General

Note

In order to ensure that a fault is no longer present after a repair or after the fault memory has been erased, the vehicle road test should be ended only when a trip has been reached. This is the only way of ensuring that all diagnosis routines are carried out by the ECM.

In the case of Tiptronic vehicles, the Tiptronic fault memory must also be read, because activation of the MIL Check Engine can also be initiated by the Tiptronic.

1996 P-1

Diagnostic Trouble Code (DTC) Texts

DTC Versions

Version 1	Signal implausible / Implausible Component Section / Malfunction
Version 2	Interruption / No Signal
Version 3	Short to Ground / Below Lower Limit / Lean Mixture Limit
Version 4	Short to B+ / Above Upper Limit/ Rich Mixture Limit

Malfunction Indicator Light MIL (Check engine)

O MIL	. is	not	triggered	with	this	fault
-------	------	-----	-----------	------	------	-------

- 1 MIL is on and Freeze Frame is stored in memory
- 2 MIL is on and a previous Freeze Frame is overridden
- 3 MIL is blinking and a previous Freeze Frame is overridden

DTC Text	DTC vers. 1	DTC vers. 2	DTC vers. 3	DTC vers. 4	MIL
Mass Air Flow Sensor	P0101		P0102	P0103	1
Air Intake Temperature Sensor			P0112	P0113	0
Engine Temperature Sensor	P0115		P0117		1
Throttle Position Sensor			P0122	P0123	1
HO2S behind TWC cylinders (1-3)	P0130	P0134	P0131	P0132	1
Aging of HO2S Ahead of TWC cylinders (1-3)			P0133		1
Aging of HO2S Ahead of TWC cylinders (1-3)			P0133		0
HO2S behind TWC cylinders (1-3)	P0136	P0140	P0137	P0138	1
Aging of HO2S Behind TWC cylinders (1-3)			P0139		0
O2S ahead of TWC cylinders (4-6)	P0150	P0154	P0151	P0152	1
Aging of HO2S Ahead of TWC cylinders (4-6)			P0153		1
	Mass Air Flow Sensor Air Intake Temperature Sensor Engine Temperature Sensor Throttle Position Sensor HO2S behind TWC cylinders (1-3) Aging of HO2S Ahead of TWC cylinders (1-3) Aging of HO2S Ahead of TWC cylinders (1-3) HO2S behind TWC cylinders (1-3) Aging of HO2S Behind TWC cylinders (1-3) O2S ahead of TWC cylinders (4-6) Aging of HO2S Ahead of TWC	Mass Air Flow Sensor P0101 Air Intake Temperature Sensor Engine Temperature Sensor P0115 Throttle Position Sensor HO2S behind TWC P0130 cylinders (1-3) Aging of HO2S Ahead of TWC cylinders (1-3) Aging of HO2S Ahead of TWC cylinders (1-3) HO2S behind TWC cylinders (1-3) Aging of HO2S Behind TWC cylinders (1-3) Aging of HO2S Behind TWC cylinders (1-3) O2S ahead of TWC cylinders (4-6) Aging of HO2S Ahead of TWC	Mass Air Flow Sensor Air Intake Temperature Sensor Engine Temperature Sensor P0115 Throttle Position Sensor HO2S behind TWC cylinders (1-3) Aging of HO2S Ahead of TWC cylinders (1-3) HO2S behind TWC cylinders (1-3) Aging of HO2S Ahead of TWC cylinders (1-3) HO2S behind TWC cylinders (1-3) Aging of HO2S Behind TWC cylinders (1-3) Aging of HO2S Behind TWC cylinders (1-3) O2S ahead of TWC cylinders (4-6) Aging of HO2S Ahead of TWC	Mass Air Flow Sensor P0101 P0102 Air Intake Temperature Sensor P0115 P0117 Throttle Position Sensor P0130 P0134 P0131 Cylinders (1-3) Aging of H02S Ahead of TWC Cylinders (1-3) H02S behind TWC Cylinders (1-3) Aging of H02S Ahead of TWC Cylinders (1-3) P0136 P0137 P0139	Mass Air Flow Sensor P0101 P0102 P0103 Air Intake Temperature Sensor P0115 P0117 P0112 P0113 Engine Temperature Sensor P0115 P0117 P0122 P0123 H02S behind TWC cylinders (1-3) Aging of H02S Ahead of TWC cylinders (1-3) P0136 P0136 P0137 P0138 Aging of H02S Behind TWC cylinders (1-3) Aging of H02S Ahead of TWC cylinders (1-3) P0136 P0137 P0138 Aging of H02S Behind TWC cylinders (1-3) Aging of H02S Ahead of TWC cylinders (1-3) Aging of H02S Ahead of TWC cylinders (1-3) P0136 P0140 P0137 P0138 Aging of H02S Behind TWC cylinders (1-3) Aging of H02S Ahead of TWC cylinders (1-3) P0150 P0151 P0152 P0153

P - 2 1996

DTC	DTC Text	DTC vers. 1	DTC vers. 2	DTC vers. 3	DTC vers. 4	MIL
22	Aging of HO2S Ahead of TWC cylinders (4-6)			P0153		0
20	HO2S behind TWC cylinders (4-6)	P0156	P0160	P0157	P0158	1
23	Aging of HO2S Behind TWC cylinders (4-6)			P0159		0
62	Misfire emission related	P0300				2
75	Misfire, damaging to TWC	P0300				3
50	Misfire, cylinder 1, emission related	P0301				2
63	Misfire, cylinder 1, damaging to TWC	P0301				3
51	Misfire, cylinder 2, emission related	P0302				2
64	Misfire, cylinder 2, damaging to TWC	P0302				3
52	Misfire, cylinder 3, emission related	P0303				2
65	Misfire, cylinder 3, damaging to TWC	P0303				3
53	Misfire, cylinder 4, emission related	P0304				2
66	Misfire, cylinder 4, damaging to TWC	P0304				3
54	Misfire, cylinder 5, emission related	P0305				2
67	Misfire, cylinder 5, damaging to TWC	P0305				3
55	Misfire, cylinder 6, emission related	P0306				2
68	Misfire, cylinder 6, damaging to TWC	P0306				3
210	Knock Sensor 1	P0326				0
211	Knock Sensor 2	P0331				0
111	Crankshaft Position Sensor	P0336				1
112	Camshaft Position Sensor	P0341				1
80	Secondary air System cylinders (1-3)	P0410				1
40	TWC Converting, cylinders (1-3)			P0420		1
45	TWC Converting, cylinders (4-6)			P0430		1
93	Fuel Tank Ventilation System			P0441		1

1996 P - 3

DTC	DTC Text	DTC vers. 1	DTC vers. 2	DTC vers. 3	DTC vers. 4	MIL
98	Fuel Tank Ventilation Valve		P0444	P0445	P0445	1
120	Vehicle Speed	P0501				1
32	Idle Air Control			P0506	P0507	1
101	ECM faulty (internal RAM)	P0604				1
102	ECM faulty (external RAM)	P0604				1
104	ECM faulty (DTC Memory)	P0604				0
103	ECM faulty (EPROM)	P0605				1
13	Heating of HO2S 1 ahead of TWC			P1115	P1102	1
14	Heating of HO2S 1 behind TWC			P1117	P1105	1
5	Heating of HO2S 2 ahead of TWC			P1119	P1107	1
4	Heating of HO2S 2 behind TWC			P1121	P1110	1
27	Oxygen Sensing, Area 1 cylinders (1-3)			P1123	P1124	2
35	Oxygen Sensing, Area 1 cylinders (4-6)			P1125	P1126	2
26	Oxygen Sensing, Area 2 cylinders (1-3)			P1127	P1128	2
34	Oxygen Sensing, Area 2 cylinders (4-6)			P1129	P1130	2
121	Load Signal	P1140				1
150	Fuel Injector, Cylinder 1		P1237	P1225	P1213	1
151	Fuel Injector, Cylinder 2		P1238	P1226	P1214	1
152	Fuel Injector, Cylinder 3		P1239	P1227	P1215	1
153	Fuel Injector, Cylinder 4		P1240	P1228	P1216	1
154	Fuel Injector, Cylinder 5		P1241	P1229	P1217	1
155	Fuel Injector, Cylinder 6		P1242	P1230	P1218	1
222	Knock Sensing Test Pulse	P1386				0
208	Secondary air System cylinders (4-6)		P1411			1
170	A/C Compresor Control		P1455	P1457	P1456	0
138	A/C Compresor Signal	P1458				0

P - 4 1996

DTC	DTC Text	DTC vers. 1	DTC vers. 2	DTC vers. 3	DTC vers. 4	MIL
167	Fuel Pump Relay End-Stage		P1541	P1501	P1502	1
168	Idle Control Valve Opening Coil		P1514	P1513	P1510	1
175	Intake Manifold Resonance Flap		P1516	P1515	P1512	0
169	Idle Control Valve Closing Coil		P1551	P1552	P1553	1
39	Immobilizer	P1570	P1571			0
209	intake Manifold Length Tuning		P1593	P1594	P1595	0
107	Voltage Supply			P1600	P1601	1
108	Voltage Supply		P1602			0
164	MIL activated externally		P1610	P1611	P1614	1
105	ECM faulty (EEPROM)	P1640				1
165	MIL (Check Engine)		P1691	P1692	P1693	1
135	Engine Engagement / Nominal Engine Torque			P1782		

1996 P - 5

On-Board Diagnosis

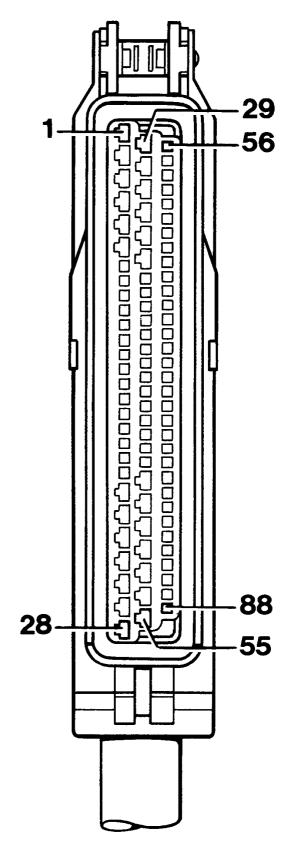
DME Connector Assignment

	•	
	1 - Oxyg en Sensor Heating behind Catalytic Converter	31 - Fuel Injector, Cylinder 6
	2 - Idle Air Control Valve, Closing Coil	32 - Fuel Injector, Cylinder 4
	3 - Fuel Injector, Cylinder 1	33 - Fuel Injector, Cylinder 5
	4 - Fuel Injector, Cylinder 2	34 - Ground Sender
	5 - Fuel Injector, Cylinder 3	35 - Intake manifold length tuning
	6 - Ground	36 - not assigned
	7 - not assigned	37 - Triggering of Relay Secondary Air Pump
	8 - Malfunction Indication Light Check Engine	38 - Signal A/C Compressor on
	9 - EX - Light (Japan)	39 - Fuel Level Pilot Light
	10 - Suppression Fuel Cutoff	40 - Knock Sensor 2
	11 - A/C Compressor Switch	41 - not assigned
	12 - MIL activated externally	42 - Tiptronic control unit intervention
	13 - not assigned	43 - not assigned
	14 - not assigned	44 - Signal Throttle Sender
	15 - not assigned	45 - Ground MAF Sensor
	16 - Intake Air Temperature Sensor	46 - Ground Oxygen Sensors
	17 - Signal Mass Air Flow Sensor	47 - not assigned
	18 - Signal Oxygen Sensor 2 ahead of Catalytic Converter	48 - not assigned
	19 - Signal Oxygen Sensor 1 ahead of Catalytic Converter	49 - Ignition Coil 1 Terminal 1
2	20 - Ground Speed Sender	50 - not assigned
2	21 - Signal Hall Sender	51 - not assigned
2	22 - Ignition coil II terminal 1	52 - not assigned
2	23 - not assigned	53 - +5 Volt Output Voltage
2	24 - not assigned	54 - DME Relay Terminal 87
2	25 - not assigned	55 - Ground Ignition System
2	26 - Terminal 30	56 - Terminal 15
2	27 - Triggering of DME Relay Terminal 85	57 - not assigned
	28 - Ground Electronic System	58 - not assigned
2	29 - Idle Air Control Valve, Opening Coil	59 - Change-over valve for resonance flap

1996 P - 1

30 - Oxygen Sensor Heating ahead of Catalytic Converter 60 - not assigned

- 61 Fuel Tank Ventilation Valve
- 62 Triggering of A/C Compressor Relay
- 63 DME Relay Terminal 85 b
- 64 not assigned
- 65 not assigned
- 66 not assigned
- 67 Signal Knocking
- 68 Drive position switch
- 69 not assigned
- 70 Knock Sensor 1 (Cylinders 1 3)
- 71 Ground Knock Sensors
- 72 not assigned
- 73 not assigned
- 74 Engine Temperature Sensor
- 75 not assigned
- 76 Signal Oxygen Sensor 2 behind Catalytic Converter
- 77 Signal Oxygen Sensor 1 behind Catalytic Converter
- 78 Signal Speed Sender
- 79 Speed Signal
- $80 T_N Signal$
- 81 not assigned
- 82 Output Throttle Signal
- 83 not assigned
- 84 not assigned
- 85 not assigned
- 86 not assigned
- 87 L Wire
- 88 K Wire



2212 - 27