or circuit short
9	Intake air temperature sensor. Circuit open or circuit short
10	Voltage at mass air sensor too high/low
11	TNA-signal (rpm signal) faulty
12	Oxygen sensor greater, circuit open or circuit short
13	Camshaft position sensor signal from ignition control module faulty
14	Intake manifold pressure too low when starting
15	Wide open throttle position information faulty
16	Closed throttle position information faulty
17	Data exchange fault between individual control module
18	Adjustable camshaft timing solenoid circuit open or circuit short

DTC Readout	Possible Cause of Failure
19	Injector open or short circuit or emission control system adaptation at limit
20	Vehicle speed signal missing
21	Purge switchover valve, circuit open or circuit short
22	Camshaft position sensor signal faulty
23	Intake manifold pressure with engine running too low
24	Starter ring gear segments faulty
25	Knock sensors faulty
26	Upshift delay switchover valve, circuit open or circuit short
27	Engine coolant temperature sensor deviation between sensor circuit 1and sensor circuit 2.
28	Engine coolant temperature sensor (engine coolant temperature change monitor)

Diagnostic Module (DM)

Models	Model Years
140.057 140.076	1992-1995

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 19
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Right oxygen sensor faulty
3	Lambda control of right LH-SFI control module faulty
4	Air injection at right cylinder bank faulty
5	Exhaust gas recirculation of right LH-SFI control module faulty
6	Idle speed control faulty
7	Ignition system for right cylinder faulty
8	Right engine coolant temperature sensor, circuit open or circuit short
9	Right intake air temperature sensor, circuit open or circuit short
10	Voltage at mass air sensor too high/low
11	Tn-signal (rpm signal) at right LH-SFI control module faulty
12	Oxygen sensor heater of right oxygen sensor, circuit open or circuit short
13	Camshaft position sensor signal of right ignition control module faulty
14	Intake manifold pressure at startup (in right ignition control module) too low or too high
15	Wide open throttle position information faulty
16	Closed throttle position information faulty
17	Data exchange fault between right-hand control modules LH-SFI ignition control module electronic accelerator
18	Right adjustable camshaft timing solenoid circuit open or circuit short

DTC Readout	Possible Cause of Failure
19	Right injector circuit open or circuit short or emission control system adaptation in right LH-SFI control module at limit
20	Vehicle speed signal missing
21	Right purge switchover valve, circuit open or circuit short
22	Right camshaft position sensor signal faulty
23	Intake manifold pressure(in right ignition control module) with engine running too low/high
24	Starter ring gear segments faulty
25	Knock sensors or right ignition control module faulty
26	Upshift delay switchover valve, circuit open or circuit short
27	Right engine coolant temperature sensor deviation between circuit 1, and sensor circuit 2.
28	Right engine coolant temperature sensor (engine coolant temperature change monitor)
34	Left oxygen sensor faulty
35	Lambda control of left LH-SFI control module faulty
36	Air injection at left cylinder bank faulty
37	Exhaust gas recirculation of left LH-SFI control module faulty
38	Not used
39	Ignition system for left cylinder faulty
40	Left engine coolant temperature sensor, circuit open or circuit short
41	Left intake air temperature sensor, circuit open or circuit short
42	Voltage at mass air sensor too high/low
43	Tn-signal (rpm signal) at left LH-SFI control module faulty
44	Oxygen sensor heater of left oxygen sensor, circuit open or circuit short
45	Camshaft position sensor signal of left ignition control module faulty
46	Intake manifold pressure at (in left ignition control module) faulty
47	Not used
48	Not used
49	Data exchange fault between left LH-SFI ignition control module

DTC Readout	Possible Cause of Failure
50	Left adjustable camshaft timing solenoid circuit open or circuit short
51	Left injector circuit open or circuit short or emission control system adaptation in left LH-SFI control module at limit
52	Not used vehicle speed signal missing
53	Left purge switchover valve, circuit open or circuit short
54	Left camshaft position sensor signal faulty
55	Intake manifold pressure(in left ignition control module) with engine running too low/high
56	Starter ring gear segments and/or left crankshaft position sensor faulty
57	Knock sensors or left ignition control module faulty
58	Not used
59	Left engine coolant temperature sensor deviation between circuit 1, and sensor circuit 2.
60	Left engine coolant temperature sensor (engine coolant temperature change monitor)

Diagnostic Module (DM)

Models	Model Year
124.028 124.032 124.052 124.092	1994-95

Connect wires of Scanner as follows

Scanner	Data link connector 16-pin
Yellow	Socket 3
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No Fault Found
2	Heated oxygen sensor faulty
3	Lambda control faulty
4	Air injection system faulty hot film mass air flow sensor with hot wire
5	Exhaust gas recirculation faulty
6	Idle speed control faulty
7	Ignition system faulty
8	Engine coolant temperature sensor open circuit
9	Intake air temperature sensor, open circuit
10	Voltage at mass air sensor too high/low
11	Tn-signal (rpm signal) at engine control module faulty
12	Heated oxygen sensor heater circuit open or circuit short
15	Injector, cylinder 2
16	Closed throttle position information faulty
17	Data exchange malfunction between individual control module
18	Adjustable camshaft timing solenoid circuit open or circuit short
19	Injectors circuit open or circuit short emission control module adaptation in engine control module at limit
20	Vehicle speed signal not present
21	Purge switchover valve circuit open or circuit short

DTC Readout	Possible Cause of Failure
22	Crankshaft position sensor signal faulty
23	Intake manifold pressure (in base module pressure sensor-) with engine running too high/low.
24	Starter ring gear segments and /or crankshaft position sensor faulty
25	Knock sensors or engine control module faulty
26	Upshift delay faulty
27	Not used
28	Engine coolant temperature sensor (engine coolant temperature change monitor)
44	Not used
45	Fuel safety shut-off electronic accelerator or cruise control active
46	Resonance intake manifold switchover valve
47	Not used
48	Not used
49	Voltage supply at engine control module 8v
50	Engine control module

Distributor Ignition (DI) LH-SFI

Model	Model Years
140.032	1992-1993

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 17
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Maximum retard setting on at least one cylinder has been reached
3	Not used
4	Load sensor in ignition control module faulty.
5	Knock sensors 1 and/or 2 faulty.
6	Camshaft position sensor faulty.
7	Knock output switch in ignition control module faulty.
8	Transmission overload switch does not close.
9	Transmission overload switch does not open.
10	Not used.
11	Preference resistor faulty .
12	Tn-signal is outside the tolerance range.
13	Not used
14	Not used
15	Ignition coil 1 output from ignition control module faulty
16	Ignition coil 2 output from the DI defective or primary winding of the coil has an open circuit
17	Crankshaft position sensor faulty
18	Magnets for crankshaft position sensor (CKP) not recognized.
19	Not used

DTC Readout	Possible Cause of Failure
20	Ignition control module DTC memory faulty
21	Load sensor in control module faulty. (Recognized with engine running)
22	Not used
23	Not used
24	Not used
25	Not used
26	Ignition control module data exchange fault
27	LH-SFI control module data exchange fault
28	Electronic accelerator control module/idle speed control data exchange fault
34	Ignition misfire detected at cylinder 1 (104) / cylinder 1 (119)
35	Ignition misfire detected at cylinder 5 (104) / cylinder 5 (119)
36	Ignition misfire detected at cylinder 3 (104) / cylinder 4 (119)
37	Ignition misfire detected at cylinder 6 (104) / cylinder 8 (119)
38	Ignition misfire detected at cylinder 2 (104) / cylinder 6 (119)
39	Ignition misfire detected at cylinder 4 (104) / cylinder 3 (119)
40	Ignition misfire detected at cylinder 7 (119)
41	Ignition misfire detected at cylinder 2 (119)

Distributor Ignition (DI)

Model	Model Years
124.051	1990-1995
129.061 129.066	1990-1995

Connect wires of Scanner as follows:

Scanner	Data Link Connector 16-pin
Yellow	Socket 8
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Maximum retard setting on at least one cylinder has been reached
3	Engine coolant temperature sensor faulty
4	Load sensor in EAL/AKR control module faulty
5	Knock sensors 1 and/or 2 faulty
6	Camshaft position sensor faulty
7	Knock output switch in EAL/AKR ignition control module faulty
8	Transmission overload switch does not close
9	Transmission overload switch does not open
10	Data exchange from EAL/AKR engine control module to CFI control module faulty.
11	Preference resistor faulty
12	Tn-signal is outside the tolerance range
13	Full load contact does not open.
14	Idle speed contact does not open.
15	Ignition coil 1 output from EAL/AKR ignition control module faulty
16	Ignition coil 2 output from EAL/AKR ignition control module faulty
17	Crankshaft position sensor faulty

Distributor Ignition (DI)

Models	Model Years
124.034 124.036	1992-1995
129.067 129.076	1992-1995
140.042 140.043 140.051 140.057 140.070 140.076	1992-1995

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 17
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Maximum retard setting on at least one cylinder has been reached
3	Not used
4	Load sensor in EAL/AKR control module faulty
5	Knock sensors 1 and/or 2 faulty
6	Camshaft position sensor faulty
7	Knock output switch in ignition control module faulty
8	Transmission overload switch does not close
9	Transmission overload switch does not open
10	Not used
11	Reference resistor (ignition control module) faulty
12	TN-signal (engine RPM) is outside the tolerance range
13	Not used
14	Not used
15	Ignition coil 1 output from ignition control module faulty or primary winding of ignition coil has open circuit
16	Ignition coil 2 output from ignition control module faulty or primary winding of ignition coil has open circuit

DTC Readout	Possible Cause of Failure
17	Crankshaft position sensor faulty
18	Magnets for crankshaft position sensor not recognized
19	Ground, Coding from Left EZL/AKR Ignition Control Module Not Present
20	Ignition control module DTC memory faulty
21	Load sensor in control module faulty. (recognized with engine running)
22	Not used
23	Not used
24	Not used
25	Not used
26	Ignition control module data exchange fault
27	Control module data exchange fault
28	Electronic accelerator control module/idle speed control data exchange fault

Cruise Control/Idle Speed Control (CC/ISC) w/o ASR

Models	Model Years
124 129 140 202	1992-97

Connect wires of Scanner as follows (W124)

Scanner	Data Link Connector 16-pin
Yellow	Socket 14
Black	Socket 1
Red	Socket 16

Connect wires of Scanner as follows (129 140 202)

Scanner	Data Link Connector 38-pin
Yellow	Socket 7
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Cruise control/idle speed control module
3	Cruise control/idle speed control actuator
4	Cruise control switch
5	Stop lamp switch
6	Starter lock-out/backup lamp switch
7	Data bus (CAN)
8	Left front axle vehicle speed sensor
9	Left rear axle vehicle speed sensor or Hall-effect speed sensor Rear axle vehicle speed sensor from ABS control module Rear axle vehicle speed sensor from ETS/SPS control module Incorrect CC/ISC control module installed ETS signal
10	Engine speed (RPM) signal (TNA)
11	Fuel safety shut-off to LH-SFI control module
12	Cruise control/idle speed control voltage supply

Electronic Accelerator / Cruise Control / Idle Speed Control (EA/CC/ISC) w/ASR

Models	Model Year
124 129 140 202	1992-96

Connect wires of Scanner as follows (W124)

Scanner	Data Link Connector 16-pin
Yellow	Socket 14
Black	Socket 1
Red	Socket 16

Connect wires of Scanner as follows (W202 W129 W140)

Scanner	Data Link Connector 38-pin
Yellow	Socket 7
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	EA/CC/ISC control module (N4/1) or Safety contact switch (M16/1s1) or Stop lamp switch or Cruise control switch or Actual value potentiometer or Starter lock-out/back-up lamp switch or engine speed signal or vehicle speed signal or closed throttle position switch or safety relay in EA/CC/ISC control module
3	Right EA/CC/ISC actuator (left cylinder bank) (M16/1)
4	Cruise control switch (S40)
5	Stop lamp switch (S9/1)
6	Starter lock-out/backup lamp switch
7	CAN data bus signal from EA/CC/ISC, ABS/ASR, HFM-SFI or LH-SFI (right or left) control module faulty.
8	Left front axle vehicle speed sensor from ABS/ASR control module
9	Left rear axle vehicle speed sensor from ABS/ASR control module or in 124 chassis Hall-effect speed sensor.
10	Engine speed signal (TN) from base module (LH-SFI) or engine control module (HFM-SFI)

11	Closed throttle recognition signal to engine control module (HFM-SFI or Left LH-SFI) Fuel safety shut-off to engine control module (HFM-SFI or left or right LH-SFI)
12	EA/CC/ISC control module voltage supply
13	Left EA/CC/ISC actuator (right cylinder bank) or actual value potentiometer (M16/4r1 or M16/4r2) or actuator motor (M16/4m1)or magnetic clutch (M16/4k1).
14	Closed throttle position contact switch
15	CAN data exchange with ABS/ASR control module illogical

Electronic Automatic Transmission Control (ETC) with CFI

Models	Model Years
129	1990-1993

Connect wires of Scanner as follows

Scanner	Data Link Connector 16-pin
Yellow	Socket 13
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Not used
3	Engine load signal interrupted
4	Throttle valve switch (potentiometer) interrupted
5	Engine speed (RPM) signal interrupted
6	Vehicle speed signal interrupted
7	Output fault in 5-speed automatic transmission control module or fault in control valve.
8	5-speed automatic transmission control module
9	Control valve
10	Control valve short circuit

Electronic Automatic Transmission Control (ETC) w/LH-SFI

Model	Model Years
129	1990-1993
140	1990-1996

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 10
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Not used
3	Transmission overload protection switch (4/5 gear) faulty
4	CAN data line to Electronic Accelerator/Cruise Control Module
5	CAN data line to ignition control module (knock sensor)
6	CAN data line - short or open circuit
7	Open circuit at control valve or transmission control module (5-speed automatic)
8	5-speed automatic transmission control module
9	Control valve faulty
10	Control valve short circuit

Also test BM and DI systems.

Automatic-engaged Four-wheel Drive (4MATIC)

Models	Model Years
124.230 124.290	1990-1993

Connect wires of Scanner as follows

Scanner	Data Link Connector 8-pin
Yellow	Socket 5
Black	Socket 1
Red	Battery (+)

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	4MATIC control module
3	Brake light switch
4	Left front axle vehicle speed sensor
5	Right front axle vehicle speed sensor
6	Rear speed sensor signal
7	All 3 vehicle speed sensors
8	Over volts protection relay, front axle train valve
9	Over volts protection relay, central differential lock valve
10	Over volts protection relay, stop lamp switch, Rear axle differential lock valve
11	Steering angle sensor signal

Adaptive Damping System (ADS)

Models	Model Years
129.061 129.066	1991-1993

Connect wires of Scanner as follows

Scanner	Data Link Connector 16-pin
Yellow	Socket 9
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Adaptive damping system control module
3	Body acceleration sensor
4	Wheel acceleration sensor
5	Steering angle sensor
6	Front axle solenoid valves 1
7	Front axle solenoid valves 2
8	Rear axle solenoid valves 1
9	Rear axle solenoid valves 2
10	Not used
11	Not used
12	ABS signal
13	Oil level switch (ADS)
14	Steering angle sensor not activated

Adaptive Damping System (ADS)

Models	Model Years
129.067 129.076	1991-1995

Connect wires of Scanner as follows

Scanner	Data link connector 38-pin
Yellow	Socket 11
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Faults
1	No fault found
2	Adaptive damping system control module
3	Body acceleration sensor
4	Wheel acceleration sensor
5	Steering angle sensor
6	Front axle solenoid valves 1
7	Front axle solenoid valves 2
8	Rear axle solenoid valves 1
9	Rear axle solenoid valves 2
12	Right front axle vehicle speed signal
13	Oil level switch (ADS)
14	Steering angle sensor not activated/initialized
15	Comfort or sport switch (ADS) short circuit
17	Vehicle load sensor
18	Adaptive damping system warning lamp
19	Volts supply too low
20	Steering angle sensor
21	Volts supply too high
22	Comfort or sport switch (ADS)

Adaptive Damping System (ADS)

Models	Model Years
140.032 140.042 140.051 140.057 140.070 140.076 140.134	1991-1994

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 11
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Faults
1	No fault found
2	Adaptive damping system control module
3	Body acceleration sensor
4	Wheel acceleration sensor
5	Steering angle sensor
6	Front axle solenoid valves 1
7	Front axle solenoid valves 2
8	Rear axle solenoid valves 1
9	Rear axle solenoid valves 2
12	Right front axle vehicle speed signal
13	Oil level switch (ADS)
14	Steering angle sensor not activated
15	Comfort or sport switch (ADS)
17	Vehicle load sensor
18	Adaptive damping system warning lamp
19	Volts supply too low
20	Steering angle sensor
21	Volts supply too high
22	Comfort or sport switch (ADS)

Automatic Locking Differential (ASD)

Models	Model Years
124.128	1991-1995
126.134 126.135	1991
129.061	1991-1995
140.134	1991-1995
201.028	1991-1993

Connect wires of Scanner as follows (Model 124 126 129)

Scanner	Data Link Connector 8-pin
Yellow	Socket 5
Black	Socket 1
Red	Battery (+)

Connect wires of Scanner as follows (Model 140.134)

Scanner	Data Link Connector 38-pin
Yellow	Socket 9
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible cause of faults
1	No fault found
2	Adaptive damping system control module
3	Stop lamp switch
4	Left front axle vehicle speed sensor signal
5	Right front axle vehicle speed sensor signal
6	Rear speed sensor signal
7	No speed signal from any sensor, missing ground
8	Adaptive damping system valve or stop lamp switch

Anti-lock Brake System (ABS)

Models	Model Years
140.032 140.042 140.043 140.134	1992-1993

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 6
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Faults
1	No faults found
2	Left front axle vehicle speed sensor signal
3	Right front axle vehicle speed sensor signal
4	Rear axle speed sensor signal
6	Left front axle solenoid valve
7	Right front axle solenoid valve
8	Rear axle solenoid valve
10	Return/pressure pump motor or return/pressure pump relay
11	Solenoid valves relay
12	Master cylinder switchover valve
13	Stop lamp switch
14	ABS Lateral acceleration sensor
15	ABS control module
16	Vehicle speed sensors incorrect, dirty or damaged toothed rotor
17	Low voltage at solenoid valves relay

Anti-lock Brake System (ABS & ABS w/ASR)

Models	Model Years
124.034 124.036	1992-1995
140.032 140.042 140.051 140.057 140.070 140.076	1992-1995

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 6
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Faults
1	No fault found
2	Left front axle vehicle speed sensor signal
3	Right front axle vehicle speed sensor signal
4	Left rear axle vehicle speed sensor signal
5	Right rear axle vehicle speed sensor signal
6	Left front axle solenoid valve
7	Right front axle solenoid valve
8	Left rear axle solenoid valve
9	Right rear axle solenoid valve
10	Return/pressure pump motor or return/pressure pump relay
11	Solenoid valves relay
12	Models 140.04/05 Master cylinder switchover valve
13	Stop lamp switch(ASD/ASR)
14	Models140.04/05 ABS lateral acceleration sensor
15	ABS/ASR control module
16	Vehicle speed sensors incorrect, dirty or damaged toothed rotor
17	Low volts at solenoid valves relay
20	Switchover or solenoid valve

DTC Readout	Possible Cause of Faults
21	Pressure switch charge
22	Pressure switch charge
23	Pressure switch hydraulic system
24	ASR charging pump
30	CAN data line to electronic accelerator/cruise control/idle speed control module
31	CAN data line to LH-SFI control module left LH-SFI control module Right LH-SFI control module
32	CAN data line to left ignition control module right ignition control module Ignition control module, LH-SFI
33	CAN data line, short or open circuit

Anti-lock Brake System (ABS)

Model	Model Years
202 210	1994-95

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 6
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Faults
1	No fault found
2	Left front axle vehicle speed sensor, open circuit
3	Right front axle vehicle speed sensor, open circuit
4	Rear speed sensor, open circuit
6	Solenoid valve, Left front axle
7	Solenoid valve, Right front axle
8	Solenoid valve, Rear axle
10	Return/pressure pump motor or return/pressure pump relay
11	Solenoid valves relay
15	ABS control module
16	Vehicle speed sensors
17	Battery volts low
25	Left front vehicle speed sensors signal Illogical
26	Right front vehicle speed sensors signal Illogical
27	Rear front vehicle speed sensors signal Illogical

Anti-lock Brake System (ABS & ABS w/ASR)

Models	Model Year
124.034	1994-95
129	1994-95
140	1994-95

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 6
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Faults
1	No fault found
2	Left front axle vehicle speed sensor, open circuit
3	Right front axle vehicle speed sensor, open circuit
4	Rear speed sensor, open circuit
6	Left front axle solenoid valves
7	Right front axle solenoid valves
8	Solenoid valve, rear axle
10	Return pump motor or return pump relay
11	Solenoid valves relay
12	Models140.04/05Master cylinder switchover valve
13	Brake lamp switch
14	Models140.04/05 Lateral acceleration sensor
15	ABS control module
16	Vehicle speed sensors signal Illogical
17	Solenoid valves relay
25	Left front vehicle speed sensors signal, Illogical
26	Right front vehicle speed sensors signal, Illogical
27	Rear front vehicle speed sensors signal, Illogical
29	Models140.04/05 Lateral acceleration sensor signal, Illogical

Electronic Traction Systems (ASR, ETS)

Models	Model Years
129 140 202	1995
210	1995-96

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 6
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Faults
1	No fault found
2	ASR/SPS or ETS/SPS control module
3	Left front axle VSS sensor, open circuit
4	Right front axle VSS sensor, open circuit
5	Left rear axle VSS sensor, open circuit
6	Right rear axle VSS sensor, open circuit
7	Left front axle VSS valves, illogical
8	Right front axle VSS valves illogical
9	Left rear axle VSS valve illogical
10	Right rear axle VSS valve illogical
11	VSS signal illogical
12	ASR/ETS hydraulic unit, solenoid valves relay
13	ASR/ETS hydraulic unit, Left front axle solenoid valves(hold)
14	ASR/ETS hydraulic unit, Left front axle solenoid valve(hold)
15	ASR/ETS hydraulic unit, right front axle solenoid valve (release)
16	ASR/ETS hydraulic unit, right front axle solenoid valve (release)
17	ASR/ETS hydraulic unit, left rear axle solenoid valve(hold)
18	ASR/ETS hydraulic unit, left rear axle solenoid valve (release)

DTC Readout	Possible Cause of Faults
19	ASR/ETS hydraulic unit, right rear axle solenoid valve(hold)
20	ASR/ETS hydraulic unit, right rear axle solenoid valve (release)
21	ASR/ETS hydraulic unit, switchover/solenoid valve
22	ASR/ETS hydraulic unit, inlet solenoid valve
23	ASR only: ASR system pressure too low
24	ASR/ETS hydraulic unit, high-pressure/return pump relay
27	Stop lamp switch
28	Battery voltage too low, circuit 87
29	ETS only Circuit 30, volts supply
30	ASR only CAN date bus to EA/CC/ISC control module, interrupted
31	ASR only CAN communication with LH-SFI control module Left LH-SFI control module right LH-SFI control module faulty CAN communication with engine control module faulty
32	ASR only CAN communication with DI or left and right DI control module, faulty
33	ASR only CAN communication faulty in general
34	ETS only Brakes overheated
35	Model 129.076,140.04/05/07 Master brake cylinder switchover valve
36	Model 129.076,140.04/05/07 ASR lateral acceleration sensor, open circuit
37	Model 129.076,140.04/05/07 ASR lateral acceleration sensor, illogical
38	ETS only EST/SPS control module not identify the software (not coded)
39	Model 140/210 ETS/SPS or ASR/SPS control module
40	Model 140 SPS P-valve
41	Model 140/210 ASR/SPS or ETS/SPS control module

Speed Sensitive Power Steering (SPS)

Models	Model Years
140.032 140.042 140.051 140.057 140.070 140.076 140.134	1992-1993

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 12
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Speed sensitive power steering control module
3	Left/center rear axle speed sensor signal
4	Right rear axle vehicle speed sensor signal
5	Diffident vehicle speed signals from right and left rear axle sensor
6	No vehicle speed sensor signal
7	Inductive speed sensor, transmission faulty
8	Short circuit between positive connection of speed sensitive power steering valve and ground (-)
9	Short circuit at speed sensitive power steering valve
10	Open circuit at speed sensitive power steering valve
11	Volts supply at speed sensitive power steering control module

Speed Sensitive Power Steering (SPS)

Model	Model Years
140	1994

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 12
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Speed sensitive power steering control module
3	Comparison of axle vehicle speed signal attars/left front axle vehicle speed signal faulty
4	Axle vehicle speed signal status missing
5	Speed-sensitive power steering control module
6	Speed-sensitive power steering P-valve; short circuit
7	Speed-sensitive power steering P-valve; open circuit
8	Short circuit between speed sensitive power steering P-valve (+) and ground (-)

Cabriolet Soft top (CST)

Model	Model Years
124.066	1993-95

Connect wires of Scanner as follows

Scanner	Data Link Connector
Yellow	Power Soft top test connection (4 pole) at Socket 2. The connection is located at the right front passenger footwell. To avoid the need for an extension cable, connect the black lead of code scanner to any good ground and red lead to a battery + source inside vehicle.
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Volts low
3	Normal operating time exceeded
4	Limit switch signals Illogical
5	Soft top compartment cover "locked", limit switch,
6	Soft top compartment cover "closed", limit switch,
7	Soft top compartment cover "open", limit switch
8	Soft top fabric bow "locked", limit switch
9	Soft top fabric bow "down", limit switch
10	Soft top fabric bow "raised", limit switch
11	Left front soft top "locked", limit switch
12	Right front soft top "locked", limit switch
13	Soft top "open" switch (soft top in storage compartment), limit switch ,
14	Soft top "overhead", limit switch
15	Soft top "retracted", limit switch
16	Roll bar "extended", limit switch,
17	Automatic deployment of roll bar has occurred
18	Power soft top switch
19	Vehicle speed signal
20	Circuit in power soft top control module, solenoid valve, roll bar retracted
21	Circuit hydraulic unit, circuit solenoid valve, roll bar retracted
22	Circuit in power soft top control module, solenoid valve, roll bar extended
23	Circuit solenoid valve, roll bar extended
24	Circuit in power soft top control module, Power windows

Roll Bar (RB)

Model	Model Year
124.066	1993-95

Connect wires of Scanner as follows

Scanner	Data Link Connector 16-pin
Yellow	Socket 9
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No faults found
2	Roll bar control module
3	Roll bar control module volts supply
6	Roll bar deployment solenoid, open circuit, short circuit to Battery + or ground (-).
7	Rear axle switch, short circuit to Battery + or ground (-).
8	Roll bar indicator lamp faulty

Roll Bar (RB)

Models	Model Years
129.061 129.066 129.067 129.076	1990-12/93

Connect wires of Scanner as follows (Model 129.061/066)

Scanner	Data Link Connector 16-pin
Yellow	Socket 7
Black	Socket 1
Red	Socket 16

Connect wires of Scanner as follows (Model 129.067/076, all 129 from 1993)

Scanner	Data Link Connector 38-pin
Yellow	Socket 22
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No faults found
2	Roll bar control module
3	Volts supply
4	Driver seat belt lock relay open circuit or short circuit to Battery + or ground (-).
5	Passenger seat belt lock relay open circuit or short circuit to Battery + or ground (-).
6	Roll bar deployment solenoid, open circuit or short circuit to Battery + or ground (-).
7	Left and/or right axle switch, roll bar, short circuit to 30 or 31
8	Roll bar warning lamp
9	SRS warning lamp and/or code scanner button held to erase faulty
10	SRS control unit

Roadster Soft Top (RST)

Models	Model Years
129.061 129.066 129.067 129.076	1990-12/93

Connect wires of Scanner as follows (Model 129.061/066)

Scanner	Data Link Connector 16-pin
Yellow	Socket 10
Black	Socket 1
Red	Socket 16

Connect wires of Scanner as follows (Model 129.067/076, all 129 from 1993)

Scanner	Data Link Connector 38-pin
Yellow	Socket 21
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No faults stored
2	Limit switch, left locked, soft top storage compartment cover
3	Limit switch, right locked, soft top storage compartment cover
4	Limit switch, left closed, soft top storage compartment cover
5	Limit switch, right closed, soft top storage compartment cover
6	Limit switch, left locked, soft top fabric bow
7	Limit switch, right locked, soft top fabric bow
8	Limit switch, left closed, soft top fabric bow
9	Limit switch, right closed, soft top fabric bow
10	Limit switch, left front locked, soft top
11	Limit switch, right front locked, soft top
12	Limit switch soft top storage compartment cover open
13	Limit switch soft top fabric bow raised
14	Limit switch soft top down (in storage compartment)
15	Limit switch soft top up (secondary closing speed)

DTC Readout	Possible Cause of Failure
16	Limit switch roll bar retracted
17	Limit switch left side window down Circuit in power soft top control module, solenoid valve, roll bar retracted
18	Limit switch right side window down Circuit hydraulic unit, circuit solenoid valve, roll bar retracted
19	Axle vehicle speed signal illogical Circuit in power soft top control module, solenoid valve, roll bar extended
20	Hardtop installed recognition Circuit solenoid valve, roll bar extended
21	Power soft top switch Circuit in power soft top control module, Power windows
22	Roll bar switch
23	Roll bar control module
24	Roll bar crash deployment
25	Limit switch signals illogical
26	Operation time exceeded
27	Insufficient volts
28	No speedometer signal
29	No axle vehicle wheel speed sensor signal
30	Soft top operation blocked

Roadster Soft Top (RST)

Model	Model Years
129	1/94-6/96

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 21
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No faults stored
2	Low voltage
3	RST/RB hydraulic unit locked up.
4	Vehicle speed sensor fault
5	RST/RB hydraulic unit
6	Right or left power window activation
7	Right or left front soft top “locked” switch fault, Soft top open/closed switch, Fabric bow locked switch,
8	Power soft top control module defective
9	Roll bar crash deployment has occurred
10	Power soft top switch or Roll bar switch.
11	Power soft top switch indicator lamp or Roll bar switch indicator lamp or Warning buzzer.

Infrared Remote Control for Central Locking (IRCL)

Models	Model Years
129.061 129.066 129.067 129.076	1990-1993

Connect wires of Scanner as follows

Scanner	Data Link Connector 16-pin
Yellow	Socket 12
Black	Socket 1
Red	Socket 16

Scanner	Data Link Connector 38-pin
Yellow	Socket 31
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Infrared remote control module
3	Supply pump, central locking system short to ground
4	Infrared remote control receiver, Left front door/Right front door/Trunk lid Red indicator lamps, short to ground
5	Infrared remote control receiver, Left front door/Right front door/Trunk lid Green indicator lamps, short to ground
6	Supply pump, central locking system, short to circuit 30
7	Infrared remote control receiver, Left front door/Right front door/Trunk lid Red indicator lamps, short to circuit 30 or open circuit
8	Infrared remote control receiver, Left front door/Right front door/Trunk lid Green indicator lamps, in receiver have short to short to circuit 30 or open circuit
9	Driver door switch group wiring, short to circuit 30 ATA/convenience microswitch wiring short to circuit 30 ATA/convenience microswitch wiring short to circuit 30
10	Ignition/starter switch-position recognition switch, open circuit
11	Ignition/starter switch-position recognition switch, open circuit 31
12	Left front door actuator, open circuit
13	Right door actuator, open circuit
14	Trunk lid lock actuator, open circuit

Infrared Remote Control for Central Locking (IRCL)

Model	Model Years
140	1992-96

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 31
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Left front door actuator, open circuit
3	Warning buzzer -open circuit
4	Warning buzzer -open circuit to ground
5	Red indicator lamps, short to ground
6	Green indicator lamps, short to ground
7	Short to positive, lock circuit 1
8	Short to positive, lock circuit 2
9	Red indicator lamps, short to positive
10	Green indicator lamps, short to positive
11	Infrared remote control module faulty
12	Immobilization output, short to circuit 30 (Battery +)

Infrared Remote Control for Central Locking (IRCL)

Model	Model Years
129	1993-96

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 31
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	IRCL control module
3	Supply pump, central locking system short to ground
	4 Infrared remote control receiver, Left front door/Right front door/Trunk lid Red indicator
5	Infrared remote control receiver, Left front door/Right front door/Trunk lid Green indicator lamps, short to ground
6	Supply pump, central locking system, short to B (+)
7	Infrared remote control receiver, Left front door/Right front door/Trunk lid Red indicator lamps , short to B (+) or open circuit
8	Infrared remote control receiver, Left front door/Right front door/Trunk lid Green indicator lamps, short to B (+) or open circuit
9	Driver door switch group wiring, short to B (+) ATA/CF microswitch wiring short to B (+) ATA/CF microswitch wiring short to B (+)
10	Ignition/starter switch-position recognition switch, open circuit
11	Ignition/starter switch-position recognition switch, open circuit 31
12	Left front door actuator, open circuit
13	Right door actuator, open circuit
14	Trunk lid lock actuator, open circuit
15	Immobilization output, short to B (+)

Pneumatic Systems Equipment (PSE)

Models	Model Years
129 140 202	1992-94

Connect wires of Scanner as follows

Scanner	Data link connector 38-pin
Yellow	Socket 20
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Central locking system, air demand too high, leakage
3	Retractable trunk lid grip, air demand too high, leakage
4	Backup assist, air demand too high, leakage
5	Orthopedic backrest pressure, air demand too high, leakage
6	Manifold vacuum assist, air demand too high, leakage
7	Short to positive, lock circuit 1
8	Short to positive, lock circuit 2
9	Signal fault, Rear head restraint retraction
10	Signal fault, Central locking interior control switch
11	Signal fault, Front door
12	Signal from lock circuit 1 is present for longer than 2 minutes
13	Signal from lock circuit 2 is present for longer than 2 minutes,
14	Central locking interior control switch signal is present for longer than 2 minutes
15	Rear head restraint retraction signal is present for longer than 2 minutes
16	Not used
17	Pneumatic control module faulty

Anti-theft Alarm System(ATA)

Models	Model Years
129.061 129.066 129.067 129.076	1990-93
140.032 140.042 140.051 140.057 140.070 140.076 140.134	1990-93
129 140 202	1994-96

Connect wires of Scanner as follows (Model 129.061, 129.066)

Scanner	Data Link Connector 16-pin
Yellow	**Socket 11**
Black	Socket 1
Red	Battery (+)

Connect wires of Scanner as follows (Model 129, 140, 202)

Scanner	Data Link Connector 38-pin
Yellow	Socket 23
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Alarm activated, trunk sensor circuit
3	Alarm activated, engine hood circuit
4	Alarm triggered, glove compartment
5	Alarm activated, rear door circuit Console compartment circuit
6	Alarm activated, front door circuit
10	Alarm activated, radio circuit
12	Alarm activated, ignition circuit
14	Alarm activated, brake circuit
19	AT Control module faulty
20	Left front door actuator, No ground connection
21	ATA disarmed, Starter lock-out relay module. short to circuit 30
23	ATA armed, Open to circuit 30

Cellular Telephone (CT)

Models	Model Years
129.061 129.066 129.067 129.076	1992-95
140.032 140.042 140.051 140.057 140.070 140.076 140.134	1992-95

If a fault code is set, the code is shown on the in-car telephones display and the phone goes off-line.

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	TR memory defect (ROM)
2	TR memory defect (RAM)
3	NAM defect
4	ESN defect
5	TR memory defect (EE PROM)
6	TR output power defect
7	IDCM defect
8	TR output power control defect

Convenience Features (CF)

Model	Model Year
140	1992-96

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 21
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Control module, Close circuit for left front power window motor
3	Control module, Open circuit for left front power window motor
4	Control module, Close circuit for right front power window motor
5	Control module, Open circuit for right front power window motor
6	Control module, Close circuit for left rear power window motor
7	Control module, Open circuit for left rear front power window motor
8	Control module, Close circuit for right rear power window motor
9	Control module, Open circuit for right rear power window motor
10	Switch for left front power window Closing time exceeded
11	Switch for left front power window Opening time exceeded
12	Switch for right front power window Closing time exceeded
13	Switch for right front power window Opening time exceeded
14	Left rear power window circuit and left rear power window switch front console closing time exceeded
15	Left rear power window circuit and left rear power window switch front console opening time exceeded
16	Right rear power window circuit and right rear power window switch front console closing time exceeded
17	Right rear power window circuit and right rear power window switch front console opening time exceeded
18	Circuit for left front lock switch, right front, trunk lid lock switch closing time exceeded, lock switch circuit 2

DTC Readout	Possible Cause of Failure
19	Circuit for left front lock switch, right front, trunk lid lock switch opening time exceeded, lock switch circuit 1
20	Left front power window switch short to ground or wires reversed
21	Right front power window switch short to ground or wires reversed
22	Left rear window circuit and left rear power window switch front console short to ground or wires reversed
23	Right rear power window circuit and right rear power window switch front console short to ground or wires reversed
24	Left front power window motor , wiring or speed sensor
25	Right front power window motor, wiring or speed sensor
26	Left rear power window motor, wiring or speed sensor
27	Right rear power window motor, wiring or speed sensor
28	Left front power window motor, sensor wiring reversed
29	Right front power window motor, sensor wiring reversed
30	Left rear power window motor, sensor wiring reversed
31	Right rear power window motor, sensor wiring reversed
32	Left front power window motor, Speed sensor signal faulty
33	Right front power window motor, Speed sensor signal faulty
34	Left rear power window motor, Speed sensor signal faulty
35	Right rear power window motor, Speed sensor signal faulty
36	Convenience control module faulty
37	Volts too low(9V), circuit 30E fuse F4-11
38	Sliding/pop-up roof switch circuit short, check wiring harness
39	Volts supply circuit 30 A, control module
40	Volts supply circuit 30 B, control module

Tempmatic A/C

Models	Model Year
201.028 201.029 201.034 201.126 201.128	1988-93

Connect wires of Scanner as follows

Scanner	Data Link Connector 8-pin
Yellow	Socket 7
Black	Socket 1
Red	Battery (+)

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	In car temperature sensor, short circuit
3	In car temperature sensor, open circuit
4	Outside temperature sensor, short circuit
5	Outside temperature sensor, open circuit
6	Evaporator temperature sensor, short circuit
7	Evaporator temperature sensor, open circuit
12	Coolant temperature gauge sensor, short circuit
13	Coolant temperature gauge sensor, open circuit
14	Feedback potentiometer, short circuit
15	Feedback potentiometer, open circuit
30	Coolant pump, short circuit
33	A/C compressor control module, short circuit
34	Auxiliary fan relay short circuit
50	Switchover valve unit (5 connections) between pins 5 and 4 faulty
51	Switchover valve unit (5 connections) between pins 5 and 6 faulty
52	Switchover valve unit (5 connections) between pins 5 and 2 faulty
54	Switchover valve unit (5 connections) between pins 5 and 3 faulty
55	Switchover valve unit (4 connections) between pins 5 and 1 faulty
56	Switchover valve unit (4 connections) between pins 5 and 2 faulty

DTC Readout	Possible Cause of Failure
57	Switchover valve unit (4 connections) between pins 5 and 1 faulty
58	Switchover valve blend air flaps (warm) short circuit
59	Switchover valve blend air flaps (cold) short circuit
60	Switchover valve blend air flaps (closes) short circuit
61	Blower switch, low speed faulty
62	Blower switch, high speed faulty

A/C

Models	Model Year
124.034 124.036	1992-1995

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 16
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Short circuit, In car temperature sensor
3	Open circuit, In car temperature sensor
4	Short circuit, Outside temperature sensor
5	Open circuit, Outside temperature sensor
6	Short circuit, Evaporator temperature sensor
7	Open circuit, Evaporator temperature sensor
8	Short circuit Left heat exchanger temperature sensor
9	Left heat exchanger sensor, open
10	Right heat exchanger temperature sensor, short circuit
11	Right heat exchanger temperature sensor, open
12	Engine coolant temperature sensor, short circuit
13	Engine coolant temperature sensor, open circuit
30	Circulation pump, short or open circuit
31/32	Duo valve short circuit/open
33	compressor cut-out control module short circuit/open
34	Auxiliary fan 2nd stage (actuation), short circuit
56	Switchover valve fresh air/recirculated air flaps, long stroke short circuit
57	Switchover valve fresh air/recalculated air flaps, long stroke short circuit

A/C

Models	Model Years
124.026 124.030 124.050 124.090 124.051 124.230 124.290	1988-95
126.024 126.025 126.035 126.039 126.045 126.134 126.135	1988-91

Connect wires of Scanner as follows

Scanner	Data Link Connector 8-pin
Yellow	Socket 7
Black	Socket 1
Red	Battery (+)

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	In car temperature sensor, short circuit
3	In car temperature sensor, open circuit
4	Outside temperature sensor, short circuit
5	Outside temperature sensor, open circuit
6	Evaporator temperature sensor, short circuit
7	Evaporator temperature sensor, open circuit
8	Heater core temperature sensor, short-circuit
9	Heater core sensor, open
12	Engine coolant temperature sensor, short circuit
13	Engine coolant temperature sensor, open circuit
30	Coolant pump, short circuit
31	Duo valve short circuit/open
33	A/C compressor control module short circuit
34	Auxiliary fan relay faulty
50	Switchover valve unit, faulty at between pins 5 and 8 (7 connections)
51	Switchover valve unit, faulty between pins 8 and 7 (7 connections)
52	Switchover valve unit, faulty between pins 8 and 3(7 connections)
54	Switchover valve unit, faulty between pins 8 and 4 (7 connections)
55	Switchover valve unit, faulty between pins 8 and 6(7 connections)
56	Switchover valve unit, faulty between pins 8 and 2(7 connections)
57	Switchover valve unit, faulty between pins 8 and 1(7 connections)

A/C SELF DIAGNOSTIC SYSTEMS

TAU 2.1

READING ACTUAL VALUES

1. Remove the operating console from the TAU
2. At the upper side of the operating consol there is a display.
3. Ignition ON : Position 1
4. The fan speed selector NOT on position 1
5. The display alternates between the sensor/component number and the value of that sensor/component. Example: "OP E" : Open circuit or "CL O" : Closed circuit.

COMPONENT UNDER TEST

Number	Component
02	Interior Temperature Sensor
04	Exterior Temperature Sensor
06	Evaporator Temperature Sensor
08	Left Heater Core Temperature Sensor
10	Right Heater Core Temperature Sensor
12	Engine Coolant Temperature Sensor (ECT)
14	Left Temperature Selector Wheel Setting (Degree C)
16	Right Temperature Selector Wheel Setting (Degree C)
18	Vehicle Speed Signal(km/h)
20	Soft Top OPEN : "U", Soft Top CLOSED : "O"
22	Power Supply Voltage
83	OFF/ON (Not Used)
84	Blower Motor Voltage "050" (0.5v) - "600" (6.0v)

FAULT DIAGNOSIS

1 Turn temperature selector wheel into the white area.
2 Place the air speed selector at position 0 and the air direction to "DOWN"
3 IGNITION = ON : Position 1
4 Within the next 10 sec., press the "RECIRCULATE AIR" and "REST" button simultaneously for 3 sec.
5 Press the AUTO button until all error numbers are read and recorded.

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - TAU 2.1		
DTC Readout	**Description**	**Cause**
1	No DTC's Stored in System Memory.	No faults
2	In-Car Temperature Sensor (B10/4)	Short Circuit
3	In-Car Temperature Sensor (B10/4)	Open Circuit
4	Outside Temperature Sensor (B10/5)	Short Circuit
5	Outside Temperature Sensor (B10/5)	Open Circuit
6	Evaporator Temperature Sensor (B10/6)	Short Circuit
7	Evaporator Temperature Sensor (B10/6)	Open Circuit
8	Heater Core Temperature Sensor (B10/1))	Short Circuit
9	Heater Core Temperature Sensor (B10/1)	Open Circuit
10	Heater Core Temperature Sensor (Right)	Short Circuit
11	Heater Core Temperature Sensor(Right)	Open Circuit
12	Engine Coolant Temperature Sensor (B10/8)	Short Circuit
13	Engine Coolant Temperature Sensor (B10/8)	Open Circuit
16	Center Air Vent Control Module (N18/2r2)	Short Circuit
17	Center Air Vent Control Module (N18/2r2)	Open Circuit
18	Center Air Vent Feedback Potentiometer (R23/3)	Short Circuit
19	Center Air Vent Feedback Potentiometer (R23/3)	Open Circuit
20	Left Air Vent Control Module (N18/2r1)	Short Circuit
21	Left Air Vent Control Module (N18/2r1)	Open Circuit
22	Left Air Vent Feedback Potentiometer (R23/1)	Short Circuit
23	Left Air Vent Feedback Potentiometer (R23/1)	Open Circuit
24	Right Air Vent Control Module (N18/2r3)	Short Circuit
25	Right Air Vent Control Module (N18/2r3)	Open Circuit
26	Right Air Vent Feedback Potentiometer (R23/2)	Short Circuit
27	Right Air Vent Feedback Potentiometer (R23/2)	Open Circuit
30	Auxiliary Coolant Pump	Short Circuit
31	Automatic A/C Monovalve (Left)	Short Circuit
32	Automatic A/C Monovalve (Right)	Short Circuit
33	A/C Compressor Signal	Short Circuit

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - TAU 2.1		
DTC Readout	**Description**	**Cause**
34	Auxiliary Fan Signal 2 Stage	Short Circuit
35	Auxiliary Fan Signal 1 Stage	Short Circuit
50	Switchover Valve Block Signal	Short Circuit
70	Auxiliary Coolant Pump	Open Circuit
71	Automatic A/C Monovalve (Left)	Open Circuit
72	Automatic A/C Monovalve (Right)	Open Circuit
73	A/C Compressor Signal	Open Circuit
74	Auxiliary Fan Signal 2nd Stage	Open Circuit
75	Auxiliary Fan Signal 1st Stage	Open Circuit

A/C SELF DIAGNOSTIC SYSTEMS

129 Chassis to 8/95

READING ACTUAL VALUES

1. IGNITION ON : Position 1
2. Press the REST button and within 1 second press blower speed button 4.
3. The temperature window (upper left) will alternately display the test step number (ex. "02" In-car Temp) or "0P E" for Open Circuit or "Cl 0" for Closed Circuit.
4. Press "F" button to go to higher test.
5. Press "C" button to go to a lower test.
6. To end this test mode turn IGNITION OFF : Position 0 for longer then 5 seconds.

COMPONENT UNDER TEST

Number	Component
02	In-Car Temperature Sensor
04	Outside Temperature Sensor
06	Evaporator Temperature Sensor
08	Heater Core Temperature Sensor
12	Engine Coolant Temperature (ETC) Sensor
14	Temperature Selector Wheel Setting
18	Vehicle Speed Signal(km/h)
20	Soft Top OPEN : "U" ; Soft Top CLOSED : "O"
22	Power Supply Voltage
83	OFF/ON (Not Used)
84	Blower motor voltage "050" (0,5V) - "600" (6,0V)

FAULT DIAGNOSIS

1. Turn temperature selector wheel into the white area.
2. IGNITION ON : Position 1
3. Within the next 10 sec., press the "F", "RECIRCULATE AIR" and "REST" buttons simultaneously for 2 to 4 seconds.
4. The display will show the permanent DTC's stored. press the "RECIRCULATE AIR" button after each is displayed until the display reads "END"
5. Press "RECIRCULATE AIR" button again and the intermittent DTC's will be shown. A SQUARE is shown after each DTC to indicate that it is intermittent. Press the "RECIRCULATE AIR" button again to see the next DTC. Until "END" is shown.
6. To erase the DTC's : IGNITION ON : Position 1 Press the "RECIRCULATE AIR", "REST" and "UP" buttons simultaneously until --- is displayed in the window.

FAULT CODES - 129 Chassis to 8/95		
DTC Readout	**Description**	**Cause**
1	No DTC's Stored in System Memory.	No Faults

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 129 Chassis to 8/95		
DTC Readout	**Description**	**Cause**
2	In-Car Temperature Sensor (B10/4)	Short Circuit
3	In-Car Temperature Sensor (B10/4)	Open Circuit
4	Outside Temperature Sensor (B10/5)	Short Circuit
5	Outside Temperature Sensor (B10/5)	Open Circuit
6	Evaporator Temperature Sensor (B10/6)	Short Circuit
7	Evaporator Temperature Sensor (B10/6)	Open Circuit
8	Heater Core Temperature Sensor (B10/1)(Left)	Short Circuit
9	Heater Core Temperature Sensor (B10/1)(Left)	Open Circuit
10	Heater Core Temperature Sensor (Right)	Short Circuit
11	Heater Core Temperature Sensor(Right)	Open Circuit
12	Engine Coolant Temperature Sensor (B10/8)	Short Circuit
13	Engine Coolant Temperature Sensor (B10/8)	Open Circuit
16	Center Air Vent Control Module (N18/2r2)	Short Circuit
17	Center Air Vent Control Module (N18/2r2)	Open Circuit
18	Center Air Vent Feedback Potentiometer (R23/3)	Short Circuit
19	Center Air Vent Feedback Potentiometer (R23/3)	Open Circuit
20	Left Air Vent Control Module (N18/2r1)	Short Circuit
21	Left Air Vent Control Module (N18/2r1)	Open Circuit
22	Left Air Vent Feedback Potentiometer (R23/1)	Short Circuit
23	Left Air Vent Feedback Potentiometer (R23/1)	Open Circuit
24	Right Air Vent Control Module (N18/2r3)	Short Circuit
25	Right Air Vent Control Module (N18/2r3)	Open Circuit
26	Right Air Vent Feedback Potentiometer (R23/2)	Short Circuit
27	Right Air Vent Feedback Potentiometer (R23/2)	Open Circuit
30	Auxiliary Coolant Pump (M13)	Short Circuit
31	Automatic A/C Monovalve (Y19)	Short Circuit
32	Automatic A/C Monovalve (Right)	Short Circuit
33	A/C Compressor Signal	Short Circuit
34	Auxiliary Fan Signal, 2nd Stage	Short Circuit
35	Auxiliary Fan Signal, 1st Stage	Short Circuit
50	Switchover Valve Block Signal (Y11)	Short Circuit
70	Auxiliary Coolant Pump (M13)	Open Circuit

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 129 Chassis to 8/95		
DTC Readout	**Description**	**Cause**
71	Automatic A/C Monovalve (Y19)	Open Circuit
72	Automatic A/C Monovalve (Right)	Open Circuit
73	A/C Compressor Signal	Open Circuit
74	Auxiliary Fan Signal, 2nd Stage	Open Circuit
75	Auxiliary Fan Signal, 1st Stage	Open Circuit

A/C SELF DIAGNOSTIC SYSTEMS

129 Chassis from 9/95

READING ACTUAL VALUES

1. IGNITION : Position 1
2. Set temperature selector to 72 degrees F.
3. Press the REST button for more than 6 seconds.
4. The left display will alternately show the number "01" and the in-car temperature.
5. Press the FAN button and the next component number and its value will be displayed.
6. Press the REST button to end the test program.

COMPONENT UNDER TEST

Number	Component
01	In-Car Temperature Sensor with Aspirator Blower (B10/4)
02	Outside Temperature Sensor (B14)
03	Left Heater Core Temperature Sensor (B10/2)
05	Evaporator Temperature Sensor (B10/6)
06	Engine Coolant Temperature Sensor (ECT) (B11/4)
07	Refrigerant Pressure in Bar
08	Refrigerant Temperature Sensor (B12/1)
09	Not Used
10	Blower Control Voltage
20	Control Current for Auxiliary Fan exp. : 7 = 7 mA
21	Engine RPM. example 00..99 (x100) = 9900
22	Vehicle Speed
23	PIN 58D exp. 99.0 = 99% of Battery Voltage
24	Battery Voltage : 12.8 = 12,8 Volt
40	A/C Controller Software Version Coding
41	A/C Controller Hardware Version
42	Variant code 1
43	Variant code 2
50	Not Used
51	Not Used
52	Not Used
54	ON/OFF A/C Compressor emergency off signal from engine control module.

A/C SELF DIAGNOSTIC SYSTEMS

60	Roof "OPE" = OPEN, "CLO" = CLOSED
61	Left Air Outlet, Potentiometer Voltage
62	Vacuum Actuator 46, Feedback Potentiometer Voltage
63	Center Air Outlet, Potentiometer Voltage
64	Vacuum Actuator 47, Feedback Potentiometer Voltage
65	Right Air Outlet, Potentiometer Voltage
66	Vacuum Actuator 47, Feedback Potentiometer Voltage

FAULT DIAGNOSIS

1. IGNITION : Position 1
2. Temperature selector wheel : "LO"
3. Within 20 seconds press the REST and DEFROST buttons simultaneously for more than 5 seconds.
4. The LED in the RECIRCULATE button flashes and "dI A" appears on the display.
5. Press the AUTO button until all DTC's are displayed and recorded.
6. The current faults are displayed first, then the intermittent faults. "END"' is displayed when all codes have been displayed.
7. To erase codes press AUTO again, "dEL" will be displayed. Press v and ^ simultaneously for more than 5 seconds. The display will then show "---". Press AUTO to cancel the erase.
8. IGNITION : OFF to end the test program.

FAULT CODES - 129 Chassis from 9/95	
DTC Readout	**Description**
026	CAN Bus Communication
226	In-Car Air Temperature Sensor (B10/4)
227	Outside Air Temperature Sensor (B14)
228	Heater Core Temperature Sensor (B10/2)
230	Evaporator Temperature Sensor (B10/6)
231	Engine Coolant Temperature Sensor (B11/4)
232	Refrigerant Pressure Sensor (B12)
233	Refrigerant Temperature Sensor (B12/1)
241	Refrigerant Level
416	Coolant Circulation Pump (A31m1)
417	Automatic A/C Monovalve (Y19)
419	A/C Compressor Electromagnetic Clutch (A9k1)
420	Closed (Idle) Throttle Speed Increase

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 129 Chassis from 9/95	
DTC Readout	**Description**
421	Auxiliary Fan Control Module (N65/1)
422	Serial Interface Connection (K1) to Instrument Cluster (IC)
423	Switchover Valve Block (15 connection multiplex) (Y11)
459	Serial Interface Connection (K2) to Instrument Cluster (IC)

A/C SELF DIAGNOSTIC SYSTEMS

140 Chassis to 8/95

READING ACTUAL VALUES

1. Turn temperature selector wheel into the white area.
2. IGNITION = ON : Position 1
3. Press the left and right "AUTO" buttons.
4. Within 20 seconds press the "REST" button for more than 5 sec.
5. LEFT DISPLAY = Component Number
   RIGHT DISPLAY = Actual Component Value or "HI" for a short circuit or "LO" for an open circuit
6. Press the left "AUTO" button to monitor the next component.
7. Press the "REST" button to end the test mode.

COMPONENTS UNDER TEST

Number	Component
01	In-Car Temperature Sensor with Aspirator Blower (B10/4)
02	Outside Temperature Sensor (B10/5)
03	Left Heater Core Temperature Sensor (B10/2)
04	Right Heater Core Temperature Sensor (B10/3)
05	Evaporator Temperature Sensor (B10/6)
06	Engine Coolant Temperature (ECT) Sensor (A/C) (B10/8)
07	Refrigerant Pressure in Bar : Ex. 06'4 = 6.4 Bar
08	Blower Control Voltage from 8(min) - 60(max)
09	Software Status, A/C Pushbutton Control Module(N22) Mfg.
10	Left rear heater core temperature sensor (B10/9)
11	Right rear heater core temperature sensor (B10/10)
12	Rear Evaporator Temperature Sensor (B10/11)
13	Software Status, Rear A/C Pushbutton Control Module(N22) Mfg.
16	Control Module Applicable for Charcoal Filter : "A"=YES "0 "=NO

FAULT DIAGNOSIS

1. Turn the left selector wheel into the red area.
2. Turn the right selector wheel into the blue area.
3. IGNITION = ON : Position 1.
4. Press the "AUTO" button.
5. Within 20 seconds, press the "REST" and "O" button for more than 2 seconds.
6. The display will show the permanent DTC's stored. Left window "E0" or "E1", right window "01", "02"...etc. Record each DTC and press the right "AUTO" button to display the next code. Continue until "END" is displayed.
7. To erase the DTC's : Turn IGNITION OFF, Then turn IGNITION ON : Position 1. Press the left "AUTO" button. A "d" (delete) is displayed in the left window. By pressing the right "AUTO" button the DTC will be deleted. Alternate left and right "AUTO" buttons until all DTCs are erased and "E0 00" is displayed.

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 140 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
001	No DTC's Stored in System Memory.		
002	A/C Pushbutton Control Module (N22)		
003	Rear A/C Pushbutton Control Module (N22/3)		
006	Connection to the Switchover Valve Block (Y11)		
007	Data Exchange (CAN B)	Short Circuit.	
008	Data Exchange (CAN A)	Short Circuit.	
009	Data Exchange (CAN A and CAN B)	Short Circuit.	
010	Make the Diagnosis Again.		
011	Data Exchange (CAN B)	Open Circuit.	
012	Data Exchange (CAN A)	Open Circuit.	
013	Connection with the Rear A/C Pushbutton Control Module		
014	Data Exchange (CAN B) : Rear A/C Control Module	Open Circuit.	
015	Data Exchange (CAN A) : Rear A/C Control Module	Open Circuit.	
016	In-Car Air Temperature Sensor (B10/4)	Short Circuit	CONTINUOUS
017	In-Car Air Temperature Sensor (B10/4)	Short Circuit	INTERMITTENT
018	In-Car Air Temperature Sensor (B10/4)	Short or Open Circuit	CONTINUOUS
019	In-Car Air Temperature Sensor (B10/4)	Short or Open Circuit	INTERMITTENT
024	Left Heater Core Temperature Sensor (B10/2)	Short Circuit	CONTINUOUS
025	Left Heater Core Temperature Sensor (B10/2)	Short Circuit	INTERMITTENT
026	Left Heater Core Temperature Sensor (B10/2)	Short or Open Circuit	CONTINUOUS
027	Left Heater Core Temperature Sensor (B10/2)	Short or Open Circuit	INTERMITTENT
028	Right Heater Core Temperature Sensor (B10/3)	Short Circuit	CONTINUOUS
029	Right Heater Core Temperature Sensor (B10/3)	Short Circuit	INTERMITTENT
030	Right Heater Core Temperature Sensor (B10/3)	Short or Open Circuit	CONTINUOUS
031	Right Heater Core Temperature Sensor (B10/3)	Short or Open Circuit	INTERMITTENT
032	Outside Air Temperature Sensor (B10/5)	Short Circuit	CONTINUOUS
033	Outside Air Temperature Sensor (B10/5)	Short Circuit	INTERMITTENT
034	Outside Air Temperature Sensor (B10/5)	Short or Open Circuit	CONTINUOUS
035	Outside Air Temperature Sensor (B10/5)	Short or Open Circuit	INTERMITTENT

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 140 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
036	Evaporator Temperature Sensor (B10/6)	Short Circuit	CONTINUOUS
037	Evaporator Temperature Sensor (B10/6)	Short Circuit	INTERMITTENT
038	Evaporator Temperature Sensor (B10/6)	Short or Open Circuit	CONTINUOUS
039	Evaporator Temperature Sensor (B10/6)	Short or Open Circuit	INTERMITTENT
040	Engine Coolant Temperature Sensor (B10/8)	Short Circuit	CONTINUOUS
041	Engine Coolant Temperature Sensor (B10/8)	Short Circuit	INTERMITTENT
042	Engine Coolant Temperature Sensor (B10/8)	Short or Open Circuit	CONTINUOUS
043	Engine Coolant Temperature Sensor (B10/8)	Short or Open Circuit	INTERMITTENT
044	Refrigerant Pressure Sensor (B12)	Short Circuit	CONTINUOUS
045	Refrigerant Pressure Sensor (B12)	Short Circuit	INTERMITTENT
046	Refrigerant Pressure Sensor (B12)	Short or Open Circuit	CONTINUOUS
047	Refrigerant Pressure Sensor (B12)	Short or Open Circuit	INTERMITTENT
048	Left Temperature Wheel	Short Circuit	CONTINUOUS
049	Left Temperature Wheel	Short Circuit	INTERMITTENT
050	Left Temperature Wheel	Short or Open Circuit	CONTINUOUS
051	Left Temperature Wheel	Short or Open Circuit	INTERMITTENT
052	Right Temperature Wheel	Short Circuit	CONTINUOUS
053	Right Temperature Wheel	Short Circuit	INTERMITTENT
054	Right Temperature Wheel	Short or Open Circuit	CONTINUOUS
055	Right Temperature Wheel	Short or Open Circuit	INTERMITTENT
072	Heater Supply Unit Coolant Circulation Pump (A31m1)	Short Circuit	CONTINUOUS
073	Heater Supply Unit Coolant Circulation Pump (A31m1)	Short Circuit	INTERMITTENT
074	Coolant Circulation Pump (A31m1)	Short or Open Circuit	CONTINUOUS
075	Coolant Circulation Pump (A31m1)	Short or Open Circuit	INTERMITTENT
076	Coolant Circulation Pump (A31m1)	Overload	CONTINUOUS
077	Coolant Circulation Pump (A31m1)	Overload	INTERMITTENT
080	Left Duovalve (Water Valve) (A31y1)	Short Circuit	CONTINUOUS
081	Left Duovalve (Water Valve) (A31y1)	Short Circuit	INTERMITTENT
082	Left Duovalve (Water Valve) (A31y1)	Short or Open Circuit	CONTINUOUS
083	Left Duovalve (Water Valve) (A31y1)	Short or Open Circuit	INTERMITTENT
084	Right Duovalve (Water Valve) (A31y2)	Short Circuit	CONTINUOUS

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 140 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
085	Right Duovalve (Water Valve) (A31y2)	Short Circuit	INTERMITTENT
086	Right Duovalve (Water Valve) (A31y2)	Short or Open Circuit	CONTINUOUS
087	Right Duovalve (Water Valve) (A31y2)	Short or Open Circuit	INTERMITTENT
088	A/C Compressor Ground Activation		CONTINUOUS
089	A/C Compressor Ground Activation		INTERMITTENT
090	A/C Compressor Ground Activation	Short or Open Circuit	CONTINUOUS
091	A/C Compressor Ground Activation	Short or Open Circuit	INTERMITTENT
096	Auxiliary Fan, 1ST Stage Activation	Short Circuit	CONTINUOUS
097	Auxiliary Fan, 1ST Stage Activation	Short Circuit	INTERMITTENT
098	Auxiliary Fan, 1ST Stage Activation	Short or Open Circuit	CONTINUOUS
099	Auxiliary Fan, 1ST Stage Activation	Short or Open Circuit	INTERMITTENT
100	Auxiliary Fan, 2ND Stage Activation	Short Circuit	CONTINUOUS
101	Auxiliary Fan, 2ND Stage Activation	Short Circuit	INTERMITTENT
102	Auxiliary Fan, 2ND Stage Activation	Short or Open Circuit	CONTINUOUS
103	Auxiliary Fan, 2ND Stage Activation	Short or Open Circuit	INTERMITTENT
104	Auxiliary Fan, 3RD Stage Activation	Short Circuit	CONTINUOUS
105	Auxiliary Fan, 3RD Stage Activation	Short Circuit	INTERMITTENT
106	Auxiliary Fan, 3RD Stage Activation	Short or Open Circuit	CONTINUOUS
107	Auxiliary Fan, 3RD Stage Activation	Short or Open Circuit	INTERMITTENT
108	Auxiliary Coolant Pump Control Relay Module (K30), Power Supply	Short Circuit	CONTINUOUS
109	Auxiliary Coolant Pump Control Relay Module (K30), Power Supply	Short Circuit	INTERMITTENT
110	Auxiliary Coolant Pump Control Relay Module (K30), Power Supply	Short or Open Circuit	CONTINUOUS
111	Auxiliary Coolant Pump Control Relay Module (K30), Power Supply	Short or Open Circuit	INTERMITTENT
112	Engine RPM Increase Diode Matrix (V2)	Short Circuit	CONTINUOUS
113	Engine RPM Increase Diode Matrix (V2)	Short Circuit	INTERMITTENT
114	Engine RPM Increase Diode Matrix (V2)	Short or Open Circuit	CONTINUOUS
115	Engine RPM Increase Diode Matrix (V2)	Short or Open Circuit	INTERMITTENT
116	Activated Charcoal Filter Actuator (A32m2) : (OPEN)	Short Circuit	CONTINUOUS
117	Activated Charcoal Filter Actuator (A32m2) : (OPEN)	Short Circuit	INTERMITTENT

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 140 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
118	Activated Charcoal Filter Actuator (A32m2) : (OPEN)	Short or Open Circuit	CONTINUOUS
119	Activated Charcoal Filter Actuator (A32m2) : (OPEN)	Short or Open Circuit	INTERMITTENT
120	Activated Charcoal Filter Actuator (A32m2) : (CLOSED)	Short Circuit	CONTINUOUS
121	Activated Charcoal Filter Actuator (A32m2) : (CLOSED)	Short Circuit	INTERMITTENT
122	Activated Charcoal Filter Actuator (A32m2) : (CLOSED)	Short or Open Circuit	CONTINUOUS
123	Activated Charcoal Filter Actuator (A32m2) : (CLOSED)	Short or Open Circuit	INTERMITTENT
128	Left Rear Heater Core Temperature Sensor (B10/9)	Short Circuit	CONTINUOUS
129	Left Rear Heater Core Temperature Sensor (B10/9)	Short Circuit	INTERMITTENT
130	Left Rear Heater Core Temperature Sensor (B10/9)	Short or Open Circuit	CONTINUOUS
131	Left Rear Heater Core Temperature Sensor (B10/9)	Short or Open Circuit	INTERMITTENT
132	Right Rear Heater Core Temperature Sensor (B10/10)	Short Circuit	CONTINUOUS
133	Right Rear Heater Core Temperature Sensor (B10/10)	Short Circuit	INTERMITTENT
134	Right Rear Heater Core Temperature Sensor (B10/10)	Short or Open Circuit	CONTINUOUS
135	Right Rear Heater Core Temperature Sensor (B10/10)	Short or Open Circuit	INTERMITTENT
136	Left Temperature Selector wheel	Short Circuit	CONTINUOUS
137	Left Temperature Selector wheel	Short Circuit	INTERMITTENT
138	Left Temperature Selector wheel	Short or Open Circuit	CONTINUOUS
139	Left Temperature Selector wheel	Short or Open Circuit	INTERMITTENT
140	Right Temperature Selector wheel	Short Circuit	CONTINUOUS
141	Right Temperature Selector wheel	Short Circuit	INTERMITTENT
142	Right Temperature Selector wheel	Short or Open Circuit	CONTINUOUS
143	Right Temperature Selector wheel	Short or Open Circuit	INTERMITTENT
144	Rear Evaporator Temperature Sensor (B10/11)	Short Circuit	CONTINUOUS

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 140 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
145	Rear Evaporator Temperature Sensor (B10/11)	Short Circuit	INTERMITTENT
146	Rear Evaporator Temperature Sensor (B10/11)	Short or Open Circuit	CONTINUOUS
147	Rear Evaporator Temperature Sensor (B10/11)	Short or Open Circuit	INTERMITTENT
148	Coolant Circulation Pump (A31/1m1)	Short Circuit	CONTINUOUS
149	Coolant Circulation Pump (A31/1m1)	Short Circuit	INTERMITTENT
150	Coolant Circulation Pump (A31/1m1)	Short or Open Circuit	CONTINUOUS
151	Coolant Circulation Pump (A31/1m1)	Short or Open Circuit	INTERMITTENT
152	Coolant Circulation Pump (A31/1m1)	Overload	CONTINUOUS
153	Coolant Circulation Pump (A31/1m1)	Overload	INTERMITTENT
156	Left Duovalve (Water Valve) (A31/1y1)	Short Circuit	CONTINUOUS
157	Left Duovalve (Water Valve) (A31/1y1)	Short Circuit	INTERMITTENT
158	Left Duovalve (Water Valve) (A31/1y1)	Short or Open Circuit	CONTINUOUS
159	Left Duovalve (Water Valve) (A31/1y1)	Short or Open Circuit	INTERMITTENT
160	Right Duovalve (Water Valve) (A31/1y2)	Short Circuit	CONTINUOUS
161	Right Duovalve (Water Valve) (A31/1y2)	Short Circuit	INTERMITTENT
162	Right Duovalve (Water Valve) (A31/1y2)	Short or Open Circuit	CONTINUOUS
163	Right Duovalve (Water Valve) (A31/1y2)	Short or Open Circuit	INTERMITTENT
164	Rear Refrigerant Shut-Off Valve (Y67)	Short Circuit	CONTINUOUS
165	Rear Refrigerant Shut-Off Valve (Y67)	Short Circuit	INTERMITTENT
166	Rear Refrigerant Shut-Off Valve (Y67)	Short or Open Circuit	CONTINUOUS
167	Rear Refrigerant Shut-Off Valve (Y67)	Short or Open Circuit	INTERMITTENT
168	Rear Tunnel Flap Vacuum Valve (Y67/1)	Short Circuit	CONTINUOUS
169	Rear Tunnel Flap Vacuum Valve (Y67/1)	Short Circuit	INTERMITTENT
170	Rear Tunnel Flap Vacuum Valve (Y67/1)	Short or Open Circuit	CONTINUOUS
171	Rear Tunnel Flap Vacuum Valve (Y67/1)	Short or Open Circuit	INTERMITTENT

140 Chassis from 9/95

READING ACTUAL VALUES

1. IGNITION : Position 1
2. Press the AUTO button
3. Set both temperature selectors to 72 degrees F.
4. Press the REST button for more than 5 seconds.
5. The left display will alternately show the number "1" and the in-car temperature.
6. Press the AUTO button and the next component number and its value will be displayed.
7. Press the REST button to end the test program.

A/C SELF DIAGNOSTIC SYSTEMS

COMPONENT UNDER TEST

Number	Component
01	In-Car Temperature Sensor with Aspirator Blower (B10/4)
02	Outside Temperature Sensor (B10/5) 1996, (B14) as of 1997
03	Left Heater Core Temperature Sensor (B10/2)
04	Right Heater Core Temperature Sensor (B10/3)
05	Evaporator Temperature Sensor (B10/6)
06	Engine Coolant Temperature (ECT) Sensor (A/C) (B11/4)
07	Refrigerant Pressure in Bar
08	Refrigerant Temperature Sensor (B12/1)
10	Blower Control Voltage
11	Emissions (Refrigerant Leak) Sensor (B31)
12	Sun (Excessive Heat) Sensor (B32)
20	Control Current for Auxiliary Fan example : 7 = 7 mA
21	Engine RPM. example 00..99 (x100) = 9900
22	Vehicle Speed
23	PIN 58D example. 99.0 = 99% of Battery Voltage
24	Battery Voltage : 12.8 = 12,8 Volt
30	Left Rear Heater Core Temperature Sensor (B10/9)
31	Right Rear Heater Core Temperature sensor (B10/10)
32	Rear Evaporator Temperature Sensor (B10/11)
33	Rear Blower Control Voltage
34	Left Rear Temperature Sensor version
35	Right Rear Temperature Sensor
38	Rear A/C Controller Software Version Coding
39	Rear A/C Controller Hardware Version
40	Front A/C Controller Software Version Coding
41	Front A/C Controller Hardware Version
42	Variant code 1
43	Variant code 2

A/C SELF DIAGNOSTIC SYSTEMS

FAULT DIAGNOSIS

1. IGNITION : Position 1
2. Left Temperature selector wheel : HI
   Right Temperature selector wheel : LO
3. Within 20 seconds press the REST and EC buttons simultaneously for more than 5 seconds.
4. The LED in the RECIRCULATE button flashes and "OFF" appears on the display.
5. Press the right AUTO button until all DTC's are displayed and recorded.
6. To erase all codes must be read out. Press both AUTO buttons simultaneously for more than 2 seconds. "d" will be displayed on the left and "FF" is displayed on the right. The erase can be canceled by pressing the AUTO button.
7. Reset temperature selector to normal setting.
8. IGNITION : OFF to end the test program.

FAULT CODES - 140 Chassis from 9/95	
DTC Readout	**Description**
026	CAN Bus Communication
226	In-Car Air Temperature Sensor (B10/4)
227	Outside Air Temperature Sensor (B10/5) to 1996, (B14) as of 1997
228	Left Heater Core Temperature Sensor (B10/2)
229	Right Heater Core Temperature Sensor (B10/3)
230	Evaporator Temperature Sensor (B10/6)
231	Engine Coolant Temperature Sensor (B11/4) DFI or IFI models Right Engine Coolant Temperature Sensor (B11/10) to 1996
232	Refrigerant Pressure Sensor (B12)
233	Refrigerant Temperature Sensor (B12/1)
234	Sun Sensor (B32)
235	Emissions (Refrigerant Leak) Sensor (B31)
241	Refrigerant Level
416	Coolant Circulation Pump (A31m1)
417	Left Duovalve (Water Valve) (Y21y1)
418	Right Duovalve (Water Valve) (Y21y2)
419	A/C Compressor Electromagnetic Clutch (A9k1)
420	Closed (Idle) Throttle Speed Increase
421	Pulse Module (N65)
422	Serial Interface Connection (K1) to Instrument Cluster (IC)
423	Switchover Valve Block (Y11)
424	Activated Charcoal Filter Actuator (A32m2) : OPEN
425	Activated Charcoal Filter Actuator (A32m2) : CLOSE
432	Maximum Heat

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 140 Chassis from 9/95	
DTC Readout	**Description**
459	Serial Interface Connection (K2) to Instrument Cluster (IC)
460	LED - Center Air Outlet "Warm"
461	LED - Center Air Outlet "Cold"
462	Wide Open Throttle (WOT) Position Signal - Diesel Engine Only

A/C SELF DIAGNOSTIC SYSTEMS

202 Chassis to 8/95

READING ACTUAL VALUES

1. IGNITION : Position 1
2. Set temperature selection to 72 degrees F (Press v and ^ simultaneously).
3. Press the AUTO button.
4. Press the REST button for more than 5 seconds.
5. The display will alternately show the number "01" and the in-car temperature or "LO" if there is an open circuit or "HI" if there is a short circuit.
6. Press the "Top Air Outlet" button to increase the component tested and the "Bottom Air Outlet" button to decrease the component number tested.
7. Press the REST button to end the test program.

COMPONENT UNDER TEST

Number	Component
01	In-Car Temperature Sensor with Aspirator Blower (B10/4)
02	Outside Temperature Sensor (B10/5)
03	Heater Core Temperature Sensor (B10/1)
05	Evaporator Temperature Sensor (B10/6)
06	Engine Coolant Temperature (ECT) Sensor (A/C) (B10/8)
07	Refrigerant Pressure in Bar
08	Blower Control Voltage
09	Software Status of A/C Pushbutton Control Module
15	Selected In-Car Temperature
20	Version Code
21	Engine Speed in RPM
22	A/C Compressor Speed in RPM
23	Vehicle Speed in km/h
50	Not Used
51	Number of Current Poly-V Belt Slip Recognitions
52	Number of Stored Poly-V Belt Slip Recognitions

FAULT DIAGNOSIS

1 IGNITION : Position 1
2 Press the V button until "LO" appears on the display.
3 Within 20 seconds press the REST and BLOWER buttons simultaneously for more then 2 seconds.
4 The LED in the RECIRCULATE button flashes and "dI R" appears on the display
5 Press the AUTO button until all DTC's are displayed and recorded. Continuous faults are displayed first. if no faults are stored, "En d" is displayed. Press AUTO again to retrieve intermittent faults. If no intermittent faults are stored, "En d" is displayed.

A/C SELF DIAGNOSTIC SYSTEMS

6 Press the AUTO button until "dE L" is displayed. To erase codes press both V and ^ simultaneously for at least 5 seconds. The display will show "---"
7 IGNITION : OFF to end the test program.

FAULT CODES - 202 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
01	No ERROR Stored	No Faults	
02	A/C Pushbutton Control Module (N22).	Power failure or damaged computer	
03	In-Car Temperature Sensor with Aspirator Blower (B10/4)	Short circuit	CONTINUOUS
04	In Car Temperature Sensor with Aspirator Blower (B10/4)	Short circuit	INTERMITTENT
05	In-Car Temperature Sensor with Aspirator Blower (B10/4)	Short or Open circuit	CONTINUOUS
06	In-Car Temperature Sensor with Aspirator Blower (B10/4)	Short or Open circuit	INTERMITTENT
07	Outside Air Temperature Sensor (B10/5)	Short circuit	CONTINUOUS
08	Outside Air Temperature Sensor (B10/5)	Short circuit	INTERMITTENT
09	Outside air Temperature Sensor (B10/5)	Short or Open circuit	CONTINUOUS
10	Outside air Temperature Sensor (B10/5)	Short or Open circuit	INTERMITTENT
11	Heater Core Temperature Sensor (B10/1)	Short circuit	CONTINUOUS
12	Heater Core Temperature Sensor (B10/1)	Short circuit	INTERMITTENT
13	Heater Core Temperature Sensor (B10/1)	Short or Open circuit	CONTINUOUS
14	Heater Core Temperature Sensor (B10/1)	Short or Open circuit	INTERMITTENT
19	Evaporator Temperature Sensor (B10/6)	Short circuit	CONTINUOUS
20	Evaporator Temperature Sensor (B10/6)	Short circuit	INTERMITTENT
21	Evaporator Temperature Sensor (B10/6)	Short or Open circuit	CONTINUOUS
22	Evaporator Temperature Sensor (B10/6)	Short or Open circuit	INTERMITTENT
23	Engine Coolant Temperature Sensor (ETC) (B10/8)	Short circuit	CONTINUOUS
24	Engine Coolant Temperature Sensor (ETC) (B10/8)	Short circuit	INTERMITTENT
25	Engine Coolant Temperature Sensor (ETC) (B10/8)	Short or Open circuit	CONTINUOUS
26	Engine Coolant Temperature Sensor (ETC) (B10/8)	Short or Open circuit	INTERMITTENT
27	Refrigerant Pressure Sensor (B12)	Short circuit	CONTINUOUS
28	Refrigerant Pressure Sensor (B12)	Short circuit	INTERMITTENT

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 202 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
29	Refrigerant Pressure Sensor (B12)	Short or Open circuit	CONTINUOUS
30	Refrigerant Pressure Sensor (B12)	Short or Open circuit	INTERMITTENT
31	A/C Compressor RPM Sensor (A9l1)	Bad Sensor	
32	Poly-V Belt Slip Recognition	Slipping Belt	
47	Auxiliary Coolant Pump (M13)	Unknown	
48	Auxiliary Coolant Pump (M13)	Short circuit	INTERMITTENT
49	Auxiliary Coolant Pump (M13)	Short or Open circuit	CONTINUOUS
50	Auxiliary Coolant Pump (M13)	Short or Open circuit	INTERMITTENT
51	Duovalve (Water Valve) (Y21)	Short circuit	CONTINUOUS
52	Duovalve (Water Valve) (Y21)	Short circuit	INTERMITTENT
53	Duovalve (Water Valve) (Y21)	Short or Open circuit	CONTINUOUS
54	Duovalve (Water Valve) (Y21)	Short or Open circuit	INTERMITTENT
59	A/C Compressor Electromagnetic Clutch (A9k1)	Short circuit	CONTINUOUS
60	A/C Compressor Electromagnetic Clutch (A9k1)	Short circuit	INTERMITTENT
61	A/C Compressor Electromagnetic Clutch (A9k1)	Short or Open circuit	CONTINUOUS
62	A/C Compressor Electromagnetic Clutch (A9k1)	Short or Open circuit	INTERMITTENT
63	Activation of Auxiliary Fan Stage 1	Short circuit	CONTINUOUS
64	Activation of Auxiliary Fan Stage 1	Short circuit	INTERMITTENT
65	Activation of Auxiliary Fan Stage 1	Short or Open circuit	CONTINUOUS
66	Activation of Auxiliary Fan Stage 1	Short or Open circuit	INTERMITTENT
67	Activation of Auxiliary Fan Stage 2	Short circuit	CONTINUOUS
68	Activation of Auxiliary Fan Stage 2	Short circuit	INTERMITTENT
69	Activation of Auxiliary Fan Stage 2	Short or Open circuit	CONTINUOUS
70	Activation of Auxiliary Fan Stage 2	Short or Open circuit	INTERMITTENT
71	Closed (Idle) Throttle Speed Increase	Short or Open circuit	CONTINUOUS
72	Closed (Idle) Throttle Speed Increase	Short or Open circuit	INTERMITTENT
73	Closed (Idle) Throttle Speed Increase	Short circuit	CONTINUOUS
74	Closed (Idle) Throttle Speed Increase	Short circuit	INTERMITTENT
75	Switchover Valve Block (Y11/3), Diverter Flap		CONTINUOUS

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 202 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
76	Switchover Valve Block (Y11/3), Diverter Flap		INTERMITTENT
77	Switchover Valve Block (Y11/3), Diverter Flap	Short or Open circuit	CONTINUOUS
78	Switchover Valve Block (Y11/3), Diverter Flap	Short or Open circuit	INTERMITTENT
79	Switchover Valve Block (Y11/3), Tempering Flap		CONTINUOUS
80	Switchover Valve Block (Y11/3), Tempering Flap		INTERMITTENT
81	Switchover Valve Block (Y11/3), Tempering Flap	Short or Open circuit	CONTINUOUS
82	Switchover Valve Block (Y11/3), Tempering Flap	Short or Open circuit	INTERMITTENT
83	Switchover Valve Block (Y11/3), Fresh/Recirculating Air Flap Long Stroke (80%)		CONTINUOUS
84	Switchover Valve Block (Y11/3), Fresh/Recirculating Air Flap Long Stroke (80%)		INTERMITTENT
85	Switchover Valve Block (Y11/3), Fresh/Recirculating Air Flap Long Stroke (80%)	Short or Open circuit	CONTINUOUS
86	Switchover Valve Block (Y11/3), Fresh/Recirculating Air Flap	Short or Open circuit	INTERMITTENT
87	Switchover Valve Block (Y11/3), Fresh/Recirculating Air Flap Short Stroke (20%)		CONTINUOUS
88	Switchover Valve Block (Y11/3), Fresh/Recirculating Air Flap Short Stroke (20%)		INTERMITTENT
89	Switchover Valve Block (Y11/3), Fresh/Recirculating Air Flap Short Stroke (20%)	Short or Open circuit	CONTINUOUS
90	Switchover Valve Block (Y11/3), Fresh/Recirculating Air Flap Short Stroke (20%)	Short or Open circuit	INTERMITTENT
91	Switchover Valve Block (Y11/3), Defroster Flap Long Stroke (80%)		CONTINUOUS
92	Switchover Valve Block (Y11/3), Defroster Flap Long Stroke (80%)		INTERMITTENT

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 202 Chassis to 8/95			
DTC Readout	**Description**	**Cause**	**Fault Type**
93	Switchover Valve Block (Y11/3), Defroster Flap Long Stroke (80%)	Short or Open circuit	CONTINUOUS
94	Switchover Valve Block (Y11/3), Defroster Flap Long Stroke (80%)	Short or Open circuit	INTERMITTENT
95	Switchover Valve Block (Y11/3), Defroster Flap Short Stroke (20%)		CONTINUOUS
96	Switchover Valve Block (Y11/3), Defroster Flap Short Stroke (20%)		INTERMITTENT
97	Switchover Valve Block (Y11/3), Defroster Flap Short Stroke (20%)	Short or Open circuit	CONTINUOUS
98	Switchover Valve Block (Y11/3), Defroster Flap Short Stroke (20%)	Short or Open circuit	INTERMITTENT
99	Switchover Valve Block (Y11/3), Footwell Flap Long Stroke (80%)		CONTINUOUS
100	Switchover Valve Block (Y11/3), Footwell Flap Long Stroke (80%)		INTERMITTENT
101	Switchover Valve Block (Y11/3), Footwell Flap Long Stroke (80%)	Short or Open circuit	CONTINUOUS
102	Switchover Valve Block (Y11/3), Footwell Flap Long Stroke (80%)	Short or Open circuit	INTERMITTENT
103	Switchover Valve Block (Y11/3), Footwell Flap Short Stroke (20%)		CONTINUOUS
104	Switchover Valve Block (Y11/3), Footwell Flap Short Stroke (20%)		INTERMITTENT
105	Switchover Valve Block (Y11/3), Footwell Flap Short Stroke (20%)	Short or Open circuit	CONTINUOUS
106	Switchover Valve Block (Y11/3), Footwell Flap Short Stroke (20%)	Short or Open circuit	INTERMITTENT

A/C SELF DIAGNOSTIC SYSTEMS

202 Chassis from 9/95

READING ACTUAL VALUES

1. IGNITION : Position 1
2. Set temperature selector to 72 degrees F.
3. Press the REST button for more than 6 seconds.
4. The left display will alternately show the number "01" and the in-car temperature.
5. Press the FAN button and the next component number and its value will be displayed.
6. Press the REST button to end the test program.

COMPONENT UNDER TEST

Number	Component
01	In-Car Temperature Sensor with Aspirator Blower (B10/4)
02	Outside Temperature Sensor (B14)
03	Heater Core Temperature Sensor (B10/1)
05	Evaporator Temperature Sensor (B10/6)
06	Engine Coolant Temperature Sensor (ECT) (B11/4)
07	Refrigerant Pressure in Bar
08	Refrigerant Temperature Sensor (B12/1)
09	Not Used
10	Blower Control Voltage
20	Control Current for Auxiliary Fan exp. : 7 = 7 mA
21	Engine RPM. example 00..99 (x100) = 9900
22	Vehicle Speed
23	PIN 58D exp. 99.0 = 99% of Battery Voltage
24	Battery Voltage : 12.8 = 12,8 Volt
40	A/C Controller Software Version Coding
41	A/C Controller Hardware Version
42	Variant code 1
43	Variant code 2
50	Not Used
51	Not Used
52	Not Used
54	ON/OFF A/C Compressor emergency off signal from engine control module.

A/C SELF DIAGNOSTIC SYSTEMS

FAULT DIAGNOSIS

1. IGNITION : Position 1
2. Temperature selector wheel : "LO"
3. Within 20 seconds press the REST and DEFROST buttons simultaneously for more than 5 seconds.
4. The LED in the RECIRCULATE button flashes and "dI A" appears on the display.
5. Press the AUTO button until all DTC's are displayed and recorded.
6. The current faults are displayed first, then the intermittent faults. "END'" is displayed when all codes have been displayed.
7. To erase codes press v and ^ simultaneously for more than 5 seconds. The display will then show "---". Press AUTO to cancel the erase.
8. IGNITION : OFF to end the test program.

FAULT CODES - 202 Chassis from 9/95	
DTC Readout	**Description**
026	CAN Bus Communication
226	In-Car Air Temperature Sensor (B10/4)
227	Outside Air Temperature Sensor (B14)
228	Heater Core Temperature Sensor (B10/1)
230	Evaporator Temperature Sensor (B10/6)
231	Engine Coolant Temperature Sensor (B11/4)
232	Refrigerant Pressure Sensor (B12)
233	Refrigerant Temperature Sensor (B12/1)
241	Refrigerant Level
416	Coolant Circulation Pump (A31m1)
417	Left Duovalve (Water Valve) (Y21y1)
418	Right Duovalve (Water Valve) (Y21y2)
419	A/C Compressor Electromagnetic Clutch (A9k1)
420	Closed (Idle) Throttle Speed Increase
421	Pulse Module (N65)
422	Serial Interface Connection (K1) to Instrument Cluster (IC)
451	Diverter Flap (Y11/3)
452	Blend Air Flap (Y11/3)
453	Fresh/Recirculated Air Flap (Y11/3) Long Stroke
454	Fresh/Recirculated Air Flap (Y11/3) Short Stroke
455	Defroster Outlet Flap (Y11/3) Long Stroke
456	Defroster Outlet Flap (Y11/3) Short Stroke
457	Footwell Flap (Y11/3) Long Stroke
458	Footwell Flap (Y11/3) Short Stroke
459	Serial Interface Connection (K2) to Instrument Cluster (IC)

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 202 Chassis from 9/95	
DTC Readout	**Description**
462	Wide Open Throttle (WOT) Position Signal - Diesel Engine Only

A/C SELF DIAGNOSTIC SYSTEMS

210 Chassis from 9/95

READING ACTUAL VALUES

1. IGNITION : Position 1
2. Press the AUTO button
3. Set both temperature selectors to 72 degrees F.
4. Press the REST button for more than 5 seconds.
5. The left display will alternately show the number "1" and the in-car temperature.
6. Press the AUTO button and the next component number and its value will be displayed.
7. Press the REST button to end the test program.

COMPONENT UNDER TEST

Number	Component
01	In-Car Temperature Sensor with Aspirator Blower (B10/4)
02	Outside Temperature Sensor (B14)
03	Left Heater Core Temperature Sensor (B10/1)
04	Right Heater Core Temperature Sensor (B10/1)
05	Evaporator Temperature Sensor (B10/6)
06	Engine Coolant Temperature (ECT) Sensor (A/C) (B1/4)
07	Refrigerant Pressure in Bar
08	Refrigerant Temperature Sensor (B12/1)
10	Blower Control Voltage
11	Emissions (Refrigerant Leak) Sensor (B31)
12	Sun (Excessive Heat) Sensor (B32)
20	Control Current for Auxiliary Fan exp. : 7 = 7 mA
21	Engine RPM. example 00..99 (x100) = 9900
22	Vehicle Speed
23	PIN 58D exp. 99.0 = 99% of Battery Voltage
24	Battery Voltage : 12.8 = 12,8 Volt
40	Software Version Encoded
41	Hardware Version

A/C SELF DIAGNOSTIC SYSTEMS

FAULT DIAGNOSIS

1. IGNITION : Position 1
2. Left Temperature selector wheel : HI
   Right Temperature selector wheel : LO
3. Within 20 seconds press the REST and EC buttons simultaneously for more than 5 seconds.
4. The LED in the RECIRCULATE button flashes and "dI R" appears on the display
5. Press the right AUTO button until all DTC's are displayed and recorded.
6. To erase all codes must be read out. Press both AUTO buttons simultaneously for more than 2 seconds. "d" will be displayed on the left and "FF" is displayed on the right. The erase can be canceled by pressing the AUTO.
7. Reset temperature selector to normal setting.
8. IGNITION : OFF to end the test program.

FAULT CODES - 210 Chassis from 9/95	
DTC Readout	**Description**
026	CAN - Communication
226	In-Car Air Temperature Sensor (B10/4)
227	Outside Air Temperature Sensor (B14)
228	Left Heater Core Temperature Sensor (B10/1)
229	Right Heater Core Temperature Sensor (B10/1)
230	Evaporator Temperature Sensor (B10/6)
231	Engine Coolant Temperature Sensor (B10/8)
232	Refrigerant Pressure Sensor (B12)
233	Refrigerant Temperature Sensor (B12/1)
234	Sun Sensor (B32)
235	Emissions (Refrigerant Leak) Sensor (B31)
241	Refrigerant Level
416	Coolant Circulation Pump (M13)
417	Left Duovalve (Water Valve) (Y21y1)
418	Right Duovalve (Water Valve) (Y21y2)
419	A/C Compressor Electromagnetic Clutch (A9k1)
420	Closed (Idle) Throttle Speed Increase
421	Pulse Module
422	Serial Interface Connection (K1) to Instrument Cluster (IC)
423	Switchover Valve Block (Y11)
424	Activated Charcoal Filter Actuator (A32m2) : OPEN
425	Activated Charcoal Filter Actuator (A32m2) : CLOSE
432	Maximum Heat
459	Serial Interface Connection (K2) to Instrument Cluster (IC)

A/C SELF DIAGNOSTIC SYSTEMS

FAULT CODES - 210 Chassis from 9/95	
DTC Readout	**Description**
462	Wide Open Throttle (WOT) Position Signal - Diesel Engine Only

Suppplemental Restraint System (SRS)

Models	Model Years
107 126 201 140	1988-1993

Connect wires of Scanner as follows

Scanner	Data Link Connector 8-pin
Yellow	Socket 6
Black	Socket 1
Red	Battery (+)

Scanner	Data link connector 38-pin
Yellow	Socket 30
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	SRS Control unit
3	SRS - Driver air bag
4	Front passenger Airbag
5	Driver seat beat buckle
6	Front passenger seat belt buckle
7	Airbag resistor, Front passenger
8	Circuit 15R, Voltage supply
9	Waning lamp faulty
10	Control unit was activated

Suppplemental Restraint System (SRS)

Models	Model Years
124 129	1990-93

Connect wires of Scanner as follows (124, 129.061/066)

Scanner	Data Link Connector 8 or 16-pin
Yellow	Socket 6
Black	Socket 1
Red	Battery (+)

Connect wires of Scanner as follows (129.067/076)

Scanner	Data link connector 38-pin
Yellow	Socket 30
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	SRS Control unit self test failure
3	Driver Airbag squib
4	Front passenger Airbag squib
5	Airbag/ETR, Driver seat beat buckle switch
6	Front passenger seat belt buckle switch (ETR)
7	Front passenger Airbag resistor
8	Voltage supply interrupted
9	SRS Warning Lamp (with flashing SRS warning lamp Impulse counter scan tool button held too little time to read out the DTC memory or too long to erase DTC codes. Reread codes.)
10	SRS Control unit activated.

Automatic-engaged Four-wheel Drive (4MATIC)

Models	Model Years
124.230 124.290	1990-93

Connect wires of Scanner as follows

Scanner	Data Link Connector 8-pin
Yellow	Socket 5
Black	Socket 1
Red	Battery (+)

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	4MATIC control module
3	Brake light switch
4	Left front axle vehicle speed sensor
5	Right front axle vehicle speed sensor
6	Rear speed sensor signal
7	All 3 vehicle speed sensors
8	Over volts protection relay, front axle train valve
9	Over volts protection relay, central differential lock valve
10	Over volts protection relay, stop lamp switch, Rear axle differential lock valve
11	Steering angle sensor signal

Electronic Automatic Transmission Control 5-Speed (ETC) with CFI

Models	Model Years
129	1990-93

Connect wires of Scanner as follows

Scanner	Data Link Connector 16-pin
Yellow	Socket 13
Black	Socket 1
Red	Socket 16

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Not used
3	Engine load signal interrupted
4	Throttle valve position switch (potentiometer) interrupted
5	Engine speed signal (RPM) interrupted
6	Vehicle speed sensor interrupted
7	Output fault in TCM (N15/1) or fault in the valve block control valve circuit (Y3/1y2)
8	Transmission control module (TCM) (N15/1)
9	Valve control valve block (Y3/1y2)
10	Valve control valve block (Y3/1y2), short circuit

Electronic Automatic Transmission Control 5-Speed (ETC) with LH-SFI

Models	Model Years
129 140	1990-93

Connect wires of Scanner as follows

Scanner	Data Link Connector 38-pin
Yellow	Socket 10
Black	Socket 1
Red	Socket 3

FAULT CODE TABLE

DTC Readout	Possible Cause of Failure
1	No fault found
2	Engine control module (N3/4) does not match TCM
3	Transmission overload protection switch 4th/5th gear defective
4	CAN data line from EA/CC/ISC control module (N4/1) signal distorted
5	CAN data line from DI control module (N1/3) or HFM control module signal distorted
6	CAN data line signal distorted
7	Valve control valve block (Y3/1y2), open circuit or TCM (N15/1) defective
8	Automatic Transmission Control Module (TCM) (N15/1) defective
9	Valve control valve block (Y3/1y2)
10	Valve control valve block (Y3/1y2), short circuit

Active, Stored and Registered Fault Codes

Active Faults:

These faults are detected while the car is running at idle or speed and indicate components that are failing. These codes cannot be erased, and are only meaningful with the ignition on and the engine running. Codes found in this system with the key ON with engine off have no meaning. Components not present on the vehicle may be flagged as failing by the cars internal diagnostics due to the nature of the cars computer. This is particularly true in C-Class (W202) cars.

Stored or Permanent Faults:

Recorded in the permanent memory of the cars system controller and are the main cause of MIL (Check Engine Light) illumination. These codes can be erased.

Registered Faults:

Stored in the temporary memory of the cars system controller. This temporary memory records the number of times a component fails. When a certain number of failures have occurred the fault is moved to permanent storage and the Check Engine Light (MIL) will be illuminated. On cars equipped with fault registers, the Check Engine Light may stay on after the stored or permanent fault has been erased if another occurrence of the fault has happened since the permanent fault was stored. To extinguish the light, erase the stored and registered faults. These codes can be erased.

Check Engine Light

Mercedes S(140), SL(129), E(210) and C(202) class have multiple systems which can turn on a Check Engine Light. All related systems must be tested for codes and repaired before the code reader light will extinguish.

129 LH	LH (pin 4 & 5) EA/CC/ISC (pin 7), BM (pin 8), DI (pin 17 & 18) and DM (pin19)
140 LH	LH (pin 4) EA/CC/ISC (pin 7), BM (pin8), DI (kpin 17) and DM (pin 19)
124 HFM	HFM (pin 8) EA/CC/ISC (pin 14), and DM (pin 3)
140 HFM	HFM (pin 4) EA/CC/ISC (pin 7), BM (pin 8), DI (pin 17) and DM (pin 19)
202 HFM	HFM (pin 4) EA/CC/ISC (pin 7) (except C220) and DM (pin 19)
210 HFM	HFM (pin 4) EA/CC/ISC (pin 7), BM (pin 8), DI (pin 17) and DM (pin 19)

Mercedes System With Abbreviations

SYSTEM	DESCRIPTION	ANALOG	DIGITAL
A/C	Air Conditioning / Heating	1988-93	
ABS	Anti-lock Brake System	1992-95	1992-97
ADS	Automatic Damping System (Suspension)	1991-93	
ASD	Automatic Locking Differential	1991-93	
ASR	Acceleration Slip Regulation	1992-95	1992-97
ATA	Anti-theft Alarm System	1990-95	
BM	Base Module (Master ECU Controller)	1992-95	
CC	Cruise Control (Tempomat)	1992-95	
CF	Convenience Feature	1992-95	
CFI	Continuous Fuel Injection (CIS-E)	1988-92	
CST	Cabriolet Soft Top	1993-95	
DI	Distributor Ignition System	1990-93	
DM (USA)	Diagnostic Module (Emissions)	1990-93	1991-98
EA	Electronic Accelerator	1992-95	
EDS	Electronic Diesel System	1990-93	
ELR	Diesel Electronic Idle Speed Control	1989	
HFM-SFI	Hot Film Engine Management	1993-95	1994-97
IRCL	Infrared Remote Central Locking	1990-95	
ISC	Idle Speed Control	1992-95	
KE	Continuous Injection System (CIS-E)	1987-92	
LH-SFI	LH Sequential Fuel Management	1990-93	1991-93
MAS	Engine System Control Module (Mas)	1990-93	
ME-SFI	Motor Electronic Injection		1996-98
PMS		1993-95	1994-97
PSE	Pneumatic System Equipment	1992-95	
RB	Roll Bar Control	1990-95	
RST	Roadster Soft Top	1992-95	
SPS	Speed-sensitive Power Steering	1992-95	
SRS	Supplemental Restraint System (Airbag)	1988-93	1993-98

TRANSMISSION MODULE OB15-12

4MATIC	4 Wheel Drive Transmission Control	1990-93	1993-95
ETC/EGS	Electronic Transmission Control	1990-93	1993-97

Mercedes Acronyms

ACRONYM	DESCRIPTION
4MATIC	4 Wheel Drive Transmission Control
A/C (Automatic)*	Air Conditioning (Automatic)
A/C (Tempmatic)*	Air Conditioning (Tempmatic)
AB	Supplemental Restraint System (Airbag)
ABS	Anti-lock Brake System
ADM	Automatic Dimming Inside Rearview Mirror
ADS	Automatic Damping System (Suspension)
AIR	Secondary Air Injection
AP	Accelerator Pedal
AS	Antenna System
ASD	Automatic Locking Differential
ASR	Acceleration Slip Regulation
AT	Automatic Transmission
ATA*	Anti-theft Alarm System
BA	Backup Assist
BARO	Barometric Pressure
BCAPC	Barometric Pressure-charge Air Pressure Compensation
BM*	Base Module (Master ECU Controller)
BPC	Barometric Pressure Compensation
CA	Closing Assist
CAN	Controller Area Network
CC*	Cruise Control (Tempomat)
CDC	Cd Changer
CF	Convenience Feature
CFI	Continuous Fuel Injection
CKA	Crank Angle
CKP	Crankshaft Position
CL	Central Locking
CLUS	Instrument Cluster
CMP	Camshaft Position
CST*	Cabriolet Soft Top
CTEL	Cellular Telephone
CTP	Closed Throttle Position (Idle)

Mercedes Acronyms

DFI*	Electronic Distributor-type Fuel Injection
DI*	Distributor Ignition System
DM (USA)	Diagnostic Module (Emissions)
DTC	Diagnostic Trouble Code
EA*	Electronic Accelerator
EAG	Electronic Automatic Transmission Control
EATC*	Electronic Automatic Transmission Control
ECL	Engine Coolant Level
ECT	Engine Coolant Temperature
EDC	Electronic Diesel Control
EDR	Electronic Diesel Regulation
EDS	Electronic Diesel System
EDW*	Anti-theft Alarm System
EFP*	Electronic Accelerator
EGR	Exhaust Gas Recirculation
EGS	Electronic Transmission Control
EIFI	Electronic In-line Fuel Injection
EMSC	Electric Mirror, Steering Column Adjustment, Heated Mirrors
ERE*	Electronic In-line Fuel System
ESA	Electric Seat Adjustment
ESC	Electric Steering Column Adjustment
ESCM	Engine System Control Module
ESP	Electronic Stability Program
ETC	Electronic Transmission Control
ETR	Emergency Tensioning Retractor
ETS	Electronic Traction System
EVAP	Evaporative Emission Control System
EVE	Electronic Distributor-type Fuel Injection
EZL	Distributor Ignition System
FAN	Fanfare Horns
FFS	Frame Floor System
FP	Fuel Pump
GM	Base Module (Master ECU Controller)
HAU	Automatic Heater

Mercedes Acronyms

HCS	Headlamp Cleaning System
HEAT	Automatic Heater
HFM	Hot Film Engine Management
HFS	Hands Free System
HHT	Hand Held Tester
HORN	Horn Signal System
HS	Heated Seats
IAT	Intake Air Temperature
IC	Instrument Cluster
IDC	In Dash Controller
IFI*	Electronic In-line Fuel System(diesel)
IFZ	Infrared Remote Central Locking (IRCL)
IRCL*	Infrared Remote Central Locking
ISC*	Idle Speed Control
KE	Continuous Injection System (CIS)
KFB	Convenience Feature
KI	Instrument Cluster
KLA	Air Conditioning
KS	Knock Sensor
KSS	Knock Sensor System
LH-SFI	LH Sequential Fuel Management Bank 1 (1-6 Cylinders)
LH2-SFI	LH Sequential Fuel Management Bank 2 (7-12 Cylinders)
LLR	Cruise Control
LS	Loudspeaker System
MAF	Mass Air Flow
MAP	Manifold Absolute Pressure
ME	Motor Electronics
MIL	Malfunction Indicator Lamp (Check Engine)
MT	Manual Transmission
MVA	Manifold Vacuum Assist
O2S	Oxygen (O2) Sensor
OBD	On-board Diagnostics
OC	Oxidation Catalytic Convertor
OSB	Orthopedic Seat Backrest

Mercedes Acronyms

PL	Power Lock
PML	Speed-sensitive Power Steering
PMP	Partial Intake Manifold Preheater
PNP	Park/neutral Position
PS	Power Steering
PSE	Pneumatic System Equipment
PTS	Parktronic System
RB*	Roll Bar Control
RD	Radio
REST	Residual Engine Heat Utilization
RHR	Retractable Rear Head Restraints
RHS	Rear Heated Seats
RPM	Revolutions per Minute (Engine Speed)
RST*	Roadster Soft Top
RTG	Retractable Trunk Lid Grip
RV	Roadster Soft Top
SBE	Seat Belt Extender
SLO	Starter Lock-out
SMS	Service Microfiche System
SPS	Speed-sensitive Power Steering
SRS	Supplemental Restraint System (Airbag)
STH	Stationary Heater
TB	Throttle Body
TC	Turbo Charger
TCM	Transmission Control Module
TD	Speed Signal (Time Division) (EZL)
TDC	Top Dead Center
TIC	Transistorized Ignition Control
TN	Speed Signal (EZL/AKR)
TRAP	Trap Oxidizer
TS	Towing Sensor
TVV	Tank Ventilation Valve
TWC	Three Way Catalytic Convertor
ÜRB	Roll Bar Control
VAF	Volume Air Flow
VSS	Vehicle Speed Signal
WOT	Wide Open Throttle (Full Load)