Test plan for BMW Service (development status)

MEVD17.2-BN2000

ECU type	Fault Code (hex)	Fault Code (dez)	BMW Fault Code Description VS-Text	Fault description	DTC (Diagnostic Trouble Code)	DTC Description	Component	Subcomponent
MEVD17.2-BN2000	0x2710	10000	Throttle valve, function: jammed permanently	The diagnostic function checks the throttle valve's control signal for excessively high figures that would indicate that the throttle valve is seizing.	P1639	Throttle Valve Position Control Throttle Stuck Permanently (Bank 1)	Throttle Actuator	Throttle Stuck
MEVD17.2-BN2000	0x2711	10001	Throttle valve, function: jammed briefly	The diagnostic function monitors the throttle valve control signal for excessively high figures that would indicate that the throttle valve is sticking or seizing.	P1638	Throttle Valve Position Control Throttle Stuck Temporarily (Bank 1)	Throttle Actuator	Throttle Stuck
MEVD17.2-BN2000	0x2714	10004	Throttle valve, function: sluggish, too slow	The diagnostic function monitors the difference between specified and actual throttle-valve values. If this figure remains too high for a specified period, a fault is recognized and the throttle valve is deactivated.	P11AA	Throttle tight (Bank 1)	Throttle	Tight
MEVD17.2-BN2000	0x2774	10100	Mass air flow sensor, plausibility: Air mass compared with model too high	The diagnostic function compares the calculated air mass with the measured air mass.	P00BD	Mass or Volume Air Flow 'A' Circuit Range/Performance - Air Flow Too High	Mass Air Flow	Too High
MEVD17.2-BN2000	0x2774	10100	Mass air flow sensor, plausibility: Air mass compared with model too high	The diagnostic function compares the calculated air mass with the measured air mass.	P115D	Mass or Volume Air Flow 'A' Air Mass Too High Compared to Model	Mass Air Flow	Comparison to Model
MEVD17.2-BN2000	0x2775	10101	Mass air flow sensor, plausibility: Air mass compared with model too low	The diagnostic function compares the air mass calculated from the model with the measured air mass.	P00BC	Mass or Volume Air Flow 'A' Circuit Range/Performance - Air Flow Too Low	Mass Air Flow	Too Low
MEVD17.2-BN2000	0x2775	10101	Mass air flow sensor, plausibility: Air mass compared with model too low	The diagnostic function compares the air mass calculated from the model with the measured air mass.	P115C	Mass or Volume Air Flow 'A' Air Mass Too Low Compared to Model	Mass Air Flow	Comparison to Model
MEVD17.2-BN2000	0x2778	10104	Air mass sensor, signal: Implausible period duration, loose contact with low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration.	P0103	Mass or Volume Air Flow Sensor 'A' Circuit High	Mass Air Flow Sensor	Electrical
MEVD17.2-BN2000	0x2779	10105	Air mass sensor, signal: Implausible period duration, loose contact with high frequency	The diagnostic function monitors the lower limit of the digital HFM signal's period duration.	P0102	Mass or Volume Air Flow Sensor 'A' Circuit Low	Mass Air Flow Sensor	Electrical
MEVD17.2-BN2000	0x277A	10106	Air mass sensor, signal: Short-circuit or line break (open circuit)	The diagnostic function determines whether a digital signal from the HFM is present.	P0100	Mass or Volume Air Flow Sensor 'A' Circuit	Mass Air Flow Sensor	Electrical
MEVD17.2-BN2000	0x277B	10107			P00BD	Mass or Volume Air Flow 'A' Circuit Range/Performance - Air Flow Too High	Mass Air Flow	Too High
MEVD17.2-BN2000	0x277B	10107			P0103	Mass or Volume Air Flow Sensor 'A' Circuit High	Mass Air Flow Sensor	Electrical
MEVD17.2-BN2000	0x277C	10108			P00BC	Mass or Volume Air Flow 'A' Circuit Range/Performance - Air Flow Too Low	Mass Air Flow	Too Low
MEVD17.2-BN2000	0x277C	10108			P0102	Mass or Volume Air Flow Sensor 'A' Circuit Low	Mass Air Flow Sensor	Electrical
MEVD17.2-BN2000	0x27D9	10201	Accelerator pedal module, pedal sensor 1, electrical: Short circuit to B+	The diagnostic function monitors the voltage of sensor 1.	P2123	Throttle/Pedal Position Sensor/Switch 'D' Circuit High	Pedal Position Sensor	D Electrical
MEVD17.2-BN2000	0x27DA	10202	Accelerator pedal module, pedal sensor 1, electrical: Short circuit to earth or line disconnection	The diagnostic function monitors the voltage of sensor 1.	P2122	Throttle/Pedal Position Sensor/Switch 'D' Circuit Low	Pedal Position Sensor	D Electrical
MEVD17.2-BN2000	0x27DB	10203	Pedal module, pedal sensor 2, electrical: Short circuit to B+	The diagnostic function monitors the voltage of sensor 2.	P2128	Throttle/Pedal Position Sensor/Switch 'E' Circuit High	Pedal Position Sensor	E Electrical
MEVD17.2-BN2000	0x27DC	10204	Pedal module, pedal sensor 2, electrical: Short circuit to earth or line disconnection	The diagnostic function monitors the voltage of sensor 2.	P2127	Throttle/Pedal Position Sensor/Switch 'E' Circuit Low	Pedal Position Sensor	E Electrical
MEVD17.2-BN2000	0x27E4	10212	Accelerator-pedal module, pedal-travel sensor Multiple fault	Collective fault: Accelerator pedal module's pedal-travel sensor.				
MEVD17.2-BN2000	0x27E8	10216	Accelerator pedal module, pedal position sensor, plausibility: synchronisation error between signal 1 and Signal 2	The diagnostic function monitors the mutual deviation between the two sensor voltages.	P2138	Throttle/Pedal Position Sensor/Switch 'D' / 'E' Voltage Correlation	Pedal Position Sensor	D/E Correlation
MEVD17.2-BN2000	0x280E	10254	Absolute pressure sensor, intake manifold, plausibility: Intake-manifold pressure too high	During the shutdown phase the diagnosis function monitors the DME to determine whether the ambient-air, intake-manifold and boost-pressure sensors are measuring the same pressure.	P1250	Manifold Absolute Pressure Too High	Manifold Absolute Pressure Sensor	Pressure

Fault Code (hex)	Monitoring criteria	Fault debouncing	Terminal conditions	Voltage conditions	Temperature conditions	Time conditions
0x2710	PWM signal used to control the throttle valve remains above 80% for longer than 0.6 sec. Potential problem source(s): - Throttle valve moves stiffly, sticking, contaminated - Defect in wiring harness between throttle-valve actuator motor and DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Active control signal to throttle valve	- None	- None
0x2711	throttle valve is deactivated when the PWM signal used to control the throttle valve remains above 80% for longer than 5 sec. Potential problem source(s): - Throttle valve moves stiffly, sticking, contaminated - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Active control signal to throttle valve	- None	- None
0x2714	logged when the difference between the specified and the actual value is greater than the characteristic curve over throttle-valve gradient (4% - 50%). Potential problem source(s): - Stiction in throttle valve - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Active control signal to throttle valve	- None	- None
0x2774	the calculated air mass deviates too starkly from the measured air mass. Potential problem source(s): - Collateral fault caused by other components in the intake system, Valvetronic, turbocharger - Intake system leaking - HFM defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None
0x2774	the calculated air mass deviates too starkly from the measured air mass. Potential problem source(s): - Collateral fault caused by other components in the intake system, Valvetronic, turbocharger - Intake system leaking - HFM defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None
0x2775	The fault is recognized when the indicated air mass does not correlate with the calculated mass airflow rate. Potential problem source(s): - Defective HFM, problem with airflow to HFM, clean air tube fallen off intake air noise attenuator - Leak within induction tract on engine-side of throttle valve (leaks in vicinity of intake air plenum chamber, open oil filler cap) - Malfunction in components affecting airflow (valve lift monitoring, position of VANOS, throttle valve, pressure sensors....) - Compressor bypass valve stuck in open position (accompanied by low boost pressure malfunction)	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - 30°C < intake-air temperature < 120°C - -30°C < coolant temperature Time condition: - None Other conditions: - Engine on - Pressure drop at throttle valve exceeds 18 hPa - 745hPa < barometric pressure - 500 rpm < engine speed < 7000 rpm - 133 rpm < dynamic rpm response (rpm window) - 7.7% < dynamic load response (load window)	- 30°C < intake-air temperature < 120°C - -30°C < coolant temperature	- None
0x2775	The fault is recognized when the indicated air mass does not correlate with the calculated mass airflow rate. Potential problem source(s): - Defective HFM, problem with airflow to HFM, clean air tube fallen off intake air noise attenuator - Leak within induction tract on engine-side of throttle valve (leaks in vicinity of intake air plenum chamber, open oil filler cap) - Malfunction in components affecting airflow (valve lift monitoring, position of VANOS, throttle valve, pressure sensors....) - Compressor bypass valve stuck in open position (accompanied by low boost pressure malfunction)	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - 30°C < intake-air temperature < 120°C - -30°C < coolant temperature Time condition: - None Other conditions: - Engine on - Pressure drop at throttle valve exceeds 18 hPa - 745hPa < barometric pressure - 500 rpm < engine speed < 7000 rpm - 133 rpm < dynamic rpm response (rpm window) - 7.7% < dynamic load response (load window)	- 30°C < intake-air temperature < 120°C - -30°C < coolant temperature	- None
0x2778	This fault is recognized when the period duration of the HFM signal exceeds 640 µs. Potential problem source(s): - Defect in wiring harness between HFM and DME - Mass-airflow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None
0x2779	the period duration of the HFM signal is less than 84 µs. Potential problem source(s): - Defect in wiring harness between HFM and DME - Mass-airflow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None
0x277A	This fault is recognized when the period duration of the HFM signal is zero. Potential problem source(s): - Defect in wiring harness between HFM and DME - Mass-airflow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None
0x277B						
0x277B						
0x277C						
0x277C						
0x27D9	the voltage at sensor 1 rises above 4.085 V. Potential problem source(s): - Defect in wiring harness between DME and accelerator pedal module sensor 1 - Accelerator pedal module defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None
0x27DA	the voltage at sensor 1 is less than 0.566 V. Potential problem source(s): - Defect in wiring harness between DME and accelerator pedal module sensor 1 - Voltage supply for accelerator pedal module in the DME is defective - Accelerator pedal module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None
0x27DB	the voltage at sensor 2 rises above 2.043 V. Potential problem source(s): - Defect in wiring harness between DME and accelerator pedal module sensor 2 - Accelerator pedal module defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None
0x27DC	the voltage at sensor 2 is less than 0.430 V. Potential problem source(s): - Defect in wiring harness between DME and accelerator pedal module sensor 2 - Accelerator pedal module defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None
0x27E4	The response to the fault is specified for a different fault entry. Potential problem source(s): - None	immediately	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None
0x27E8	This fault is detected when the voltage differential between sensor 1 and sensor 2 exceeds a specific defined value. Potential problem source(s): - Defective wiring harness - Accelerator pedal module defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None
0x280E	the intake-manifold pressure sensor deviates from the average for the pressure sensors (barometric pressure, boost pressure, intake-manifold pressure) by more than 70 mbar. Potential problem source(s): - Defective wiring harness - Sensor has been tampered with - Sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine off Other conditions: - Shutdown phase	- None	- 5 sec. after engine off

Fault Code (hex)	System test	Signal information	Calculated value Y/N	Possible Fault Causes	Repair procedures (plant/service)	MIL illumination/CC message/emergency program
0x2710	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	none	Y	- Throttle valve moves stiffly, sticking, contaminated - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	- Use tester to activate throttle valve and observe repositioning speed - Check wiring harness between DME and throttle valve - Visual inspection of throttle valve and air-induction system for contamination - Move the throttle valve manually to determine whether it progresses throughout its entire travel range freely without excess resistance - Replace throttle-valve actuator motor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x2711	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	none	Y	- Throttle valve moves stiffly, sticking, contaminated - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	- Use tester to activate throttle valve and observe repositioning speed - Check wiring harness between DME and throttle valve - Visual inspection of throttle valve and air-induction system for contamination - Move the throttle valve manually to determine whether it progresses throughout its entire travel range freely without excess resistance - Replace throttle valve	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x2714	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	none	Y	- Stiction in throttle valve - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	- Check wiring harness between DME and throttle valve - Use tester to activate throttle valve and observe its reaction - Check throttle valve for contamination and foreign objects - Move throttle valve by hand, checking for resistance to motion and noting how quickly it closes when released - Replace throttle-valve actuator motor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x2774	NO	none	Y	- Collateral fault caused by other components in the intake system, Valvetronic, turbocharger - Intake system leaking - HFM defective	- If other diagnostic fault codes related to components in the induction tract, Valvetronic or turbocharger have been logged, then process these first (collateral faults) - Check intake system for leaks - Replace HFM	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none
0x2774	NO	none	Y	- Collateral fault caused by other components in the intake system, Valvetronic, turbocharger - Intake system leaking - HFM defective	- If other diagnostic fault codes related to components in the induction tract, Valvetronic or turbocharger have been logged, then process these first (collateral faults) - Check intake system for leaks - Replace HFM	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none
0x2775	NO	none	Y	- Defective HFM, problem with airflow to HFM, clean air tube fallen off intake air noise attenuator - Leak within induction tract on engine side of throttle valve (leaks in vicinity of intake air plenum chamber, open oil filler cap) - Malfunction in components affecting airflow (valve lift monitoring, position of VANOS, throttle valve, pressure sensors....) - Compressor bypass valve stuck in open position (accompanied by low boost pressure malfunction) - Severely contaminated air filter	- Check wiring harness on HFM - Check intake system for leaks on engine side of throttle valve - Seal on oil filler cap is defective - Problem with airflow to HFM (air filter insert is defective or installed incorrectly) - Replace HFM	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none
0x2775	NO	none	Y	- Defective HFM, problem with airflow to HFM, clean air tube fallen off intake air noise attenuator - Leak within induction tract on engine side of throttle valve (leaks in vicinity of intake air plenum chamber, open oil filler cap) - Malfunction in components affecting airflow (valve lift monitoring, position of VANOS, throttle valve, pressure sensors....) - Compressor bypass valve stuck in open position (accompanied by low boost pressure malfunction) - Severely contaminated air filter	- Check wiring harness on HFM - Check intake system for leaks on engine side of throttle valve - Seal on oil filler cap is defective - Problem with airflow to HFM (air filter insert is defective or installed incorrectly) - Replace HFM	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none
0x2778	NO	Read test data block; ID 58AE	N	- Defect in wiring harness between HFM and DME - Mass-airflow sensor defective - Defective DME	- Check wiring harness between DME and mass-airflow sensor - Replace mass-airflow sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none
0x2779	NO	Read test data block; ID 58AE	N	- Defect in wiring harness between HFM and DME - Mass-airflow sensor defective - Defective DME	- Check wiring harness between DME and mass-airflow sensor - Replace mass-airflow sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none
0x277A	NO	Read test data block; ID 58AE	N	- Defect in wiring harness between HFM and DME - Mass-airflow sensor defective - Defective DME	- Check wiring harness between DME and mass-airflow sensor - Replace mass-airflow sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none
0x277B						
0x277B						
0x277C						
0x277C						
0x27D9	Accelerator pedal sensor 1 voltage	Accelerator pedal sensor 1 voltage (0x5846)	N	- Defect in wiring harness between DME and accelerator pedal module sensor 1 - Accelerator pedal module defective	- Check wiring harness between DME and accelerator pedal - Replace accelerator pedal	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x27DA	Accelerator pedal sensor 1 voltage	Accelerator pedal sensor 1 voltage (0x5846)	N	- Defect in wiring harness between DME and accelerator pedal module sensor 1 - Voltage supply for accelerator pedal module in the DME is defective - Accelerator pedal module defective	- Check wiring harness between DME and accelerator pedal - Check voltage supply at accelerator pedal module sensor 1 for 5 V - Replace accelerator pedal - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x27DB	Accelerator pedal sensor 2 voltage	Accelerator pedal sensor 2 voltage (0x5847)	N	- Defect in wiring harness between DME and accelerator pedal module sensor 2 - Accelerator pedal module defective	- Check wiring harness between DME and accelerator pedal - Check voltage supply at accelerator pedal module sensor 2 for 5 V - Replace accelerator pedal	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x27DC	Accelerator pedal sensor 2 voltage	Accelerator pedal sensor 2 voltage (0x5847)	N	- Defect in wiring harness between DME and accelerator pedal module sensor 2 - Accelerator pedal module defective - Defective DME	- Check wiring harness between DME and accelerator pedal - Check voltage supply at accelerator pedal module sensor 2 for 5 V - Replace accelerator pedal	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x27E4	Accelerator pedal sensor 1 voltage Accelerator pedal sensor 2 voltage	none	Y	- None	- None	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x27E8	Accelerator pedal sensor 1 voltage Accelerator pedal sensor 2 voltage	Pedal data sensor 1 voltage (0x5846); Pedal data sensor 2 voltage (0x5847)	N	- Defective wiring harness - Accelerator pedal module defective	- Check wiring and plug connections - Check voltage supply to accelerator pedal for 5 V - Replace accelerator pedal module	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on
0x280E	NO	none	Y	- Defective wiring harness - Sensor has been tampered with - Sensor defective	- Check wiring harness at sensor - Replace sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none

Fault Code (hex)	Remarks	Customer perception comments	Breakdown instruction	Service instruction
0x2710	none	Possible apparent symptoms: - Reduced power	Breakdown notice: Ability to continue driving is restricted because engine speed is limited to roughly 1300 rpm.	none
0x2711	none	Possible apparent symptoms: - Reduced power	Breakdown notice: Ability to continue driving is restricted because engine speed is limited to roughly 1300 rpm.	none
0x2714	none	Possible apparent symptoms: - Reduced power	Breakdown notice: Ability to continue driving is restricted because engine speed is limited to roughly 1300 rpm.	none
0x2774	none	Possible apparent symptoms: - none	Breakdown notice: - none	- none
0x2774	none	Possible apparent symptoms: - none	Breakdown notice: - none	- none
0x2775	none	Possible apparent symptoms: If the HFM is recognized as defective it is deactivated, following jerk during deactivation owing to lambda error no limitations	Breakdown notice: - none	none
0x2775	none	Possible apparent symptoms: If the HFM is recognized as defective it is deactivated, following jerk during deactivation owing to lambda error no limitations	Breakdown notice: - none	none
0x2778	none	Possible apparent symptoms: Engine runs roughly	Breakdown notice: None	None
0x2779	none	Possible apparent symptoms: Engine runs roughly	Breakdown notice: None	None
0x277A	none	Possible apparent symptoms: Engine runs roughly	Breakdown notice: None	None
0x277B				
0x277B				
0x277C				
0x277C				
0x27D9	none	Possible apparent symptoms: - Limit on pedal value variation and on maximum absolute value (34.5% pedal) - In combination with fault in accelerator pedal sensor 2 or clocking error, increased idle speed and no processing of accelerator pedal	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
0x27DA	none	Possible apparent symptoms: - Limit on pedal value variation and on maximum absolute value (34.5% pedal) - In combination with fault in accelerator pedal sensor 2 or clocking error, increased idle speed and no processing of accelerator pedal	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
0x27DB	none	Possible apparent symptoms: - Limit on pedal value variation and on maximum absolute value (34.5% pedal) - In combination with fault in accelerator pedal sensor 1 or clocking error, increased idle speed and no processing of accelerator pedal data	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
0x27DC	none	Possible apparent symptoms: - Limit on pedal value variation and on maximum absolute value (34.5% pedal) - In combination with fault in accelerator pedal sensor 1 or clocking error, increased idle speed and no processing of accelerator pedal data	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
0x27E4	none	Possible apparent symptoms: Depending on fault source (L4: 10201, 10202, 10203, 10204, 10216; L6: 0x103001, 0x103002, 0x103101, 0x103102, 0x103308)	Breakdown notice: Depending on fault source (L4: 10201, 10202, 10203, 10204, 10216; L6: 0x103001, 0x103002, 0x103101, 0x103102, 0x103308)	none
0x27E8	none	Possible apparent symptoms: - Limit on pedal value variation and on maximum absolute value (34.5% pedal) - In combination with fault in accelerator pedal sensor 1 and/or 2, increased idle speed and no processing of accelerator pedal data	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
0x280E	none	Possible apparent symptoms: Best case scenario: None	Breakdown notice: - none	none

MEVD17.2-BN2000	0x280E	10254	Absolute pressure sensor, intake manifold, plausibility: Intake-manifold pressure too high	During the shutdown phase the diagnosis function monitors the DME to determine whether the ambient-air, intake-manifold and boost-pressure sensors are measuring the same pressure.	P12A5	Manifold Absolute Pressure Sensor 'A' Afterrunning Diagnosis Pressure Too High	Manifold Absolute Pressure Sensor	Afterrunning	the intake-manifold pressure sensor deviates from the average for the pressure sensors (barometric pressure, boost pressure, intake-manifold pressure) by more than 70 mbar. Potential problem source(s): - Defective wiring harness - Sensor has been tampered with - Sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine off Other conditions: - Shutdown phase	- None	- 5 sec. after engine off	NO	none	Y	- Defective wiring harness - Sensor has been tampered with - Sensor defective	- Check wiring harness at sensor - Replace sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Best case scenario: None		Breakdown notice: - none	none
MEVD17.2-BN2000	0x280F	10255	Absolute pressure sensor, intake manifold, plausibility: Intake-manifold pressure too low	The diagnostic function monitors the DME's barometric pressure sensor.	P1255	Manifold Absolute Pressure Too Low	Manifold Absolute Pressure Sensor	Pressure	The fault is recognized when the voltage of the barometric-pressure sensor > 4.5 V. Potential problem source(s): - Internal DME fault, because barometric-pressure sensor is located in the DME ECU; sensor voltage above threshold;	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine off Other conditions: - Shutdown phase	- None	- 5 sec. after engine off	NO	none	Y	- Internal DME fault, because barometric-pressure sensor is located in the DME ECU; sensor voltage above threshold;	- Check air-induction system (wastegate, etc.) - Check air-induction tract between turbocharger and intake-air plenum - Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Best case scenario: None		Breakdown notice: - none	none
MEVD17.2-BN2000	0x280F	10255	Absolute pressure sensor, intake manifold, plausibility: Intake-manifold pressure too low	The diagnostic function monitors the DME's barometric pressure sensor.	P12A4	Manifold Absolute Pressure Sensor 'A' Afterrunning Diagnosis Pressure Too Low	Manifold Absolute Pressure Sensor	Afterrunning	The fault is recognized when the voltage of the barometric-pressure sensor > 4.5 V. Potential problem source(s): - Internal DME fault, because barometric-pressure sensor is located in the DME ECU; sensor voltage above threshold;	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine off Other conditions: - Shutdown phase	- None	- 5 sec. after engine off	NO	none	Y	- Internal DME fault, because barometric-pressure sensor is located in the DME ECU; sensor voltage above threshold;	- Check air-induction system (wastegate, etc.) - Check air-induction tract between turbocharger and intake-air plenum - Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Best case scenario: None		Breakdown notice: - none	none
MEVD17.2-BN2000	0x281A	10266	Absolute pressure sensor, intake pipe, electrical: Short circuit to B+	The diagnostic function monitors the intake-manifold pressure sensor's upper voltage limit.	P0108	Manifold Absolute Pressure/Barometric Pressure Sensor Circuit High	Manifold Absolute Pressure Sensor	Electrical	the voltage of the intake-manifold pressure sensor exceeds 4.8 V. Potential problem source(s): - Defect in wiring harness between DME and intake-manifold pressure sensor - Intake-manifold pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 4AB8 (BN2020), 5AB8 (BN2000)	N	- Defect in wiring harness between DME and Intake-manifold pressure sensor - Intake-manifold pressure sensor defective - Defective DME	- Check wiring harness between intake-manifold pressure sensor and DME - Replace intake-manifold pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-BN2000	0x281A	10266	Absolute pressure sensor, intake pipe, electrical: Short circuit to B+	The diagnostic function monitors the intake-manifold pressure sensor's upper voltage limit.	P119A	Manifold Absolute Presssure Sensor Circuit High (Bank 1)			the voltage of the intake-manifold pressure sensor exceeds 4.8 V. Potential problem source(s): - Defect in wiring harness between DME and intake-manifold pressure sensor - Intake-manifold pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 4AB8 (BN2020), 5AB8 (BN2000)	N	- Defect in wiring harness between DME and Intake-manifold pressure sensor - Intake-manifold pressure sensor defective - Defective DME	- Check wiring harness between intake-manifold pressure sensor and DME - Replace intake-manifold pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-BN2000	0x281B	10267	Absolute pressure sensor, intake pipe, electrical: Short circuit to earth	The diagnostic function monitors the intake-manifold pressure sensor's lower voltage limit.	P0107	Manifold Absolute Pressure/Barometric Pressure Sensor Circuit Low	Manifold Absolute Pressure Sensor	Electrical	the voltage of the intake-manifold pressure sensor is less than 0.2 V. Potential problem source(s): - Defect in wiring harness between DME and Intake-manifold pressure sensor - Intake-manifold pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 4AB8 (BN2020), 5AB8 (BN2000)	N	- Defect in wiring harness between DME and Intake-manifold pressure sensor - Intake-manifold pressure sensor defective - Defective DME	- Check wiring harness between intake-manifold pressure sensor and DME - Replace intake-manifold pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-BN2000	0x281B	10267	Absolute pressure sensor, intake pipe, electrical: Short circuit to earth	The diagnostic function monitors the intake-manifold pressure sensor's lower voltage limit.	P119B	Manifold Absolute Presssure Sensor Circuit Low (Bank 1)			the voltage of the intake-manifold pressure sensor is less than 0.2 V. Potential problem source(s): - Defect in wiring harness between DME and Intake-manifold pressure sensor - Intake-manifold pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 4AB8 (BN2020), 5AB8 (BN2000)	N	- Defect in wiring harness between DME and Intake-manifold pressure sensor - Intake-manifold pressure sensor defective - Defective DME	- Check wiring harness between intake-manifold pressure sensor and DME - Replace intake-manifold pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-BN2000	0x283C	10300	Ambient pressure sensor, electrical: Short to B+ or open circuit	The diagnostic function monitors the DME's barometric pressure sensor.	P2229	Barometric Pressure Sensor 'A' Circuit High	Ambient Pressure Sensor	Electrical	The fault is recognized when the barometric pressure sensor's signal voltage falls below 4.5 V. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U	N	- DME defective	Clear the ECU fault memory, if the diagnostic fault code is logged again, replace the DME.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL on, customer proceeds to service facility		Breakdown notice: None	None
MEVD17.2-BN2000	0x283D	10301	Ambient pressure sensor, electrical: Short circuit to earth	The diagnostic function monitors the DME's barometric pressure sensor.	P2228	Barometric Pressure Sensor 'A' Circuit Low	Ambient Pressure Sensor	Electrical	The fault is detected by the internal calculation algorithms. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U	N	- DME defective	- If the diagnostic fault code has been logged more than 3 times replace the DME.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL on, customer proceeds to service facility		Breakdown notice: None	None
MEVD17.2-BN2000	0x2841	10305	Ambient pressure sensor, overrun: Pressure too high	During the control module's shutdown phase the diagnostic function monitors the barometric-pressure sensor, intake-manifold pressure sensor and boost-pressure sensor to determine whether they are all measuring the same pressure.	P12B9	Ambient Pressure Sensor Afterrunning Diagnosis Pressure Too High	Ambient Pressure Sensor	Afterrunning	the barometric-pressure sensor deviates from the average for the pressure sensors (barometric pressure, boost pressure, intake-manifold pressure) by more than 70 mbar. Potential problem source(s): - Error in sensor measurement	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine off Other conditions: - Shutdown phase	- None	- 5 sec. after engine off	NO	none	N	- Error in sensor measurement - Sensor defective	- If the diagnostic fault code has been logged more than 3 times replace the DME.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: - none	None
MEVD17.2-BN2000	0x2842	10306	Ambient pressure sensor, overrun: Pressure too low	The diagnostic function monitors the voltage at the boost pressure sensor.	P12B8	Ambient Pressure Sensor Afterrunning Diagnosis Pressure Too Low	Ambient Pressure Sensor	Afterrunning	the boost-pressure sensor's voltage is < 0.2 V. Potential problem source(s): - Defect in wiring harness between DME and boost-pressure sensor - Boost-pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine off Other conditions: - Shutdown phase	- None	- 5 sec. after engine off	NO	none	N	- Defect in wiring harness between DME and boost-pressure sensor - Boost-pressure sensor defective - Defective DME	- Replace the DME if the fault code is currently present or has been logged more than three times	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x284C	10316	Ambient pressure sensor, plausibility: Pressure too high	The diagnostic function monitors the barometric-pressure sensor.	P11CB	Barometric Pressure Too High	Ambient Pressure	General	No electrical fault in barometric pressure sensor (PUEmax, PUEmin) Potential problem source(s): - Barometric pressure sensor installed in DME ECU; sensor voltage above threshold - DME defective owing to internal fault	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Barometric pressure sensor installed in DME ECU; sensor voltage above threshold - DME defective owing to internal fault	- Replace the DME if the fault code is currently present or has been logged more than three times	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x284D	10317	Ambient pressure sensor, plausibility: Pressure too low	The diagnostic function monitors the barometric-pressure sensor.	P0129	Barometric Pressure Too Low	Ambient Pressure	General	The fault is recognized when a short circuit is present. Potential problem source(s): - Defective wiring harness - Cutoff relay for electric fan defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Defective wiring harness - Cutoff relay for electric fan defective	- Check wiring harness between electric fan cutoff relay and DME - Check cutoff relay (when Terminal 15 is off then 0 V should be present at both screw connections (M6). When activated the relay should click loudly, while virtually no resistance (0 ohms) should be measured between the screw connections - Replace cutoff relay	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x284E	10318	Ambient pressure sensor, plausibility: Pressure implausible	The diagnostic function monitors the plausibility of the barometric pressure relative to that measured in the previous driving cycle.	P1247	Barometric Pressure Plausibility	Ambient Pressure	Plausibility	The fault is recognized in response to excessive variations in the value. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- DME defective	- Replace the DME if the fault code is currently present or has been logged more than three times	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x284F	10319	Ambient pressure sensor, plausibility: Pressure implausible	The diagnostic function monitors variations in the barometric pressure reading for plausibility.	P1247	Barometric Pressure Plausibility	Ambient Pressure	Plausibility	The fault is recognized when the value remains constant. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- DME defective	- Replace the DME if the fault code is currently present or has been logged more than three times	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x28A0	10400	Throttle-valve angle - intake-manifold pressure, correlation: Limit value exceeded	The diagnostic function monitors the throttle valve aperture and the current intake manifold pressure reading to determine whether they are mutually plausible.	P112F	Manifold Absolute Pressure to Throttle Angle - Too High (Bank 1)	Manifold Absolute Pressure	Correlation	The fault is recognized when the relationship between the indicated intake manifold pressure and the mass airflow calculated based on throttle-valve angle is not correct. Potential problem source(s): - Measured value for intake manifold pressure (absolute) too high - Vacuum leak within induction tract/crankcase - Incorrect throttle-valve angle - Pressure sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - 30°C < intake-air temperature < 120°C - -30°C < coolant temperature Time condition: - None Other conditions: - Engine on - Pressure drop at throttle valve exceeds 18 hPa - 745hPa < barometric pressure - 500 rpm < engine speed < 7000 rpm - 133 rpm < dynamic rpm	- 30°C < intake-air temperature < 120°C - -30°C < coolant temperature	- None	NO	none	Y	- Measured value for intake manifold pressure (absolute) too high - Vacuum leak within induction tract/crankcase - Incorrect throttle-valve angle - Pressure sensor defective	- Check intake system and crankcase for leakage - Check throttle valve (contamination, carbon deposits, icing) - Check plug and wiring harness between intake-manifold pressure sensor and DME - Check plug, wiring harness at electric throttle-valve actuator - Replace pressure sensor - Replace throttle valve	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	None
MEVD17.2-BN2000	0x28A1	10401	Throttle-valve angle - intake-manifold pressure, correlation: Limit value not exceeded	The diagnostic function monitors the throttle valve aperture and the current intake manifold pressure reading to determine whether they are mutually plausible.	P112E	Manifold Absolute Pressure to Throttle Angle - Too Low (Bank 1)	Manifold Absolute Pressure	Correlation	the relationship between the indicated intake manifold pressure and the mass airflow calculated based on throttle-valve angle is not correct. Potential problem source(s): - Measured value for intake manifold pressure (absolute) is too low - Defective plug or wiring harness - Vacuum leak within induction tract/crankcase - Incorrect throttle-valve	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Pressure drop at throttle valve exceeds 18 hPa	- None	- None	NO	none	Y	- Measured value for intake manifold pressure (absolute) is too low - Defective plug(s) or wiring harness - Vacuum leak within induction tract/crankcase - Incorrect throttle-valve angle - Pressure sensor defective	- Check intake system and crankcase for leakage - Check throttle valve (contamination, carbon deposits, icing) - Check wiring harness between intake-manifold pressure sensor and DME - Check plug, wiring harness at electric throttle-valve actuator - Replace pressure sensor - Replace throttle valve	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	None
MEVD17.2-BN2000	0x28A4	10404	Throttle valve, throttle valve potentiometer 1, electrical: Short to B+ or open circuit	The diagnostic function checks the signal from throttle valve actuator 1 for electrical faults.	P0123	Throttle/Pedal Position Sensor/Switch 'A' Circuit High	Throttle Position Sensor	1	the signal from throttle valve sensor 1 rises above the fault threshold of 4.75 V. Potential problem source(s): - Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	Sensor 1 voltage: 0..5 V (0x584E)	N	- Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME defective	- Check wiring harness between DME and throttle valve - Replace throttle valve - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced power		Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
MEVD17.2-BN2000	0x28A5	10405	Throttle valve, throttle valve potentiometer 1, electrical: Short circuit to earth	The diagnostic function checks the signal from throttle valve actuator 1 for electrical faults.	P0122	Throttle/Pedal Position Sensor/Switch 'A' Circuit Low	Throttle Position Sensor	1	the signal from throttle valve sensor 1 falls below the fault threshold of 0.22 V. Potential problem source(s): - Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	Sensor 1 voltage: 0..5 V (0x584E)	N	- Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME defective	- Check wiring harness between DME and throttle valve - Replace throttle valve - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced power		Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
MEVD17.2-BN2000	0x28A8	10408	Throttle valve, throttle potentiometer 2, electrical: Short circuit to B+	The diagnostic function checks the voltage of throttle valve sensor 2 for electrical faults.	P0223	Throttle/Pedal Position Sensor/Switch 'B' Circuit High	Throttle Position Sensor	2	the signal from throttle valve sensor 2 rises above the fault threshold of 4.77 V. Potential problem source(s): - Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	Voltage sensor 2: 0..5 V (0x584C)	N	- Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME defective	- Check wiring harness between DME and throttle valve - Replace throttle valve - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced power		Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none

MEVD17.2-8N2050	0x2B49	10409	Throttle valve, throttle potentiometer 2, electrical: Short circuit to earth or line disconnection	The diagnostic function checks the voltage of throttle valve sensor 2 for electrical faults.	P2222	Throttle/Pedal Position Sensor/Switch 'B' Circuit Low	Throttle Position Sensor	2	the signal from throttle valve sensor 2 falls below the fault threshold of 0.22 V. Potential problem source(s): - Defective wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	Voltage sensor 2: 0.5 V (0x5B4C)	N	- Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME defective	- Check wiring harness between DME and throttle valve - Replace throttle valve - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
MEVD17.2-8N2050	0x2B80	10416	Throttle valve: Limp-home operating mode active		P16BF	Throttle Valve Limp Home Mode Active	Throttle	Limp Home	Potential problem source(s): - 0			Voltage condition: Temperature condition: Time condition: Other conditions:				- None		0	0	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	new for I-10-03-450	Possible apparent symptoms:	Breakdown notice:	
MEVD17.2-8N2050	0x2B84	10420	Throttle valve, throttle potentiometer: plausibility Timing fault between potentiometer 1 and potentiometer 2	The diagnostic function monitors the mutual deviation between the two sensor voltages.	P1158	Throttle/Pedal Position Sensor/Switch 'A' / 'B' Synchronous Operation Correlation (Bank 1)	Throttle Position Sensor	Correlation	voltages from sensors 1 and 2 exceeds a value defined in the application (characteristic curve) the fault is recognized. Potential problem source(s): - Defect in wiring harness between throttle valve potentiometer and DME - Throttle valve	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	Accelerator pedal sensor 1 voltage Accelerator pedal sensor 2 voltage	Pedal data sensor 1 voltage (0x5B4E) Pedal data sensor 2 voltage (0x5B4F)	N	- Defect in wiring harness between throttle valve potentiometer and DME - Throttle valve potentiometer defective	- Check wiring harness between throttle valve potentiometer and DME - Replace throttle valve potentiometer	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Limit on pedal value variation and on maximum absolute value (24.5% pedal) - In combination with fault in accelerator pedal sensor 1 and/or 2, increased idle speed and no processing of accelerator pedal data	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	None
MEVD17.2-8N2050	0x2B8A	10422	DME, internal fault, activation of throttle valve: Short circuit	The diagnostic function monitors the driver circuit controlling operation of the throttle valve.	P2103	Throttle Actuator 'A' Control Motor Circuit High	Throttle Actuator	Control Motor	The fault is detected by the internal calculation algorithms. Potential problem source(s): - Defective wiring harness between DME and throttle valve - Defective throttle valve - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	none	N	- Defective wiring harness between DME and throttle valve - Defective throttle valve - Defective DME	- Check wiring harness between DME and throttle valve - Replace throttle valve - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: -Ability to continue driving is restricted because engine speed is limited to roughly 1,200 rpm.	- none
MEVD17.2-8N2050	0x2B8B	10423	DME, internal fault, activation of throttle valve: Excess temperature or current too high	The diagnostic function monitors the driver circuit controlling operation of the throttle valve.	P2118	Throttle Actuator 'A' Control Motor Current Range/Performance	Throttle Actuator	Control Motor	The fault is detected by the internal calculation algorithms. Potential problem source(s): - Defective wiring harness between DME and throttle valve - Defective throttle valve - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	none	N	- Defective wiring harness between DME and throttle valve - Defective throttle valve - Defective DME	- Check wiring harness between DME and throttle valve - Replace throttle valve - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: -Ability to continue driving is restricted because engine speed is limited to roughly 1,200 rpm.	- none
MEVD17.2-8N2050	0x2B8A	10425	DME, internal fault, activation of throttle valve: Internal communication fault	The diagnostic function monitors the driver circuit controlling operation of the throttle valve.	P061F	Internal Control Module Throttle Actuator Controller Performance	ECM	Throttle Actuator	The fault is detected by the internal calculation algorithms. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: -Ability to continue driving is restricted because engine speed is limited to roughly 1,200 rpm.	- none
MEVD17.2-8N2050	0x2B8B	10427	DME, internal fault, activation of throttle valve: Line disconnection	The diagnostic function monitors the driver circuit controlling operation of the throttle valve.	P2100	Throttle Actuator 'A' Control Motor Circuit/Open	Throttle Actuator	Control Motor	The fault is detected by the internal calculation algorithms. Potential problem source(s): - Defective wiring harness between DME and throttle valve - Defective throttle valve - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	none	N	- Defective wiring harness between DME and throttle valve - Defective throttle valve - Defective DME	- Check wiring harness between DME and throttle valve - Replace throttle valve - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: -Ability to continue driving is restricted because engine speed is limited to roughly 1,200 rpm.	- none
MEVD17.2-8N2050	0x2B9C	10428	Throttle valve actuator, closing spring test: Cancellation of check, spring does not close	During the spring test the diagnostic function monitors the throttle valve to determine whether it returns to the emergency air position within the specified period when no voltage is being applied.	P1634	Throttle Valve Adaptation Spring Test Failed (Bank 1)	Throttle Actuator	Adaptation	the throttle valve does not return to an aperture of roughly 18% within 500 ms when voltage is not being applied to the unit. Potential problem source(s): - Stiction in valve - Return spring defective - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Vehicle velocity = 0 km/h	- None	- None	NO	none	Y	- Stiction in valve - Return spring defective - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	- Check wiring harness between DME and throttle valve - Use tester to activate throttle valve and observe its reaction - Check throttle valve for contamination and foreign objects - Move throttle valve by hand, checking for resistance to motion and noting how quickly it closes when released - Replace throttle-valve actuator motor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
MEVD17.2-8N2050	0x28D0	10429	Throttle valve actuator, closing spring test: Fault during spring check	During the spring test the diagnostic function monitors the throttle valve to determine whether it reaches the specified position within the specified period.	P1631	Throttle Valve Actuator Spring Test (Bank 1)	Throttle Actuator	Spring Test	the throttle valve fails to achieve an effective aperture of roughly 35% within 140 ms. Potential problem source(s): - Stiction in throttle valve - Return spring defective - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Vehicle velocity = 0 km/h	- None	- None	NO	none	Y	- Stiction in throttle valve - Return spring defective - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	- Check wiring harness between DME and throttle valve - Use tester to activate throttle valve and observe its reaction - Check throttle valve for contamination and foreign objects - Move throttle valve by hand, checking for resistance to motion and noting how quickly it closes when released - Replace throttle-valve actuator motor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
MEVD17.2-8N2050	0x28C0	10431	Throttle valve actuator, opening spring test: Cancellation of check, spring does not open	During the spring test the diagnostic function monitors the throttle valve to determine whether it returns to the emergency-air position within the specified period when no voltage is being applied.	P1629	Throttle Valve Actuator Spring Test Stop, Spring does not Open (Bank 1)	Throttle Actuator	Spring Test	the throttle valve does not return to an aperture of more than 7.4% within 560 ms when voltage is not being applied to the unit. Potential problem source(s): - Stiction in throttle valve - Return spring defective - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Vehicle velocity = 0 km/h	- None	- None	NO	none	Y	- Stiction in throttle valve - Return spring defective - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	- Check wiring harness between DME and throttle valve - Use tester to activate throttle valve and observe its reaction - Check throttle valve for contamination and foreign objects - Move throttle valve by hand, checking for resistance to motion and noting how quickly it closes when released - Replace throttle-valve actuator motor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
MEVD17.2-8N2050	0x28C1	10433	Throttle valve actuator, opening spring test: Fault during spring check	During the spring test the diagnostic function monitors the throttle valve to determine whether it reaches the specified position below the emergency-air point within the specified time.	P1628	Throttle Valve Actuator Spring Test Malfunction during Opening (Bank 1)	Throttle Actuator	Spring Test	logged when the throttle valve fails to reach a position of less than 2.5 % and more than 2.4 % opening within 350 ms. Potential problem source(s): - Stiction in throttle valve - Return spring defective - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Vehicle velocity = 0 km/h	- None	- None	NO	none	Y	- Stiction in throttle valve - Return spring defective - Defect in wiring harness between throttle-valve actuator motor and DME - Defective throttle-valve actuator motor	- Check wiring harness between DME and throttle valve - Use tester to activate throttle valve and observe its reaction - Check throttle valve for contamination and foreign objects - Move throttle valve by hand, checking for resistance to motion and noting how quickly it closes when released - Replace throttle-valve actuator motor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
MEVD17.2-8N2050	0x28C4	10436	Throttle valve, adaptation: emergency running position not adapted	The diagnostic function monitors the throttle valve to determine whether it is at the emergency air position (open at angle of roughly 7.4°) when no voltage is applied.	P1633	Throttle Valve Adaptation Limp-Home Position Unknown (Bank 1)	Throttle Actuator	Adaptation	the values for the emergency air point are determined to be less than 1.8% or larger than 18% during the adaptation process. Potential problem source(s): - Defect in wiring harness between throttle-valve actuator motor and DME - Dirt/contamination on throttle valve - Throttle valve seized in open or fully-closed position	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 30 sec. after Terminal 15 on Other conditions: - Engine on - Vehicle velocity = 0 km/h	- Engine warmed to normal temperature, more than 80°C	- 30 sec. after Terminal 15 on	STEUERN_DK, STEUERN_ENDE_DK, STATUS_DKP_VOLT	none	Y	- Defect in wiring harness between throttle-valve actuator motor and DME - Dirt/contamination on throttle valve - Throttle valve seized in open or fully-closed position - Defective throttle-valve actuator motor	- Determine whether throttle valve is open to an aperture of roughly 8° (almost closed) when no voltage is applied. Check measured data in tester (sensor 1 and voltage, throttle-valve angle). - Visual inspection of throttle valve and air-induction system for contamination - Check wiring harness between DME and throttle valve - Replace throttle-valve actuator motor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	none
MEVD17.2-8N2050	0x28C6	10438	Throttle valve, adaptation: Marginal conditions not met	During the throttle valve adaptation the diagnostic function monitors compliance with the prescribed process conditions.	P1632	Throttle Valve Adaptation Conditions Not Met (Bank 1)	Throttle Actuator	Adaptation	mechanical travel stop aborted owing to low battery voltage (> 10 V). Potential problem source(s): - Fault code entry is for information only - Throttle-valve adaptation aborted in response to low onboard electrical system voltage	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 30 sec. after Terminal 15 on Other conditions: - Engine on	- Engine warmed to normal temperature, more than 80°C	- 30 sec. after Terminal 15 on	NO	none	Y	- Fault code entry is for information only - Throttle-valve adaptation aborted in response to low onboard electrical system voltage	- Check battery voltage (> 10 V), Terminal 15 off -> Terminal 15 on -> Wait 1 min - Provided that the voltage condition has been met the fault should not occur again - Component replacement based on this fault is not necessary!	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: -Ability to continue driving is restricted because engine speed is limited to roughly 1,200 rpm.	none
MEVD17.2-8N2050	0x28C9	10441	Throttle valve, adaptation: Marginal conditions not met; battery voltage too low	The diagnostic function monitors the throttle valve to determine whether it reaches the lower mechanical travel stop (UMA) during the initial adaptation.	P1689	Throttle Valve Adaptation Conditions Not Met, Battery Voltage Too Low (Bank 1)	Throttle Actuator	Adaptation	The fault is recognized when the limits specified for the signal voltages (signal voltages (signal voltage sensor 1 < 0.27 V, sensor 2 > 4.73 V) are violated during the initial adaptation, or when the deviation of the sum voltage of sensor 1 and sensor 2 of 5 V exceeds X V. Potential problem source(s): - Fault during initial initialization attempt; lower mechanical travel stop range violation - Dirt/contamination on travel	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 30 sec. after Terminal 15 on Other conditions: - Engine on - Vehicle velocity = 0 km/h	- Engine warmed to normal temperature, more than 80°C	- 30 sec. after Terminal 15 on	NO	none	Y	- Fault during initial initialization attempt; lower mechanical travel stop range violation - Dirt/contamination on travel stop - Foreign material/objects - Sporadic contact resistance - Defective throttle valve	- Clear ECU fault memory? Ignition off? Ignition on for at least 1 minute - If fault is still present: a. Check wiring harness DME - throttle valve (sum of throttle valve voltages must equal 5 V) b. Inspect to determine whether any objects are present in the intake manifold or within the throttle valve's travel range c. Completely close the throttle valve by hand and measures the voltages on the two sensors (S1: 0.5 V +/- tolerance, S2: 4.5 V +/- tolerance) - Replace throttle valve	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: -Ability to continue driving is restricted because engine speed is limited to roughly 1,200 rpm.	none
MEVD17.2-8N2050	0x28D0	10444	Throttle valve, adaptation: Initial adaptation, lower limit position not taught in	The diagnostic function monitors the throttle valve to determine whether it reaches the lower mechanical travel stop (UMA) during a repeat throttle-valve adaptation routine (after roughly 30 sec. Terminal 15 without engine start)	P1690	Throttle Valve Adaptation Lower Stop Not Learned (Bank 1)	Throttle Actuator	Adaptation	The fault is recognized when the limits specified for the signal voltages (sensor 1 signal voltage < 0.27 V, sensor 2 > 4.73 V) are violated during the repeat adaptation routine (roughly 30 sec. at Terminal 15 without engine start) or the mutual deviation between the sum voltages for sensors 1 and 2 of 5 V is more than X V. Potential problem source(s): - Fault during repeat initialization attempt; lower mechanical travel limit range violation; 1.a. Travel stop (0%)	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 30 sec. after Terminal 15 on Other conditions: - Engine on - Vehicle velocity = 0 km/h	- Engine warmed to normal temperature, more than 80°C	- 30 sec. after Terminal 15 on	NO	none	Y	- Fault during repeat initialization attempt; lower mechanical travel limit range violation; 1.a. Travel stop (0%) 1.b. Foreign object/matter 1.c. Sporadic contact resistance 1.d. Defective throttle valve	1. Clear ECU fault memory? Ignition off? Ignition on for at least 1 minute 2. If fault remains: 2.a. Check wiring harness DME - throttle valve (sum of throttle-valve voltages must equal 5 V) 2.b. Check to determine whether foreign objects/matter in the intake manifold or at the throttle valve or prevent the throttle valve from closing 2.c. Completely close the throttle valve by hand and measures the voltages on the two sensors (S1: 0.5 V +/- tolerance, S2: 4.5 V +/- tolerance) 3. Replace throttle valve	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: -Reduced power	Breakdown notice: -Ability to continue driving is restricted because engine speed is limited to roughly 1,200 rpm.	none
MEVD17.2-8N2050	0x28D4	10452	Throttle valve, adaptation: Teach in again, lower limit position not taught in	During the throttle valve adaptation routine the diagnostic function monitors the offset and amplification of throttle valve potentiometer 1 in the amplified range.	P1644	Throttle Valve Adaptation Stop Relearning Lower Mechanical Stop (Bank 1)	Throttle Actuator	Adaptation	the amplifier's offset exceeds 0.1 V or drops below -0.1 V. This fault is also registered when the amplification factor is greater than 4.15 or less than 3.85. Potential problem source(s): - Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 30 sec. after Terminal 15 on Other conditions: - Engine on - Vehicle velocity = 0 km/h	- Engine warmed to normal temperature, more than 80°C	- 30 sec. after Terminal 15 on	NO	none	Y	- Defect in wiring harness between throttle-valve actuator motor and DME - Throttle-valve sensor defective - AD converter input in DME defective	- Check wiring harness between DME and throttle valve - Replace throttle valve - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: None	Breakdown notice: None	none
MEVD17.2-8N2050	0x2B06	10502	Intake air system: Suspicion of leaks between turbocharger and intake valves	The diagnostic function monitors the compressed intake air.					The fault is recognized when the amount of entering air is less than that required for the calculated fuel-air ratio. Potential problem source(s): - Extreme dirt/contamination in air filter - Leaks in boost-air tubes between compressor and intake manifold - Positive crankcase ventilation valve defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine speed above 1900 rpm - Engine load - Turbocharger boost in closed-loop control range	- None	- None	NO	none	Y	- Extreme dirt/contamination in air filter - Leaks in boost-air tubes between compressor and intake manifold - Positive crankcase ventilation valve defective	cross in one or several cylinders, or combustion miss when fuel level is low, repair these issues first. No fault diagnosis required on turbocharging system! - Visual inspection of boost-air tubes between compressor and intake manifold - Check air filter - Apply positive pressure of 200 ± 20 mbar to check for leaks in the pressurized tract between the compressor and the intake-air plenum and intake manifold. Replace any leaking components. - If no problems are detected, although the induction tract fails to retain pressure, proceed	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on -US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs poorly (miss, unsatisfactory idle) Power reduction	Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	None
MEVD17.2-			Coolant temperature sensor, electrical: Short	The diagnostic function monitors the coolant		Engine Coolant Temperature Sensor 1 Circuit Low			the sensor voltage lies below 0.1 V. Potential problem source(s): - Coolant temperature sensor wiring harness has short circuit to ground - Temperature is outside measurement range - Coolant temperature sensor	This fault is logged in the control module's fault		Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions:						- Coolant temperature sensor wiring harness has short circuit to ground - Temperature is outside measurement range	0x5A37 0x5A38 0x5A39	- Check coolant temperature sensor wiring harness	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: off		Possible apparent symptoms: Possible power reduction	Breakdown notice:	

MEVD17.2-8N2050	0x2037	10551	Coolant temperature sensor, electrical: Short to B+ or open circuit	The diagnostic function monitors the coolant temperature sensor's wires.	P0118	Engine Coolant Temperature Sensor 1 Circuit High	Engine Coolant Temperature Sensor	1 Electrical	the sensor voltage is above 4.85 V. Potential problem source(s): - The coolant temperature sensor's wiring harness is shorted to positive or has an open wire - Temperature is outside measurement range - Coolant temperature sensor defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: -21 sec. after engine start Other conditions: - Cold engine start	- None	- 21 sec. after engine start	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- The coolant temperature sensor's wiring harness is shorted to positive or has an open wire - Temperature is outside measurement range - Coolant temperature sensor defective	- Check coolant temperature sensor wiring harness - Replace coolant temperature sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible power reduction Fan at maximum rotation speed		Breakdown notice: None	None
MEVD17.2-8N2050	0x293A	10934	Coolant temperature sensor, cold start: Coolant temperature too high	The diagnostic function monitors the coolant temperature to detect excessively high values during cold starts.	P1426	Cold Start Engine Coolant Temperature Too Low	Engine Coolant Temperature	Cold Start	the coolant temperature is 18°C above the average of several temperatures at cold start. Potential problem source(s): - Engine block heater or auxiliary heater may be installed - Defect in wiring harness between DME and sensor	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: -21 sec. after engine start Other conditions: - None	- None	- 21 sec. after engine start	NO	Read test data block; ID 581F	N	- Engine block heater or auxiliary heater may be installed - Defect in wiring harness between DME and sensor - Sensor defective - Defective DME	- Determine whether an engine block heater or auxiliary heater is installed - Check wiring harness between DME and sensor - Replace sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Rough engine, possibly followed by power reduction caused by thermal management		Breakdown notice: None	None
MEVD17.2-8N2050	0x293B	10935	Coolant temperature sensor, cold start: Coolant temperature too low	The diagnostic function monitors the coolant temperature to detect excessively low values during cold starts.	P1424	Cold Start Engine Coolant Temperature Too Low	Engine Coolant Temperature	Cold Start	The fault is recognized when the coolant temperature is 18°C below the average of several temperatures at cold start. Potential problem source(s): - Defect in wiring harness between DME and sensor - Sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: -21 sec. after engine start Other conditions: - Cold engine start	- None	- 21 sec. after engine start	NO	Read test data block; ID 581F	N	- Defect in wiring harness between DME and sensor - Sensor defective - Defective DME	- Check wiring harness between DME and sensor - Replace sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Rough engine, possibly followed by power reduction caused by thermal management		Breakdown notice: None	None
MEVD17.2-8N2050	0x2943	10943	Coolant temperature sensor, plausibility: Signal change too fast	The diagnostic function monitors the coolant temperature sensor's voltage signal for plausibility.	P0116	Engine Coolant Temperature Sensor 1 Circuit Range/Performance	Engine Coolant Temperature Sensor	1 Plausibility	temperature jumps of 30°C occur. Potential problem source(s): - Defect in wiring harness to coolant temperature sensor - Coolant temperature sensor installed incorrectly - Coolant temperature sensor defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine On	- None	- None	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Defect in wiring harness to coolant temperature sensor - Coolant temperature sensor installed incorrectly - Coolant temperature sensor defective	- Check coolant temperature sensor wiring harness - Replace coolant temperature sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible power reduction Fan at maximum rotation speed		Breakdown notice: None	None
MEVD17.2-8N2050	0x2943	10943	Coolant temperature sensor, plausibility: Signal change too fast	The diagnostic function monitors the coolant temperature sensor's voltage signal for plausibility.	P0196	Engine Coolant Temperature 1 Gradient Too High	Engine Coolant Temperature	General	temperature jumps of 30°C occur. Potential problem source(s): - Defect in wiring harness to coolant temperature sensor - Coolant temperature sensor installed incorrectly - Coolant temperature sensor defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine On	- None	- None	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Defect in wiring harness to coolant temperature sensor - Coolant temperature sensor installed incorrectly - Coolant temperature sensor defective	- Check coolant temperature sensor wiring harness - Replace coolant temperature sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible power reduction Fan at maximum rotation speed		Breakdown notice: None	None
MEVD17.2-8N2050	0x2947	10947	Coolant temperature sensor, plausibility: Engine temperature compared with model implausibly too low	The diagnostic function monitors the coolant temperature sensor.	P1128	Engine Coolant Temperature Too Low	Engine Coolant Temperature Sensor	1 Temperature	the coolant temperature sensor transmits implausible temperature data. Potential problem source(s): - Defect in wiring harness between DME and coolant temperature sensor - Coolant temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 1 min. after engine start Other conditions: - Engine on - No block heater active	- None	- 1 min. after engine start	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Defect in wiring harness between DME and coolant temperature sensor - Coolant temperature sensor defective - Defective DME	- Check wiring harness between DME and coolant temperature sensor - Replace coolant temperature sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Possible power reduction Fan at maximum rotation speed		Breakdown notice: None	None
MEVD17.2-8N2050	0x2947	10947	Coolant temperature sensor, plausibility: Engine temperature compared with model implausibly too low	The diagnostic function monitors the coolant temperature sensor.	P2188	Engine Coolant Temperature Signal Stuck Low	Engine Coolant Temperature	General	the coolant temperature sensor transmits implausible temperature data. Potential problem source(s): - Defect in wiring harness between DME and coolant temperature sensor - Coolant temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 1 min. after engine start Other conditions: - Engine on - No block heater active	- None	- 1 min. after engine start	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Defect in wiring harness between DME and coolant temperature sensor - Coolant temperature sensor defective - Defective DME	- Check wiring harness between DME and coolant temperature sensor - Replace coolant temperature sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Possible power reduction Fan at maximum rotation speed		Breakdown notice: None	None
MEVD17.2-8N2050	0x2948	10948	Coolant temperature sensor, plausibility: Engine temperature implausible	The diagnostic function monitors the coolant temperature sensor.	P0116	Engine Coolant Temperature Sensor 1 Circuit Range/Performance	Engine Coolant Temperature Sensor	1 Plausibility	the coolant temperature sensor transmits implausible temperature data. Potential problem source(s): - Defect in wiring harness between DME and coolant temperature sensor - Coolant temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Engine temperature between 20°C and 80°C	- None	- None	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Defect in wiring harness between DME and coolant temperature sensor - Coolant temperature sensor defective - Defective DME	- Check wiring harness between DME and coolant temperature sensor - Replace coolant temperature sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Possible power reduction Fan at maximum rotation speed		Breakdown notice: None	None
MEVD17.2-8N2050	0x2949	10949	Coolant temperature sensor, plausibility: Engine temperature implausible	The diagnostic function monitors the coolant temperature sensor.	P2189	Engine Coolant Temperature Signal Stuck	Engine Coolant Temperature	General	the coolant temperature sensor transmits implausible temperature data. Potential problem source(s): - Defect in wiring harness between DME and coolant temperature sensor - Coolant temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Engine temperature between 20°C and 80°C	- None	- None	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Defect in wiring harness between DME and coolant temperature sensor - Coolant temperature sensor defective - Defective DME	- Check wiring harness between DME and coolant temperature sensor - Replace coolant temperature sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Possible power reduction Fan at maximum rotation speed		Breakdown notice: None	None
MEVD17.2-8N2050	0x294A	10950	Outside temperature sensor, signal: Upper threshold value exceeded	The diagnostic function monitors the outside temperature sensor for excessively high temperature figures.	P0073	Ambient Air Temperature Sensor Circuit 'A' High	Ambient Air Temperature Sensor	Electrical	This is monitored in the instrument cluster. Potential problem source(s): - Wiring harness to outside temperature sensor defective - Outside temperature sensor defective - Instrument cluster faulty	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN signal (clum) from I-cluster	Y	- Wiring harness to outside temperature sensor defective - Outside temperature sensor defective - Instrument cluster faulty	- Continue fault diagnosis at the instrument cluster	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2050	0x294B	10951	Outside temperature sensor, signal: Lower threshold value undershot	The diagnostic function monitors the outside temperature sensor for excessively low temperature figures.	P0072	Ambient Air Temperature Sensor Circuit 'A' Low	Ambient Air Temperature Sensor	Electrical	This is monitored in the instrument cluster. Potential problem source(s): - Wiring harness to outside temperature sensor defective - Outside temperature sensor defective - Instrument cluster faulty	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN signal (clum) from I-cluster	Y	- Wiring harness to outside temperature sensor defective - Outside temperature sensor defective - Instrument cluster faulty	- Continue fault diagnosis at the instrument cluster	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2050	0x294C	10952	Outside temperature sensor, signal: CAN message faulty	The diagnostic function monitors the outside temperature sensor's CAN data.	P519F	Ambient Air Temperature Sensor Faulty CAN Signal	Ambient Air Temperature Sensor	Signal	This is monitored in the instrument cluster. Potential problem source(s): - Wiring harness to outside temperature sensor defective - Outside temperature sensor defective - Instrument cluster faulty	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN signal (clum) from I-cluster	Y	- Wiring harness to outside temperature sensor defective - Outside temperature sensor defective - Instrument cluster faulty	- Continue fault diagnosis at the instrument cluster	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: Clarification in progress	None
MEVD17.2-8N2050	0x29A2	10959	Outside temperature sensor, plausibility: Ambient temperature higher than model temperature	The diagnostic function checks the plausibility of the outside temperature.	P0071	Ambient Air Temperature Sensor Circuit 'A' Range/Performance	Ambient Air Temperature Sensor	Plausibility	The fault is recognized when the outside temperature remains more than 20°C above the model value for longer than 14 sec. Potential problem source(s): - Defective wiring harness - Outside temperature sensor defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp. above 80 °C Time condition: - None Other conditions: - Engine on - Vehicle speed in excess of 45 km/h - Mass-airflow rate less than 200 kg/h - Intake-air temperature is	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Defect in wiring harness - Outside temperature sensor defective	- Check outside temperature - Check outside temperature sensor - Check wiring harness between the instrument cluster and the outside temperature sensor	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	M/L ON in US versions only	Possible apparent symptoms: None		Breakdown notice: None	- The following conditions can lead to an incorrect diagnosis: - Battery change or defective battery - Engine heated by secondary source, such as auxiliary heater - Sensor frozen
MEVD17.2-8N2050	0x29A2	10959	Outside temperature sensor, plausibility: Ambient temperature higher than model temperature	The diagnostic function checks the plausibility of the outside temperature.	P1854	Ambient Air Temperature Too High	Ambient Air Temperature	General	The fault is recognized when the outside temperature remains more than 20°C above the model value for longer than 14 sec. Potential problem source(s): - Defective wiring harness - Outside temperature sensor defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp. above 80 °C Time condition: - None Other conditions: - Engine on - Vehicle speed in excess of 45 km/h - Mass-airflow rate less than 200 kg/h - Intake-air temperature is	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Defect in wiring harness - Outside temperature sensor defective	- Check outside temperature - Check outside temperature sensor - Check wiring harness between the instrument cluster and the outside temperature sensor	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	M/L ON in US versions only	Possible apparent symptoms: None		Breakdown notice: None	- The following conditions can lead to an incorrect diagnosis: - Battery change or defective battery - Engine heated by secondary source, such as auxiliary heater - Sensor frozen
MEVD17.2-8N2050	0x29A3	10959	Outside temperature sensor, plausibility: Ambient temperature less than model temperature	The diagnostic function checks the plausibility of the outside temperature.	P0071	Ambient Air Temperature Sensor Circuit 'A' Range/Performance	Ambient Air Temperature Sensor	Plausibility	The fault is recognized when the outside temperature remains more than 20°C below the model value for longer than 14 sec. Potential problem source(s): - Defective wiring harness - Outside temperature sensor defective	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp. above 80 °C Time condition: - None Other conditions: - Engine on - Vehicle speed in excess of 45 km/h - Mass-airflow rate less than 200 kg/h - Intake-air temperature is	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Defect in wiring harness - Outside temperature sensor defective	- Check outside temperature - Check outside temperature sensor - Check wiring harness between the instrument cluster and the outside temperature sensor	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	M/L ON in US versions only	Possible apparent symptoms: None		Breakdown notice: None	- The following conditions can lead to an incorrect diagnosis: - Battery change or defective battery - Engine heated by secondary source, such as auxiliary heater - Sensor frozen
MEVD17.2-8N2050	0x29A3	10959	Outside temperature sensor, plausibility: Ambient temperature less than model temperature	The diagnostic function checks the plausibility of the outside temperature.	P1DEB	Ambient Air Temperature Too Low	Ambient Air Temperature	General	The fault is recognized when the outside temperature remains more than 20°C below the model value for longer than 14 sec. Potential problem source(s): - Defective wiring harness - Outside temperature sensor defective	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp. above 80 °C Time condition: - None Other conditions: - Engine on - Vehicle speed in excess of 45 km/h - Mass-airflow rate less than 200 kg/h - Intake-air temperature is	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Defect in wiring harness - Outside temperature sensor defective	- Check outside temperature - Check outside temperature sensor - Check wiring harness between the instrument cluster and the outside temperature sensor	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	M/L ON in US versions only	Possible apparent symptoms: None		Breakdown notice: None	- The following conditions can lead to an incorrect diagnosis: - Battery change or defective battery - Engine heated by secondary source, such as auxiliary heater - Sensor frozen
MEVD17.2-8N2050	0x29CC	10705	Intake-air temperature sensor, cold start: Intake-air temperature too high	The diagnostic function monitors the intake-air temperature to detect excessively high values during cold starts.	P1DC9	Cold Start Intake Air Temperature Too High (Bank 1)	Intake Air Temperature	1 Cold Start	the intake-air temperature exceeds an average figure from several temperatures during cold starts. Potential problem source(s): - Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: -21 sec. after engine start Other conditions: - Cold engine start	- None	- 21 sec. after engine start	NO	Read test data block; ID 581F	N	- Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	- Check wiring harness between DME and intake-air temperature sensor - Replace intake-air temperature sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Rough engine, possibly followed by power reduction caused by thermal management		Breakdown notice: None	None
MEVD17.2-8N2050	0x29CD	10706	Intake-air temperature sensor, cold start: Intake-air temperature too low	The diagnostic function monitors the intake-air temperature to detect excessively low values during cold starts.	P1DD0	Cold Start Intake Air Temperature Too Low (Bank 1)	Intake Air Temperature	1 Cold Start	the intake-air temperature is below an average figure from several temperatures during cold starts. Potential problem source(s): - Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: -21 sec. after engine start Other conditions: - Cold engine start	- None	- 21 sec. after engine start	NO	Read test data block; ID 581F	N	- Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	- Check wiring harness between DME and intake-air temperature sensor - Replace intake-air temperature sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-8N2050	0x29D0	10704	Intake air temperature sensor, electrical: Short circuit to B+	The diagnostic function monitors the upper voltage limit of the intake-air temperature sensor on the engine-side of the air filter.	P0113	Intake Air Temperature Sensor 1 Circuit High (Bank 1)	Intake Air Temperature Sensor	1 Electrical	the voltage of the intake-air temperature sensor exceeds 4.85 V. Potential problem source(s): - Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 581I	N	- Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	- Check wiring harness between DME and intake-air temperature sensor - Replace intake-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-8N2050	0x29D1	10705	Intake air temperature sensor, electrical: Short circuit to earth	The diagnostic function monitors the lower voltage limit of the intake-air temperature sensor on the engine-side of the air filter.	P0112	Intake Air Temperature Sensor 1 Circuit Low (Bank 1)	Intake Air Temperature Sensor	1 Electrical	the voltage of the intake-air temperature sensor is less than 0.17 V. Potential problem source(s): - Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 581I	N	- Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	- Check wiring harness between DME and intake-air temperature sensor - Replace intake-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None

MEVD17.2-8N2000	0x2802	10708	Intake air temperature sensor, electrical: Signal not plausible	The diagnostic function monitors the voltage of the intake-air temperature sensor on the engine-side of the air filter to detect jumps that violate the specified level.	P0111	Intake Air Temperature Sensor 1 Circuit Range/Performance (Bank 1)	Intake Air Temperature Sensor	1 Plausibility	the difference between the raw voltage value and the low-pass-filtered voltage is greater than 0.6 V. Potential problem source(s): - Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block: ID 5851	N	- Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	- Check wiring harness between DME and intake-air temperature sensor - Replace intake-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off -US electronic engine power reduction: off -CC message: none	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-8N2000	0x2806	10712	Intake air temperature sensor, plausibility: Intake air temperature too high	The diagnostic function monitors the intake-air temperature to detect implausibly high figures.	P0127	Intake Air Temperature Too High	Intake Air Temperature	1 General	the intake-air temperature on the engine-side of the air filter is more than 24°C above the intake-air temperature before the throttle valve. Potential problem source(s): - Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Vehicle speed in excess of 40 km/h	- None	- None	NO	Read test data block: ID 5851	N	- Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	- Check wiring harness between DME and intake-air temperature sensor - Replace intake-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off -US electronic engine power reduction: off -CC message: none	Active in US only	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-8N2000	0x2809	10713	Intake air temperature sensor, plausibility: Intake air temperature too low	The diagnostic function monitors the intake-air temperature to detect implausibly low figures.	P1129	Intake Air Temperature Too Low	Intake Air Temperature	1 General	the intake-air temperature on the engine-side of the air filter is more than 39°C below the intake-air temperature before the throttle valve. Potential problem source(s): - Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Vehicle speed exceeds 40 km/h for at least 2 minutes	- None	- None	NO	Read test data block: ID 5851	N	- Defective wiring harness between DME and intake-air temperature sensor - Intake-air temperature sensor defective - Defective DME	- Check wiring harness between DME and intake-air temperature sensor - Replace intake-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off -US electronic engine power reduction: off -CC message: none	Active in US only	Possible apparent symptoms: Engine runs roughly		Breakdown notice: None	None
MEVD17.2-8N2000	0x280C	10714	Charge-air temperature sensor, cold start: Charge air temperature too high	The diagnostic function monitors the charge-air temperature to detect excessively high values during cold starts.	P1000	Cold Start Charge Air Temperature Too High (Bank 1)	Charge Air Temperature	Cold Start	the charge-air temperature exceeds an average figure from several temperatures during cold starts. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 21 sec. after engine start Other conditions: - Cold engine start	- None	- 21 sec. after engine start	NO	Read test data block: ID 581E	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x280D	10717	Charge-air temperature sensor, cold start: Charge air temperature too low	The diagnostic function monitors the charge-air temperature to detect excessively low values during cold starts.	P1001	Cold Start Charge Air Temperature Too Low	Charge Air Temperature	Cold Start	the charge-air temperature is below an average figure from several temperatures during cold starts. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 21 sec. after engine start Other conditions: - Cold engine start	- None	- 21 sec. after engine start	NO	Read test data block: ID 581E	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x280E	10720	Charge-air temperature sensor, electrical : Short circuit to B+	The diagnostic function monitors the upper voltage limit of the intake-air temperature sensor on the engine-side of the air filter.	P007D	Charge Air Cooler Temperature Sensor Circuit High (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Electrical	the voltage of the intake-air temperature sensor exceeds 4.85 V. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block: ID 580T	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x280E	10721	Charge-air temperature sensor, electrical : Short circuit to earth	The diagnostic function monitors the lower voltage limit of the intake-air temperature sensor on the engine-side of the air filter.	P007C	Charge Air Cooler Temperature Sensor Circuit Low (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Electrical	the voltage of the intake-air temperature sensor is less than 0.17 V. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block: ID 580T	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x28E1	10722	Charge-air temperature sensor, electrical : Signal not plausible	The diagnostic function monitors the voltage of the intake-air temperature sensor on the engine-side of the air filter to detect jumps that violate the specified level.	P007B	Charge Air Cooler Temperature Sensor Circuit Range/Performance (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Plausibility	the difference between the raw voltage value and the low-pass-filtered voltage > 0.6 V. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block: ID 580T	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x28E4	10724	Charge-air temperature sensor, plausibility: Charge air temperature too high	The diagnostic function monitors the charge-air temperature to detect implausibly high figures.	P0380	Charge Air Cooler Temperature Too High (Bank 1)	Charge Air Temperature	General	The fault is recognized when the boost-air temperature is more than 24°C above the intake-air temperature. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: Drive vehicle at a speed above 40 km/h for at least 2 minutes to reduce the charge-air temperature, then allow the engine to idle for at least 2 minutes to allow the charge-air temperature to rise again	- None	- None	NO	Read test data block: ID 581E	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x28E5	10725	Charge-air temperature sensor, plausibility: Signal frozen	The diagnostic function monitors the charge-air temperature sensor for an invariable signal.	P0088	Charge Air Cooler Temperature Sensor Signal Stuck (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Electrical	The fault is recognized when the voltage of the charge-air temperature sensor does not change by at least 0.005 V. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 27 sec. after reaching engine temperature of 80 °C Other conditions: Drive vehicle at a speed above 40 km/h for at least 2 minutes to reduce the charge-air temperature, then allow the engine to idle for at least 2 minutes to allow the charge-	- Engine warmed to normal temperature, more than 80°C	- 27 sec. after reaching engine temperature of 80 °C	NO	Read test data block: ID 581E	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	Active in US only	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x28E6	10728	Charge-air temperature sensor, gradient: Rise too high	The diagnostic function monitors the charge-air temperature for excessively rapid rises.	P007B	Charge Air Cooler Temperature Sensor Circuit Range/Performance (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Plausibility	The fault is recognized when the boost-air temperature rises by at least 35 °C within 10 sec. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: Drive vehicle at a speed above 40 km/h for at least 2 minutes to reduce the charge-air temperature, then allow the engine to idle for at least 2 minutes to allow the charge-air temperature to rise again.	- None	- None	NO	Read test data block: ID 581E	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x28E8	10729	Charge-air temperature sensor, gradient: Rise too high	The diagnostic function monitors the charge-air temperature for excessively rapid rises.	P0084	Charge Air Cooler Temperature Sensor Gradient Too High (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Plausibility	The fault is recognized when the boost-air temperature rises by at least 35 °C within 10 sec. Potential problem source(s): - Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: Drive vehicle at a speed above 40 km/h for at least 2 minutes to reduce the charge-air temperature, then allow the engine to idle for at least 2 minutes to allow the charge-air temperature to rise again.	- None	- None	NO	Read test data block: ID 581E	N	- Defect in wiring harness between DME and charge-air temperature sensor - Charge-air temperature sensor defective - Charge-air temperature sensor has been tampered with - Defective DME	- Check wiring harness between DME and charge-air temperature sensor - Replace charge-air temperature sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x28F8	10750	Injection system, cylinder 1, activation: High voltage side, short to ground	The diagnostic function monitors control-activation of the injector's high-voltage side.	P3149	Cylinder 1 High-Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 1. If fault remains switch the new injector to cylinder 2. - Replace the DME control module only if the fault is still present continuously.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x28F9	10751	Injection system, cylinder 1, activation: Low voltage side, short to positive	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3102	Cylinder 1 High-Pressure Injector Low Side Circuit High	Injector Low Side	Short to Ball	The fault is recognized when the outside temperature remains more than 20°C above the model value for longer than 14 sec. Potential problem source(s): - Defective wiring harness - Outside temperature sensor defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defect in wiring harness - Outside temperature sensor defective	- Read out outside temperature with tester and assess plausibility - Visual inspection of outside temperature sensor - Check wiring harness between the instrument cluster and the outside temperature sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	- The following conditions can lead to an incorrect diagnosis: - Battery charge or defective battery - Engine heated by secondary source, such as auxiliary heater - Sensor frozen
MEVD17.2-8N2000	0x2A00	10752	Injection system, cylinder 1, activation: High voltage side, short to positive	The diagnostic function monitors control-activation of the injector's high-voltage side.	P3150	Cylinder 1 High-Pressure Injector High Side Circuit High	Injector High Side	Short to Ball	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 1. If fault remains switch the new injector to cylinder 2. - Replace DME only if the fault remains present continuously.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x2A01	10753	Injection system, cylinder 1, activation: Low voltage side, short circuit to earth	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3101	Cylinder 1 High-Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2 - Replace injector 1, if the defect remains present respond by switching the new injector to cylinder 2 - Replace the DME control module only if the fault is still present continuously.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x2A02	10754	Injection system, cylinder 2, activation: High voltage side, short to ground	The diagnostic function monitors control-activation of the injector's high-voltage side.	P3152	Cylinder 2 High-Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective plug or wiring harness - Defective injector - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective plug or wiring harness - Defective injector - Defective DME	- Inspect plug/wiring harness between DME and injector 2, replace injector 2. - Replace DME only if the fault remains continuously.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector
MEVD17.2-8N2000	0x2A03	10755	Injection system, cylinder 2, activation: Low voltage side, short to positive	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3105	Cylinder 2 High-Pressure Injector Low Side Circuit High	Injector Low Side	Short to Ball	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Inspect wiring harness between DME and injector 2, replace injector 2. - Replace DME only if the fault remains continuously.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector
MEVD17.2-8N2000	0x2A04	10758	Injection system, cylinder 2, activation: High voltage side, short to positive	The diagnostic function monitors control-activation of the injector's high-voltage side.	P3153	Cylinder 2 High-Pressure Injector High Side Circuit High	Injector High Side	Short to Ball	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Inspect wiring harness between DME and injector 2, replace injector 2. - Replace DME only if the fault remains continuously.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on -US electronic engine power reduction: on -CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector

MEVD17.2-8N2000	0x240D	10757	Injection system, cylinder 2, activation: Low voltage side: short circuit to earth	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2105	Cylinder 2 High-Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Inspect wiring harness between DME and injector 2, replace injector 2. - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x240E	10758	Injection system, cylinder 3, activation: High voltage side: short to ground	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2106	Cylinder 3 High-Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4 - Replace injector 4, if the defect remains present respond by switching the new injector to cylinder 3. - Replace DME only if the fault remains present continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x240F	10759	Injection system, cylinder 3, activation: Low voltage side: short to positive	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2110	Cylinder 3 High-Pressure Injector Low Side Circuit High	Injector Low Side	Short to Batt	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	This fault is logged in the ECU fault memory if it remains present for longer than 3 sec.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Read out and work through diagnostic fault codes in instrument cluster and in junction box	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x2410	10760	Injection system, cylinder 3, activation: High voltage side: short to positive	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2106	Cylinder 3 High-Pressure Injector High Side Circuit High	Injector High Side	Short to Batt	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4 - Replace injector 4, if the defect remains present respond by switching the new injector to cylinder 3. - Replace DME only if the fault remains present continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x2411	10761	Injection system, cylinder 3, activation: Low voltage side: short to earth	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2109	Cylinder 3 High-Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4 - Replace injector 4, if the defect remains present respond by switching the new injector to cylinder 3. - Replace DME only if the fault remains present continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x240A	10762	Injection system, cylinder 4, activation: High voltage side: short to ground	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2158	Cylinder 4 High-Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective plug or wiring harness - Defective injector - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective plug or wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4 - Replace injector 4, if the defect remains present respond by switching the new injector to cylinder 3 - Replace DME only if the fault remains present continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x240B	10763	Injection system, cylinder 4, activation: Low voltage side: short to positive	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2114	Cylinder 4 High-Pressure Injector Low Side Circuit High	Injector Low Side	Short to Batt	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 4 and 2, replace injector 4, if fault remains switch the new injector to cylinder 4 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x240C	10764	Injection system, cylinder 4, activation: High voltage side: short to positive	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2159	Cylinder 4 High-Pressure Injector High Side Circuit High	Injector High Side	Short to Batt	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 4 and 2, replace injector 4, if fault remains switch the new injector to cylinder 4 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x240D	10765	Injection system, cylinder 4, activation: Low voltage side: short circuit to earth	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2113	Cylinder 4 High-Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 4 and 2, replace injector 4, if fault remains switch the new injector to cylinder 3 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x240E	10766	Injection system, cylinder 5, activation: High voltage side: short to ground	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2161	Cylinder 5 High-Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered immediately when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4, replace injector 3, if fault remains switch the new injector to cylinder 4 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x240F	10767	Injection system, cylinder 5, activation: Low voltage side: short to positive	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2118	Cylinder 5 High-Pressure Injector Low Side Circuit High	Injector Low Side	Short to Batt	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4, replace injector 3, if fault remains switch the new injector to cylinder 4 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x2410	10768	Injection system, cylinder 5, activation: High voltage side: short to positive	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2162	Cylinder 5 High-Pressure Injector High Side Circuit High	Injector High Side	Short to Batt	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered immediately when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4, replace injector 3, if fault remains switch the new injector to cylinder 4 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x2411	10769	Injection system, cylinder 5, activation: Low voltage side: short circuit to earth	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2117	Cylinder 5 High-Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Inspect wiring harness between DME and injector 5, replace injector 5. - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x2412	10770	Injection system, cylinder 6, activation: High voltage side: short to ground	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2164	Cylinder 6 High-Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 2, if fault remains switch the new injector to cylinder 1. - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x2413	10771	Injection system, cylinder 6, activation: Low voltage side: short to positive	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2122	Cylinder 6 High-Pressure Injector Low Side Circuit High	Injector Low Side	Short to Batt	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 2, if fault remains switch the new injector to cylinder 1. - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x2414	10772	Injection system, cylinder 6, activation: High voltage side: short to positive	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2165	Cylinder 6 High-Pressure Injector High Side Circuit High	Injector High Side	Short to Batt	The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 2, if fault remains switch the new injector to cylinder 1. - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-8N2000	0x2415	10773	Injection system, cylinder 6, activation: Low voltage side: short circuit to earth	The diagnostic function monitors control-activation of the injector's low-voltage side.	P2121	Cylinder 6 High-Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 2, if fault remains switch the new injector to cylinder 1 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x2430	10809	Injection system, cylinder 1 high voltage side, activation: Interturn fault	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2148	Cylinder 1 High-Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	The fault is recognized when a short circuit between the high and low-voltage sides is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 1, if fault remains switch the new injector to cylinder 2 - Replace the DME control module only if the fault is still present continuously.	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x2431	10801	Fuel injector, cylinder 2, high voltage side, activation: Interturn fault	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2151	Cylinder 2 High-Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	The fault is recognized when a short circuit between the high and low-voltage sides is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Inspect wiring harness between DME and injector 2, replace injector 2. - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x2432	10802	Fuel injector, cylinder 3, high voltage side, activation: Interturn fault	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2154	Cylinder 3 High-Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	The fault is recognized when a short circuit between the high and low-voltage sides is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 4 and 2, replace injector 4, if fault remains switch the new injector to cylinder 3 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x2433	10803	Injection system, cylinder 4, activation: Interturn fault	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2157	Cylinder 4 High-Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	The fault is recognized when a short circuit between the high and low-voltage sides is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 4 and 2, replace injector 4, if fault remains switch the new injector to cylinder 4 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x2434	10804	Injection system, cylinder 5, high-voltage side, activation: Interturn fault	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2160	Cylinder 5 High-Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	The fault is recognized when a short circuit between the high and low-voltage sides is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4, replace injector 3, if fault remains switch the new injector to cylinder 4 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-8N2000	0x2435	10805	Fuel injector, cylinder 6, high voltage side, activation: Interturn fault	The diagnostic function monitors control-activation of the injector's high-voltage side.	P2163	Cylinder 6 High-Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	The fault is recognized when a short circuit between the high and low-voltage sides is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 2, if fault remains switch the new injector to cylinder 1 - Replace DME only if the fault remains continuously	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases	Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!

MEVD17.2-BN2000	0x2A40	10816	Fuel injector, cylinder 1 low voltage side, activation: Booster time window	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3103	Cylinder 1 High Pressure Injector Low Side Booster Time Error	Injector Low Side	Booster Time Error	The fault is recognized when the current rises too slowly. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	If the fault occurs on the same cylinder 3 times in an uninterrupted sequence, plus the debounce time of 0.5 sec., the diagnostic fault code is logged.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 1, if fault remains switch the new injector to cylinder 2 - Replace the DME control module only if the fault is still present continuously.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-BN2000	0x2A41	10817	Fuel injector, cylinder 2 low voltage side, activation: Booster time window	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3107	Cylinder 2 High Pressure Injector Low Side Booster Time Error	Injector Low Side	Booster Time Error	The fault is recognized when the current rises too slowly. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	If the fault occurs on the same cylinder 3 times in an uninterrupted sequence, plus the debounce time of 0.5 sec., the diagnostic fault code is logged.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 6, replace injector 6, if fault remains switch the new injector to cylinder 1 - Replace DME only if the fault remains continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-BN2000	0x2A42	10818	Fuel injector, cylinder 3 low voltage side, activation: Booster time window	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3111	Cylinder 3 High Pressure Injector Low Side Booster Time Error	Injector Low Side	Booster Time Error	The fault is recognized when the current rises too slowly. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	If the fault occurs on the same cylinder 3 times in an uninterrupted sequence, plus the debounce time of 0.5 sec., the diagnostic fault code is logged.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4 - Replace injector 4, if the defect remains present respond by switching the new injector to cylinder 3. - Replace DME only if the fault remains present continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-BN2000	0x2A43	10819	Fuel injector, cylinder 4 low voltage side, activation: Booster time window	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3115	Cylinder 4 High Pressure Injector Low Side Booster Time Error	Injector Low Side	Booster Time Error	The fault is recognized when the current rises too slowly. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	If the fault occurs on the same cylinder 3 times in an uninterrupted sequence, plus the debounce time of 0.5 sec., the diagnostic fault code is logged.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4 - Replace injector 4, if the defect remains present respond by switching the new injector to cylinder 3. - Replace DME only if the fault remains present continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-BN2000	0x2A44	10820	Fuel injector, cylinder 5 low voltage side, activation: Booster time window	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3119	Cylinder 5 High Pressure Injector Low Side Booster Time Error	Injector Low Side	Booster Time Error	The fault is recognized when the current rises too slowly. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	If the fault occurs on the same cylinder 3 times in an uninterrupted sequence, plus the debounce time of 0.5 sec., the diagnostic fault code is logged.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4, replace injector 3, if fault remains switch the new injector to cylinder 4 - Replace DME only if the fault remains continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-BN2000	0x2A45	10821	Injection system, cylinder 6 low voltage side, activation: Booster time window	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3123	Cylinder 6 High Pressure Injector Low Side Booster Time Error	Injector Low Side	Booster Time Error	The fault is recognized when the current rises too slowly. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	If the fault occurs on the same cylinder 3 times in an uninterrupted sequence, plus the debounce time of 0.5 sec., the diagnostic fault code is logged.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 2, if fault remains switch the new injector to cylinder 1 - Replace DME only if the fault remains continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Engine runs roughly		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-BN2000	0x2A4C	10828	Fuel injector, cylinder 1 low voltage side, activation: Line disconnection	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3100	Cylinder 1 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	The fault is recognized when an open wire is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 2, replace injector 1, if fault remains switch the new injector to cylinder 2 - Replace the DME control module only if the fault is still present continuously.	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-BN2000	0x2A4D	10829	Fuel injector, cylinder 2 low voltage side, activation: Line disconnection	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3104	Cylinder 2 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	The fault is recognized when an open wire is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Inspect wiring harness between DME and injector 2, replace injector 2. - Replace DME only if the fault remains continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-BN2000	0x2A4E	10830	Fuel injector, cylinder 3 low voltage side, activation: Line disconnection	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3108	Cylinder 3 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	The fault is recognized when an open wire is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 3 and 4 - Replace injector 4, if the defect remains present respond by switching the new injector to cylinder 3. - Replace DME only if the fault remains present continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 2, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective.
MEVD17.2-BN2000	0x2A4F	10831	Fuel injector, cylinder 4 low voltage side, activation: Line disconnection	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3112	Cylinder 4 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	The fault is recognized when an open wire is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 4 and 3, replace injector 4, if fault remains switch the new injector to cylinder 3 - Replace DME only if the fault remains continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-BN2000	0x2A50	10832	Fuel injector, cylinder 5 low voltage side, activation: Line disconnection	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3116	Cylinder 5 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	The fault is recognized when an open wire is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Inspect wiring harness between DME and injector 5, replace injector 5. - Replace DME only if the fault remains continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-BN2000	0x2A51	10833	Injection system, cylinder 6 low voltage side, activation: Line disconnection	The diagnostic function monitors control-activation of the injector's low-voltage side.	P3120	Cylinder 6 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	The fault is recognized when an open wire is present. Potential problem source(s): - Defective wiring harness - Defective injector - Defective DME	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no interruption on a single cylinder.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injectors 1 and 6, replace injector 6, if fault remains switch the new injector to cylinder 1. - Replace DME only if the fault remains continuously	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs roughly and can stall in extreme cases		Breakdown notice: Engine fault	Injectors 1 and 6, and 3 and 4, are connected to shared DME driver circuits. This means that diagnostic fault codes are always logged for both injectors, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!
MEVD17.2-BN2000	0x2A5F	10847	Injection systems, voltage supply: Short circuit to B+	The diagnostic function monitors the wire for the injector voltage supply from the overload-protection relay for ignition and injection for short circuits to positive.					logged when voltage is present at the DME input (E_U_INJ) although the relay has switched off. Potential problem source(s): - Defect at plug or in wiring harness between relay and DME - Relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 8 sec. after deactivation of overload-protection relay for ignition and injection Other conditions: - Shutdown phase	- None	- 8 sec. after deactivation of overload-protection relay for ignition and injection	NO	U	N	- Defect at plug or in wiring harness between relay and DME - Relay defective - Defective DME	- Check plug and wiring harness between relay and DME - Replace relay - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2A60	10848	Injection systems, voltage supply: Short circuit to earth	The diagnostic function monitors the wire for the injector voltage supply from the overload-protection relay for ignition and injection for short circuits to ground.					logged when no voltage is present at the DME input (E_U_INJ) although the relay has switched on. Potential problem source(s): - Fuse defective - Defect at plug or in wiring harness between relay and DME - Relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Fuse defective - Defect at plug or in wiring harness between relay and DME - Relay defective - Defective DME	- Check fuse - Check plug and wiring harness between relay and DME - Replace relay - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Non-starter		Breakdown notice: None	none
MEVD17.2-BN2000	0x2A61	10849	Injection systems, voltage supply: Line disconnection	The diagnostic function monitors the wire for the injector voltage supply from the overload-protection relay for ignition and injection for an open circuit.					logged when no voltage is present at the DME input (E_U_INJ) although the relay has switched on. Potential problem source(s): - Fuse defective - Defect at plug or in wiring harness between relay and DME - Relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U	N	- Fuse defective - Defect at plug or in wiring harness between relay and DME - Relay defective - Defective DME	- Check fuse - Check plug and wiring harness between relay and DME - Replace relay - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Non-starter		Breakdown notice: None	None
MEVD17.2-BN2000	0x2A70	10864	DME, internal fault, HDEV output stage module 1: SPI communication faulty	The diagnostic function monitors the driver circuit responsible for activating the injector.	P16A5	Control Module Multiple Output Stage SPI-Bus Communication Error	ECM	Multiple Output Stage	The fault is recognized when communications with the driver circuit that activates the injector break down. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Engine runs poorly with power loss - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2A71	10865	DME, internal fault, HDEV output stage module 2: SPI communication faulty	The diagnostic function monitors the driver circuit responsible for activating the injector.	P16A5	Control Module Multiple Output Stage SPI-Bus Communication Error	ECM	Multiple Output Stage	The fault is recognized when communications with the driver circuit that activates the injector break down. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Engine runs poorly with power loss - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2A72	10866	DME, internal fault, HDEV output stage module 1: SPI communication implausible	The diagnostic function monitors the driver circuit responsible for activating the injector.	P16A5	Control Module Multiple Output Stage SPI-Bus Communication Error	ECM	Multiple Output Stage	The fault is recognized when communications with the driver circuit that activates the injector break down. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Engine runs poorly with power loss - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2A73	10867	DME, internal fault, HDEV output stage module 2: SPI communication implausible	The diagnostic function monitors the driver circuit responsible for activating the injector.	P16A5	Control Module Multiple Output Stage SPI-Bus Communication Error	ECM	Multiple Output Stage	The fault is recognized when communications with the driver circuit that activates the injector break down. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Engine runs poorly with power loss - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2A74	10868	DME, internal fault, HDEV output stage module 1: SPI communication, signal fault	The diagnostic function monitors the driver circuit responsible for activating the injector.	P16A5	Control Module Multiple Output Stage SPI-Bus Communication Error	ECM	Multiple Output Stage	The fault is recognized when communications with the driver circuit that activates the injector break down. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Engine runs poorly with power loss - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2A75	10869	DME, internal fault, HDEV output stage module 2: SPI communication, signal fault	The diagnostic function monitors the driver circuit responsible for activating the injector.	P16A5	Control Module Multiple Output Stage SPI-Bus Communication Error	ECM	Multiple Output Stage	The fault is recognized when communications with the driver circuit that activates the injector break down. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Engine runs poorly with power loss - Breakdown in extreme cases		Breakdown notice: - none	- none

MEVD17.2-8N2000	0x2BC0	11200	Mixture adaptation, lower engine speed range: Mixture at partial load too lean	The diagnostic function monitors the mixture adaptation.	P0171	System Too Lean (Bank 1)	Fuel System	All Load Ranges	the state is recognized when the mixture is too lean and must be enriched by more than 25-30%, depending on load factor. Potential problem source(s): - Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Intake system leaking - Oil cap not sealing - Leak in exhaust system	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - EVAP not active	- None	- None	START_SYSTEMCHECK_GRUNDDAPPT	- Mixture adaptation (ID: 0x5A85) - Mixture controller (ID: 0x5855) - Load (ID: 0x5813) - Engine rpm (ID: 0x4B27) - Engine temperature (ID:0x4D07)	Y	- Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Intake system leaking - Oil cap not sealing - Leak in exhaust system before oxygen sensor - behind catalytic converter - Poor quality gasoline	- If additional faults related to the following components are present, process these first: Pre-catalyst oxygen sensor, mass-airflow sensor, intake-manifold pressure sensor, intake-air temperature sensor, camshaft position sensor, high-pressure fuel system, low-pressure fuel system Check air-induction system for leaks (also checking the following components: Positive crankcase ventilation, oil cap, tank evaporative emissions system) - Check exhaust system for leaks - Replace injectors	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: - Loss of power	- Delete mixture adaptations following repair
MEVD17.2-8N2000	0x2BD0	11200	Mixture adaptation, lower engine speed range: Mixture at partial load too lean	The diagnostic function monitors the mixture adaptation.	P2177	System Too Lean Off Idle (Bank 1)	Fuel System	Off Idle	the state is recognized when the mixture is too lean and must be enriched by more than 25-30%, depending on load factor. Potential problem source(s): - Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Intake system leaking - Oil cap not sealing - Leak in exhaust system	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - EVAP not active	- None	- None	START_SYSTEMCHECK_GRUNDDAPPT	- Mixture adaptation (ID: 0x5A85) - Mixture controller (ID: 0x5855) - Load (ID: 0x5813) - Engine rpm (ID: 0x4B27) - Engine temperature (ID:0x4D07)	Y	- Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Intake system leaking - Oil cap not sealing - Leak in exhaust system before oxygen sensor - behind catalytic converter - Poor quality gasoline	- If additional faults related to the following components are present, process these first: Pre-catalyst oxygen sensor, mass-airflow sensor, intake-manifold pressure sensor, intake-air temperature sensor, camshaft position sensor, high-pressure fuel system, low-pressure fuel system Check air-induction system for leaks (also checking the following components: Positive crankcase ventilation, oil cap, tank evaporative emissions system) - Check exhaust system for leaks - Replace injectors	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: - Loss of power	- Delete mixture adaptations following repair
MEVD17.2-8N2000	0x2BC1	11201	Mixture adaptation, lower engine speed range: Mixture at partial load too rich	The diagnostic function monitors the mixture adaptation.	P0172	System Too Rich (Bank 1)	Fuel System	All Load Ranges	the state is recognized when the mixture is too rich and must be leaned out by more than 25-30%, depending on load factor. Potential problem source(s): - Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Leak in exhaust system	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - EVAP not active	- None	- None	START_SYSTEMCHECK_GRUNDDAPPT	- Mixture adaptation (ID: 0x5A85) - Mixture controller (ID: 0x5855) - Load (ID: 0x5813) - Engine rpm (ID: 0x4B27) - Engine temperature (ID:0x4D07)	Y	- Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Leak in exhaust system before oxygen sensor - behind catalytic converter - Poor quality gasoline	- If additional faults related to the following components are present, process these first: Pre-catalyst oxygen sensor, mass-airflow sensor, intake-manifold pressure sensor, intake-air temperature sensor, camshaft position sensor, high-pressure fuel system, low-pressure fuel system Check air-induction system for leaks (also checking the following components: Positive crankcase ventilation, oil cap, tank evaporative emissions system) - Check exhaust system for leaks - Replace injectors	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- Delete mixture adaptations following repair
MEVD17.2-8N2000	0x2BC2	11202	Mixture adaptation, lower engine speed range: Mixture at partial load too rich	The diagnostic function monitors the mixture adaptation.	P2178	System Too Rich Off Idle (Bank 1)	Fuel System	Off Idle	the state is recognized when the mixture is too rich and must be leaned out by more than 25-30%, depending on load factor. Potential problem source(s): - Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Leak in exhaust system	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - EVAP not active	- None	- None	START_SYSTEMCHECK_GRUNDDAPPT	- Mixture adaptation (ID: 0x5A85) - Mixture controller (ID: 0x5855) - Load (ID: 0x5813) - Engine rpm (ID: 0x4B27) - Engine temperature (ID:0x4D07)	Y	- Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Leak in exhaust system before oxygen sensor - behind catalytic converter - Poor quality gasoline	- If additional faults related to the following components are present, process these first: Pre-catalyst oxygen sensor, mass-airflow sensor, intake-manifold pressure sensor, intake-air temperature sensor, camshaft position sensor, high-pressure fuel system, low-pressure fuel system Check air-induction system for leaks (also checking the following components: Positive crankcase ventilation, oil cap, tank evaporative emissions system) - Check exhaust system for leaks - Replace injectors	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- Delete mixture adaptations following repair
MEVD17.2-8N2000	0x2BC3	11203																								
MEVD17.2-8N2000	0x2BC4	11204																								
MEVD17.2-8N2000	0x2BC5	11205																								
MEVD17.2-8N2000	0x2BC6	11210	Oxygen sensor before catalytic converter Exhaust gas after cat. conv. too rich	The diagnostic function monitors the oxygen sensor behind the catalytic converter to determine whether it displays a consistent deviation.	P0097	Post Catalyst Fuel Trim System Too Rich (Bank 1)	Fuel System	Post Catalyst	the trim control on the oxygen sensor behind catalytic converter exceeds a level of negative 4%. Potential problem source(s): - Defective wiring harness - Leak in exhaust system on engine-side of catalytic converter - Oxygen sensor before catalytic converter defective - Oxygen sensor behind catalytic converter defective - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 10 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp. above 80 °C Time condition: - None Other conditions: - Engine on - Drive at a constant speed between 50 and 80 km/h at moderate rpm (1400 to 3240 rpm). - No faults that would cause	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	N	- Defective wiring harness - Leak in exhaust system on engine-side of catalytic converter - Oxygen sensor before catalytic converter defective - Oxygen sensor behind catalytic converter defective - Defective DME	- If faults related to moisture control are present repair these first - Conduct system test for oxygen sensors in wrong mutual positions - Check muffler unit before oxygen sensor behind catalytic converter for leaks - Check wiring harness between oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Diagnosis depends on the trim controller adaptation. This is activated only under extremely constant steady-state operating conditions. This means that substantial periods can elapse before fault detection.	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-8N2000	0x2BC7	11211	Oxygen sensor before catalytic converter Exhaust gas after cat. conv. too lean	The diagnostic function monitors the oxygen sensor behind the catalytic converter to determine whether it displays a consistent deviation.	P2096	Post Catalyst Fuel Trim System Too Lean (Bank 1)	Fuel System	Post Catalyst	the trim control on the oxygen sensor behind the catalytic converter exceeds a level of positive 4%. Potential problem source(s): - Defective wiring harness - Leak in exhaust system on engine-side of catalytic converter - Oxygen sensor before catalytic converter defective - Oxygen sensor behind catalytic converter defective - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 10 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp. above 80 °C Time condition: - None Other conditions: - Engine on - Drive at a constant speed between 50 and 80 km/h at moderate rpm (1400 to 3240 rpm). - No faults that would cause	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	N	- Defective wiring harness - Leak in exhaust system on engine-side of catalytic converter - Oxygen sensor before catalytic converter defective - Oxygen sensor behind catalytic converter defective - Defective DME	- If faults related to moisture control are present repair these first - Conduct system test for oxygen sensors in wrong mutual positions - Check muffler unit before oxygen sensor behind catalytic converter for leaks - Check wiring harness between oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Diagnosis depends on the trim controller adaptation. This is activated only under extremely constant steady-state operating conditions. This means that substantial periods can elapse before fault detection.	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-8N2000	0x2BC8	11229	Rail pressure sensor, electrical: Short circuit to B+	The diagnosis function monitors the upper voltage limit of the rail-pressure sensor.	P0193	Fuel Rail Pressure Sensor 'A' Circuit High	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	the voltage of the rail-pressure sensor exceeds 4.8 V. Potential problem source(s): - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 5876	N	- Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defective DME	- Check wiring harness between DME and rail-pressure sensor - Replace rail-pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x2BDA	11229	Rail pressure sensor, electrical: Short circuit to earth	The diagnostic function monitors the rail-pressure sensor's lower voltage limit.	P0192	Fuel Rail Pressure Sensor 'A' Circuit Low	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	the voltage of the rail-pressure sensor is less than 0.2 V. Potential problem source(s): - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 5876	N	- Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defective DME	- Check wiring harness between DME and rail-pressure sensor - Replace rail-pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced power		Breakdown notice: Standard EML Test	None
MEVD17.2-8N2000	0x2BDB	11237	Fuel supply system: Pressure too high, emergency operation with low pressure	The diagnostic function monitors fuel high-pressure system to detect whether it rises above a defined maximum value.	P306A	Fuel RailSystem Pressure - Too High, Limp Home	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	the rail pressure rises above 22 bar. Potential problem source(s): - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in low-pressure	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Rail-pressure sensor voltage signal	Y	- Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in low-pressure system - High-pressure pump defective	- Check wiring harness between rail-pressure sensor and DME - Replace rail-pressure sensor - Check low-pressure sensor - Check operation of fuel pump - Replace high-pressure pump	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-8N2000	0x2BDF	11231	Low pressure fuel system: Power of FP is too high for actual pressure.	The diagnostic function monitors the current draw from the electric fuel pump.					The fault is recognized when the power consumption of the electric fuel pump rises above 160 W. Potential problem source(s): - Defect in low-pressure sensor - Fuel pump defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	see EKP electric fuel pump module	see EKP electric fuel pump module	N	- Defect in low-pressure sensor - Fuel pump defective	- Check low-pressure sensor - Check operation of fuel pump	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - None		Breakdown notice: - None	none
MEVD17.2-8N2000	0x2BE0	11234	Low pressure fuel system, signal: voltage of electrical fuel pump implausible	The diagnostic function monitors the voltage at the electric fuel pump.					The fault is recognized when the voltage at the electric fuel pump is below 5 V. Potential problem source(s): - Errors in CAN messages - Defect in wiring harness to fuel pump - Electric fuel pump defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	see EKP electric fuel pump module	see EKP electric fuel pump module	N	- Errors in CAN messages - Defect in wiring harness to fuel pump - Electric fuel pump defective	- Collateral fault caused by defect in CAN - Check fuel pump wiring harness - Check operation of fuel pump	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Ranges from none to breakdown owing to fuel deviation		Breakdown notice: None	none
MEVD17.2-8N2000	0x2BE3	11235	Low pressure fuel system, control: Actual pressure too low	The diagnostic function monitors the fuel low-pressure level's deviation from the specified value.					the fuel low-pressure circuit pressure is below the specified value. Potential problem source(s): - Fuel tank empty - Leak in fuel system - Defect in wiring harness to low-pressure sensor - Defect in low-pressure sensor - Defective pressure limiter valve in the fuel pump - Defect in wiring harness to fuel pump	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - No overrun cutoff	- None	- None	see EKP electric fuel pump module	see EKP electric fuel pump module	N	- Fuel tank empty - Leak in fuel system - Defect in wiring harness to low-pressure sensor - Defect in low-pressure sensor - Defective pressure limiter valve in the fuel pump - Defect in wiring harness to fuel pump - Fuel pump defective	- Check fuel level - Check low-pressure system for leaks - Check low-pressure sensor - Conduct pressure breakdown test in low-pressure fuel system - Check operation of fuel pump - Check fuel pump wiring harness	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Ranges from none to breakdown owing to fuel deviation		Breakdown notice: None	none
MEVD17.2-8N2000	0x2BE4	11236	Low pressure fuel system, control: Actual pressure too high	The diagnostic function monitors the fuel low-pressure level's deviation from the specified value.					the fuel low-pressure circuit pressure is above the specified value. Potential problem source(s): - Defect in wiring harness to low-pressure sensor - Defect in low-pressure sensor - Pressure limiter valve in EKP electric fuel pump - Defect in wiring harness to fuel pump	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - No overrun mode	- None	- None	see EKP electric fuel pump module	see EKP electric fuel pump module	N	- Defect in wiring harness to low-pressure sensor - Defect in low-pressure sensor - Pressure limiter valve in EKP electric fuel pump - Defect in wiring harness to fuel pump - Fuel pump defective	- Inspect wiring harness to low-pressure sensor - Check low-pressure sensor - Check operation of fuel pump - Check fuel pump wiring harness	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	none
MEVD17.2-8N2000	0x2BE9	11241	Fuel pressure: Pressure below minimum pressure, injection deactivation for catalytic converter protection	The diagnostic function monitors the high-pressure system for pressure deviations.	P1A2E	Cylinder Injection Cut-Off, Pressure Too Low in High-Pressure System	Injection Deactivation	Pressure	The fault is recognized when the fail pressure in the high or low-pressure system falls below a value based on the program map. Potential problem source(s): - Tank fuel level too low - Collateral malfunction stemming from defective fuel system	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp. above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	- None	none	Y	- Tank fuel level too low - Collateral malfunction stemming from defective fuel system	- Check fuel level - Repair the source of the problem (if present) in the fuel system	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x2BE6	11243	Fuel pressure: Pressure below minimum pressure, injection deactivation for catalytic converter protection	The diagnostic function monitors the high-pressure system for pressure deviations.	P200F	Fuel Rail Pressure, Minimum Pressure Fallen Below, Injection Cut-Off	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	The fault is recognized when the fail pressure in the high or low-pressure system falls below a value based on the program map. Potential problem source(s): - Tank fuel level too low - Collateral malfunction stemming from defective fuel system	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp. above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	- None	none	Y	- Tank fuel level too low - Collateral malfunction stemming from defective fuel system	- Check fuel level - Repair the source of the problem (if present) in the fuel system	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None

MEVD17.2-BN2000	0x2BEA	11242	Fuel supply system, oxygen sensor emissions control: upper limit exceeded	The diagnostic function monitors the lambda closed-loop mixture control. The mixture is too lean and the lambda control enriches it.	P0171	System Too Lean (Bank 1)	Fuel System	All Load Ranges	The fault is recognized when an enrichment of more than 30 % is required for longer than 30 seconds. Potential problem source(s): - Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Leak in exhaust system before oxygen sensor behind	This fault is logged in the control module's fault memory if it remains present for longer than 30 sec.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - EVAP not active	- None	- None	None	none	Y	- Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Leak in exhaust system before oxygen sensor behind catalytic converter - Poor-quality gasoline	- If additional faults related to the following components are present, process these first: Pre-catalyst oxygen sensor, mass-airflow sensor, intake-manifold pressure sensor, intake-air temperature sensor, camshaft position sensor, high-pressure fuel system, low-pressure fuel system Check exhaust system for leaks - Replace injectors	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2BEA	11242	Fuel supply system, oxygen sensor emissions control: upper limit exceeded	The diagnostic function monitors the lambda closed-loop mixture control. The mixture is too lean and the lambda control enriches it.	P306D	Fuel Supply Closed Loop Fuel Control, Upper Limit Exceeded	Fuel Supply	Closed Loop Fuel Control	The fault is recognized when an enrichment of more than 30 % is required for longer than 30 seconds. Potential problem source(s): - Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Leak in exhaust system before oxygen sensor behind	This fault is logged in the control module's fault memory if it remains present for longer than 30 sec.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - EVAP not active	- None	- None	None	none	Y	- Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Leak in exhaust system before oxygen sensor behind catalytic converter - Poor-quality gasoline	- If additional faults related to the following components are present, process these first: Pre-catalyst oxygen sensor, mass-airflow sensor, intake-manifold pressure sensor, intake-air temperature sensor, camshaft position sensor, high-pressure fuel system, low-pressure fuel system Check exhaust system for leaks - Replace injectors	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2BEB	11243	Fuel supply system, oxygen sensor emissions control: lower limit undershot	The diagnostic function monitors the lambda closed-loop mixture control. The mixture is too rich and the lambda control dials in a leaner mixture.	P0172	System Too Rich (Bank 1)	Fuel System	All Load Ranges	The fault is recognized when the mixture requires a lean correction of more than 30 % for longer than 30 seconds. Potential problem source(s): - Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Intake system leaking - Oil cap not sealing - Leak in exhaust system before oxygen sensor behind	This fault is logged in the control module's fault memory if it remains present for longer than 30 sec.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - EVAP not active	- None	- None	None	none	Y	- Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Intake system leaking - Oil cap not sealing - Leak in exhaust system before oxygen sensor behind catalytic converter - Poor-quality gasoline	- If additional faults related to the following components are present, process these first: Pre-catalyst oxygen sensor, mass-airflow sensor, intake-manifold pressure sensor, intake-air temperature sensor, camshaft position sensor, high-pressure fuel system, low-pressure fuel system Check air-induction system for leaks (also checking the following components: Positive crankcase ventilation, oil cap, tank evaporative emissions system) - Check exhaust system for leaks - Replace injectors	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: - Loss of power	- none
MEVD17.2-BN2000	0x2BEB	11243	Fuel supply system, oxygen sensor emissions control: lower limit undershot	The diagnostic function monitors the lambda closed-loop mixture control. The mixture is too rich and the lambda control dials in a leaner mixture.	P306E	Fuel Supply Closed Loop Fuel Control, Lower Limit Fallen Below	Fuel Supply	Closed Loop Fuel Control	The fault is recognized when the mixture requires a lean correction of more than 30 % for longer than 30 seconds. Potential problem source(s): - Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Intake system leaking - Oil cap not sealing - Leak in exhaust system before oxygen sensor behind	This fault is logged in the control module's fault memory if it remains present for longer than 30 sec.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - EVAP not active	- None	- None	None	none	Y	- Oxygen sensor before catalytic converter defective - Mass-airflow sensor defective - Defective injectors - Intake-manifold pressure sensor defective - Intake-air temperature sensor defective - Camshaft position sensor defective - Defect in high-pressure fuel system - Defect in low-pressure fuel system - Intake system leaking - Oil cap not sealing - Leak in exhaust system before oxygen sensor behind catalytic converter - Poor-quality gasoline	- If additional faults related to the following components are present, process these first: Pre-catalyst oxygen sensor, mass-airflow sensor, intake-manifold pressure sensor, intake-air temperature sensor, camshaft position sensor, high-pressure fuel system, low-pressure fuel system Check air-induction system for leaks (also checking the following components: Positive crankcase ventilation, oil cap, tank evaporative emissions system) - Check exhaust system for leaks - Replace injectors	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: - Loss of power	- none
MEVD17.2-BN2000	0x2BEC	11244	High fuel pressure after engine shutdown: Pressure too high	The diagnostic function monitors the flow-control valve on the high-pressure pump during the engine's shutdown phase.					The fault is recognized when the high-pressure fuel pressure exceeds 50 bar after the engine is switched off. Potential problem source(s): - Defective rail-pressure sensor - Defect in low-pressure system	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 3 sec. after engine off Other conditions: - Shutdown phase - No high-pressure fault	- None	- 3 sec. after engine off	None	none	N	- Defective rail-pressure sensor - Defect in low-pressure system - High-pressure pump defective	- Check rail-pressure sensor - Replace rail-pressure sensor - Check low-pressure sensor - Check operation of fuel pump - Replace high-pressure pump	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Range from none to reduced power with following HDRmin fault		Breakdown notice: None	none
MEVD17.2-BN2000	0x2BED	11245	High-pressure fuel system, cold start: Pressure too high	The diagnostic function monitors the high-pressure fuel system to determine whether the pressure levels remain as specified during the catalyst preheating phase.	P15DE	Cold Start Fuel Pressure Too High (Bank 1)	Fuel System	Cold Start	The fault is recognized when the pressure level in the high-pressure fuel system exceeds the specified value. Potential problem source(s): - Defective rail-pressure sensor - Defect in low-pressure system	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Rail-pressure sensor voltage signal	Y	- Defective rail-pressure sensor - Defect in low-pressure system - High-pressure pump defective	- Check rail-pressure sensor - Replace rail-pressure sensor - Check low-pressure sensor - Check operation of fuel pump - Replace high-pressure pump	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	for US only	Possible apparent symptoms: - Loss of power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2BEE	11246	High-pressure fuel system, cold start: Pressure too low	The diagnostic function monitors pressure levels in the high-pressure fuel system to determine whether they conform to specified levels during the catalyst preheating phase.	P15DF	Cold Start Fuel Pressure Too Low (Bank 1)	Fuel System	Cold Start	The fault is recognized when the pressure level in the high-pressure system is 3.5 bar lower than the specified value. Potential problem source(s): - Fuel tank empty - Defective rail-pressure sensor - Defect in low-pressure	This fault is logged in the ECU fault memory if it remains present for longer than 45 sec.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: None Time condition: - None Other conditions: - None	none	- None	NO	Rail-pressure sensor voltage signal	Y	- Tank empty - Defective rail-pressure sensor - Defect in low-pressure system - High-pressure pump defective	- Check rail-pressure sensor - Replace rail-pressure sensor - Check low-pressure sensor - Check operation of fuel pump - Replace high-pressure pump	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	US only	Possible apparent symptoms: - Loss of power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2BF2	11250	Rail pressure sensor, voltage check: upper threshold exceeded	The diagnostic function monitors the voltage of the rail-pressure sensor.	P10CE	Fuel Rail Pressure Sensor 'A' Votage Too High	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	The fault is recognized when the voltage of the rail-pressure sensor is between 4.1 V and 4.8 V. Potential problem source(s): - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure system	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	Read test data block; ID 5876	N	- Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure system - Defective DME	- Check wiring harness between DME and rail-pressure sensor - Replace rail-pressure sensor - Repair problem in high-pressure fuel system - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Active in US only	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2BF3	11251	Rail pressure sensor, voltage check: lower threshold not reached	The diagnostic function monitors the voltage of the rail-pressure sensor.	P10CF	Fuel Rail Pressure Sensor 'A' Votage Too Low	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	The fault is recognized when the voltage of the rail-pressure sensor is between 0.2 V and 0.52 V. Potential problem source(s): - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure system	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - DME not in shutdown phase	- None	- None	NO	Read test data block; ID 5876	N	- Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure system - Defective DME	- Check wiring harness between DME and rail-pressure sensor - Replace rail-pressure sensor - Repair problem in high-pressure fuel system - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Active in US only	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2BF4	11252	Rail pressure sensor, plausibility: Maximum pressure exceeded	The diagnostic function monitors the fuel rail for excessive pressure levels prior to the engine start.	P0088	Fuel Rail/System Pressure - Too High	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	The fault is recognized when the relative rail pressure prior to engine start is >10 bar, and a mixture fault or fuel high-pressure circuit fault appears following the engine start. Potential problem source(s): - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 10 sec. after engine start Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- 10 sec. after engine start	NO	Read test data block; ID 5876	N	- Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure system - Defective DME	- Check wiring harness between DME and rail-pressure sensor - Replace rail-pressure sensor - Repair problem in high-pressure fuel system - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Active in US only	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2BF5	11253	Rail pressure sensor, plausibility: Minimum pressure undershot	The diagnostic function monitors the rail pressure to determine whether it drops too low during engine operation.	P0087	Fuel Rail/System Pressure - Too Low	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	The fault is recognized when the relative rail pressure during engine operation is > 40 bar and a mixture fault or a fuel high-pressure fault is present at the same time. Potential problem source(s): - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure system	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 5876	N	- Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure system - Defective DME	- Check wiring harness between DME and rail-pressure sensor - Replace rail-pressure sensor - Repair problem in high-pressure fuel system - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Active in US only	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2BF6	11254	Fuel low-pressure sensor, electrical: Short circuit to B+	The diagnostic function monitors the upper voltage limit of the low-pressure sensor.	P2542	Low Pressure Fuel System Sensor Circuit High			The fault is recognized when the voltage of the low-pressure sensor is > 3.6 V. Potential problem source(s): - Wiring harness between DME and low-pressure sensor - Defect in low-pressure sensor - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 58F4	N	- Wiring harness between DME and low-pressure sensor - Defect in low-pressure sensor - Defective DME	- Check wiring harness between DME and low-pressure sensor - Replace low-pressure sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2BF7	11255	Fuel low-pressure sensor, electrical: Short circuit to earth	The diagnostic function monitors the lower voltage limit of the low-pressure sensor.	P2541	Low Pressure Fuel System Sensor Circuit Low			The fault is recognized when the voltage of the low-pressure sensor is < 0.3 V. Potential problem source(s): - Wiring harness between DME and low-pressure sensor - Defect in low-pressure sensor - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 58F4	N	- Wiring harness between DME and low-pressure sensor - Defect in low-pressure sensor - Defective DME	- Check wiring harness between DME and low-pressure sensor - Replace low-pressure sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2BF8	11256	Rail pressure sensor, plausibility: Signal frozen	The diagnostic function monitors the variations in the signal from the rail-pressure sensor.	P10D9	Fuel Rail Pressure Sensor 'A' Signal Stuck	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	The fault is recognized when the voltage of the rail-pressure sensor varies by less than 5 mV. Potential problem source(s): - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Rail pressure exceeds 4	- None	- None	NO	Read test data block; ID 5876	N	- Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defective DME	- Check wiring harness between DME and rail-pressure sensor - Replace rail-pressure sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Active in US only	Possible apparent symptoms: - Loss of power		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2C00	11264	High pressure fuel system, fuel pressure: Maximum pressure exceeded	The diagnostic function monitors the high-pressure fuel system to determine whether the pressure levels remain at the specified levels.	P0088	Fuel Rail/System Pressure - Too High	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	The fault is recognized when the rail pressure rises beyond the specified level. Potential problem source(s): - Defect in low-pressure system - Defective rail-pressure sensor - High-pressure pump defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	Rail-pressure sensor voltage signal	Y	- Defect in low-pressure system - Defective rail-pressure sensor - High-pressure pump defective	- Check low-pressure system (filter, pump pressure and flow rate, sensor, plugs/wiring harness), replace as indicated - Low-pressure ECU (EKP electric fuel pump), read out diagnostic fault codes - Delete adaptation data for fuel low-pressure control - Check rail pressure sensor incl. plugs/wiring harness, replace as indicated - Replace high-pressure pump	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2C00	11264	High pressure fuel system, fuel pressure: Maximum pressure exceeded	The diagnostic function monitors the high-pressure fuel system to determine whether the pressure levels remain at the specified levels.	P302A	Fuel Rail Pressure, Maximum Pressure Exceeded (Bank 1)	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	The fault is recognized when the rail pressure rises beyond the specified level. Potential problem source(s): - Defect in low-pressure system - Defective rail-pressure sensor - High-pressure pump defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	Rail-pressure sensor voltage signal	Y	- Defect in low-pressure system - Defective rail-pressure sensor - High-pressure pump defective	- Check low-pressure system (filter, pump pressure and flow rate, sensor, plugs/wiring harness), replace as indicated - Low-pressure ECU (EKP electric fuel pump), read out diagnostic fault codes - Delete adaptation data for fuel low-pressure control - Check rail pressure sensor incl. plugs/wiring harness, replace as indicated - Replace high-pressure pump	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2C01	11265	High pressure fuel system, fuel pressure: Minimum pressure undershot	The diagnostic function monitors the high-pressure fuel system to determine whether the pressure levels remain at the specified levels.	P0087	Fuel Rail/System Pressure - Too Low	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	The fault is recognized when the rail pressure is below the specified level. Potential problem source(s): - Fuel tank empty - Obstruction in fuel filter - Fuel pump defective - Defective rail-pressure sensor - High-pressure pump	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	Rail-pressure sensor voltage signal	Y	- Fuel tank empty - Obstruction in fuel filter - Fuel pump defective - Defective rail-pressure sensor - High-pressure pump defective	- Check low-pressure system (filter, pump pressure and flow rate, sensor, plugs/wiring harness), replace as indicated - Low-pressure ECU (EKP electric fuel pump), read out diagnostic fault codes - Delete adaptation data for fuel low-pressure control - Check rail pressure sensor incl. plugs/wiring harness, replace as indicated - Replace high-pressure pump	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None

MEVD17.2-BN2000	0x2C01	11265	High pressure fuel system, fuel pressure: Minimum pressure undershot	The diagnostic function monitors the high-pressure fuel system to determine whether the pressure levels remain at the specified levels.	P302C	Fuel Rail Pressure, Minimum Pressure Fallen Below (Bank 1)	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	the rail pressure is below the specified level. Potential problem source(s): - Fuel tank empty - Obstruction in fuel filter - Fuel pump defective - Defective rail-pressure sensor - High-pressure pump	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	Rail-pressure sensor voltage signal	Y	- Fuel tank empty - Obstruction in fuel filter - Fuel pump defective - Defective rail-pressure sensor - High-pressure pump defective	- Check low-pressure system (filter, pump pressure and flow rate, sensor, plugs/wiring harness), replace as indicated - Low-pressure ECU (EKP electric fuel pump), read out diagnostic fault codes - Delete adaptation data for fuel low-pressure control - Check rail pressure sensor incl. plugs/wiring harness, replace as indicated - Replace high-pressure pump	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2C3D	11325	Quantity control valve, activation: Short circuit to B+	The diagnostic function monitors the flow-control valve's control-activation wire for shorts to positive.	P0004	Fuel Volume Regulator Control Circuit High	Fuel Regulators / Valves / Sensors	Fuel Volume Regulator	the driver circuit diagnostic function. Potential problem source(s): - Defect in plug or wiring harness between DME and flow-control valve - Defective flow-control valve - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_MSV, STEUERN_ENDE_MSV	PWM activation signal, 0x58f2	N	- Defect in plug or wiring harness between DME and flow-control valve - Defective flow-control valve - Defective DME	- Check plug and wiring harness between flow-control valve and DME - Replace flow-control valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: None	None
MEVD17.2-BN2000	0x2C3E	11326	Quantity control valve, activation: Short circuit to earth	The diagnostic function monitors the flow-control valve's control-activation wire for shorts to ground.	P0003	Fuel Volume Regulator Control Circuit Low	Fuel Regulators / Valves / Sensors	Fuel Volume Regulator	the driver circuit diagnostic function. Potential problem source(s): - Defect in plug or wiring harness between DME and flow-control valve - Defective flow-control valve - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_MSV, STEUERN_ENDE_MSV	PWM activation signal, 0x58f2	N	- Defect in plug or wiring harness between DME and flow-control valve - Defective flow-control valve - Defective DME	- Check plug and wiring harness between flow-control valve and DME - Replace flow-control valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: None	None
MEVD17.2-BN2000	0x2C3F	11327	Quantity control valve, activation: Line disconnection	The diagnostic function monitors the flow-control valve's control-activation wire for an open circuit.	P0001	Fuel Volume Regulator Control Circuit/Open	Fuel Regulators / Valves / Sensors	Fuel Volume Regulator	the driver circuit diagnostic function. Potential problem source(s): - Defect in plug or wiring harness between DME and flow-control valve - Defective flow-control valve - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_MSV, STEUERN_ENDE_MSV	PWM activation signal, 0x58f2	N	- Defect in plug or wiring harness between DME and flow-control valve - Defective flow-control valve - Defective DME	- Check plug and wiring harness between flow-control valve and DME - Replace flow-control valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: None	None
MEVD17.2-BN2000	0x2C56	11350	Boost pressure control, upper value: Boost pressure too high	The diagnostic function monitors the pressure measured by the boost-pressure sensor.	P0234	Turbocharger/Supercharger 'A' Overboost Condition	Supercharger Boost Pressure	Pressure	the monitored pressure exceeds the specified pressure. Potential problem source(s): - Boost-pressure sensor is defective or has been tampered with - Electropneumatic pressure converter in wastegate valve is defective - Wastegate valve is defective (seized in closed	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine speed above 1900 rpm - Engine load - Turbocharger boost in control range	- None	- None	steuern_systemtest_atl status_systemtest_atl	STAT_ATLSVC_DPVDK2_WERT must lie within a defined pressure range (see test plan).	N	- Boost-pressure sensor is defective or has been tampered with - Electropneumatic pressure converter in wastegate valve is defective - Wastegate valve is defective (seized in closed position) - Vacuum line defective	- Check wiring harness - Boost-pressure sensor - Check electropneumatic pressure converter - Check vacuum line and vacuum	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2C57	11351	Charge-air pressure control, lower value: Boost pressure too low	The diagnostic function monitors the pressure measured by the boost-pressure sensor.	P0299	Turbocharger/Supercharger 'A' Underboost Condition	Supercharger Boost Pressure	Pressure	the monitored pressure is less than the specified pressure. Potential problem source(s): - Boost-pressure sensor defective - Defective electropneumatic pressure converter in wastegate valve - Wastegate valve is defective (seized in open position) - Air-induction tract between turbocharger and intake-air plenum has leak	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine speed above 1900 rpm - Engine load - Turbocharger boost in control range	- None	- None	steuern_systemtest_atl status_systemtest_atl	STAT_ATLSVC_DPVDK2_WERT must lie within a defined pressure range (see test plan).	N	- Boost-pressure sensor defective - Defective electropneumatic pressure converter in wastegate valve - Wastegate valve is defective (seized in open position) - Air-induction tract between turbocharger and intake-air plenum has leak - Vacuum line for controlling wastegate valve is defective	- Check wiring harness - Boost-pressure sensor - Check electropneumatic pressure converter - Check vacuum line and vacuum - Check air-induction tract between turbocharger and intake-air plenum for vacuum leaks	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2C58	11352	Boost pressure control, deactivation: Boost-pressure build-up blocked	The diagnostic function monitors the DME's deactivation of active boost.	P1260	Turbocharger/Supercharger Boost Control Cut-Off (Bank 1)			Collective fault, only serves to trigger the emissions warning lamp, and can also trigger a CC message. The response to the fault is specified for a different fault entry. Potential problem source(s): - None	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	NO	Y	- None	- None	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	- Boost-pressure control is deactivated to protect the engine.
MEVD17.2-BN2000	0x2C6F	11375	Boost pressure sensor, electrical: Short circuit to B+	The diagnostic function monitors the wire to the boost-pressure sensor.	P0238	Turbocharger/Supercharger Boost Sensor 'A' Circuit High	Supercharger Boost Sensor	Electrical	the boost-pressure sensor's voltage exceeds 4.9 V. Potential problem source(s): - Defect in wiring harness between DME and boost-pressure sensor - Boost-pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 58DE	N	- Defect in wiring harness between DME and boost-pressure sensor - Boost-pressure sensor defective - Defective DME	- Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2C70	11376	Boost pressure sensor, electrical: Short circuit to earth	The diagnostic function monitors the wire to the boost-pressure sensor.	P0237	Turbocharger/Supercharger Boost Sensor 'A' Circuit Low	Supercharger Boost Sensor	Electrical	the boost-pressure sensor's voltage is less than 4.9 V. Potential problem source(s): - Defect in wiring harness between DME and boost-pressure sensor - Boost-pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 58DE	N	- Defect in wiring harness between DME and boost-pressure sensor - Boost-pressure sensor defective - Defective DME	- Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2C71	11377	Boost pressure sensor. Pressure too high	During the control module's shutdown phase the diagnostic function monitors the barometric-pressure sensor, intake-manifold pressure sensor and boost-pressure sensor to determine whether they are all measuring the same pressure.	P12A9	Boost Sensor 'A' Afterrunning Diagnosis Pressure Too High	Supercharger Boost Sensor	Afterrunning	the boost-pressure sensor deviates from the average for the pressure sensors (barometric pressure, boost pressure, intake-manifold pressure) by more than 70 mbar. Potential problem source(s): - Defective wiring harness - Sensor has been tampered with - Sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine off Other conditions: - Shutdown phase	- None	- 5 sec. after engine off	NO	none	N	- Defective wiring harness - Sensor has been tampered with - Sensor defective	- Check wiring harness - Replace sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2C72	11378	Boost pressure sensor. Pressure too low	During the control module's shutdown phase the diagnostic function monitors the barometric pressure sensor, intake-manifold sensor and the pressure sensor on the air-intake side of the throttle valve to determine whether they are all measuring the same pressure.	P12A8	Boost Sensor 'A' Afterrunning Diagnosis Pressure Too Low	Supercharger Boost Sensor	Afterrunning	the boost-pressure sensor deviates from the average for the pressure sensors (barometric pressure, boost pressure, intake-manifold pressure) by less than 70 mbar. Potential problem source(s): - Wiring harness defective - Error in sensor measurement	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine off Other conditions: - Engine on - Rail pressure > 4 MPa	- None	- 5 sec. after engine off	NO	none	N	- Wiring harness defective - Error in sensor measurement - Sensor has been tampered with	- Check wiring harness - Replace sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2C83	11395	Boost pressure sensor, plausibility: Pressure before throttle valve too high	The diagnostic function monitors the boost pressure.	P0234	Turbocharger/Supercharger 'A' Overboost Condition	Supercharger Boost Pressure	Pressure	prior to engine start, the absolute boost pressure is greater than 3.0 bar, or the absolute boost pressure is greater than 1.4 bar. Potential problem source(s): - Defect in boost-pressure system - Defect in wiring harness between boost-pressure sensor and DME - Boost-pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 58DD	N	- Defect in boost-pressure system - Defect in wiring harness between boost-pressure sensor and DME - Boost-pressure sensor defective - Defective DME	- Check air-induction system operation (wastegate, etc.,...) - Inspect wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2C84	11396	Boost pressure sensor, plausibility: Pressure before throttle valve too low	The diagnostic function monitors the boost-pressure sensor.	P0299	Turbocharger/Supercharger 'A' Underboost Condition	Supercharger Boost Pressure	Pressure	Collective fault, only serves to trigger the emissions warning lamp, and can also trigger a CC message. The response to the fault is specified for a different fault entry. Potential problem source(s): - None	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 58DD	N	- None	- None	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2C85	11397	Boost pressure sensor, plausibility: Pressure before throttle valve too high when engine not running	The diagnostic function monitors the boost pressure.	P10F2	Charge Air Pressure in Comparison to Barometric Pressure Too High	Supercharger Boost Pressure/Ambient Pressure	Correlation	the boost pressure is higher than the ambient barometric pressure while the engine is not running. Potential problem source(s): - Defect in boost-pressure system - Defect in wiring harness between boost-pressure sensor and DME - Boost-pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine OFF	- None	- None	NO	Read test data block; ID 58DD	N	- Defect in boost-pressure system - Defect in wiring harness between boost-pressure sensor and DME - Boost-pressure sensor defective - Defective DME	- Check operation of air system (wastegate, etc.) - Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2C86	11398	Boost pressure sensor, plausibility: Pressure before throttle valve too low when engine not running	The diagnostic function monitors the boost pressure.	P10F3	Charge Air Pressure in Comparison to Barometric Pressure Too Low	Supercharger Boost Pressure/Ambient Pressure	Correlation	the boost pressure is lower than the ambient barometric pressure while the engine is not running. Potential problem source(s): - Defect in boost-pressure system - Defect in wiring harness between boost-pressure sensor and DME - Boost-pressure sensor defective - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine OFF	- None	- None	NO	Read test data block; ID 58DD	N	- Defect in boost-pressure system - Defect in wiring harness between boost-pressure sensor and DME - Boost-pressure sensor defective - DME defective	- Check operation of air system (wastegate, etc.) - Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Reduced power		Breakdown notice: Standard EML Text	None
MEVD17.2-BN2000	0x2C88	11400	Diverter valve, actuation: Short circuit to B+	The diagnostic function monitors the wire to the compressor bypass valve.	P0035	Turbocharger/Supercharger Bypass Valve 'A' Control Circuit High	Supercharger Bypass Valve	Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between compressor bypass valve and DME - Compressor bypass valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Control signal being transmitted to compressor	- None	- None	STEUERN_ULV, STEUERN_ENDE_ULV	PWM activation signal	N	- Defect in wiring harness between compressor bypass valve and DME - Compressor bypass valve defective - Defective DME	- Check wiring harness between compressor bypass valve and DME - Replace compressor bypass valve - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Power reduction, CC message for engine malfunction		Breakdown notice: None	None
MEVD17.2-BN2000	0x2C89	11401	Diverter valve, actuation: Short circuit to earth	The diagnostic function monitors the wire to the compressor bypass valve.	P0034	Turbocharger/Supercharger Bypass Valve 'A' Control Circuit Low	Supercharger Bypass Valve	Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between compressor bypass valve and DME - Compressor bypass valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_ULV, STEUERN_ENDE_ULV	PWM activation signal	N	- Defect in wiring harness between compressor bypass valve and DME - Compressor bypass valve defective - Defective DME	- Check wiring harness between compressor bypass valve and DME - Replace compressor bypass valve - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Power reduction, CC message for engine malfunction		Breakdown notice: None	None
MEVD17.2-BN2000	0x2C8A	11402	Diverter valve, actuation: Line disconnection	The diagnostic function monitors the wire to the compressor bypass valve.	P0033	Turbocharger/Supercharger Bypass Valve 'A' Control Circuit	Supercharger Bypass Valve	Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between compressor bypass valve and DME - Compressor bypass valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Control signal being transmitted to compressor	- None	- None	STEUERN_ULV, STEUERN_ENDE_ULV	PWM activation signal	N	- Defect in wiring harness between compressor bypass valve and DME - Compressor bypass valve defective - Defective DME	- Check wiring harness between compressor bypass valve and DME - Replace compressor bypass valve - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Power reduction, CC message for engine malfunction		Breakdown notice: None	None
MEVD17.2-BN2000	0x2C90	11408	Blow-off valve, mechanics: Jammed closed	The diagnostic function monitors the compressor bypass valve to determine if it is seizing in its closed position.					The fault is recognized when the airflow upstream from the throttle valve is interrupted. Potential problem source(s): - Seized compressor bypass valve - Diverter valve defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Seized compressor bypass valve - Compressor bypass valve defective	- Read out faults logged in control module: If the temperature was less than 0°C when the fault was logged, ice may have been present: Delete stored fault codes, no additional action required Replace compressor bypass valve - Replace turbocharger.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Increased pumping noise from turbocharger		Breakdown notice: None	None
MEVD17.2-BN2000	0x2CA1	11425	Wastegate valve, activation: Short circuit to B+	The diagnostic function monitors the electrical wire from the DME to the electropneumatic pressure converter.	P0246	Turbocharger/Supercharger Wastegate Solenoid 'A' High			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective wiring harness - Electropneumatic pressure converter is defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Activation signal applied to	- None	- None	steuern_lds1, steuern_ende_lds1	PWM activation signal, 0x4aab	N	- Defective wiring harness - Electropneumatic pressure converter is defective - Defective DME	- Check wiring harness - Replace electropneumatic pressure converter - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, customer proceeds to service facility, loss of power		Breakdown notice: None	None

MEVD17.2-BN2000	0x2CA2	11426	Wastegate valve, activation: Short circuit to earth	The diagnostic function monitors the electrical wire from the DME to the electropneumatic pressure converter.	P0245	Turbocharger/Supercharger Wastegate Solenoid 'A' Low			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective wiring harness - Electropneumatic pressure converter is defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Activation signal applied to	- None	- None	steuern_lds1, steuern_ende_lds1	PWM activation signal, 0x4aab	N	- Defective wiring harness - Electropneumatic pressure converter is defective - Defective DME	- Check wiring harness - Replace electropneumatic pressure converter - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, customer proceeds to service facility, clarification pending		Breakdown notice: None	None
MEVD17.2-BN2000	0x2CA3	11427	Wastegate valve, activation: Line disconnection	The diagnostic function monitors the electrical wire from the DME to the electropneumatic pressure converter.	P0243	Turbocharger/Supercharger Wastegate Solenoid 'A'			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective wiring harness - Electropneumatic pressure converter is defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Activation signal applied to	- None	- None	steuern_lds1, steuern_ende_lds1	PWM activation signal, 0x4aab	N	- Defective wiring harness - Electropneumatic pressure converter is defective - Defective DME	- Check wiring harness - Replace electropneumatic pressure converter - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, customer proceeds to service facility, loss of power		Breakdown notice: None	None
MEVD17.2-BN2000	0x2CED	11501	Oxygen sensor after catalytic converter, dynamics, from rich to lean: Slow response	The diagnostic function monitors the dynamic response of the oxygen sensor behind the catalytic converter on overrun.	P013A	O2 Sensor Slow Response - Rich to Lean (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Slow Response	The fault is recognized when the voltage of the oxygen sensor behind the catalytic converter reacts to slowly. Potential problem source(s): - Defective wiring harness - Oxygen sensor behind catalytic converter defective - Leak in exhaust system on engine-side of catalytic converter	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - at least 8 sec. overrun phase Other conditions: - Engine on	- Engine warmed to normal temperature, more than 80°C	- at least 8 sec. overrun phase	NO	none	N	- Defective wiring harness - Oxygen sensor behind catalytic converter defective - Leak in exhaust system on engine-side of catalytic converter	- If faults related to mixture control are present, repair these first - Check exhaust system for leaks - Inspect wiring harness between oxygen sensor behind catalytic converter and DME - Replace oxygen sensor behind catalytic converter	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL lights up when fault is detected in two consecutive driving cycles		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2CEE	11502	Oxygen sensor heating before catalytic converter, function: Heater fault		P102A	O2 Sensor Heating, Heater Error (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater	Potential problem source(s): 0			Voltage condition: Temperature condition: Time condition: Other conditions:				- None		0	0	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	new for I-10-03-450	Possible apparent symptoms:		Breakdown notice:	
MEVD17.2-BN2000	0x2CF4	11508	Oxygen sensor before catalytic converter, dynamics: Slow response	The diagnostic function monitors the dynamic response of the oxygen sensor before the catalytic converter.	P0133	O2 Sensor Circuit Slow Response (Bank 1 Sensor 1)	Oxygen Sensor, Front	Slow Response	The fault is recognized when closed-loop sensor reacts too slowly to changes in the oxygen concentration within the exhaust gas. Potential problem source(s): - Oxygen sensor before catalytic converter defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Drive at a constant speed between 50 and 80 km/h at moderate rpm (1400 to 3240 rpm). - No faults that would cause	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	N	- Oxygen sensor before catalytic converter defective	- Replace oxygen sensor before catalytic converter if fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	Determine whether cylinder balancing is plausible; if not plausible, perform cylinder balancing following repair
MEVD17.2-BN2000	0x2CF8	11512	Oxygen sensor before catalytic converter, installation: Sensor not connected	The diagnostic function monitors correct installation of the oxygen sensor before the catalytic converter.	P2414	O2 Sensor Exhaust Sample Error (Bank 1 Sensor 1)	Oxygen Sensor, Front	Exhaust Sample Error	The fault is recognized when the oxygen sensor on the engine-side of the catalytic converter is not screwed firmly into place and/or the threaded connection is not sealed. Potential problem source(s): - Pre-catalyst oxygen sensor not screwed in tightly or	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	N	- Pre-catalyst oxygen sensor not screwed in tightly or hanging in the air	- Determine whether the pre-catalyst oxygen sensor is installed at the correct position - Determine whether the pre-catalyst oxygen sensor is screwed in tightly - Inspect the pre-catalyst oxygen sensor for damage - Replace pre-catalyst oxygen sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2CFA	11514	Oxygen sensor before catalytic converter, line fault: Line disconnection, Nernst cable	The diagnostic function monitors the internal resistance and the output voltage of the oxygen sensor before the catalytic converter.	P2243	O2 Sensor Reference Voltage Circuit/Open (Bank 1 Sensor 1)	Oxygen Sensor, Front	Reference Voltage	The fault is recognized when an electrical malfunction is present in the oxygen sensor before the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name: 'IUSV1 ' or identifier '0x5A11 '	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2CFF	11519	Oxygen sensor before catalytic converter, signal lines:Short circuit to B+	The diagnostic function monitors the controller in the DME.	P0132	O2 Sensor Circuit High Voltage (Bank 1 Sensor 1)	Oxygen Sensor, Front	Electrical	The fault is recognized when an electrical malfunction is present in the oxygen sensor before the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name: 'IUSV1 ' or identifier '0x5A11 '	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D00	11520	Oxygen sensor before catalytic converter, signal lines:Short circuit to earth	The diagnostic function monitors the controller in the DME.	P0131	O2 Sensor Circuit Low Voltage (Bank 1 Sensor 1)	Oxygen Sensor, Front	Electrical	The fault is recognized when an electrical malfunction is present in the oxygen sensor before the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name: 'IUSV1 ' or identifier '0x5A11 '	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D03	11523	DME, internal fault, oxygen sensor before catalytic converter: Oxygen-sensor module, signal-circuit adaptation values too high	The diagnostic function monitors the controller in the DME.	P3012	O2 Sensor Signal Circuit Adaptation Value Too High (Bank 1 Sensor 1)	Oxygen Sensor, Front	ECM Self-Test	The fault is recognized when the oxygen sensor chip in the DME detects a fault. Potential problem source(s): - DME defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Engine runs poorly - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2D04	11524	DME, internal fault, oxygen sensor before catalytic converter: Oxygen-sensor module, undervoltage	The diagnostic function monitors the controller in the DME.	P3014	O2 Sensor WRAF-IC Supply Voltage Too Low (Bank 1 Sensor 1)	Oxygen Sensor, Front	ECM Self-Test	The fault is recognized when the oxygen sensor chip in the DME detects a fault. Potential problem source(s): - DME defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Engine runs poorly - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2D05	11525	DME, internal fault, oxygen sensor before catalytic converter: Initialisation error	The diagnostic function monitors the controller in the DME.	P3024	O2 Sensor Initialization Error WRAF-IC (Bank 1 Sensor 1)	Oxygen Sensor, Front	ECM Self-Test	The fault is recognized when the oxygen sensor chip in the DME detects a fault. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Engine runs poorly - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2D06	11526	DME, internal fault, oxygen sensor before catalytic converter: Communication fault	The diagnostic function monitors the controller in the DME.	P3022	O2 Sensor Disturbed SPI Communication to WRAF-IC (Bank 1 Sensor 1)	Oxygen Sensor, Front	ECM Self-Test	The fault is recognized when the oxygen sensor chip in the DME detects a fault. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Engine runs poorly - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2D0B	11531	Oxygen sensor heating before catalytic converter, activation: Short circuit to B+	The diagnostic function monitors activation of the heater for the oxygen sensor before the catalytic converter.	P0032	HO2S Heater Control Circuit High (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater Electrical	The fault is recognized when an activation signal is transmitted to the oxygen sensor before the catalytic converter and an electrical defect is present. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 10 sec. after engine start Other conditions: - Engine ON	- None	- 10 sec. after engine start	While an appropriate tester service exists (STEUERN_LSH1) -> in response to safety considerations it can only be used to deactivate the oxygen sensor heater	none	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D0C	11532	Oxygen sensor heating before catalytic converter, activation: Short circuit to earth	The diagnostic function monitors activation of the heater for the oxygen sensor before the catalytic converter.	P0031	HO2S Heater Control Circuit Low (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater Electrical	The fault is recognized when an activation signal is transmitted to the oxygen sensor before the catalytic converter and an electrical defect is present. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 10 sec. after engine start Other conditions: - Engine ON	- None	- 10 sec. after engine start	While an appropriate tester service exists (STEUERN_LSH1) -> in response to safety considerations it can only be used to deactivate the oxygen sensor heater	none	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D0D	11533	Oxygen sensor heating before catalytic converter, activation: Line disconnection	The diagnostic function monitors activation of the heater for the oxygen sensor before the catalytic converter.	P0030	HO2S Heater Control Circuit (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater Electrical	The fault is recognized when an activation signal is transmitted to the oxygen sensor before the catalytic converter and an electrical defect is present. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 10 sec. after engine start Other conditions: - Engine ON	- None	- 10 sec. after engine start	While an appropriate tester service exists (STEUERN_LSH1) -> in response to safety considerations it can only be used to deactivate the oxygen sensor heater	none	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D0F	11535	Oxygen sensor heating after catalytic converter, activation: Short circuit to B+	The diagnostic function monitors activation of the heater for the oxygen sensor behind the catalytic converter.	P0038	HO2S Heater Control Circuit High (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Heater Electrical	The fault is recognized when an activation signal is transmitted to the heater for the oxygen sensor behind the catalytic converter and an electrical defect is present. Potential problem source(s): - Defective wiring harness - Oxygen sensor behind catalytic converter defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 10 sec. after engine start Other conditions: - Engine ON	- None	- 10 sec. after engine start	STEUERN_LSH2, STEUERN_ENDE_LSH2, STATUS_LSH2	none	N	- Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	- Inspect wiring harness between oxygen sensor behind catalytic converter and DME - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D10	11536	Oxygen sensor heating after catalytic converter, activation: Short circuit to earth	The diagnostic function monitors activation of the heater for the oxygen sensor behind the catalytic converter.	P0037	HO2S Heater Control Circuit Low (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Heater Electrical	The fault is recognized when an activation signal is transmitted to the heater for the oxygen sensor behind the catalytic converter and an electrical defect is present. Potential problem source(s): - Defective wiring harness - Oxygen sensor behind catalytic converter defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 10 sec. after engine start Other conditions: - Engine ON	- None	- 10 sec. after engine start	STEUERN_LSH2, STEUERN_ENDE_LSH2, STATUS_LSH2	none	N	- Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	- Inspect wiring harness between oxygen sensor behind catalytic converter and DME - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D11	11537	Oxygen sensor heating after catalytic converter, activation: Line disconnection	The diagnostic function monitors activation of the heater for the oxygen sensor behind the catalytic converter.	P0036	HO2S Heater Control Circuit (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Heater Electrical	The fault is recognized when an activation signal is transmitted to the heater for the oxygen sensor behind the catalytic converter and an electrical defect is present. Potential problem source(s): - Defective wiring harness - Oxygen sensor behind catalytic converter defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 10 sec. after engine start Other conditions: - Engine ON	- None	- 10 sec. after engine start	STEUERN_LSH2, STEUERN_ENDE_LSH2, STATUS_LSH2	none	N	- Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	- Inspect wiring harness between oxygen sensor behind catalytic converter and DME - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D13	11539	Oxygen sensor heating after catalytic converter, function: Internal resistance too high	The diagnostic function monitors the difference between the expected and the actual internal resistance in the heater for the oxygen sensor behind the catalytic converter.	P0141	O2 Sensor Heater Circuit (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Heater Electrical	The fault is recognized when the actual internal resistance of the heater for the oxygen sensor behind the catalytic converter remains higher than expected for a specified period of time. Potential problem source(s): - Defective wiring harness - Oxygen sensor behind	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - Engine off for longer than 13 min. Other conditions: - Engine ON	- None	- Engine off for longer than 13 min.	none	none	N	- Defective wiring harness - Oxygen sensor behind catalytic converter defective	- Check wiring harness between oxygen sensor behind catalytic converter and DME (contact resistance) - Replace oxygen sensor behind catalytic converter	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	Because diagnosis relies on assessment of the post-catalyst oxygen sensor, following logging of a diagnostic fault code the exhaust system must be inspected for leaks and sealed if any leakage is found (without additional repair)
MEVD17.2-BN2000	0x2D15	11541			P013E	O2 Sensor Delayed Response - Rich to Lean (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Delayed Response																	
MEVD17.2-BN2000	0x2D1B	11547	Oxygen sensor after catalytic converter, system check: Signal fixed at lean	The diagnostic function monitors whether the voltage of the oxygen sensor behind catalytic converter remains stuck at a low value.	P2270	O2 Sensor Signal Biased/Stuck Lean (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Signal Check	The fault is recognized when the voltage of the oxygen sensor behind the catalytic converter remains consistently too low. Potential problem source(s): - Mixture too lean - Leak in exhaust system on engine-side of catalytic converter - Defective wiring harness - Oxygen sensor behind catalytic converter defective	The diagnostic fault code is logged when the fault remains present for longer than 10 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Steady-state at low to medium partial load	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	N	- Mixture too lean - Leak in exhaust system on engine-side of catalytic converter - Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	- Check the connection between the DME and the oxygen sensor behind catalytic converter - Determine whether the oxygen sensors are in the wrong mutual locations - Check the exhaust system upstream from the oxygen sensor for leaks - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL lights up when fault is detected in two consecutive driving cycles		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None

MEVD17.2-BN2000	0x2D1C	11548	Oxygen sensor after catalytic converter, system check: Signal fixed at grease	The diagnostic function monitors whether the voltage of the oxygen sensor behind catalytic converter remains stuck at a high value.	P2271	O2 Sensor Signal Biased/Stuck Rich (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Signal Check	the voltage of the oxygen sensor behind the catalytic converter remains consistently too high. Potential problem source(s): - Mixture too rich - Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 10 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Steady-state at low to	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	N	- Mixture too rich - Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	- Inspect wiring harness between oxygen sensor behind catalytic converter and DME - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL lights up when fault is detected in two consecutive driving cycles		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D1F	11551	Oxygen sensor after catalytic converter, electrical: Short circuit to B+	The diagnostic function monitors electrical status of the oxygen sensor behind catalytic converter.	P0138	O2 Sensor Circuit High Voltage (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Electrical	The fault is recognized when an electrical malfunction is present in the oxygen sensor behind the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temperature, more than 80°C - Exhaust-gas temperature at post-catalyst oxygen sensor not higher than 800 °C Time condition: - Active heating activation more than 1 min. Other conditions:	- Engine warmed to normal temperature, more than 80°C - Exhaust-gas temperature at post-catalyst oxygen sensor not higher than 800 °C	- Active heater activation more than 1 min.	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name 'IUSN1 ' or identifier '0x5A13 '	N	- Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	- Check the connection between the DME and the oxygen sensor behind catalytic converter - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL lamp on after second driving cycle		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D20	11552	Oxygen sensor after catalytic converter, electrical: Short circuit to earth	The diagnostic function monitors electrical status of the oxygen sensor behind catalytic converter.	P0137	O2 Sensor Circuit Low Voltage (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Electrical	The fault is recognized when an electrical malfunction is present in the oxygen sensor behind the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	600 sec., if tank is not verifiably full	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine switched off at temperature higher than 60 °C - Engine starting temperature less than 40 °C, then engine warmed to normal temperature - Exhaust-gas temperature at post-catalyst oxygen sensor not higher than 800 °C Time condition: - Active heating activation	- Engine switched off at temperature higher than 60 °C - Engine starting temperature less than 40 °C, then engine warmed to normal temperature - Exhaust-gas temperature at post-catalyst oxygen sensor not higher than 800 °C	- Active heater activation more than 1 min.	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name 'IUSN1 ' or identifier '0x5A13 '	N	- Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	- Inspect wiring harness between oxygen sensor behind catalytic converter and DME - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL lamp on after second driving cycle		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D22	11554	Oxygen sensor after catalytic converter, electrical: Line disconnection	The diagnostic function monitors the oxygen sensor behind catalytic converter.	P0136	O2 Sensor Circuit (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Electrical	The fault is recognized when an electrical malfunction is present in the oxygen sensor behind the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 6 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temperature, more than 80°C - Exhaust-gas temperature at post-catalyst oxygen sensor for detection of signal interruption: 600..800 °C Time condition: - Active heating activation more than 1 min. Other conditions:	- Engine warmed to normal temperature, more than 80°C - Exhaust-gas temperature at post-catalyst oxygen sensor for detection of signal interruption: 600..800 °C	- Active heater activation more than 1 min.	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name 'IUSN1 ' or identifier '0x5A13 '	N	- Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective DME	- Inspect wiring harness between oxygen sensor behind catalytic converter and DME - Check heating of oxygen sensor behind catalytic converter - Replace oxygen sensor behind catalytic converter - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL lamp on after second driving cycle		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D23	11555	Oxygen sensor before catalytic converter, pump power cable : Oxygen sensor control value above threshold due to open pump current cable	The diagnostic function monitors the voltage of the oxygen sensor before the catalytic converter.	P3018	O2 Sensor Lambda Controller Value Above Threshold due to Open Pumping Current Circuit (Bank 1 Sensor 1)	Oxygen Sensor, Front	Positive Current	an electrical malfunction is present in the oxygen sensor before the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name: 'IUSV1 ' or identifier '0x5A11 '	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D24	11556	Oxygen sensor before catalytic converter, in coasting/overrun mode: Signal outside limit value	The diagnostic function monitors the voltage of the oxygen sensor before the catalytic converter.	P2297	O2 Sensor Out of Range During Deceleration (Bank 1 Sensor 1)	Oxygen Sensor, Front	Deceleration	The fault is recognized when an electrical malfunction is present in the oxygen sensor before the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - Overrun operation must be present for at least 3 seconds and the EGR valve must be closed. Other conditions: - Engine on - Vehicle underway - Pre-catalyst oxygen sensor heated to adequate	- Engine warmed to normal temperature, more than 80°C	- Overrun operation must be present for at least 3 seconds and the EGR valve must be closed.	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name: 'IUSV1 ' or identifier '0x5A11 '	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D25	11557	Oxygen sensor before catalytic converter, line fault: Open circuit, pump current lead	The diagnostic function monitors the voltage of the oxygen sensor before the catalytic converter.	P2237	O2 Sensor Positive Current Control Circuit/Open (Bank 1 Sensor 1)	Oxygen Sensor, Front	Positive Current	an electrical malfunction is present in the oxygen sensor before the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name: 'IUSV1 ' or identifier '0x5A11 '	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D27	11559	Oxygen sensor before catalytic converter, line fault: Open circuit, virtual ground	The diagnostic function monitors the internal resistance and the output voltage of the oxygen sensor before the catalytic converter.	P2251	O2 Sensor Negative Current Control Circuit/Open (Bank 1 Sensor 1)	Oxygen Sensor, Front	Negative Current	Battery voltage: 10.7 V to 16 V No deactivation of voltage to pre-catalyst oxygen sensor Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	NO	Read-out available from tester service 'STATUS_MESSWERTBLOCK_LESEN ': Argument name: 'IUSV1 ' or identifier '0x5A11 '	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	- Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D2B	11563	Oxygen sensor before catalytic converter, electric Nernst cell resistance or ceramic temperature implausible, line or heating fault	The diagnostic function monitors the temperature of the oxygen sensor before the catalytic converter.					The fault is recognized when the oxygen sensor temperature is too low, no fault in heater driver circuit (HSVE), no fault in evaluation IC of LSU (ICLSU), no short circuit in oxygen sensor wires (LSUKS), no battery voltage fault is present (UBR). Potential problem source(s): Increased resistance in sensor heater or corroded contacts in plug connections or fault already detected at	2 sec.	Terminal 15	Voltage condition: Battery voltage: 10.7 V...16 V Temperature condition: None Time condition: None Other conditions: Engine on	none	none	NO	none	N	Increased resistance in sensor heater or corroded contacts in plug connections or a oxygen sensor before cat. wiring fault or heater fault has already been detected	1. Fault is entered without any additional ECU fault memory entries: Check oxygen sensor heater: Contact resistance in plugs and in wire too high (DME - wiring harness - sensor), replace pre-catalyst oxygen sensor if indicated 2. Diagnostic fault code logged together with wiring fault: Repair wiring fault	MY10: - ECE emissions warning lamp: off - US emissions warning lamp: off - ECE electronic engine power reduction: off - US electronic engine power reduction: off - CC message: on MY11: No	none	Possible apparent symptoms: MIL lights up when fault is detected in two consecutive driving cycles		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D33	11571	Oxygen sensor before catalytic converter, system check: Signal fixed at lean	The diagnostic function monitors the voltage of the pre-catalyst oxygen sensor and compares it with the voltage of the oxygen sensor behind the catalytic converter (at lambda = 1).	P2195	O2 Sensor Signal Biased/Stuck Lean (Bank 1 Sensor 1)	Oxygen Sensor, Front	Signal Check	the lambda signal from the pre-catalyst oxygen sensor deviates too much from the lambda signal from the oxygen sensor behind the catalytic converter. Potential problem source(s): - Defective wiring harness - Defective oxygen sensors	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - No diagnostic fault codes	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	N	- Defective wiring harness - Defective oxygen sensors	- Inspect wiring harness between oxygen sensors before/behind catalytic converter and DME - Replace oxygen sensors before and behind catalytic converter	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL lights up when fault is detected in two consecutive driving cycles		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D34	11572	Oxygen sensor before catalytic converter, system check: Signal fixed at grease	The diagnostic function monitors the voltage of the pre-catalyst oxygen sensor and compares it with the voltage of the oxygen sensor behind the catalytic converter (at lambda = 1).	P2196	O2 Sensor Signal Biased/Stuck Rich (Bank 1 Sensor 1)	Oxygen Sensor, Front	Signal Check	the lambda signal from the pre-catalyst oxygen sensor deviates too much from the lambda signal from the oxygen sensor behind the catalytic converter. Potential problem source(s): - Leak in exhaust system before oxygen sensors - Defective wiring harness - Oxygen sensor before	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - No diagnostic fault codes logged indicating a mixture fault	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	N	- Leak in exhaust system before oxygen sensors - Defective wiring harness - Oxygen sensor before catalytic converter defective	- Conduct catalytic converter diagnosis - Check wiring harness between pre-catalyst oxygen sensor and DME - Replace pre-catalyst oxygen sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL lights up when fault is detected in two consecutive driving cycles		Breakdown notice: Continued driving is possible, but because the oxygen sensor is not ready for closed-loop control, conversion of exhaust gases in the catalytic converter will be seriously impaired.	None
MEVD17.2-BN2000	0x2D42	11586	Valvetronic, adjustment range: Stop not learnt	The diagnostic function determines whether a valid travel limit is reached during initialization of the Valvetronic system.	P101A	VVT-Self-Learning Function, Stops Not Learned	Valvetronic (VVT)	Self-Learning Function	Valvetronic system, each time the DME control module wakes up, and each time terminals are changed on the DME, the upper travel stop is relearned. This fault is logged when the system fails to recognize the travel stop correctly. Potential problem source(s): - Valvetronic system travel stops damaged - Stiction in the Valvetronic	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Initialization of Valvetronic systems	- Engine warmed to normal temperature, more than 80°C	- None	SYSTEMCHECK_VVT_ANSCHLAG STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	Y	- Valvetronic system travel stops damaged - Stiction in the Valvetronic system	- Check travel stops in cylinder head and on the eccentric shaft - Inspect Valvetronic system to verify correct installation and freedom of movement	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Once the VVT has reached its emergency running position, unlimited throttled operation is possible. If it fails to reach the emergency running position, results ranging from a power loss to breakdown vehicle can occur depending on the VVT position that the system does reach.		Breakdown notice: Continued driving is usually not possible.	None
MEVD17.2-BN2000	0x2D43	11587	Valvetronic, adjustment range: Fault range check	The diagnostic function monitors whether the adjustment range has varied from the base learning data during the course of the vehicle's service life.	P1023	VVT-Self-Learning Function Faulty Adjustment Range (Bank 1)	Valvetronic (VVT)	Self-Learning Function	The fault is recognized when the adjustment range deviates from the base adjustment range by more than 2°. Potential problem source(s): - Wear at the travel stops - Wear in the Valvetronic mechanism	none	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - Adjustment range check every 1800 min. of operating time	- Engine warmed to normal temperature, more than 80°C	- Adjustment range check every 1800 min. of operation	SYSTEMCHECK_VVT_ANSCHLAG STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	Y	- Wear at the travel stops - Wear in the Valvetronic mechanism	- Repeat Valvetronic travel stop learning routine, refer to service functions - Inspect Valvetronic for mechanical wear and resistance to motion - Replace components with mechanical wear	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: VVT reverts to limp-home mode, minor effects can be felt		Breakdown notice: The engine runs in throttled mode, full drivability/power	None
MEVD17.2-BN2000	0x2D44	11588	Valvetronic, adjustment range: Range check, deviation to master adaptation	The diagnostic function monitors the adjustment range during the check of the Valvetronic's range.	P1023	VVT-Self-Learning Function Faulty Adjustment Range (Bank 1)	Valvetronic (VVT)	Self-Learning Function	The fault is recognized when the adjustment range deviates from the base adjustment range by more than 1°. Potential problem source(s): - Wear at the travel stops - Wear in the Valvetronic mechanism	none	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - Adjustment range check every 18000 min. of operating time	- Engine warmed to normal temperature, more than 80°C	- Adjustment range check every 18000 min. of operation	SYSTEMCHECK_VVT_ANSCHLAG STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	Y	- Wear at the travel stops - Wear in the Valvetronic mechanism	- Repeat Valvetronic travel stop learning routine, refer to service functions - Inspect Valvetronic for mechanical wear and resistance to motion - Replace components with mechanical wear	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D51	11601	Intake VANOS solenoid valve, actuation: Short circuit to B+	The diagnostic function monitors the wire to the VANOS solenoid valve.	P2089	'A' Camshaft Position Actuator Control Circuit High (Bank 1)	Camshaft Position Actuator	Intake Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_ENWS, STEUERN_ENDE_ENWS,	PWM activation signal, 0x4a7a	N	- Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	- Check wiring harness between DME and VANOS solenoid valve - Replace VANOS solenoid valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, performance reduction, turbo deactivation		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D52	11602	Intake VANOS solenoid valve, actuation: Short circuit to earth	The diagnostic function monitors the wire to the VANOS solenoid valve.	P2088	'A' Camshaft Position Actuator Control Circuit Low (Bank 1)	Camshaft Position Actuator	Intake Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_ENWS, STEUERN_ENDE_ENWS,	PWM activation signal, 0x4a7a	N	- Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	- Check wiring harness between DME and VANOS solenoid valve - Replace VANOS solenoid valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, performance reduction, turbo deactivation		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D53	11603	Intake VANOS solenoid valve, actuation: Line disconnection	The diagnostic function monitors the wire to the VANOS solenoid valve.	P0010	'A' Camshaft Position Actuator Circuit/Open (Bank 1)	Camshaft Position Actuator	Intake Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_ENWS, STEUERN_ENDE_ENWS,	PWM activation signal, 0x4a7a	N	- Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	- Check wiring harness between DME and VANOS solenoid valve - Replace VANOS solenoid valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, performance reduction, turbo deactivation		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D54	11604	Variable camshaft timing control (VANOS), exhaust, cold start not controllable	The diagnostic function monitors adjustment of the exhaust camshaft during the catalytic converter's warm-up phase.	P054B	Cold Start 'B' Camshaft Position Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Cold Start	the camshaft cannot be adjusted to the specified position. Potential problem source(s): - Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wires or plug terminals on VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine cold start to ensure that catalyst heater is active. Time condition: - None Other conditions: - Engine ON	- Engine cold start to ensure that catalyst heater is active.	- None	Yes	NO	N	- Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wires or plug terminals on VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve defective	- Check oil level, change engine oil and filter as indicated - If faults related to the camshaft position sensor have been logged, repair these first - Check wiring harness between VANOS solenoid valve and DME - Perform system test - Check camshaft and VANOS unit for freedom of movement and mechanical damage - Clean VANOS solenoid valve, replace as required	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2D55	11605	Variable camshaft timing control (VANOS), intake, cold start: not controllable	The diagnostic function monitors adjustment of the intake-side camshaft during the catalytic converter's warm-up phase.	P052B	Cold Start 'A' Camshaft Position Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Cold Start	the camshaft cannot be adjusted to the specified position. Potential problem source(s): - Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wires or plug terminals on VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine cold start to ensure that catalyst heater is active. Time condition: - None Other conditions: - Engine ON	- Engine cold start to ensure that catalyst heater is active.	- None	Yes	NO	N	- Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wires or plug terminals on VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve defective	- Check oil level, change engine oil and filter as indicated - If faults related to the camshaft position sensor have been logged, repair these first - Check wiring harness between VANOS solenoid valve and DME - Perform system test - Check camshaft and VANOS unit for freedom of movement and mechanical damage - Clean VANOS solenoid valve, replace as required	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None

MEVD17.2-BN2000	0x2D5A	11610	VANOS intake: control fault, camshaft stuck	The diagnostic function monitors the camshaft timing adjustment.	P13C0	'A' Camshaft Stuck	Camshaft	Intake Stuck	the actual angle fails to conform to the specified angle while the engine is running. Potential problem source(s): - Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defect in wiring harness to VANOS solenoid valve - VANOS solenoid valve seized	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Specified/actual angle difference exceeds 15° crankshaft	- Engine warmed to normal temperature, more than 80°C	- None	Yes	NO	N	- Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defect in wiring harness to VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve defective	- Check oil level, change engine oil and filter as indicated - If faults related to the camshaft position sensor have been logged, repair these first - Check wiring harness between VANOS solenoid valve and DME - Perform system test - Check camshaft and VANOS unit for freedom of movement and mechanical damage - Clean VANOS solenoid valve, replace as required	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2D5B	11611	VANOS intake: Control fault, position not reached	The diagnostic function monitors the camshaft timing adjustment.	P0012	'A' Camshaft Position - Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Intake	the actual angle assumes the specified angle too slowly while the engine is running. Potential problem source(s): - Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wires or plug terminals on VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Specified/actual angle difference exceeds 15° crankshaft	- Engine warmed to normal temperature, more than 80°C	- None	STEUERN_ENWS, STEUERN_ENDE_ENWS, STATUS_ENWS	NO	N	- Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wires or plug terminals on VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve defective	- Check oil level, change engine oil and filter as indicated - If faults related to the camshaft position sensor have been logged, repair these first - Check wiring harness between VANOS solenoid valve and DME - Perform system test - Check camshaft and VANOS unit for freedom of movement and mechanical damage - Clean VANOS solenoid valve, replace as required	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2D60	11616	VANOS, exhaust: control fault, camshaft stuck	The diagnostic function monitors the camshaft timing adjustment.	P13C9	'B' Camshaft Stuck	Camshaft	Exhaust Stuck	the actual angle fails to conform to the specified angle while the engine is running. Potential problem source(s): - Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defect in wiring harness to VANOS solenoid valve - VANOS solenoid valve seized	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Specified/actual angle difference exceeds 15° crankshaft	- Engine warmed to normal temperature, more than 80°C	- None	Yes	NO	N	- Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defect in wiring harness to VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve defective	- Check oil level, change engine oil and filter as indicated - If faults related to the camshaft position sensor have been logged, repair these first - Check wiring harness between VANOS solenoid valve and DME - Perform system test - Check camshaft and VANOS unit for freedom of movement and mechanical damage - Clean VANOS solenoid valve, replace as required	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2D61	11617	VANOS, exhaust: Control fault, position not reached	The diagnostic function monitors the camshaft timing adjustment.	P0015	'B' Camshaft Position - Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Exhaust	the actual angle assumes the specified angle too slowly while the engine is running. Potential problem source(s): - Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wires or plug terminals on VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Specified/actual angle difference exceeds 15° crankshaft	- Engine warmed to normal temperature, more than 80°C	- None	STEUERN_ANWS, STEUERN_ENDE_ANWS, STATUS_ANWS	NO	N	- Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wires or plug terminals on VANOS solenoid valve - VANOS solenoid valve seized - VANOS solenoid valve defective	- Check oil level, change engine oil and filter as indicated - If faults related to the camshaft position sensor have been logged, repair these first - Check wiring harness between VANOS solenoid valve and DME - Perform system test - Check camshaft and VANOS unit for freedom of movement and mechanical damage - Clean VANOS solenoid valve, replace as required	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: - Engine runs poorly		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2D9B	11675	Exhaust VANOS solenoid valve, actuation: Short circuit to B+	The diagnostic function monitors the wire to the VANOS solenoid valve.	P2091	'B' Camshaft Position Actuator Control Circuit High (Bank 1)	Camshaft Position Actuator	Exhaust Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_ANWS, STEUERN_ENDE_ANWS	PWM activation signal, 0x4a7b	N	- Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	- Check wiring harness between DME and VANOS solenoid valve - Replace VANOS solenoid valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, performance reduction, turbo deactivation		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D9C	11676	Exhaust VANOS solenoid valve, actuation: Short circuit to earth	The diagnostic function monitors the wire to the VANOS solenoid valve.	P2090	'B' Camshaft Position Actuator Control Circuit Low (Bank 1)	Camshaft Position Actuator	Exhaust Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_ANWS, STEUERN_ENDE_ANWS	PWM activation signal, 0x4a7b	N	- Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	- Check wiring harness between DME and VANOS solenoid valve - Replace VANOS solenoid valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, performance reduction, turbo deactivation		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D9D	11677	Exhaust VANOS solenoid valve, actuation: Line disconnection	The diagnostic function monitors the wire to the VANOS solenoid valve.	P0013	'B' Camshaft Position - Actuator Circuit/Open (Bank 1)	Camshaft Position Actuator	Exhaust Electrical	the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_ANWS, STEUERN_ENDE_ANWS	PWM activation signal, 0x4a7b	N	- Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	- Check wiring harness between DME and VANOS solenoid valve - Replace VANOS solenoid valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, performance reduction, turbo deactivation		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D9F	11679	Intake camshaft sensor: Signal implausible	The diagnostic function monitors the intake camshaft position sensor.	P0341	Camshaft Position Sensor 'A' Circuit Range/Performance (Bank 1 or Single Sensor)	Camshaft Position Sensor	Intake Plausibility	the engine is turning over and camshaft signals have been present. Potential problem source(s): - Defect in wiring harness between DME and camshaft position sensor - Incorrect gap between camshaft position sensor and camshaft sensor reluctor ring - Sensor contaminated or	If the 'crankshaft revolutions' fault is present.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor - Incorrect gap between camshaft position sensor and camshaft sensor reluctor ring - Sensor contaminated or defective	- Check wiring harness between DME and camshaft position sensor - Check installation of camshaft position sensor and camshaft position sensor reluctor ring - Replace sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: Extended starting time, power loss, and no restart possible in combination with an exhaust sensor fault		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2DA0	11680	Inlet camshaft: Angle offset with respect to crankshaft outside tolerance	The diagnostic function monitors the offset angle between crankshaft and camshaft.	P1338	Camshaft Position Sensor 'A' Faulty Phase Position (Bank 1)	Camshaft Position Sensor	Intake Phase	the camshaft's reference position does not align with the specified position. Potential problem source(s): - Loose center bolt - Camshaft position sensor reluctor ring out of adjustment - Timing chain has jumped time	Camshaft reference position has shifted by more than or and the camshaft has executed rotations.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - After execution of camshaft position sensor	- None	- None	NO	none	N	- Loose center bolt - Camshaft position sensor reluctor ring out of adjustment - Timing chain has jumped time - Defective timing chain (stretched)	- When intake and exhaust camshafts display simultaneous angular offset errors relative to crankshaft: Check center bolt - Check camshaft position sensor reluctor ring - Check timing chain - Check valve timing	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: MIL comes on		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2DA1	11681	Exhaust camshaft sensor: Signal implausible	The diagnostic function monitors the exhaust camshaft position sensor.	P0366	Camshaft Position Sensor 'B' Circuit Range/Performance (Bank 1)	Camshaft Position Sensor	Exhaust Plausibility	the engine is turning over and camshaft signals have been present. Potential problem source(s): - Defect in wiring harness between DME and camshaft position sensor - Incorrect gap between camshaft position sensor and camshaft sensor reluctor ring - Sensor contaminated or	If the 'crankshaft revolutions' fault is present.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor - Incorrect gap between camshaft position sensor and camshaft sensor reluctor ring - Sensor contaminated or defective	- Check wiring harness between DME and camshaft position sensor - Check installation of camshaft position sensor and camshaft position sensor reluctor ring - Replace sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: Extended starting time, power loss, and no restart possible in combination with an exhaust sensor fault		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2DA2	11682	Exhaust camshaft: Angle offset with respect to crankshaft outside tolerance	The diagnostic function monitors the offset angle between crankshaft and camshaft.	P1339	Camshaft Position Sensor 'B' Faulty Phase Position (Bank 1)	Camshaft Position Sensor	Exhaust Phase	the camshaft's reference position does not align with the specified position. Potential problem source(s): - Loose center bolt - Camshaft position sensor reluctor ring out of adjustment - Timing chain has jumped time	Camshaft reference position has shifted by more than or and the camshaft has executed rotations.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - After execution of camshaft position sensor	- None	- None	NO	none	N	- Loose center bolt - Camshaft position sensor reluctor ring out of adjustment - Timing chain has jumped time - Defective timing chain (stretched)	- When intake and exhaust camshafts display simultaneous angular offset errors relative to crankshaft: Check center bolt - Check camshaft position sensor reluctor ring - Check timing chain - Check valve timing	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: MIL comes on		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2DB0	11696	VANOS, exhaust: Intake camshaft not in locking position at start up	The diagnostic function monitors camshaft position locking.	P1325	B Camshaft Starting Position not Reached (Bank 1)			the camshaft is not locked during starting. Potential problem source(s): - Engine oil dirty, old or not to specification - VANOS adjustment unit dirty - VANOS adjustment unit defective	The fault is logged immediately when it occurs during an engine start.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	Y	- Engine oil dirty, old or not to specification - VANOS adjustment unit dirty - VANOS adjustment unit defective	- Check engine oil, replace engine oil and filter as required - Perform system test on VANOS solenoid valves - Replace VANOS adjustment unit	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Non-starter in extreme cases		Breakdown notice: - none	none
MEVD17.2-BN2000	0x2DB1	11697	VANOS intake: Intake camshaft not in locking position at start up	The diagnostic function monitors camshaft position locking.	P1323	A Camshaft Starting Position not Reached (Bank 1)			the camshaft is not locked during starting. Potential problem source(s): - Engine oil dirty, old or not to specification - VANOS adjustment unit dirty - VANOS adjustment unit defective	The fault is logged immediately when it occurs during an engine start.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	Y	- Engine oil dirty, old or not to specification - VANOS adjustment unit dirty - VANOS adjustment unit defective	- Check engine oil, replace engine oil and filter as required - Perform system test on VANOS solenoid valves - Replace VANOS adjustment unit	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Non-starter in extreme cases		Breakdown notice: - none	none
MEVD17.2-BN2000	0x2DB4	11700	Valvetronic relay, activation: Short circuit to B+	The diagnostic function monitors electrical control-activation of the Valvetronic relay for a short circuit to positive.	P10D8	VVT-Relay Circuit High	Valvetronic (VVT)	Relay	The fault is recognized when a short circuit to positive is detected when activation voltage is transmitted to the Valvetronic relay. Potential problem source(s): - Defective wiring harness - Valvetronic relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	N	- Defective wiring harness - Valvetronic relay defective - Defective DME	- Inspect wiring harness between DME and Valvetronic relay - Replace Valvetronic relay - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: If the malfunction occurs while the VVT system is at maximum stroke extension (full load, vehicle parked), only limited or no effects will be apparent to the customer. (Switching process may be felt after GD, starting response). Otherwise breakdown vehicle, as power is no longer transmitted to the VVT system, which thus closes.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2DB5	11701	Valvetronic relay, activation: Short circuit to earth	The diagnostic function monitors electrical activation of the Valvetronic relay for short circuits to ground.	P10D7	VVT-Relay Circuit Low	Valvetronic (VVT)	Relay	The fault is recognized when a short circuit to ground is detected when activation voltage is transmitted to the Valvetronic relay. Potential problem source(s): - Defective wiring harness - Valvetronic relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	N	- Defective wiring harness - Valvetronic relay defective - Defective DME	- Inspect wiring harness between DME and Valvetronic relay - Replace Valvetronic relay - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: If the malfunction occurs while the VVT system is at maximum stroke extension (full load, vehicle parked), only limited or no effects will be apparent to the customer. (Switching process may be felt after GD, starting response). Otherwise breakdown vehicle, as power is no longer transmitted to the VVT system, which thus closes.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2DB6	11702	Valvetronic relay, activation: Line disconnection	The diagnostic function monitors electrical activation of the Valvetronic relay for open circuits.	P10D6	VVT-Relay Circuit	Valvetronic (VVT)	Relay	The fault is recognized if an open circuit is detected when activation voltage is transmitted to the Valvetronic relay. Potential problem source(s): - Defective wiring harness - Valvetronic relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	N	- Defective wiring harness - Valvetronic relay defective - Defective DME	- Inspect wiring harness between DME and Valvetronic relay - Replace Valvetronic relay - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: If the malfunction occurs while the VVT system is at maximum stroke extension (full load, vehicle parked), only limited or no effects will be apparent to the customer. (Switching process may be felt after GD, starting response). Otherwise breakdown vehicle, as power is no longer transmitted to the VVT system, which thus closes.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2DBA	11706	Valvetronic, component protection, output stage System switch-off	The diagnostic function monitors the temperature of the driver circuit.	P10DF	VVT-Overload Protection Output Stage System Shutdown	Valvetronic (VVT)	Overload Protection	the calculated driver circuit temperature rises above 130°C. Potential problem source(s): - Valvetronic system consumes excessive energy owing to: - Stiction and high resistance in the Valvetronic system - Abuse ("blipping" the accelerator pedal, etc.) - Frequent open-loop	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	Y	- Valvetronic system consumes excessive energy owing to: - Stiction and high resistance in the Valvetronic system - Abuse ("blipping" the accelerator pedal, etc.) - Frequent open-loop operation (limp-home mode/learning routines)	- Check electrical system voltage - If other diagnostic fault codes related to Valvetronic are logged, work through these first - Check Valvetronic mechanism for freedom of movement, wear and stiction (with external voltage source connected as required) - Replace components with mechanical wear	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Range from no effects to power reduction/breakdown		Breakdown notice: VVT driver circuit component protection	None
MEVD17.2-BN2000	0x2DBB	11707	Valvetronic, component protection servomotor: System switch-off	The diagnostic function monitors the temperature of the Valvetronic actuator motor.	P10E0	VVT-Overload Protection Control Motor System Shutdown	Valvetronic (VVT)	Overload Protection	the calculated temperature of the Valvetronic actuator motor rises above 200°C / 65535 (temperature in the windings of the Valvetronic servo motor). Potential problem source(s): - Valvetronic system consumes excessive energy owing to: - Stiction and high resistance in the Valvetronic system - Abuse ("blipping" the accelerator pedal, etc.) - Frequent open-loop	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	Y	- Valvetronic system consumes excessive energy owing to: - Stiction and high resistance in the Valvetronic system - Abuse ("blipping" the accelerator pedal, etc.) - Frequent open-loop operation (limp-home mode/learning routines)	- Check electrical system voltage - If other diagnostic fault codes related to Valvetronic are logged, work through these first - Check Valvetronic mechanism for freedom of movement, wear and stiction (with external voltage source connected as required) - Replace components with mechanical wear	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Range from no effects to power reduction/breakdown		Breakdown notice: VVT system component protection	None
MEVD17.2-BN2000	0x2DBC	11708	Valvetronic, eccentric shaft adaptation: Lower stop reached	Open					The fault is recognized when ? Potential problem source(s): - ? - ?			Voltage condition: Temperature condition: Time condition: Other conditions:				- None		- ? - ?	- ? - ?	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	new for I-10-03-450	Possible apparent symptoms: Customer perception in prose at this juncture		Breakdown notice: - none	
MEVD17.2-BN2000	0x2DBF	11711	Valvetronic servomotor, activation: Short circuit to B+	The diagnostic function monitors the Valvetronic actuator motor's three phases for a short circuit to positive.	P1047	VVT-Control Circuit High (Bank 1)	Valvetronic (VVT)	Control Motor	deactivated when a fault is suspected. The fault is logged when the measured diagnosis voltage is greater than 1.2 V ? 2.3 V and the voltage behind the Valvetronic relay exceeds 10 V. Potential problem source(s): - Defective wiring harness	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Voltage behind motor relay > 5V	- None	- None	none	none	N	- Defective wiring harness - Valvetronic actuator defective	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: If the malfunction occurs while the VVT system is not at its maximum stroke position, the engine stalls/vehicle breaks down. Engine will not restart, as the VVT driver circuit is deactivated and the VVT system reverts to minimum stroke. If the fault occurs at maximum stroke, unrestricted throttled operation is possible.		Breakdown notice: No continued driving possible.	None

MEVD17.2-BN2000	0x2DC0	11712	Valvetronic servomotor, activation: Short circuit to earth	The diagnostic function monitors the Valvetronic actuator motor's three phases for a short circuit to ground.	P1048	VVT-Control Circuit Low (Bank 1)	Valvetronic (VVT)	Control Motor	deactivated when a fault is suspected. The diagnostic fault code is logged when the voltage measured during diagnosis is less than 0.2 V and the voltage behind the Valvetronic relay is greater than 6 V. Potential problem source(s): - Defective wiring harness	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Voltage behind motor relay > 5V	- None	- None	none	none	N	- Defective wiring harness - Valvetronic actuator defective	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: If the malfunction occurs while the VVT system is not at its maximum stroke position, the engine stalls/vehicle breaks down. Engine will not restart, as the VVT driver circuit is deactivated and the VVT system reverts to minimum stroke. If the fault occurs at maximum stroke, unrestricted throttled operation is possible.		Breakdown notice: Continued driving is usually not possible.	None
MEVD17.2-BN2000	0x2DC3	11715	Valvetronic servomotor, activation: Line disconnection	The diagnostic function monitors the Valvetronic actuator motor's three phases for an open circuit in one of the wires.	P1050	VVT-Control Circuit (Bank 1)	Valvetronic (VVT)	Control Motor	The driver circuit is deactivated when a fault is suspected. The fault is logged when the measured diagnosis voltage is less than 0.35 V ? 0.61 V. Potential problem source(s): - Defective wiring harness - Valvetronic actuator defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Voltage behind motor relay > 5V	- None	- None	none	none	N	- Defective wiring harness - Valvetronic actuator defective	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: If the malfunction occurs while the VVT system is not at its maximum stroke position, the engine stalls/vehicle breaks down. Engine will not restart, as the VVT driver circuit is deactivated and the VVT system reverts to minimum stroke. If the fault occurs at maximum stroke, unrestricted throttled operation is possible.		Breakdown notice: Continued driving is usually not possible.	None
MEVD17.2-BN2000	0x2DCA	11722	Valvetronic, overload protection: output stage overloaded	The diagnostic function monitors the temperature of the driver circuit.	P10E7	VVT-Overload Protection Output Stage Overload	Valvetronic (VVT)	Overload Protection	the calculated driver circuit temperature rises above 120°C. Potential problem source(s): - Valvetronic system consumes excessive energy owing to: - Stiction and high resistance in the Valvetronic system - Abuse ("blipping" the accelerator pedal, etc.) - Frequent open-loop	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	Y	- Valvetronic system consumes excessive energy owing to: - Stiction and high resistance in the Valvetronic system - Abuse ("blipping" the accelerator pedal, etc.) - Frequent open-loop operation (limp-home mode/learning routines)	- Check electrical system voltage - If other diagnostic fault codes related to Valvetronic are logged, work through these first - Check Valvetronic mechanism for freedom of movement, wear and stiction (with external voltage source connected as required) - Replace components with mechanical wear	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: VVT reverts to limp-home mode, minor effects can be felt		Breakdown notice: The engine runs in throttled mode, full drivability/power	None
MEVD17.2-BN2000	0x2DCB	11723	Valvetronic, overload protection: Actuator motor overloaded	The diagnostic function monitors the temperature of the Valvetronic actuator motor.	P10E8	VVT-Overload Protection Control Motor Overload	Valvetronic (VVT)	Overload Protection	the calculated temperature of the Valvetronic actuator motor rises above 190°C / (temperature in the windings of the Valvetronic actuator motor). Potential problem source(s): - Valvetronic system consumes excessive energy owing to: - Stiction and high resistance in the Valvetronic system - Abuse ("blipping" the accelerator pedal, etc.) - Frequent open-loop	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	Y	- Valvetronic system consumes excessive energy owing to: - Stiction and high resistance in the Valvetronic system - Abuse ("blipping" the accelerator pedal, etc.) - Frequent open-loop operation (limp-home mode/learning routines)	- Check electrical system voltage - If other diagnostic fault codes related to Valvetronic are logged, work through these first - Check Valvetronic mechanism for freedom of movement, wear and stiction (with external voltage source connected as required) - Replace components with mechanical wear	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: VVT reverts to limp-home mode, minor effects can be felt		Breakdown notice: The engine runs in throttled mode, full drivability/power	None
MEVD17.2-BN2000	0x2DCE	11726	Valvetronic system: Control deviation too great	The diagnostic function monitors the Valvetronic system's control precision.	P1030	VVT-Actuator Monitoring Position Control; Tight, no Adjustment possible (Bank 1)	Valvetronic (VVT)	Position Control	a counter rises above the fault threshold of 10 000. The counter is incrementalized when the closed-loop control difference exceeds a specified threshold while the Valvetronic actuator motor is stationary. Potential problem source(s): - Defective wiring harness - Valvetronic actuator	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	N	- Defective wiring harness - Valvetronic actuator defective - Valvetronic system sticking - Defective DME	- Check wiring harness and plug connectors for electrical faults - If other diagnostic fault codes related to Valvetronic are logged, work through these first - Check Valvetronic mechanism for freedom of movement, wear and stiction (with external voltage source connected as required) - Replace Valvetronic actuator motor - Replace components with mechanical wear - Replace DME	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Unrestricted, throttled operation remains available if the VVT system's stroke is at maximum extension. If maximum stroke is not achieved, results ranging from a power loss to breakdown can occur depending on the VVT position that the system does reach.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2DCF	11727	Valvetronic system: no movement identified	The diagnostic function determines whether the Valvetronic system moves freely and without resistance during the initialization routine.	P10E1	VVT-System No Travel Detected	Valvetronic (VVT)	System	neither upward nor downward motion of 6° is possible during initialization of the Valvetronic system. Potential problem source(s): - Defective wiring harness - Valvetronic actuator defective - Valvetronic system sticking - Defective DME	none	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - When the Valvetronic system is initialized (Terminal	- Engine warmed to normal temperature, more than 80°C	- None	STEUERN_VVT	ivvtsumperf_w vvtdtperf_w	N	- Defective wiring harness - Valvetronic actuator defective - Valvetronic system sticking - Defective DME	- Check wiring harness and plug connectors for electrical faults - If other diagnostic fault codes related to Valvetronic are logged, work through these first - Check Valvetronic mechanism for freedom of movement, wear and stiction (with external voltage source connected as required) - Replace Valvetronic actuator motor - Replace components with mechanical wear - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Once the VVT has reached its emergency running position, unlimited throttled operation is possible. If it fails to reach the emergency running position, results ranging from a power loss to breakdown vehicle can occur depending on the VVT position that the system does reach.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2DD6	11734	Valvetronic servomotor, position sensors: Short-circuit or line break (open circuit)	The diagnostic function monitors the wires to the five position sensors.	P10E2	VVT-Sensors Supply Voltage Circuit Electrical	Valvetronic (VVT)	Sensors	all three position sensors have the same level. Potential problem source(s): - No power-supply voltage to sensors - One or several wires to the position sensors is/are shorted to positive or ground - One or several position-sensor wires is open - One or more position sensors in the Valvetronic actuator motor is defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	N	- No power-supply voltage to sensors - One or several wires to the position sensors is/are shorted to positive or ground - One or several position-sensor wires is open - One or more position sensors in the Valvetronic actuator motor is defective	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: VVT reverts to limp-home mode, minor effects can be felt		Breakdown notice: The engine runs in throttled mode, full drivability/power	None
MEVD17.2-BN2000	0x2DD7	11735	Valvetronic servomotor, position sensors: Supply voltage faulty	The diagnostic function monitors the power-supply wires to the position sensors.	P10E6	VVT-Sensors Supply Voltage Circuit Open	Valvetronic (VVT)	Power Supply Sensors	The fault is recognized when the DME hardware detects a fault in the voltage supply to the Hall-effect sensors. Potential problem source(s): - Defective wiring harness - Valvetronic actuator defective - Defective DME	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	N	- Defective wiring harness - Valvetronic actuator defective - Defective DME	- Check wiring harness between Valvetronic actuator motor and DME - Check Valvetronic actuator motor Check Valvetronic actuator motor with multimeter, specified results: Pin 11 to Pin 10: roughly 1 mOhm Pin 11 to cylinder head: Infinite resistance Pin 10 to cylinder head: Infinite resistance - Replace Valvetronic actuator motor - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: VVT reverts to limp-home mode, minor effects can be felt		Breakdown notice: The engine runs in throttled mode, full drivability/power	None
MEVD17.2-BN2000	0x2DD8	11736	Valvetronic servomotor, position sensors: Signal implausible	The diagnostic function monitors the switching sequence of the position sensors.	P1017	VVT- Sensors Plausibility (Bank 1)	Valvetronic (VVT)	Sensors	The fault is recognized when the position sensors indicate an incorrect switching sequence. Potential problem source(s): - Defective wiring harness - Valvetronic actuator defective - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	N	- Defective wiring harness - Valvetronic actuator defective - Defective DME	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: VVT reverts to limp-home mode, minor effects can be felt		Breakdown notice: The engine runs in throttled mode, full drivability/power	None
MEVD17.2-BN2000	0x2DE1	11745																							
MEVD17.2-BN2000	0x2DE2	11746			P10F4	VVT-Control Phase U Circuit Open (Bank 1)																			
MEVD17.2-BN2000	0x2DE3	11747			P10F5	VVT-Control Phase V Circuit Open (Bank 1)																			
MEVD17.2-BN2000	0x2DE4	11748			P10F6	VVT-Control Phase W Circuit Open (Bank 1)																			
MEVD17.2-BN2000	0x2DE5	11749			P10E8	VVT-Overload Protection Control Motor Overload	Valvetronic (VVT)	Overload Protection																	
MEVD17.2-BN2000	0x2DE8	11752			P10DF	VVT-Overload Protection Output Stage System Shutdown	Valvetronic (VVT)	Overload Protection																	
MEVD17.2-BN2000	0x2DE9	11753			P10E0	VVT-Overload Protection Control Motor System Shutdown	Valvetronic (VVT)	Overload Protection																	
MEVD17.2-BN2000	0x2DEA	11754			P10E7	VVT-Overload Protection Output Stage Overload	Valvetronic (VVT)	Overload Protection																	
MEVD17.2-BN2000	0x2E0A	11786	Valvetronic servomotor, activation, voltage phase: Line disconnection	The diagnostic function monitors activation of Phase U in the Valvetronic actuator motor for open circuits.					The fault is recognized when the current falls below 0.3 amps despite application of voltage to Phase U. Potential problem source(s): - Defective wiring harness - Valvetronic actuator defective - Defective DME	Diagnostic fault code is logged when condition is present for at least 8 ms.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	none	- Defective wiring harness - Valvetronic actuator defective - Defective DME	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Range from no effects to power reduction/breakdown		Breakdown notice: Engine runs in throttled operation. Normally no limitations will be noticed. However continued driving is impossible in worst-case scenario	None
MEVD17.2-BN2000	0x2E0B	11787	Valvetronic servomotor, activation, volt phase: Line disconnection	The diagnostic function monitors activation of Phase V in the Valvetronic actuator motor for open circuits.					The fault is recognized when the current falls below 0.3 amps despite application of voltage to Phase V. Potential problem source(s): - Defective wiring harness - Valvetronic actuator defective - Defective DME	The diagnostic fault code is logged when the condition is present for at least 8 ms.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	none	- Defective wiring harness - Valvetronic actuator defective - Defective DME	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Range from no effects to power reduction/breakdown		Breakdown notice: Engine runs in throttled operation. Normally no limitations will be noticed. However continued driving is impossible in worst-case scenario	None
MEVD17.2-BN2000	0x2E0C	11788	Valvetronic servomotor, activation, watt phase: Line disconnection	The diagnostic function monitors activation of Phase W in the Valvetronic actuator motor for indication of an open circuit.					The fault is recognized when the current falls below 0.3 amps despite application of voltage to Phase W. Potential problem source(s): - Defective wiring harness - Valvetronic actuator defective - Defective DME	Diagnostic fault code is logged when condition is present for at least 8 ms.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	none	- Defective wiring harness - Valvetronic actuator defective - Defective DME	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Range from no effects to power reduction/breakdown		Breakdown notice: Engine runs in throttled operation. Normally no limitations will be noticed. However continued driving is impossible in worst-case scenario	None
MEVD17.2-BN2000	0x2E0E	11790	Valvetronic servomotor, position sensors: Signals implausible	The diagnostic function monitors the Valvetronic actuator motor's position sensors for plausibility.					the low-resolution Hall-effect sensors detect motion, but the high-resolution Hall-effect sensors fail to detect any corresponding motion. Potential problem source(s): - Defective wiring harness - Valvetronic actuator defective	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	none	N	- Defective wiring harness - Valvetronic actuator defective - Defective DME	- Check wiring harness between Valvetronic actuator motor and DME - Replace Valvetronic actuator motor - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Switch to VVT limp-home mode/GD may be mildly perceptible		Breakdown notice: The engine runs in throttled mode, full drivability/power	None
MEVD17.2-BN2000	0x2E4A	11850	Exhaust gas flap, activation: Short circuit to B+	The diagnostic function monitors the activation wire to the exhaust-gas flap.	P0478	Exhaust Pressure Control Valve 'A' High			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defect in wire between DME and exhaust flap - Exhaust-gas flap's valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Exhaust-gas flap	- None	- None	steuern_agk, steuernd_end_agk	U, 0x4A65	N	- Defect in wire between DME and exhaust flap - Exhaust-gas flap's valve defective - Defective DME	- Check wiring harness between DME and exhaust-gas flap - Replace valve - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Vehicle quieter during driving		Breakdown notice: None	None
MEVD17.2-BN2000	0x2E4B	11851	Exhaust gas flap, activation: Short circuit to earth	The diagnostic function monitors the activation wire to the exhaust-gas flap.	P0477	Exhaust Pressure Control Valve 'A' Low			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defect in wire between DME and exhaust flap - Exhaust-gas flap's valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Exhaust-gas flap	- None	- None	steuern_agk, steuernd_end_agk	U, 0x4A65	N	- Defect in wire between DME and exhaust flap - Exhaust-gas flap's valve defective - Defective DME	- Check wiring harness between DME and exhaust-gas flap - Replace valve - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Vehicle louder when stationary		Breakdown notice: None	None
MEVD17.2-BN2000	0x2E4C	11852	Exhaust gas flap, activation: Line disconnection	The diagnostic function monitors the activation wire to the exhaust-gas flap.	P0475	Exhaust Pressure Control Valve 'A'			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defect in wire between DME and exhaust flap - Exhaust-gas flap's valve defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Exhaust-gas flap	- None	- None	steuern_agk, steuernd_end_agk	U, 0x4A66	N	- Defect in wire between DME and exhaust flap - Exhaust-gas flap's valve defective - Defective DME	- Check wiring harness between DME and exhaust-gas flap - Replace valve - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Vehicle louder when stationary		Breakdown notice: None	None
MEVD17.2-BN2000	0x2E7C	11900	Radiator shutter, top: Hardware fault	The diagnostic function monitors the actor for the radiator vent slats.	P14C5	Controlled Upper Air Shutter Hardware Defect			The fault is recognized when an activation signal is transmitted to the actor and a component defect is recognized. Potential problem source(s): - Internal fault in actor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Activated 1 time	- None	- None	systemcheck_glf	none	N	- Internal fault in actor	- Replace radiator vent slat assembly	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine overheating is possible		Breakdown notice: Continued driving possible, avoid subjecting engine to major loads. (mountain driving, full throttle, etc.)	None
MEVD17.2-BN2000	0x2E7D	11901	Radiator shutter, top: mechanical	The diagnostic function monitors the radiator vent slats to confirm freedom of motion.	P14C4	Controlled Upper Air Shutter Mechanical			The fault is recognized when the vent slats receive multiple activation signals. Potential problem source(s): - Slats are blocked by foreign objects/matter - Ice accumulation	Send activation signal three times	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Activated 3 times, open/closed/open	- None	- None	systemcheck_glf	none	N	- Slats are blocked by foreign objects - Ice accumulation	- Replace radiator vent slat assembly	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine overheating is possible		Breakdown notice: Continued driving possible, avoid subjecting engine to major loads. (mountain driving, full throttle, etc.)	None
MEVD17.2-BN2000	0x2E7E	11902	Radiator shutter, top: no communication	The diagnostic function monitors the actor for the radiator vent slats.	U1130	Lost Communication With Controlled Upper Air Shutter			The fault is recognized when communications with the actor are established following an engine start. Potential problem source(s): - Internal fault in actor	No more communications from the automatic cold-air flap control	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	systemcheck_glf	none	N	- Internal fault in actor	- Replace radiator vent slat assembly	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine overheating is possible		Breakdown notice: Continued driving possible, avoid subjecting engine to major loads. (mountain driving, full throttle, etc.)	None
MEVD17.2-BN2000	0x2E80	11904	Radiator shutter, activation: Short circuit to B+	The diagnostic function monitors the wiring harness to the radiator vent slats.	P300A	Controlled Air Shutter Circuit High			a short circuit is present in the wire to the radiator vent slats. Potential problem source(s): - Defect in wiring harness between radiator vent slats and DME - Radiator vent slat assembly is defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	systemcheck_glf	none	N	- Defect in wiring harness between radiator vent slats and DME - Radiator vent slat assembly is defective	- Check wiring harness between radiator vent slats and DME - Replace radiator vent slat assembly	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine overheating is possible		Breakdown notice: Radiator vent slats should open automatically.	None

MEVD17.2-BN2000	0x2E81	11905	Radiator shutter, activation: Short circuit to earth	The diagnostic function monitors the wiring harness to the radiator vent slats.	P300B	Controlled Air Shutter Circuit Low			The fault is recognized when a short circuit is present in the wire to the radiator vent slats. Potential problem source(s): - Defect in wiring harness between radiator vent slats and DME - Radiator vent slat assembly is defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	systemcheck_glf	none	N	- Defect in wiring harness between radiator vent slats and DME - Radiator vent slat assembly is defective	- Check wiring harness between radiator vent slats and DME - Replace radiator vent slat assembly	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine overheating is possible		Breakdown notice: Radiator vent slats should open automatically.	None
MEVD17.2-BN2000	0x2E82	11906	Radiator shutter, activation: Line disconnection	The diagnostic function monitors the wiring harness to the radiator vent slats.	P300C	Controlled Air Shutter Circuit/Open			The fault is recognized when an open circuit is present in the wiring harness to the radiator vent slats. Potential problem source(s): - Defect in wiring harness between radiator vent slats and DME - Radiator vent slat assembly defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	systemcheck_glf	none	N	- Defect in wiring harness between radiator vent slats and DME - Radiator vent slat assembly is defective	- Check wiring harness between radiator vent slats and DME - Replace radiator vent slat assembly	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine overheating is possible		Breakdown notice: Radiator vent slats should open automatically.	None
MEVD17.2-BN2000	0x2E84	11908	Radiator shutter, bottom, electrical: malfunction	The diagnostic function monitors the activation wire leading to the lower radiator vent slat assembly.	P14C6	Controlled Lower Air Shutter Electrical			The fault is recognized when a short to positive or ground is present on the activation wire for the lower radiator vent slats or the wire is open. Potential problem source(s): - Defect in wiring harness between radiator vent slat assembly (upper radiator slat assembly) and passive cold-air flap system (lower radiator slats)	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Activated 3 times	- None	- None	systemcheck_glf	none	N	- Defect in wiring harness between radiator vent slats (upper radiator slat assembly) and passive cold-air flap system (lower radiator vent slat assembly) - Defect in lower radiator vent slat assembly	- Check wiring harness between radiator vent slats (upper radiator slat assembly) and passive cold-air flap system (lower radiator vent slat assembly) - Replace lower radiator vent slat assembly	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EE0	12000	Combustion misfiring, several cylinders: Fuel injection deactivation	The diagnostic function monitors whether multiple "combustion miss" malfunctions are logged in the course of a single driving cycle.	P0300	Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	The fault is recognized when combustion miss is present on at least two cylinders. Potential problem source(s): - see Individual fault	see Individual fault	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- see Individual fault	- see Individual fault	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: see Individual fault		Breakdown notice: None	none
MEVD17.2-BN2000	0x2EE1	12001	Combustion misfiring, several cylinders: damaging exhaust gas	The diagnostic function monitors whether multiple "combustion miss" malfunctions are logged in the course of a single driving cycle.	P0300	Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	The fault is recognized when combustion miss is present on at least two cylinders. Potential problem source(s): - see Individual fault	see Individual fault	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- see Individual fault	- see Individual fault	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: see Individual fault		Breakdown notice: None	none
MEVD17.2-BN2000	0x2EE2	12002	Combustion misfiring, several cylinders: damaging exhaust gas after start sequence	The diagnostic function monitors whether multiple "combustion miss" malfunctions are logged in the course of a single driving cycle.	P0300	Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	The fault is recognized when combustion miss is present on at least two cylinders. Potential problem source(s): - see Individual fault	see Individual fault	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- see Individual fault	- see Individual fault	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: see Individual fault		Breakdown notice: None	none
MEVD17.2-BN2000	0x2EE4	12004	Combustion misfiring, cylinder 1: Fuel injection deactivation	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0301	Cylinder 1 Misfire Detected	Misfire	Cyl 1	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when within 200 : (KFKSWF) crankshaft revolutions a specified number of ignition miss events is detected.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced engine power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2EE5	12005	Combustion misfiring, cylinder 1: damaging exhaust gas	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0301	Cylinder 1 Misfire Detected	Misfire	Cyl 1	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized within 1000 crankshaft revolutions.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EE6	12006	Combustion misfiring, cylinder 1: damaging exhaust gas after start sequence	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0301	Cylinder 1 Misfire Detected	Misfire	Cyl 1	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized during the first 1000 crankshaft revolutions following the start.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EE7	12007	Combustion misfiring, cylinder 2: Fuel injection deactivation	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0302	Cylinder 2 Misfire Detected	Misfire	Cyl 2	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Collateral fault logged, from problem with mixture formation, ignition system or mechanism.	The diagnostic fault code is logged when a specific number of combustion miss events are recognized within 200 crankshaft revolutions. The number depends on rpm and load factor.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Collateral fault logged, from problem with mixture formation, ignition system or mechanism.	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced engine power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2EE8	12008	Combustion misfiring, cylinder 2: damaging exhaust gas	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0302	Cylinder 2 Misfire Detected	Misfire	Cyl 2	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Collateral fault logged, from problem with mixture formation, ignition system or mechanical components	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized within 1000 crankshaft revolutions. This must proceed in 4 intervals.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Collateral fault logged, from problem with mixture formation, ignition system or mechanical components	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EE9	12009	Combustion misfiring, cylinder 2: damaging exhaust gas after start sequence	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0302	Cylinder 2 Misfire Detected	Misfire	Cyl 2	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Collateral fault logged, from problem with mixture formation, ignition system or mechanical components	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized during the first 1000 crankshaft revolutions following the start.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Collateral fault logged, from problem with mixture formation, ignition system or mechanical components	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EEA	12010	Combustion misfiring, cylinder 3: Fuel injection deactivation	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0303	Cylinder 3 Misfire Detected	Misfire	Cyl 3	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events are recognized within 200 crankshaft revolutions.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced engine power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2EEB	12011	Combustion misfiring, cylinder 3: damaging exhaust gas	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0303	Cylinder 3 Misfire Detected	Misfire	Cyl 3	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized within 1000 crankshaft revolutions.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EEC	12012	Combustion misfiring, cylinder 3: damaging exhaust gas after start sequence	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0303	Cylinder 3 Misfire Detected	Misfire	Cyl 3	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized during the first 1000 crankshaft revolutions following the start.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EED	12013	Combustion misfiring, cylinder 4: Fuel injection deactivation	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0304	Cylinder 4 Misfire Detected	Misfire	Cyl 4	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Collateral fault logged, from problem with mixture formation, ignition system or mechanism.	The diagnostic fault code is logged when a specific number of combustion miss events are recognized within 200 crankshaft revolutions. The number depends on rpm and load factor.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Collateral fault logged, from problem with mixture formation, ignition system or mechanism.	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced engine power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2EEF	12015	Combustion misfiring, cylinder 4: damaging exhaust gas	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0304	Cylinder 4 Misfire Detected	Misfire	Cyl 4	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Collateral fault logged, from problem with mixture formation, ignition system or mechanical components	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized within 1000 crankshaft revolutions. This must proceed in 4 intervals.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Collateral fault logged, from problem with mixture formation, ignition system or mechanical components	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EF0	12016	Combustion misfiring, cylinder 4: damaging exhaust gas after start sequence	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0304	Cylinder 4 Misfire Detected	Misfire	Cyl 4	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Collateral fault logged, from problem with mixture formation, ignition system or mechanism.	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized during the first 1000 crankshaft revolutions following the start.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Collateral fault logged, from problem with mixture formation, ignition system or mechanism.	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EF1	12017	Combustion misfiring, cylinder 5: Fuel injection deactivation	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0305	Cylinder 5 Misfire Detected	Misfire	Cyl 5	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events are recognized within 200 crankshaft revolutions.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced engine power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2EF2	12018	Combustion misfiring, cylinder 5: damaging exhaust gas	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0305	Cylinder 5 Misfire Detected	Misfire	Cyl 5	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized within 1000 crankshaft revolutions.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EF3	12019	Combustion misfiring, cylinder 5: damaging exhaust gas after start sequence	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0305	Cylinder 5 Misfire Detected	Misfire	Cyl 5	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized during the first 1000 crankshaft revolutions following the start.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EF4	12020	Combustion misfiring, cylinder 6: Fuel injection deactivation	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0306	Cylinder 6 Misfire Detected	Misfire	Cyl 6	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events are recognized within 200 crankshaft revolutions.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced engine power		Breakdown notice: The engine reverts to its limp-home program, continued vehicle operation is possible but drivability is restricted, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x2EF5	12021	Combustion misfiring, cylinder 6: damaging exhaust gas	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0306	Cylinder 6 Misfire Detected	Misfire	Cyl 6	The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized within 1000 crankshaft revolutions.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None

MEVD17.2-BN2000	0x2EF6	12022	Combustion misfiring, cylinder 6: damaging exhaust gas after start sequence	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0306	Cylinder 6 Misfire Detected	Misfire	Cyl 6	the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders. Potential problem source(s): - Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	The diagnostic fault code is logged when a specific number of combustion miss events, with their negative effects on exhaust emissions, are recognized during the first 1000 crankshaft revolutions following the start.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	- None	Y	- Defect in mixture formation - Defect in ignition system - Mechanical defect - Defective DME	- Because this is a secondary fault, start by repairing the primary faults	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Combustion miss may be noticed.		Breakdown notice: None	None
MEVD17.2-BN2000	0x2EFE	12030			P0300	Random/Multiple Cylinder Misfire Detected	Misfire	Multiple																	
MEVD17.2-BN2000	0x2EFF	12031			P0301	Cylinder 1 Misfire Detected	Misfire	Cyl 1																	
MEVD17.2-BN2000	0x2F00	12032			P0302	Cylinder 2 Misfire Detected	Misfire	Cyl 2																	
MEVD17.2-BN2000	0x2F01	12033			P0303	Cylinder 3 Misfire Detected	Misfire	Cyl 3																	
MEVD17.2-BN2000	0x2F02	12034			P0304	Cylinder 4 Misfire Detected	Misfire	Cyl 4																	
MEVD17.2-BN2000	0x2F03	12035			P0305	Cylinder 5 Misfire Detected	Misfire	Cyl 5																	
MEVD17.2-BN2000	0x2F04	12036			P0306	Cylinder 6 Misfire Detected	Misfire	Cyl 6																	
MEVD17.2-BN2000	0x2F44	12100	Ignition circuit, supply voltage: Bank or engine failure	The diagnostic function simultaneously monitors the spark duration in all cylinders.					The fault is recognized when the spark duration is too short in all cylinders at once. Potential problem source(s): - Defect in central voltage supply	If the fault ?, then it is logged.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defect in central voltage supply	- Check power supply of ignition coils	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Ignition failure encompassing all cylinders, fault detected when all combustion durations = 0 ms,	Possible apparent symptoms: Motor does not run		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F45	12101	Irregular operation, single cylinder filling: Torque contribution too low	The diagnostic function monitors the ?					The fault is recognized when ? Potential problem source(s): - ? - ?	If the fault ?, then it is logged.	none	Voltage condition: 0 Temperature condition: 0 Time condition: 0 Other conditions: 0	0	0	0	0	0	- ? - ?	- ? - ?	- ECE emissions warning lamp: off - US emissions warning lamp: off - ECE electronic engine power reduction: off - US electronic engine power reduction: off - CC message: none MY11: No	0	Possible apparent symptoms: Customer perception in prose at this juncture		Breakdown notice: 0	0
MEVD17.2-BN2000	0x2F76	12150	Super-knocking, cylinder 1: Injection switch-off	The diagnostic function responds to extreme combustion knock by deactivating the injection at the 1st cylinder.	P13A0	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 1			a high number of intense knock events is detected during engine operation in the upper end of the load range. Potential problem source(s): - Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on, in upper load range	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or intake passages	- If the diagnostic fault code has been logged once, clear the ECU fault memory - If the fault has been logged multiple times, check the spark plug, injector and ignition coil on the cylinder	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs poorly with power loss		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F77	12151	Super-knocking, cylinder 2: Injection switch-off	The diagnostic function responds to extreme combustion knock by deactivating the injection at the 2nd cylinder.	P13A1	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2			a high number of intense knock events is detected during engine operation in the upper end of the load range. Potential problem source(s): - Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on, in upper load range	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or intake passages	- If the diagnostic fault code has been logged once, clear the ECU fault memory - If the diagnostic fault code has been logged multiple times, check the injector and ignition coil at cylinder 2	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs poorly with power loss		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F78	12152	Super-knocking, cylinder 3: Injection switch-off	The diagnostic function responds to extreme combustion knock by deactivating the injection at the 3rd cylinder.	P13A2	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 3			a high number of intense knock events is detected during engine operation in the upper end of the load range. Potential problem source(s): - Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on, in upper load range	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or intake passages	- If the diagnostic fault code has been logged once, clear the ECU fault memory - If the fault has been logged multiple times, check the spark plug, injector and ignition coil on the cylinder	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs poorly with power loss		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F79	12153	Super-knocking, cylinder 4: Injection switch-off	The diagnostic function responds to extreme combustion knock by deactivating the injection at the 4th cylinder.	P13A3	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4			a high number of intense knock events is detected during engine operation in the upper end of the load range. Potential problem source(s): - Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on, in upper load range	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or intake passages	- If the diagnostic fault code has been logged once, clear the ECU fault memory - If the diagnostic fault code has been logged multiple times, check the injector and ignition coil at cylinder 4	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs poorly with power loss		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F7A	12154	Super-knocking, cylinder 5: Injection switch-off	The diagnostic function responds to extreme combustion knock by deactivating the injection at the 5th cylinder.	P13A4	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 5			a high number of intense knock events is detected during engine operation in the upper end of the load range. Potential problem source(s): - Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on, in upper load range	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or intake passages	- If the diagnostic fault code has been logged once, clear the ECU fault memory - If the fault has been logged multiple times, check the spark plug, injector and ignition coil on the cylinder	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs poorly with power loss		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F7B	12155	Super-knocking, cylinder 6: Injection switch-off	The diagnostic function responds to extreme combustion knock by deactivating the injection at the 6th cylinder.	P13A5	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 6			a high number of intense knock events is detected during engine operation in the upper end of the load range. Potential problem source(s): - Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on, in upper load range	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or intake passages	- If the diagnostic fault code has been logged once, clear the ECU fault memory - If the fault has been logged multiple times, check the spark plug, injector and ignition coil on the cylinder	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs poorly with power loss		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F7C	12156	Super knocking: Injection switch-off	The diagnostic function responds to extreme combustion knock by deactivating the injection.	P137F	Knock Control Fuel Cut-Off due to Super Knocking	Knock Control System	Super Knocking	a high number of intense knock events is detected during engine operation in the upper end of the load range. Potential problem source(s): - Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on, in upper load range	- Engine warmed to normal temperature, more than 80°C	- None	NO	none	Y	- Misuse, terminal status switch during vehicle operation - Temporary contamination in combustion chamber or intake passages	- If the diagnostic fault code has been logged once, clear the ECU fault memory - If the fault has been logged multiple times, check the spark plug, injector and ignition coil on the cylinder	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Engine runs poorly with power loss		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F83	12163	Ignition timing adjustment in idle, cold start Ignition timing too early	The diagnostic function monitors the ignition angle while the catalytic converter is being heated.	P050B	Cold Start Ignition Timing Performance	Ignition Timing	Cold Start	The fault is recognized when the ignition-angle adjustment is outside the tolerance range. Potential problem source(s): - Poor fuel quality	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine on Other conditions: - Engine on and running at idle - Catalyst heating (always	- None	- 5 sec. after engine on	None	None	Y	- Poor fuel quality	- Replace fuel	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only, fault based on legislative requirement, probably will never occur	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2F84	12164	Ignition timing adjustment at partial load, cold start: Ignition timing too early	The diagnostic function monitors the ignition angle while the catalytic converter is being heated.	P13EA	Cold Start Ignition Timing Performance Off Idle	Ignition Timing	Cold Start	The fault is recognized when the ignition-angle adjustment is outside the tolerance range. Potential problem source(s): - Poor fuel quality	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after engine on Other conditions: - Engine on and running at idle - Catalyst heating (always	- None	- 5 sec. after engine on	None	None	Y	- Poor fuel quality	- Replace fuel	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only, fault based on legislative requirement, probably will never occur	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x2F8A	12170	Ignition, voltage supply: Short circuit to B+	The diagnostic function monitors the power-supply wire providing voltage to the individual ignition coils from the overload-protection relay for ignition and injection, checking for open wires and shorts to ground.					voltage is present at the DME input (E_U_IGN) although the overload-protection relay for ignition and injection has switched off. Potential problem source(s): - Wiring harness between DME and overload-protection relay for ignition and injection is defective - Defect in overload-	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 5 sec. after deactivation of overload-protection relay for ignition and injection Other conditions: - Shutdown phase (Terminal 87)	- None	- 5 sec. after deactivation of overload-protection relay for ignition and injection	NO	U	N	- Wiring harness between DME and overload-protection relay for ignition and injection is defective - Defect in overload-protection relay for ignition and injection - Defective DME	- Inspect wiring harness between overload-protection relay for ignition and injection, and DME - Replace overload-protection relay for ignition and injection - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2F8B	12171	Ignition, voltage supply: Line disconnection or short circuit to earth	The diagnostic function monitors the power-supply wire providing voltage to the individual ignition coils from the overload-protection relay for ignition and injection, checking for open wires and shorts to ground.					no voltage is present at the DME input (E_U_IGN) although the overload-protection relay for ignition and injection has switched on. Potential problem source(s): - Fuse defective - Defect in wiring harness between overload-protection relay for ignition and injection, and DME - Defect in overload-protection relay for ignition	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U	N	- Fuse defective - Defect in wiring harness between overload-protection relay for ignition and injection, and DME - Defect in overload-protection relay for ignition and injection - Defective DME	- Check fuse - Inspect wiring harness between overload-protection relay for ignition and injection, and DME - Replace overload-protection relay for ignition and injection - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Non-starter		Breakdown notice: None	None
MEVD17.2-BN2000	0x2FA8	12200	Combustion miss, cylinder 1: Spark duration too short	The diagnostic function monitors the spark duration.					the spark duration is below a value stored in the program map. Potential problem source(s): - Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil	The diagnostic fault code is logged when the fault counter total is above 320.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil - Defective DME	- Replace spark plug - Check wiring harness between ignition coil and DME - Check ignition coil - Replace DME if the fault code remains logged continuously	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Ignition miss and hard starting can occur.		Breakdown notice: Continued driving possible if only the one cylinder is affected. The ignition miss detection should recognize the affected cylinder and deactivate the injection to protect the catalytic converter.	None
MEVD17.2-BN2000	0x2FA9	12201	Combustion miss, cylinder 2: Spark duration too short	The diagnostic function monitors the spark duration.					the spark duration is below a value stored in the program map. Potential problem source(s): - Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil	The diagnostic fault code is logged when the fault counter total is above 320.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	none	none	N	- Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil - Defective DME	- Replace spark plug - Check wiring harness between ignition coil and DME - Check ignition coil - Replace DME if the fault code remains logged continuously	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Ignition miss and hard starting can occur.		Breakdown notice: Continued driving possible if only the one cylinder is affected. The ignition miss detection should recognize the affected cylinder and deactivate the injection to protect the catalytic converter.	None
MEVD17.2-BN2000	0x2FAA	12202	Combustion misfiring, cylinder 3: Spark duration too short	The diagnostic function monitors the spark duration.					the spark duration is below a value stored in the program map. Potential problem source(s): - Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil	The diagnostic fault code is logged when the fault counter total is above 320.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil - Defective DME	- Replace spark plug - Check wiring harness between ignition coil and DME - Check ignition coil - Replace DME if the fault code remains logged continuously	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Ignition miss and hard starting can occur.		Breakdown notice: Continued driving possible if only the one cylinder is affected. The ignition miss detection should recognize the affected cylinder and deactivate the injection to protect the catalytic converter.	None
MEVD17.2-BN2000	0x2FAB	12203	Combustion miss, cylinder 4: Spark duration too short	The diagnostic function monitors the spark duration.					the spark duration is below a value stored in the program map. Potential problem source(s): - Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil	The diagnostic fault code is logged when the fault counter total is above 320.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	none	none	N	- Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil - Defective DME	- Replace spark plug - Check wiring harness between ignition coil and DME - Check ignition coil - Replace DME if the fault code remains logged continuously	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Ignition miss and hard starting can occur.		Breakdown notice: Continued driving possible if only the one cylinder is affected. The ignition miss detection should recognize the affected cylinder and deactivate the injection to protect the catalytic converter.	None
MEVD17.2-BN2000	0x2FAC	12204	Combustion miss, cylinder 5: Spark duration too short	The diagnostic function monitors the spark duration.					the spark duration is below a value stored in the program map. Potential problem source(s): - Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil	The diagnostic fault code is logged when the fault counter total is above 320.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil - Defective DME	- Replace spark plug - Check wiring harness between ignition coil and DME - Check ignition coil - Replace DME if the fault code remains logged continuously	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Ignition miss and hard starting can occur.		Breakdown notice: Continued driving possible if only the one cylinder is affected. The ignition miss detection should recognize the affected cylinder and deactivate the injection to protect the catalytic converter.	None

MEVD17.2-BN2000	0x2FAD	12205	Combustion misfiring, cylinder 6: Spark duration too short	The diagnostic function monitors the spark duration.					the spark duration is below a value stored in the program map. Potential problem source(s): - Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil	The diagnostic fault code is logged when the fault counter total is above 320.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective spark plug - Defect in wiring harness between ignition coil and DME - Defective ignition coil - Defective DME	- Replace spark plug - Check wiring harness between ignition coil and DME - Check ignition coil - Replace DME if the fault code remains logged continuously	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Ignition miss and hard starting can occur.		Breakdown notice: Continued driving possible if only the one cylinder is affected. The ignition miss detection should recognize the affected cylinder and deactivate the injection to protect the catalytic converter.	None
MEVD17.2-BN2000	0x2FDA	12250	Crankshaft sensor, signal: missing	The diagnostic function monitors the crankshaft sensor.	P0335	Crankshaft Position Sensor 'A' Circuit	Crankshaft Position Sensor	Electrical	no crankshaft position sensor signal is detected, although a signal from the camshaft position sensor is present. Potential problem source(s): - Defect in wiring harness between DME and crankshaft sensor	No signal for camshaft revolutions	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Terminal 50 (starter) or, - engine on, with engine	- None	- None	NO	NO	N	- Defect in wiring harness between DME and crankshaft sensor - Crankshaft sensor defective	- Check wiring harness between DME and crankshaft sensor - Replace crankshaft sensor	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: When the fault is logged the engine stalls at idle, at higher engine speeds a brief drop in rpm can be felt / It is possible to restart engine when the fault is present (starting takes longer), engine runs in limp-home mode		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x2FDB	12251	Crankshaft sensor: Disturbed crankshaft signal	The diagnostic function monitors the crankshaft sensor.	P0336	Crankshaft Position Sensor 'A' Circuit Range/Performance	Crankshaft Position Sensor	Plausibility	an interference factor affecting the crankshaft sensor signal is detected. Potential problem source(s): - Defect in wiring harness between DME and crankshaft sensor - Oscillation in reluctor ring (for instance, when starter engages) - Reluctor ring contaminated or defective	Malfunctions	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Terminal 50 (starter) or, - engine on, with engine speed > 500 rpm	- None	- None	NO	NO	Y	- Defect in wiring harness between DME and crankshaft sensor - Oscillation in reluctor ring (for instance, when starter engages) - Reluctor ring contaminated or defective - Crankshaft sensor defective	- Check wiring harness between DME and crankshaft sensor - Inspect installation of crankshaft sensor - Clean or replace reluctor ring - Replace crankshaft sensor	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: When the fault is logged the engine stalls at idle, at higher engine speeds a brief drop in rpm can be felt / It is possible to restart engine when the fault is present (starting takes longer), engine runs in limp-home mode		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x2FDD	12253	Crankshaft sensor, parked position: Implausible	The diagnostic function monitors the crankshaft sensor.	P13CE	Crankshaft Parking Position Implausible	Crankshaft	Parking Position	the engine is synchronized using a secure initial position during starting (supply to sensor was permanent - MSA) Potential problem source(s): - Defect in wiring harness between DME and crankshaft sensor - Oscillation in reluctor ring (for instance, when starter engages)	If the reference mark was incorrect by during the MSA automatic engine start/stop.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on with MSA start	- None	- None	NO	NO	N	- Defect in wiring harness between DME and crankshaft sensor - Oscillation in reluctor ring (for instance, when starter engages) - Defective reluctor ring - Crankshaft sensor defective	- Check wiring harness between DME and crankshaft sensor - Inspect installation of crankshaft sensor - Replace crankshaft sensor	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Extended starting times		Breakdown notice: None	None
MEVD17.2-BN2000	0x300C	12300	Intake camshaft sensor: Signal high	The diagnostic function monitors the intake camshaft position sensor.	P0343	Camshaft Position Sensor 'A' Circuit High (Bank 1 or Single Sensor)	Camshaft Position Sensor	Intake Electrical	The fault is recognized when the engine is turning over and no fault related to the crankshaft sensor is present. Potential problem source(s): - Defect in wiring harness between DME and camshaft position sensor or crankshaft sensor.	1 Camshaft rotates but no signal from camshaft reluctor	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor or crankshaft sensor.	- Check wiring harness between DME and camshaft position sensor - Camshaft sensor defective	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: Extended starting times and power loss, if it appears in combination with an exhaust camshaft sensor fault then no restart is possible		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x300D	12301	Intake camshaft sensor: Signal low	The diagnostic function monitors the intake camshaft position sensor.	P0342	Camshaft Position Sensor 'A' Circuit Low (Bank 1 or Single Sensor)	Camshaft Position Sensor	Intake Electrical	The fault is recognized when the engine is turning over and no fault related to the crankshaft sensor is present. Potential problem source(s): - Defect in wiring harness between DME and camshaft position sensor or crankshaft sensor.	1 Camshaft rotates but no signal from camshaft reluctor	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor or crankshaft sensor.	- Check wiring harness between DME and camshaft position sensor - Camshaft sensor defective	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: Extended starting times and power loss, if it appears in combination with an exhaust camshaft sensor fault then no restart is possible		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x300E	12302	Exhaust camshaft sensor: Signal high	The diagnostic function monitors the exhaust camshaft position sensor.	P0368	Camshaft Position Sensor 'B' Circuit High (Bank 1)	Camshaft Position Sensor	Exhaust Electrical	The fault is recognized when the engine is turning over and no fault related to the crankshaft sensor is present. Potential problem source(s): - Defect in wiring harness between DME and camshaft position sensor or crankshaft sensor.	1 Camshaft rotates but no signal from camshaft reluctor	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor or crankshaft sensor.	- Check wiring harness between DME and camshaft position sensor - Camshaft sensor defective	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: Extended starting times and power loss, if it appears in combination with an intake camshaft sensor fault then no restart is possible		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x300F	12303	Exhaust camshaft sensor: Signal low	The diagnostic function monitors the exhaust camshaft position sensor.	P0367	Camshaft Position Sensor 'B' Circuit Low (Bank 1)	Camshaft Position Sensor	Exhaust Electrical	The fault is recognized when the engine is turning over and no fault related to the crankshaft sensor is present. Potential problem source(s): - Defect in wiring harness between DME and camshaft position sensor or crankshaft sensor.	1 Camshaft rotates but no signal from camshaft reluctor	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor or crankshaft sensor.	- Check wiring harness between DME and camshaft position sensor - Camshaft sensor defective	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: Extended starting times and power loss, if it appears in combination with an intake camshaft sensor fault then no restart is possible		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x3011	12305	Intake camshaft, mechanics: Assembly faulty	The diagnostic function monitors the installation position of the intake camshaft.	P13CA	'A' Camshaft Incorrect Assembly	Camshaft	Intake Incorrect Assembly	The fault is recognized when the camshaft sensor reluctor rings run through the adaptation routine during initial start or following programming. Potential problem source(s): - Incorrect installation of intake camshaft	When assembly test is performed.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	N	- Incorrect installation of intake camshaft	- Install intake camshaft correctly - Adjust valve timing	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: None		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x3012	12306	Exhaust camshaft, mechanical: Assembly faulty	The diagnostic function monitors the installation position of the exhaust camshaft.	P13CB	'B' Camshaft Incorrect Assembly	Camshaft	Exhaust Incorrect Assembly	The fault is recognized when the camshaft sensor reluctor rings run through the adaptation routine during initial start or following programming. Potential problem source(s): - Incorrect installation of exhaust camshaft	When assembly test is performed.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	NO	N	- Incorrect installation of exhaust camshaft	- Install exhaust camshaft correctly - Adjust valve timing	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	Fault leads to ATLCTLmax (FC Text L6/L4: ?Boost-pressure control, deactivation: Boost-pressure generation disabled?; FC (Dec./Hex) L6: 1180680 / 0x120408; FC (Dec./Hex) L4: 11352 / 0x2C58)	Possible apparent symptoms: None		Breakdown notice: The engine reverts to its emergency limp-home program, continued vehicle operation is possible, because power is reduced the driver should refrain from passing maneuvers.	None
MEVD17.2-BN2000	0x303E	12350	Knock control, fault check: Malfunction, system fault	The diagnostic function monitors the quality of the signals from the knock sensors.	P0324	Knock/Combustion Vibration Control System Error	Knock Control System	General	The fault is recognized when the signal from the knock sensors is outside the measurement range. Potential problem source(s): - Signal-processing error, incorrect measurement range - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Signal-processing error, incorrect measurement range - Defective wiring harness - Knock sensor defective	- If faults related to the knock sensors have been logged, repair these first - Check wiring harness between knock sensor and DME - Replace knock sensor	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Engine runs poorly with power loss		Breakdown notice: None	None
MEVD17.2-BN2000	0x303F	12351	Knock sensor, electrical: Signal, input A, short circuit to positive	The diagnostic function monitors the sensor wire for short circuits.	P13AF	Knock Sensor 1 Circuit 'A' High (Bank 1)	Knock Sensor	Sensor 1	The fault is logged in the ECU fault memory when the knock sensor's signal voltage is above 1 V. Potential problem source(s): - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Knock sensor defective	- Check wiring harness between knock sensor and DME - Replace knock sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3040	12352	Knock sensor, electrical: Signal, input A, short circuit to ground	The diagnostic function monitors the sensor wire for short circuits.	P13AE	Knock Sensor 1 Circuit 'A' Low (Bank 1)	Knock Sensor	Sensor 1	The fault is logged in the ECU fault memory when the knock sensor's signal voltage is below -0.7 V. Potential problem source(s): - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Knock sensor defective	- Check wiring harness between knock sensor and DME - Replace knock sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3041	12353	Knock sensor, electrical: Signal, input B, short circuit to positive	The diagnostic function monitors the sensor wire for short circuits.	P13B9	Knock Sensor 1 Circuit 'B' High (Bank 1)	Knock Sensor	Sensor 1	The fault is logged in the ECU fault memory when the knock sensor's signal voltage is above 1 V. Potential problem source(s): - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Knock sensor defective	- Check wiring harness between knock sensor and DME - Replace knock sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3042	12354	Knock sensor, electrical: Signal, input B, short circuit to ground	The diagnostic function monitors the sensor wire for short circuits.	P13B8	Knock Sensor 1 Circuit 'B' Low (Bank 1)	Knock Sensor	Sensor 1	The fault is logged in the ECU fault memory when the knock sensor's signal voltage is below -0.7 V. Potential problem source(s): - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Knock sensor defective	- Check wiring harness between knock sensor and DME - Replace knock sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3043	12355	Knock sensor 2, electrical: Signal, input A, short circuit to positive	The diagnostic function monitors the sensor wire for short circuits.	P13BF	Knock Sensor 2 Circuit 'A' High (Bank 1)	Knock Sensor	Sensor 2	The fault is logged in the ECU fault memory when the knock sensor's signal voltage is above 1 V. Potential problem source(s): - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Knock sensor defective	- Check wiring harness between knock sensor and DME - Replace knock sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3044	12356	Knock sensor 2, electrical: Signal, input A, short circuit to ground	The diagnostic function monitors the sensor wire for short circuits.	P13BE	Knock Sensor 2 Circuit 'A' Low (Bank 1)	Knock Sensor	Sensor 2	The fault is logged in the ECU fault memory when the knock sensor's signal voltage is below -0.7 V. Potential problem source(s): - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Knock sensor defective	- Check wiring harness between knock sensor and DME - Replace knock sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3045	12357	Knock sensor 2, electrical: Signal, input B, short circuit to positive	The diagnostic function monitors the sensor wire for short circuits.	P13C8	Knock Sensor 2 Circuit 'B' High (Bank 1)	Knock Sensor	Sensor 2	The fault is logged in the ECU fault memory when the knock sensor's signal voltage is above 1 V. Potential problem source(s): - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Knock sensor defective	- Check wiring harness between knock sensor and DME - Replace knock sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3046	12358	Knock sensor 2, electrical: Signal, input B, short circuit to ground	The diagnostic function monitors the sensor wire for short circuits.	P13C7	Knock Sensor 2 Circuit 'B' Low (Bank 1)	Knock Sensor	Sensor 2	The fault is logged in the ECU fault memory when the knock sensor's signal voltage is below -0.7 V. Potential problem source(s): - Defective wiring harness - Knock sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Defective wiring harness - Knock sensor defective	- Check wiring harness between knock sensor and DME - Replace knock sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3048	12360	Knock sensor, signal: Engine mechanically too loud or KS outside tolerance (sensitivity)	The diagnostic function monitors the engine's noise level.	P0328	Knock/Combustion Vibration Sensor 1 Circuit High (Bank 1 or Single Sensor)	Knock Sensor	Sensor 1	The fault is logged in the ECU fault memory when the reference level is too high relative to the program map. Potential problem source(s): - Knock sensor is defective or installed incorrectly - Engine too loud owing to mechanical defect - Low-quality fuel < RON 91	Debounce via event counter	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Engine speed above 1600 rpm - Relative charge factor above 30%	- Engine warmed to normal temperature, more than 80°C	- None	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Knock sensor is defective or installed incorrectly - Engine too loud owing to mechanical defect - Low-quality fuel < RON 91	- Check installation torque and installation position of sensor - Check wiring harness - Check engine for mechanical defects (chain, crankshaft assembly) - Refuel with RON 95 or higher - Replace knock sensor	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3049	12361	Knock sensor, signal: Electrical fault KS (loose contact) or KS loose	The diagnostic function monitors the knock sensor's electrical signal.	P0327	Knock/Combustion Vibration Sensor 1 Circuit Low (Bank 1 or Single Sensor)	Knock Sensor	Sensor 1	The fault is logged in the ECU fault memory when the reference level is too low relative to the program map. Potential problem source(s): - Knock sensor is defective or installed incorrectly - Wiring harness defective	Debounce via event counter	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Engine speed above 2000 rpm - Relative charge factor: >	- Engine warmed to normal temperature, more than 80°C	- None	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Knock sensor is defective or installed incorrectly - Wiring harness defective	- Check installation torque and installation position of sensor - Check wiring harness - Check engine for mechanical defects (chain, crankshaft assembly) - Refuel with RON 95 or higher - Replace knock sensor	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None

MEVD17.2-BN2000	0x304C	12364	Knock sensor 2, signal: Engine mechanically too loud or KS outside tolerance (sensitivity)	The diagnostic function monitors the engine's noise level.	P1328	Knock/Combustion Vibration Sensor 2 Circuit High (Bank 1)	Knock Sensor	Sensor 2	The fault is logged in the ECU fault memory when the reference level is too high relative to the program map. Potential problem source(s): - Knock sensor is defective or installed incorrectly - Engine too loud owing to mechanical defect - Low-quality fuel < RON 91	Debounce via event counter	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Engine speed above 1600 rpm - Relative charge factor above 30%	- Engine warmed to normal temperature, more than 80°C	- None	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Knock sensor is defective or installed incorrectly - Engine too loud owing to mechanical defect - Low-quality fuel < RON 91	- Check installation torque and installation position of sensor - Check wiring harness - Check engine for mechanical defects (chain, crankshaft assembly) - Refuel with RON 95 or higher - Replace knock sensor	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x304D	12365	Knock sensor 2, signal: Electrical fault KS (loose contact) or KS loose	The diagnostic function monitors the knock sensor's electrical signal.	P1327	Knock/Combustion Vibration Sensor 2 Circuit Low (Bank 1)	Knock Sensor	Sensor 2	The fault is logged in the ECU fault memory when the reference level is too low relative to the program map. Potential problem source(s): - Knock sensor is defective or installed incorrectly - Wiring harness defective	Debounce via event counter	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on - Engine speed above 2000 rpm - Relative charge factor: >	- Engine warmed to normal temperature, more than 80°C	- None	NO	0x5A37 0x5A38 0x5A39 0x581E	N	- Knock sensor is defective or installed incorrectly - Wiring harness defective	- Check installation torque and installation position of sensor - Check wiring harness - Check engine for mechanical defects (chain, crankshaft assembly) - Refuel with RON 95 or higher - Replace knock sensor	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Possible reduction in power		Breakdown notice: None	None
MEVD17.2-BN2000	0x3106	12550	Catalytic converter: Efficiency below limit	The diagnostic function monitors the ability of the catalytic converter to store oxygen.	P0420	Catalyst System Efficiency Below Threshold (Bank 1)	Catalyst	Efficiency	the catalytic converter loses the ability to store sufficient levels of oxygen. Potential problem source(s): - Collateral fault stemming from defective oxygen sensor or mixture adaptation fault - Leak in exhaust system	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	STEUERN_DKAT, STEUERN_ENDE_DKAT, STATUS_DKAT	none	Y	- Collateral fault stemming from defective oxygen sensor or mixture adaptation fault - Leak in exhaust system - Catalytic converter defective	- If faults related to the oxygen sensor or mixture adaptation have been logged, repair these first (collateral fault) - Check exhaust system for leaks - If the fault is continuously present or has multiple log entries respond by replacing the catalytic converter	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x3155	12629	Tank vent valve, activation: Short circuit to B+	The diagnostic function monitors the control wire to the EVAP valve for short circuits to positive.	P0459	Evaporative Emission System Purge Control Valve 'A' Circuit High	EVAP System	Valve	the driver circuit diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and EVAP evaporative emissions valve - Defect in evaporative emissions valve - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_TEV, STEUERN_ENDE_TEV	PWM activation signal, 0x4a77	N	- Defect in wiring harness between DME and EVAP evaporative emissions valve - Defect in evaporative emissions valve - Defective DME	- Check wiring harness between evaporative emissions valve and DME - Replace EVAP evaporative emissions valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL on, customer proceeds to service facility		Breakdown notice: None	None
MEVD17.2-BN2000	0x3156	12630	Tank vent valve, activation: Short circuit to earth	The diagnostic function monitors the control wire to the EVAP valve for short circuits to ground.	P0458	Evaporative Emission System Purge Control Valve 'A' Circuit Low	EVAP System	Valve	the driver circuit diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and EVAP evaporative emissions valve - Defect in evaporative emissions valve - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_TEV, STEUERN_ENDE_TEV	PWM activation signal, 0x4a77	N	- Defect in wiring harness between DME and EVAP evaporative emissions valve - Defect in evaporative emissions valve - Defective DME	- Check wiring harness between evaporative emissions valve and DME - Replace EVAP evaporative emissions valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL on, customer proceeds to service facility		Breakdown notice: None	None
MEVD17.2-BN2000	0x3157	12631	Tank vent valve, activation: Line disconnection	The diagnostic function monitors the control wire to the EVAP valve for an open circuit.	P0444	Evaporative Emission System Purge Control Valve 'A' Circuit Open	EVAP System	Valve	the driver circuit diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and EVAP evaporative emissions valve - Defect in evaporative emissions valve - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_TEV, STEUERN_ENDE_TEV	PWM activation signal, 0x4a77	N	- Defect in wiring harness between DME and EVAP evaporative emissions valve - Defect in evaporative emissions valve - Defective DME	- Check wiring harness between evaporative emissions valve and DME - Replace EVAP evaporative emissions valve - Replace DME	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL on, customer proceeds to service facility		Breakdown notice: None	None
MEVD17.2-BN2000	0x315A	12634	Fuel tank vent valve: jammed open	The diagnostic function monitors the flow through the fuel tank's EVAP vent line.	P2421	Evaporative Emission System Vent Valve Stuck Open	EVAP System	Valve	there is no drop in the current consumed by the leakage diagnosis pump. Potential problem source(s): - EVAP evaporative emissions valve seizes in closed position - Obstruction in path between intake manifold and tank	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	START_SYSTEMCHECK_TEV	none	N	- EVAP evaporative emissions valve seizes in closed position - Obstruction in path between intake manifold and tank	- Replace EVAP evaporative emissions valve - Check flow in lines between intake manifold and tank	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	new for I-11-03-300	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3160	12640	Tank safety valve shut-off valve, activation: Short circuit to B+	The diagnostic function monitors electrical activation of the tank cutoff valve.	P149C	Evaporative Emission System Shutoff Valve 2 Control Circuit High	EVAP System	Shutoff Valve 2	The fault is recognized when the diagnostic fault code for the sensor is logged on the PT CAN (OBD services message) from the TFE1 ECU (ECU for tank's electronic functions). Potential problem source(s): - Global LIN bus fault 'LIN bus communications: signal missing' (InmLINBusBlk; 0x3B97) - Defective fuse - Defect in the LIN bus wire, ground wire or Terminal 30 wire (open wire, short to ground, short to UBatt) - Corrosion on plug	This fault is logged in the ECU fault memory if it remains present for longer than 45 sec.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Global LIN bus fault 'LIN bus communications: signal missing' (InmLINBusBlk; 0x3B97) - Defective fuse - Defect in the LIN bus wire, ground wire or Terminal 30 wire (open wire, short to ground, short to UBatt) - Corrosion on plug - Electric water pump component fault	- If diagnostic fault code 'LIN bus communications: signal missing' (InmLINBusBlk; 0x3B97) is logged, start by repairing this problem, then clear the ECU fault memory, switch on the ignition, then wait at least 1 minute before checking to determine whether the fault has been logged again - Check pump plug (also for corrosion) - Check power-supply voltage to Terminal 30 / Terminal 31 - If no voltage is present, check the fuse - If the fuse is defective, replace it and check power supply for short and open circuits - Check the LIN wire for opens and shorts to UBatt and ground - Perform tester job, if not successful: Replace EWP electric water pump	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL comes on		Breakdown notice: None	None
MEVD17.2-BN2000	0x3161	12641	Tank safety valve shut-off valve, activation: Short circuit to earth	The diagnostic function monitors electrical activation of the tank cutoff valve.	P149B	Evaporative Emission System Shutoff Valve 2 Control Circuit Low	EVAP System	Shutoff Valve 2	the diagnostic fault code for the sensor is logged on the PT CAN (OBD services message) from the TFE1 ECU (ECU for tank electronic functions). Potential problem source(s): - Defective wiring harness - Tank cutoff valve	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Tank cutoff valve defective	- Check wiring harness at TFE1 ECU and tank cutoff valve - Replace tank cutoff valve	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL comes on		Breakdown notice: None	None
MEVD17.2-BN2000	0x3162	12642	Tank safety valve shut-off valve, activation: Line disconnection	The diagnostic function monitors electrical activation of the tank cutoff valve.	P149A	Evaporative Emission System Shutoff Valve 2 Control Circuit	EVAP System	Shutoff Valve 2	the diagnostic fault code for the sensor is logged on the PT CAN (OBD services message) from the TFE1 ECU (ECU for tank electronic functions). Potential problem source(s): - Defective wiring harness - Tank cutoff valve	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defective wiring harness - Tank cutoff valve defective	- Check wiring harness at TFE1 ECU and tank cutoff valve - Replace tank cutoff valve	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: MIL comes on		Breakdown notice: None	None
MEVD17.2-BN2000	0x3163	12643	Tank safety valve shut-off valve: jammed open		P149D	Evaporative Emission System Shutoff Valve 2 Stuck Off	EVAP System	Shutoff Valve 2	Potential problem source(s): - none	If the fault ?, then it is logged.	none	Voltage condition: Temperature condition: Time condition: Other conditions:				- None		- None	- None	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	new for I-10-03-450, diagnosis is currently in preparation.	Possible apparent symptoms: Customer perception in prose at this juncture		Breakdown notice:	
MEVD17.2-BN2000	0x3164	12644	Tank safety valve: malfunction	Open	P0440	Evaporative Emission System	EVAP System	Flow Check	The fault is recognized when ? Potential problem source(s): - ? - ?	If the fault ?, then it is logged.	none	Voltage condition: Temperature condition: Time condition: Other conditions:				- None		- ? - ?	- ? - ?	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	new for I-10-03-450, diagnosis is currently in preparation.	Possible apparent symptoms: Customer perception in prose at this juncture		Breakdown notice:	
MEVD17.2-BN2000	0x3166	12646	Tank safety valve: malfunction	The diagnostic function monitors the flow through the fuel tank's EVAP vent line.	P0440	Evaporative Emission System	EVAP System	Flow Check	there is no drop in the current consumed by the leakage diagnosis pump. Potential problem source(s): - Tank EVAP evaporative emissions valve sticks in closed position - Obstruction in line between tank and intake manifold	The diagnostic fault code is logged once the fault appears four times.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	START_SYSTEMCHECK_TEV	none	N	- Tank evaporative emissions valve seizes in closed position - Obstruction in line between tank and intake manifold	- Replace EVAP evaporative emissions valve - Check flow in line between intake manifold and tank and replace as indicated	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Data content defined	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3183	12675	Fuel level sensor, right, signal: Short circuit to B+	The diagnostic function monitors the tank fuel-level sensor for a valid output signal within specified limits. The fault is first stored in the junction box electronics and then relayed to the DME.	P2068	Fuel Level Sensor 'B' Circuit High	Fuel Level Sensor	Electrical	The fault is recognized when the output signal from the tank fuel-level sensor exceeds a specified level. Potential problem source(s): - Open electrical circuit to fuel-level sensor on right (looking toward front)	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	Yes + JBBFE raw values for tank fuel level	none	N	- Open electrical circuit to fuel-level sensor on right (looking toward front)	- Read out and work through diagnostic fault codes in instrument cluster and in junction box	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible problem with fuel gauge display in I-cluster		Breakdown notice: None	With the JPE Terminal 15 is adequate to trigger entry of a fault code, with the DME the engine must also be running.
MEVD17.2-BN2000	0x3184	12676	Fuel level sensor, right, signal: Short circuit to earth	The diagnostic function monitors the tank fuel-level sensor for a valid output signal within specified limits. The fault is first stored in the junction box electronics and then relayed to the DME.	P2067	Fuel Level Sensor 'B' Circuit Low	Fuel Level Sensor	Electrical	The fault is recognized when the output signal from the tank fuel-level sensor is below a specified level. Potential problem source(s): - Open electrical circuit to fuel-level sensor on right (looking toward front)	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	Yes + JBBFE raw values for tank fuel level	none	N	- Open electrical circuit to fuel-level sensor on right (looking toward front)	- Read out and work through diagnostic fault codes in instrument cluster and in junction box	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible problem with fuel gauge display in I-cluster		Breakdown notice: None	With the JPE Terminal 15 is adequate to trigger entry of a fault code, with the DME the engine must also be running.
MEVD17.2-BN2000	0x3185	12677	Fuel level sensor, right, signal: CAN value implausible	The diagnostic function monitors the message on the CAN bus to assess the plausibility of the fuel level indicated by the right-side fuel-level sensor.	P1408	Fuel Level Signal 2	Fuel Level Sensor	Signal	the right-side fuel-level sensor transmits correct data, but the processed fuel level is too high to be plausible. Potential problem source(s): - Problem with CAN communications between instrument cluster, junction	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Problem with CAN communications between instrument cluster, junction box and DME	- Read out and work through diagnostic fault codes in instrument cluster and in junction box	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible problem with fuel gauge display in I-cluster		Breakdown notice: Tank may be empty. Please refuel using fuel canister and proceed to nearest service station. Then proceed to BMW Service facility.	None
MEVD17.2-BN2000	0x3187	12679	Fuel level sensor, left, signal: Short circuit to B+	The diagnostic function monitors the tank fuel-level sensor for a valid output signal within specified limits. The fault is first stored in the junction box electronics and then relayed to the DME.	P0463	Fuel Level Sensor 'A' Circuit High	Fuel Level Sensor	Electrical	The fault is recognized when the output signal from the tank fuel-level sensor exceeds a specified level. Potential problem source(s): - Defective wiring harness - Tank fuel-level sensor on left (looking toward front) is defective	This fault is logged in the ECU fault memory if it remains present for longer than 3 sec.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	Yes + JBBFE raw values for tank fuel level	none	N	- Defective wiring harness - Tank fuel-level sensor on left (looking toward front) is defective	- Read out and work through diagnostic fault codes in instrument cluster and in junction box	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible problem with fuel gauge display in I-cluster		Breakdown notice: None	With the JPE Terminal 15 is adequate to trigger entry of a fault code, with the DME the engine must also be running.
MEVD17.2-BN2000	0x3188	12680	Fuel level sensor, left, signal: Short circuit to earth	The diagnostic function monitors the tank fuel-level sensor for a valid output signal within specified limits. The fault is first stored in the junction box electronics and then relayed to the DME.	P0462	Fuel Level Sensor 'A' Circuit Low	Fuel Level Sensor	Electrical	The fault is recognized when the output signal from the tank fuel-level sensor is below a specified level. Potential problem source(s): - Defective wiring harness - Tank fuel-level sensor on left (looking toward front) is defective	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	Yes + JBBFE raw values for tank fuel level	none	N	- Defective wiring harness - Tank fuel-level sensor on left (looking toward front) is defective	- Read out and work through diagnostic fault codes in instrument cluster and in junction box	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible problem with fuel gauge display in I-cluster		Breakdown notice: None	With the JPE Terminal 15 is adequate to trigger entry of a fault code, with the DME the engine must also be running.
MEVD17.2-BN2000	0x318A	12682	Fuel level sensor, left, signal: CAN value implausible	The diagnostic function monitors the message on the CAN bus to assess the plausibility of the fuel level indicated by the left-side fuel-level sensor.	P1407	Fuel Level Signal 1	Fuel Level Sensor	Signal	the left-side fuel-level sensor transmits correct data, but the processed fuel level is too high to be plausible. Potential problem source(s): - Problem with CAN communications between instrument cluster, junction box and DME	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Problem with CAN communications between instrument cluster, junction box and DME	- Read out and work through diagnostic fault codes in instrument cluster and in junction box	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Possible problem with fuel gauge display in I-cluster		Breakdown notice: Tank may be empty. Please refuel using fuel canister and proceed to nearest service station. Then proceed to BMW Service facility.	None
MEVD17.2-BN2000	0x318D	12685	Fuel level sensor: Deviation between consumption and fill-level change	The diagnostic function monitors the drop in the tank's fuel level and compares it to the quantity of fuel injected into the engine during the same period.	P144B	Fuel Level / Fuel Consumption Correlation	Fuel Level	Correlation	the tank content that the DME calculates from the injection signal deviates too starkly from the actual gauge reading appearing in the instrument cluster. Potential problem source(s): - Fuel level sensor sticking - Fuel level sensor mechanically damaged - Float on fuel level sensor is damaged - Frequent refueling with quantities of less than 5 liters (as with rental vehicles)	The diagnostic fault code is logged the first time (pending FC) and then confirmed the second time (confirmed fault code).	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - No fault related to tank fuel-level sensor is currently present - At least 20 liters of fuel must be consumed without refueling (multiple cycles possible)	- None	- None	NO	none	Y	- Fuel level sensor sticking - Fuel level sensor mechanically damaged - Float on fuel level sensor is damaged - Frequent refueling with quantities of less than 5 liters (as with rental vehicles)	- Read out instrument cluster ECU fault memory and work through logged faults	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Fuel gauge fails to read full after refueling. - Tank is empty although gauge indicates that fuel is still present.		Breakdown notice: Tank may be empty. Please refuel using fuel canister and proceed to nearest service station. Then proceed to BMW Service facility.	None
MEVD17.2-BN2000	0x31E7	12775	Electric fan, actuation: Short circuit to B+	The diagnostic function monitors the wire between the electric fan and the DME.	P0692	Fan 1 Control Circuit High	Cooling System	Fan 1	The fault is recognized when a short circuit is present between the DME and the electric fan. Potential problem source(s): - Defective wiring harness - Electric fan defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	Yes + STEUERN_E_LUEFTER, STEUERN_ENDE_E_LUEFTER, STATUS_E_LUEFTER	PWM activation signal 0x4A79	N	- Defect in wiring harness - Electric fan defective	- Check wiring harness - Check electric fan (specified resistance between PWM pin and Terminal 30 pin with electric fan plug disconnected: greater than 10 ohms) - Replace electric fan	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	An inoperative electric fan can also cause the engine to overheat.	Possible apparent symptoms: Engine can overheat, breakdown in extreme cases		Breakdown notice: Probably not possible to activate electric fan, continued driving at reduced power possible.	none

MEVD17.2-BN2000	0x31E8	12776	Electric fan, actuation: Short circuit to earth	The diagnostic function monitors the wire between the electric fan and the DME.	P0691	Fan 1 Control Circuit Low	Cooling System	Fan 1	The fault is recognized when a short circuit is present between the DME and the electric fan. Potential problem source(s): - Defective wiring harness - Electric fan defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	Yes + STEUERN_E_LUEFTER, STEUERN_ENDE_E_LUEFTER, STATUS_E_LUEFTER	PWM activation signal 0x4A79	N	- Defect in wiring harness - Electric fan defective	- Check wiring harness - Check electric fan cutoff relay - Check electric fan (specified resistance between PWM pin and Terminal 30 pin with electric fan plug disconnected: greater than 10 ohms) - Replace electric fan	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	An inoperative electric fan can also cause the engine to overheat.	Possible apparent symptoms: Engine can overheat, breakdown in extreme cases		Breakdown notice: Probably not possible to activate electric fan, continued driving at reduced power possible.	none
MEVD17.2-BN2000	0x31E9	12777	Electric fan, actuation: Line disconnection	The diagnostic function monitors the wire between the electric fan and the DME.	P0480	Fan 1 Control Circuit	Cooling System	Fan 1	The fault is recognized when the electric fan has no power supply. Potential problem source(s): - Defect in wiring harness - Cutoff relay for electric fan defective - Electric fan defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	Yes + STEUERN_E_LUEFTER, STEUERN_ENDE_E_LUEFTER, STATUS_E_LUEFTER	PWM activation signal 0x4A79	N	- Defect in wiring harness - Cutoff relay for electric fan defective - Electric fan defective	- Check wiring harness - Check electric fan cutoff relay - Check electric fan (specified resistance between PWM pin and Terminal 30 pin with electric fan plug disconnected: less than 1 mOhm) - Replace electric fan	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	An inoperative electric fan can also cause the engine to overheat.	Possible apparent symptoms: Engine can overheat, breakdown in extreme cases		Breakdown notice: Probably not possible to activate electric fan, continued driving at reduced power possible.	none
MEVD17.2-BN2000	0x31EA	12778	Electric fan, self-diagnosis: Mechanical or hardware fault	The diagnostic function monitors operation of the electric fan.					The fault is recognized when unit fails to reach the specified rotation rate within the specified period. Potential problem source(s): - Fan shows resistance to rotation - Electric fan is defective (electronics)	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	Yes, 0x2F60DA03_STEUERN_E_LUEFTER,?Activate electric fan?	none	N	- Fan shows resistance to rotation - Electric fan is defective (electronics)	hazard). Check freedom of movement of fan. Remove any foreign objects/matter as required. - Fan is physically seized: Replace fan - Fan turns freely: Connect plug and use tester to transmit activation signal of at least 30 %; if fan fails to start rotating: Replace fan - Allow engine to run roughly 6 minutes, until it warms to normal temperature (above 80 °C), read out diagnostic fault codes from ECU; if fan fault has returned: Replace fan - Allow engine to run an additional 10 minutes, read out diagnostic fault codes from ECU; if fan fault is again present: Replace fan - If no new diagnostic fault code has been entered: Test OK	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	An inoperative electric fan can cause the engine to overheat.	Possible apparent symptoms: None		Breakdown notice: None	none
MEVD17.2-BN2000	0x3219	12825			P2420	Evaporative Emission System Switching Valve Control Circuit High	EVAP System	Switching Valve																	
MEVD17.2-BN2000	0x321A	12826			P2419	Evaporative Emission System Switching Valve Control Circuit Low	EVAP System	Switching Valve																	
MEVD17.2-BN2000	0x321B	12827			P2418	Evaporative Emission System Switching Valve Control Circuit/Open	EVAP System	Switching Valve																	
MEVD17.2-BN2000	0x321C	12828			P0442	Evaporative Emission System Leak Detected (small leak)	EVAP System	Leak Detection																	
MEVD17.2-BN2000	0x321D	12829			P0456	Evaporative Emission System Leak Detected (very small leak)	EVAP System	Leak Detection																	
MEVD17.2-BN2000	0x321E	12830			P1449	Diagnostic Module Tank Leakage (DM-TL) Pump Current Too High	EVAP System	Pump Current																	
MEVD17.2-BN2000	0x321F	12831			P1448	Diagnostic Module Tank Leakage (DM-TL) Pump Current Too Low	EVAP System	Pump Current																	
MEVD17.2-BN2000	0x3220	12832			P1434	Diagnostic Module Tank Leakage (DM-TL)	EVAP System	Pump Current																	
MEVD17.2-BN2000	0x3221	12833			P1447	Diagnostic Module Tank Leakage (DM-TL) Pump Current Too High during Switching Solenoid Test	EVAP System	Pump Current																	
MEVD17.2-BN2000	0x3222	12834			P240C	Evaporative Emission System Leak Detection Pump Heater Control Circuit High	EVAP System	DMTL Heater																	
MEVD17.2-BN2000	0x3223	12835			P240B	Evaporative Emission System Leak Detection Pump Heater Control Circuit Low	EVAP System	DMTL Heater																	
MEVD17.2-BN2000	0x3224	12836			P240A	Evaporative Emission System Leak Detection Pump Heater Control Circuit/Open	EVAP System	DMTL Heater																	
MEVD17.2-BN2000	0x3225	12837			P2402	Evaporative Emission System Leak Detection Pump Control Circuit High	EVAP System	Pump																	
MEVD17.2-BN2000	0x3226	12838			P2401	Evaporative Emission System Leak Detection Pump Control Circuit Low	EVAP System	Pump																	
MEVD17.2-BN2000	0x3227	12839			P2400	Evaporative Emission System Leak Detection Pump Control Circuit/Open	EVAP System	Pump																	
MEVD17.2-BN2000	0x3228	12840			P143F	Evaporative Emission System Afterrunning Diagnosis	EVAP System	Leak Detection																	
MEVD17.2-BN2000	0x32AB	12971	EWS-DME message incorrect Frame error	The diagnostic function monitors communications on the CAN bus to assess electronic immobilizer messages.	U1166	Message Monitoring EWS (Electronic Immobilizer) - Frame Error			The fault is registered when a message error is present. Potential problem source(s): - Defective CAS - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine off - Vehicle key recognized and valid for the duration of the	- None	- None	NO	CAN bus telegrams	N	- Defective CAS - Defective DME	- Replace CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: In worst case the starter turns but the engine fails to start		Breakdown notice: None	None
MEVD17.2-BN2000	0x32C8	13000	Poor-road-surface detection: Wheel speed too high	The diagnostic function monitors the signals from the wheelspeed sensors to determine if they are valid.	P1518	Rough Road Detection Wheel Speed Too High			The fault is recognized when one peripheral wheelspeed is too high. Potential problem source(s): - Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Vehicle speed signal implausible	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x32C9	13001	Poor-road-surface detection: No wheel-speed signal received	The diagnostic function monitors reception of the message.	P1517	Rough Road Detection No Wheel Speed Signal			The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Signal error from at least one wheelspeed sensor	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Signal error from at least one wheelspeed sensor	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x32CC	13004	Vehicle speed, plausibility: Instrument cluster has sent signal of invalidity	The diagnostic function determines whether the vehicle speed from the instrument cluster is plausible.					The diagnostic fault code is logged in the ECU fault memory when the speed deviates by more than 35 km/h. Potential problem source(s): - I-cluster transmits "invalid" signal	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - Time after start greater than 45 sec. Other conditions: - Engine on - Driving - No pressure on accelerator pedal - Brakes not on - No active closed-loop DSC operation	- None	- Time since start greater than 45 sec.	NO	none	N	- I-cluster transmits "invalid" signal	- Continue fault diagnosis in the instrument cluster and in the DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Cruise control fails to operate		Breakdown notice: None	None
MEVD17.2-BN2000	0x32CD	13005	Vehicle speed, plausibility: DSC signal implausible in relation to instrument-cluster display	The diagnostic function determines whether the vehicle speed from the instrument cluster is plausible.					The diagnostic fault code is logged in the ECU fault memory when the speed deviates by more than 35 km/h. Potential problem source(s): - Speed signal transmitted by instrument cluster displays excessive deviation from DSC speed signal	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - Time after start greater than 45 sec. Other conditions: - Engine on - Driving - No pressure on accelerator pedal - Brakes not on - No active closed-loop DSC operation	- None	- Time since start greater than 45 sec.	NO	none	N	- Speed signal transmitted by instrument cluster displays excessive deviation from DSC speed signal	- Continue fault diagnosis in the instrument cluster and in the DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Cruise control fails to operate		Breakdown notice: None	None
MEVD17.2-BN2000	0x32D0	13008	Vehicle speed: Signal too high	The diagnostic function determines whether the speed signal is within a plausible range.	P0503	Vehicle Speed Sensor 'A' Intermittent/Erratic/High	Vehicle Speed Sensor	Electrical	None Potential problem source(s): - Speed signal too high (possible tampering)	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Vehicle speed in excess of 4 km/h	- None	- None	NO	NO	N	- Speed signal too high (possible tampering)	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x32D8	13016	Vehicle speed, plausibility: Minimum speed under load not reached	The diagnostic function monitors the plausibility of the speed signal.	P152A	Vehicle Speed Sensor, Speed Too Low Compared to Reference under Load	Vehicle Speed Sensor	Plausibility	The fault is recognized when the vehicle speed deviates from the calculated vehicle speed. Potential problem source(s): - Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine speed above 1800 rpm	- Engine warmed to normal temperature, more than 80°C	- None	NO	NO	N	- Vehicle speed signal implausible	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x32D9	13017	Vehicle speed, plausibility: Minimum speed in coast mode not reached	The diagnostic function monitors the plausibility of the speed signal while the overrun cutoff is active.	P152B	Vehicle Speed Sensor, Speed Too Low Compared to Reference in Coast Down	Vehicle Speed Sensor	Plausibility	The fault is recognized when the vehicle speed deviates from the calculated vehicle speed. Potential problem source(s): - Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON - Trailing throttle/overrun between 4520 rpm and 1520 rpm	- Engine warmed to normal temperature, more than 80°C	- None	NO	NO	N	- Vehicle speed signal implausible	- Continue fault diagnosis with DSC	MY10 ECE: - ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x32DA	13018	Vehicle speed, plausibility: Implausible roadspeed signal	The diagnostic function monitors the difference in signals from the left and right wheelspeed sensors.	P0501	Vehicle Speed Sensor 'A' Range/Performance	Vehicle Speed Sensor	Plausibility	The fault is recognized when the vehicle speed deviates from the calculated vehicle speed. Potential problem source(s): - Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine speed above 1800 rpm	- Engine warmed to normal temperature, more than 80°C	- None	NO	NO	N	- Vehicle speed signal implausible	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x32DC	13020	Vehicle speed, rear left wheel sensor, plausibility: Signal implausible	The diagnostic function monitors the signals from the wheelspeed sensors for plausibility.	P15DC	Wheel Speed Sensor Rear/Left Range/Performance	Wheel Speed Sensor	Plausibility	The fault is recognized when the signal from one wheelspeed sensor varies from that of the other sensors during stable vehicle operating conditions. Potential problem source(s): - Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Vehicle speed in excess of 4 km/h	- None	- None	NO	NO	Y	- Vehicle speed signal implausible	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Driver assistance systems failed		Breakdown notice: None	None
MEVD17.2-BN2000	0x32DD	13021	Vehicle speed, front left wheel sensor, plausibility: Signal implausible	The diagnostic function monitors the signals from the wheelspeed sensors for plausibility.	P15DA	Wheel Speed Sensor Front/Left Range/Performance	Wheel Speed Sensor	Plausibility	The fault is recognized when the signal from one wheelspeed sensor varies from that of the other sensors during stable vehicle operating conditions. Potential problem source(s): - Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Vehicle speed in excess of 4 km/h	- None	- None	NO	NO	Y	- Vehicle speed signal implausible	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Driver assistance systems failed		Breakdown notice: None	None
MEVD17.2-BN2000	0x32DE	13022	Vehicle speed, rear right wheel sensor, plausibility: Signal implausible	The diagnostic function monitors the signals from the wheelspeed sensors for plausibility.	P15DD	Wheel Speed Sensor Rear/Right Range/Performance	Wheel Speed Sensor	Plausibility	The fault is recognized when the signal from one wheelspeed sensor varies from that of the other sensors during stable vehicle operating conditions. Potential problem source(s): - Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Vehicle speed in excess of 4 km/h	- None	- None	NO	NO	Y	- Vehicle speed signal implausible	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Driver assistance systems failed		Breakdown notice: None	None
MEVD17.2-BN2000	0x32DF	13023	Vehicle speed, front right wheel sensor, plausibility: Signal implausible	The diagnostic function monitors the signals from the wheelspeed sensors for plausibility.	P15DB	Wheel Speed Sensor Front/Right Range/Performance	Wheel Speed Sensor	Plausibility	The fault is recognized when the signal from one wheelspeed sensor varies from that of the other sensors during stable vehicle operating conditions. Potential problem source(s): - Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Vehicle speed in excess of 4 km/h	- None	- None	NO	NO	Y	- Vehicle speed signal implausible	- Continue fault diagnosis with DSC	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Driver assistance systems failed		Breakdown notice: None	None
MEVD17.2-BN2000	0x32E1	13025	EWS tampering protection: no start value programmed	The diagnostic function determines whether a start value is programmed.	P1667	EWS (Electronic Immobilizer) Start Value not yet Programmed			The fault is recognized when no start value has been programmed. Potential problem source(s): - No start value programmed	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- No start value programmed	- DME defective	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Start value can only be programmed at the factory: The EWS electronic immobilizer code is written to the DME ECU on the production line, or, when latter is supplied as spare part, prior to shipment from the Dingolfing plant!	Possible apparent symptoms: None, as this fault occurs only on new units		Breakdown notice: None	None
MEVD17.2-BN2000	0x32E2	13026	EWS tampering protection: expected response implausible	The diagnostic function determines whether a start value is programmed.	P16CF	EWS (Electronic Immobilizer) Implausible Response			The fault is recognized when the start values of CAS and DME do not agree. Potential problem source(s): - Defective CAS - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Vehicle key recognized and valid	- None	- None	NO	none	N	- Defective CAS - Defective DME	- Replace CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	New control modules can only be synchronized and calibrated at the factory; the control modules were cross-switched to mutually incorrect positions!	Possible apparent symptoms: Starter turns, engine fails to start		Breakdown notice: None	None

MEVD17.2-BN2000	0x32E3	13027	EWS-DME interface Hardware fault	The diagnostic function monitors the electronic immobilizer messages.	P165A	EWS (Electronic Immobilizer) Interface to ECM, Hardware Error			The fault is registered when a message error is present. Potential problem source(s): - Defective wiring harness - Defective CAS - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine off - Vehicle key recognized and valid for the duration of the	- None	- None	NO	CAS bus telegram	N	- Defective wiring harness - Defective CAS - Defective DME	- Check wiring harness between CAS and DME - Replace CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: In worst case the starter turns but the engine fails to start		Breakdown notice: None	None
MEVD17.2-BN2000	0x32E4	13028	EWS-DME interface Frame error	The diagnostic function monitors the electronic immobilizer messages.	P1660	EWS (Electronic Immobilizer) Telegram Error			The fault is registered when a message error is present. Potential problem source(s): - Defective CAS - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine off - Vehicle key recognized and valid for the duration of the	- None	- None	NO	CAS bus telegram	N	- Defective CAS - Defective DME	- Replace CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: In worst case the starter turns but the engine fails to start		Breakdown notice: None	None
MEVD17.2-BN2000	0x32E5	13029	EWS-DME interface Timeout	The diagnostic function monitors the electronic immobilizer messages.	P1661	Timeout EWS (Electronic Immobilizer)-Telegram			The fault is registered when a time limit violation is detected. Potential problem source(s): - Defective wiring harness - Defective CAS - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine off - Vehicle key recognized and valid for the duration of the	- None	- None	NO	CAS bus telegram	N	- Defective wiring harness - Defective CAS - Defective DME	- Check wiring harness between CAS and DME - Replace CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: In worst case the starter turns but the engine fails to start		Breakdown notice: None	None
MEVD17.2-BN2000	0x32E6	13030	EWS-DME interface Receive error, CAS interface	The diagnostic function monitors the electronic immobilizer messages.					The fault is recognized when the checksum is false. Potential problem source(s): - Defective CAS - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine off - Vehicle key recognized and valid for the duration of the	- None	- None	NO	CAS bus telegram	N	- Defective CAS - Defective DME	- Replace CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: In worst case the starter turns but the engine fails to start		Breakdown notice: None	None
MEVD17.2-BN2000	0x32E7	13031	DME, internal fault: EWS data: no available memory possibility	The diagnostic function monitors the electronic immobilizer messages.	P165C	EWS (Electronic Immobilizer) Data, No Available Storage Possibility			The fault is recognized when no memory is available for the EWS electronic immobilizer synchronization. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x32E8	13032	DME, internal fault: EWS data: Fault, activation-code storage	The diagnostic function monitors the electronic immobilizer messages.	P165D	EWS (Electronic Immobilizer) Data, Faulty Release Code Storage			The fault is recognized when errors are present in the saved EWS electronic immobilizer data. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x32E9	13033	DME, internal fault: EWS data: Checksum error	The diagnostic function monitors the electronic immobilizer messages.	P165E	EWS (Electronic Immobilizer) Data, Checksum Error			The fault is recognized when errors are present in the saved EWS electronic immobilizer data. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x32EA	13034	DME, internal fault: EWS data: Writing fault 'Secret Key'	The diagnostic function monitors the electronic immobilizer messages.					The fault is recognized when errors are present in the saved EWS electronic immobilizer data. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x32EC	13036	EWS-DME message incorrect Timeout	The diagnostic function monitors communications on the CAN bus to assess electronic immobilizer messages.	U0167	Lost Communication With Vehicle Immobilizer Control Module			The fault is recognized when no message has been received from the CAS. Potential problem source(s): - Defective wiring harness - Gateway defect - Defective CAS - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine off - Vehicle key recognized and valid for the duration of the	- None	- None	NO	CAN bus telegrams	N	- Defective wiring harness - Gateway defect - Defective CAS - Defective DME	- Check wiring harness on CAS, gateway and at the DME - Replace gateway - Replace CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: In worst case the starter turns but the engine fails to start		Breakdown notice: None	None
MEVD17.2-BN2000	0x3325	13093	Brake light switch, plausibility: Signal implausible	The diagnostic function monitors the plausibility of the brake light switch	P0571	Brake Switch 'A' Circuit	Brake Switch	Electrical	The fault is recognized when the status of the brake light switch does not correspond to that of the brake light test switch. Potential problem source(s): - Defective wiring harness - Brake light switch defective - Defective DME	This fault code is logged in the control module's fault memory when it remains present for longer than 2 sec.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 2 min. continuous open circuit at both switches (brake light switch and brake light test switch) Other conditions:	- None	- 2 min. continuous open circuit at both switches (brake light switch and brake light test switch)	NO	none	N	- Defective wiring harness - Brake light switch defective - Defective DME	- Check wiring harness between DME and brake light switch - Replace brake light switch - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message		Breakdown notice: None	None
MEVD17.2-BN2000	0x332C	13100	Terminal 15_3, line from CAS, electrical: Short circuit to earth or line disconnection	The diagnostic function monitors the redundant "Terminal 15 off" wire from the CAS to the DME for short circuits to ground and opens.	P15B1	Terminal 15 Sense Circuit Low	Terminal 15 / 87	Electrical	The fault is recognized by the driver circuit diagnostic function. Potential problem source(s): - Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	- Check wiring harness between CAS and DME - Replace CAS - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x332D	13101	Terminal 15_3, line from CAS, electrical: Short circuit to B+	The diagnostic function monitors the redundant "Terminal 15 off" wire from the CAS to the DME for short circuits to positive.	P15B0	Terminal 15 Sense Circuit High	Terminal 15 / 87	Electrical	The fault is recognized by the driver circuit diagnostic function. Potential problem source(s): - Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Shutdown phase	- None	- None	NO	none	N	- Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	- Check wiring harness between CAS and DME - Replace CAS - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x332E	13102	Terminal 87_1, power supply switched by main relay, electrical: Short circuit to earth or line disconnection	The diagnostic function monitors the voltage-supply wire to Terminals 15N_1 and KL87_1 for an open wire or short circuit to ground.	P15D9	Terminal 15N_1 / 87_1 Power Supply Circuit	Terminal 15 / 87	Electrical	logged when no voltage is present at the DME input (KL87_1 or 15N_1) although the main relay has closed. Potential problem source(s): - Fuse defective - Defect in wiring harness between main relay and DME - Main relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Fuse defective - Defect in wiring harness between main relay and DME - Main relay defective - Defective DME	- Check fuse - Check wiring harness between main relay and DME - Replace main relay - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Range from reduced power to breakdown vehicle		Breakdown notice: None	None
MEVD17.2-BN2000	0x332F	13103	Terminal 87_2, power supply switched by main relay, electrical: Short circuit to earth or line disconnection	The diagnostic function monitors the voltage-supply wire to Terminals 15N_2 and KL87_2 for an open wire or short circuit to ground.	P15ED	Terminal 15N_2 / 87_2 Power Supply Circuit	Terminal 15 / 87	Electrical	logged when no voltage is present at the DME input (KL87_2 or 15N_2) although the main relay has closed. Potential problem source(s): - Fuse defective - Defect in wiring harness between main relay and DME - Main relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Fuse defective - Defect in wiring harness between main relay and DME - Main relay defective - Defective DME	- Check fuse - Check wiring harness between main relay and DME - Replace main relay - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: Range from reduced power to breakdown vehicle		Breakdown notice: None	None
MEVD17.2-BN2000	0x3330	13104	87_3Terminal , power supply switched by main relay, electrical: Short circuit to earth or line disconnection	The diagnostic function monitors the voltage-supply wire to Terminals 15N_3 and KL87_3 for an open wire or short circuit to ground.	P15F8	Terminal 15N_3 / 87_3 Power Supply Circuit	Terminal 15 / 87	Electrical	logged when no voltage is present at the DME input (Terminal 87_3 or 15 N_3) although the main relay has closed. Potential problem source(s): - Fuse defective - Defect in wiring harness between main relay and DME - Main relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Fuse defective - Defect in wiring harness between main relay and DME - Main relay defective - Defective DME	- Check fuse - Check wiring harness between main relay and DME - Replace main relay - Replace DME	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Range from reduced power to breakdown vehicle		Breakdown notice: None	None
MEVD17.2-BN2000	0x335B	13147																							
MEVD17.2-BN2000	0x335C	13148																							
MEVD17.2-BN2000	0x335D	13149																							
MEVD17.2-BN2000	0x3392	13202	Engine switch-off time, plausibility: Time to short in correlation to engine-coolant cooling	The diagnostic function monitors the engine's calculated downtime by comparing it with the drop in coolant temperature while the engine is stationary.	P15E8	External Engine Off Timer Engine Off Time Too Short in Correlation to Cooling-Down Of Engine Coolant	Engine Off Timer, External	Correlation	the time required for engine cooling is implausibly short relative to the calculated time. Potential problem source(s): - Instrument cluster disconnected from Terminal 30 during stationary phase (battery change) - Collateral fault stemming from a defective engine temperature sensor - Collateral fault from incorrect time signal from the	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine temperature at engine shutdown > 80 °C - Engine cooled by > 10 °C Time condition: - None Other conditions: - Engine ON	- Engine temperature at engine shutdown > 80 °C - Engine cooled down > 10 °C	- None	NO	none	Y	- Instrument cluster disconnected from Terminal 30 during stationary phase (battery change) - Collateral fault stemming from a defective engine temperature sensor - Collateral fault from incorrect time signal from the instrument cluster	- If Terminal 30 was disconnected, no further action required - Note any logged faults related to the coolant temperature sensor - Check whether the instrument cluster time is correct	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3393	13203	Engine switch-off time, plausibility: Time to long in correlation to engine-coolant cooling	The diagnostic function monitors the engine's calculated downtime by comparing it with the drop in coolant temperature while the engine is stationary.	P15E9	External Engine Off Timer Engine Off Time Too Long in Correlation to Cooling-Down Of Engine Coolant	Engine Off Timer, External	Correlation	the time required for engine cooling is implausibly long relative to the calculated time. Potential problem source(s): - Collateral fault stemming from a defective engine temperature sensor - Collateral fault stemming from incorrect time signal	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine temperature at engine shutdown > 80°C Time condition: - None Other conditions: - Engine ON	- Engine temperature at engine shutdown > 80°C	- None	NO	none	Y	- Collateral fault stemming from a defective engine temperature sensor - Collateral fault stemming from incorrect time signal from instrument cluster	- Watch for diagnostic fault code entries related to the coolant temperature sensor, replace the coolant temperature sensor as indicated - Check whether the instrument cluster time is correct	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3394	13204	Engine switch-off time: Too fast during engine operation	The diagnostic function compares the internal timers of the DME and the instrument cluster while the engine is running.	P15FA	External Engine Off Timer Incrementation Too Fast During Engine Running	Engine Off Timer, External	Incrementation	response to a disparity of 12 sec. The comparison starts again every minute while the engine is running. Potential problem source(s): - Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	- Because this is a collateral fault, start by resolving issues related to other faults logged in the DME or instrument cluster; no additional action will be needed with these kinds of faults	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3395	13205	Engine switch-off time: Too slow during engine operation	The diagnostic function compares the internal timers of the DME and the instrument cluster while the engine is running.	P15FB	External Engine Off Timer Incrementation Too Slow During Engine Running	Engine Off Timer, External	Incrementation	response to a disparity of 12 sec. The comparison starts again every minute while the engine is running. Potential problem source(s): - Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	The diagnostic fault code is logged when the fault remains present for longer than 3 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	- Because this is a collateral fault, start by resolving issues related to other faults logged in the DME or instrument cluster; no additional action will be needed with these kinds of faults	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3396	13206	Engine switch-off time, signal: missing	The diagnostic function monitors transmission of the CAN time signal from the instrument cluster. Diagnosis is interlocked by CAN fault.	P15FE	External Engine Off Timer No Signal	Engine Off Timer, External	Electrical	The fault is recognized when no CAN time signal is transmitted for longer than 5 sec. Potential problem source(s): - Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	None	None	N	- Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	- Because this is a collateral fault, start by resolving issues related to other faults logged in the DME or instrument cluster; no additional action will be needed with these kinds of faults	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: No display of time and date		Breakdown notice: None	None
MEVD17.2-BN2000	0x3398	13208	Engine switch-off time: Too fast during after-run	The diagnostic function compares the internal timers of the DME and the instrument cluster when the ignition is switched on again while the control module is in its shutdown phase.	P15FC	External Engine Off Timer Incrementation Too Fast During ECM Afterrunning	Engine Off Timer, External	Incrementation	The fault is recognized when a deviation of more than 12 sec. is present. Potential problem source(s): - Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	- Because this is a collateral fault, start by resolving issues related to other faults logged in the DME or instrument cluster; no additional action will be needed with these kinds of faults	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: None		Breakdown notice: None	- The ECU shutdown phase lasts between 1 min. and 20 min.

MEVD17.2-BN2000	0x3399	13209	Engine switch-off time: Too slow during after-run	The diagnostic function compares the internal timers of the DME and the instrument cluster when the ignition is switched on again while the control module is in its shutdown phase.	P15FD	External Engine Off Timer Incrementation Too Slow During ECM Afterrunning	Engine Off Timer, External	Incrementation	The fault is recognized when a deviation of more than 12 sec. is present. Potential problem source(s): - Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Collateral fault resulting from fault memory entries in the DME and/or instrument cluster	- Because this is a collateral fault, start by resolving issues related to other faults logged in the DME or instrument cluster; no additional action will be needed with these kinds of faults	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: None		Breakdown notice: None	- The ECU shutdown phase lasts between 1 min. and 20 min.
MEVD17.2-BN2000	0x33DC	13276																							
MEVD17.2-BN2000	0x33DD	13277																							
MEVD17.2-BN2000	0x33DE	13278																							
MEVD17.2-BN2000	0x33DF	13279																							
MEVD17.2-BN2000	0x33E0	13280																							
MEVD17.2-BN2000	0x33E1	13281																							
MEVD17.2-BN2000	0x33FC	13308	Oil-pressure control, dynamic Pressure variations	The diagnostic function monitors the oscillation characteristics of the oil pressure.	P159E	Engine Oil Pressure Control, Dynamic, Pressure Fluctuations			The fault is recognized when the oil pressure rises above the limit several times within a defined period. Potential problem source(s): - Oil pressure control valve defective - Oil pump defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	yes+ SGBD job name	- None	N	- Oil pressure control valve defective - Oil pump defective	- Replace oil pressure control valve - Replace oil pump	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Vibration noise at a frequency between 5 Hz and 7 Hz		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x33FD	13309	Engine oil pressure control, static: Engine oil pressure too high, emergency operation	The diagnostic function monitors the oil pressure.	P159F	Engine Oil Pressure Control, Static, Switchover To Limp Home Operation Because Engine Oil Pressure Too High in Map Operation			the oil pressure rises beyond a defined level in relation to oil temperature and engine speed. Potential problem source(s): - Defect in wiring harness between oil-pressure sensor and DME - Defective oil-pressure sensor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	yes+ SGBD job name	- None	N	- Defect in wiring harness between oil-pressure sensor and DME - Defective oil-pressure sensor - Oil pressure control valve defective	- Check wiring harness between oil-pressure sensor and DME - Replace oil-pressure sensor - Replace oil pressure control valve	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x33FE	13310	Engine oil pressure control, static: oil pressure too low, emergency operation	The diagnostic function monitors the oil pressure.	P15A0	Engine Oil Pressure Control, Static, Switchover To Limp Home Operation Because Engine Oil Pressure Too Low in Map Operation			the oil pressure drops below a defined level in relation to oil temperature and engine speed. Potential problem source(s): - Defect in wiring harness between oil-pressure sensor and DME - Defective oil-pressure sensor - Oil pressure control valve	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	yes+ SGBD job name	- None	N	- Defect in wiring harness between oil-pressure sensor and DME - Defective oil-pressure sensor - Oil pressure control valve defective - Oil pump defective	- Check wiring harness between oil-pressure sensor and DME - Replace oil-pressure sensor - Replace oil pressure control valve - Replace oil pump	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x33FF	13311	Oil pressure control valve, activation: Short circuit to B+	The diagnostic function monitors the wire from the DME to the oil-pressure control valve for shorts to positive.	P15EC	Engine Oil Pressure Control Valve Circuit High			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective plug or wiring harness - Oil pressure control valve/oil pump defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Control-activation of oil-pressure control valve	- None	- None	steuern_odr, steuern_ende_odr	PWM activation signal, 0x4aaa	N	- Defective plug or wiring harness - Oil pressure control valve/oil pump defective - Defective DME	- Check wiring harness between oil pump and DME - Replace oil pressure control valve/oil pump - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3400	13312	Oil pressure control valve, activation: Short circuit to earth	The diagnostic function monitors the wire from the DME to the oil-pressure control valve for shorts to ground.	P15EB	Engine Oil Pressure Control Valve Circuit Low			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective plug or wiring harness - Oil pressure control valve/oil pump defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Control-activation of oil-pressure control valve	- None	- None	steuern_odr, steuern_ende_odr	PWM activation signal, 0x4aaa	N	- Defective plug or wiring harness - Oil pressure control valve/oil pump defective - Defective DME	- Check wiring harness between oil pump and DME - Replace oil pressure control valve/oil pump - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None (possible increase in fuel consumption)		Breakdown notice: None	None
MEVD17.2-BN2000	0x3401	13313	Oil pressure control valve, activation: Line disconnection	The diagnostic function monitors the wire from the DME to the oil-pressure control valve for open circuits.	P15EA	Engine Oil Pressure Control Valve Circuit/Open			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective plug or wiring harness - Oil pressure control valve/oil pump defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Control-activation of oil-pressure control valve	- None	- None	steuern_odr, steuern_ende_odr	PWM activation signal, 0x4aaa	N	- Defective plug or wiring harness - Oil pressure control valve/oil pump defective - Defective DME	- Check wiring harness between oil pump and DME - Replace oil pressure control valve/oil pump - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3405	13317	Oil pump, mechanical Oil pressure too high	The diagnostic function monitors the oil pressure.	P15A3	Engine Oil Pressure Too High			The fault is recognized when the oil pressure rises beyond a defined level in relation to oil temperature and engine speed. Potential problem source(s): - Mechanical defect in oil pump	This fault is logged in the control module's fault memory immediately.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	yes+ SGBD job name	- None	N	- Mechanical defect in oil pump	- Replace oil pump	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x3406	13318	Oil pump, mechanical Oil pressure too low	The diagnostic function monitors the oil pressure.	P0524	Engine Oil Pressure Too Low			The fault is recognized when the oil pressure rises beyond a defined level in relation to oil temperature and engine speed. Potential problem source(s): - Mechanical defect in oil pump	This fault is logged in the control module's fault memory immediately.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	yes+ SGBD job name	- None	N	- Mechanical defect in oil pump	- Replace oil pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - none		Breakdown notice: - Engine damage possible. Switch off engine, continued driving is not possible.	- none
MEVD17.2-BN2000	0x3408	13320	Oil-pressure control valve, mechanical: hangs in fully energized position (minimum oil pressure)	The diagnostic function monitors the oil pressure.	P15A1	Engine Oil Pressure Control, Mechanical, Solenoid Valve Sticking In Fully Energized Position (Minimum Oil Pressure)			The fault is recognized when the oil pressure remains at maximum level despite targeted application of voltage to the solenoid valve. Potential problem source(s): - Oil pressure control valve defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	yes+ SGBD job name	- None	N	- Oil pressure control valve defective	- Replace oil pressure control valve	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - none		Breakdown notice: - Engine damage possible. Switch off engine, continued driving is not possible.	- none
MEVD17.2-BN2000	0x3409	13321	Oil-pressure control valve, mechanical: stuck in de-energized position (maximum oil pressure)	The diagnostic function monitors the oil pressure.	P15A2	Engine Oil Pressure Control, Mechanical, Solenoid Valve Sticking In De-Energized Position (Maximum Oil Pressure)			The fault is recognized when the oil pressure remains at maximum level despite targeted application of voltage to the solenoid valve. Potential problem source(s): - Oil pressure control valve defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine ON	- Engine warmed to normal temperature, more than 80°C	- None	yes+ SGBD job name	- None	N	- Oil pressure control valve defective	- Replace oil pressure control valve	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x3426	13350	Engine oil pressure sensor, electrical: Short circuit to B+	The diagnostic function monitors the upper voltage limit of the engine oil-pressure sensor.	P0523	Engine Oil Pressure Sensor/Switch 'A' High			The fault is recognized when the voltage of the engine oil-pressure sensor exceeds 4.9 V. Potential problem source(s): - Fault in wiring harness between sensor and DME - Sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 586F	N	- Fault in wiring harness between sensor and DME - Sensor defective - Defective DME	- Check wiring harness between DME and sensor - Replace sensor - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3427	13351	Engine oil pressure sensor, electrical: Short circuit to earth	The diagnostic function monitors the engine oil-pressure sensor's lower voltage limit.	P0522	Engine Oil Pressure Sensor/Switch 'A' Low			the voltage of the engine oil-pressure sensor is less than 0.1 V. Potential problem source(s): - Fault in wiring harness between engine oil-pressure sensor and DME - Engine oil-pressure sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Read test data block; ID 586F	N	- Fault in wiring harness between engine oil-pressure sensor and DME - Engine oil-pressure sensor defective - Defective DME	- Inspect wiring harness between engine oil-pressure sensor and DME - Replace engine oil-pressure sensor - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x342B	13355	Engine oil pressure sensor, plausibility: Signal frozen	The diagnostic function monitors the oil pressure.	P0521	Engine Oil Pressure Sensor/Switch 'A' Range/Performance			the oil pressure fails to change by more than 12 hPa for longer than 2.5 sec. Potential problem source(s): - Defect in wiring harness between oil-pressure sensor and DME - Defective oil-pressure sensor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Shutdown phase	- None	- None	yes+ SGBD job name	- None	N	- Defect in wiring harness between oil-pressure sensor and DME - Defective oil-pressure sensor	- Check wiring harness between oil-pressure sensor and DME - Replace oil-pressure sensor	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x343F	13375	Oil condition sensor, electrical: Level malfunction	The diagnostic function monitors the oil condition sensor.	P1587	Engine Oil Quality Sensor Level Measurement	Engine Oil Quality Sensor	Level	The fault is recognized when the oil condition sensor reports a fault. Potential problem source(s): - Defect in plugs or wiring harness between oil condition sensor and DME - Oil condition sensor defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Engine speed above 5000	- None	- None	NO	none	N	- Defect in plugs or wiring harness between oil condition sensor and DME - Oil condition sensor defective	- Check plugs and wiring harness between oil condition sensor and DME - Replace oil condition sensor	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Adaptation (reduction) of engine oil service interval		Breakdown notice: None	None
MEVD17.2-BN2000	0x3440	13376	Oil condition sensor, electrical: Temperature malfunction	The diagnostic function monitors the oil temperature signal to detect electrical faults.	P1586	Engine Oil Quality Sensor Temperature Measurement	Engine Oil Quality Sensor	Temperature	The fault is recognized when the oil condition sensor reports a fault over the bus. Potential problem source(s): - Defect in plugs or wiring harness between oil condition sensor and DME - Water in oil - Oil condition sensor defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine oil temperature greater than 100 °C Time condition: - Longer than 15 minutes Other conditions: - Engine on - Engine speed above 5000	- Engine oil temperature greater than 100 °C	- Longer than 15 min.	NO	none	N	- Defect in plugs or wiring harness between oil condition sensor and DME - Water in oil - Oil condition sensor defective	- Check plugs and wiring harness between oil condition sensor and DME - Replace engine oil - Replace oil condition sensor	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Adaptation (reduction) of engine oil service interval		Breakdown notice: None	None
MEVD17.2-BN2000	0x3446	13382	BSD message from the oil condition sensor: missing	The diagnostic function monitors the BSD message from the oil level sensor (QLT).	P1521	Engine Oil Quality Sensor Communication Error	Engine Oil Quality Sensor	Communication	The fault is recognized when no BSD telegram from the oil condition sensor (QLT) is received. Potential problem source(s): - Problem with BSD wire between DME and oil quality sensor (QLT) - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	BSD CAN (QLT) Indicate relevant measured variables from SGBD job test data block!	N	- Problem with BSD wire between DME and oil quality sensor (QLT) - Defective DME	- Check wiring harness between DME and oil quality sensor (QLT), - replace oil quality sensor (QLT), - replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Only relevant for E6x, as it is only vehicle with a QLT Quality-Level-Temperature unit, all other vehicles are equipped with a TOENS thermal oil level sensor!	Possible apparent symptoms: Adaptation (reduction) of engine oil service interval		Breakdown notice: None	None
MEVD17.2-BN2000	0x3447	13383	Engine oil level: Too low	The diagnostic function monitors the engine oil level.	P250F	Engine Oil Level Too Low	Engine Oil Level	Level	The fault is recognized when the engine oil level falls below 5 liters. Potential problem source(s): - Engine operated with oil level too low	The diagnostic fault code is logged when = TRUE is recognized 50 times.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	N	- Engine operated with oil level too low	- Top up engine oil - Check oil level	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message		Breakdown notice: None	None
MEVD17.2-BN2000	0x3449	13385	Oil condition sensor, electrical: malfunction	The diagnostic function monitors the signal from the oil condition sensor for electrical faults.	P252A	Engine Oil Quality Sensor Circuit	Engine Oil Quality Sensor	Electrical	The fault is recognized when the oil condition sensor reports a fault over the bus. Potential problem source(s): - Defect in plugs or wiring harness between oil condition sensor and DME - Oil condition sensor defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in plugs or wiring harness between oil condition sensor and DME - Oil condition sensor defective	- Check plugs and wiring harness between oil condition sensor and DME - Replace oil condition sensor	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Adaptation (reduction) of engine oil service interval		Breakdown notice: None	None
MEVD17.2-BN2000	0x344C	13388	Engine oil temperature sensor, electrical: malfunction	The diagnostic function monitors the signal from the engine oil temperature sensor for electrical malfunctions.	P0195	Engine Oil Temperature Sensor 'A' Circuit			The fault is recognized when the signal voltage exceeds 3.6 V. Potential problem source(s): - Defect in plugs or wiring harness between engine oil temperature sensor and DME - Defective engine oil temperature sensor	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in plugs or wiring harness between engine oil temperature sensor and DME - Defective engine oil temperature sensor	- Check plugs and wiring harness between engine oil temperature sensor and DME - Replace engine oil temperature sensor	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Adaptation (reduction) of engine oil service interval		Breakdown notice: None	None
MEVD17.2-BN2000	0x344E	13390																							
MEVD17.2-BN2000	0x344F	13391																							

MEVD17.2-BN2000	0x348A	13450	Characteristic map thermostat, mechanical: jammed open	The diagnostic function monitors the rise in coolant temperature at the engine's discharge connection.	P0128	Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)	Thermostat	Functional Check	A fault is recognized when the engine temperature is below 80 °C when the test is executed. Because the test time is defined by the temperature model, it is also determined by the model's input variables (air mass, ambient temperature and model temperature). Potential problem source(s): - Defective wiring harness - Characteristic map thermostat defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Coolant temperature sensor less than 40 °C Time condition: - None Other conditions: - Engine cold start - Vehicle speed in excess of 30 km/h - Ambient temperature higher than minus 10°C - Engine speed between 800	- Coolant temperature lower than 40 °C	- None	- No	none	Y	- Defect in wiring harness - Characteristic map thermostat defective	- Check wiring harness - Replace map-controlled thermostat	- ECE emissions warning lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	MIL ON in US versions only	Possible apparent symptoms: - The output of the interior heater may be reduced.		Breakdown notice: None	- When the engine is heated from external sources, such as an auxiliary heater, diagnosis errors can result!
MEVD17.2-BN2000	0x348E	13454	Map thermostat, activation: Short circuit to B+	The diagnostic function monitors activation of the program map thermostat.	P0599	Thermostat Heater Control Circuit High	Thermostat	Electrical	The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and program map thermostat	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_KFT, STEUERN_ENDE_KFT, STATUS_KFT	PWM activation signal, 0x4a74	N	- Defect in wiring harness between DME and program map thermostat	- Check wiring harness between DME and map-controlled thermostat - Replace map-controlled thermostat - Replace DME	lamp: off - ECE electronic engine power reduction: on - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: US: MIL on, customer proceeds to service facility.		Breakdown notice: None	None
MEVD17.2-BN2000	0x348F	13455	Map thermostat, activation: Short circuit to earth	The diagnostic function monitors activation of the program map thermostat.	P0598	Thermostat Heater Control Circuit Low	Thermostat	Electrical	The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and program map thermostat	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_KFT, STEUERN_ENDE_KFT, STATUS_KFT	PWM activation signal, 0x4a74	N	- Defect in wiring harness between DME and program map thermostat	- Check wiring harness between DME and map-controlled thermostat - Replace map-controlled thermostat - Replace DME	lamp: off - ECE electronic engine power reduction: on - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: US: MIL on, customer proceeds to service facility.		Breakdown notice: None	None
MEVD17.2-BN2000	0x3490	13456	Map thermostat, activation: Line disconnection	The diagnostic function monitors activation of the program map thermostat.	P0597	Thermostat Heater Control Circuit/Open	Thermostat	Electrical	The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defect in wiring harness between DME and program map thermostat	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	STEUERN_KFT, STEUERN_ENDE_KFT, STATUS_KFT	PWM activation signal, 0x4a74	N	- Defect in wiring harness between DME and program map thermostat	- Check wiring harness between DME and map-controlled thermostat - Replace map-controlled thermostat - Replace DME	lamp: off - ECE electronic engine power reduction: on - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: US: MIL on, customer proceeds to service facility.		Breakdown notice: None	None
MEVD17.2-BN2000	0x34A3	13475																							
MEVD17.2-BN2000	0x34A5	13477																							
MEVD17.2-BN2000	0x34A8	13480																							
MEVD17.2-BN2000	0x34A9	13481																							
MEVD17.2-BN2000	0x34AD	13485																							
MEVD17.2-BN2000	0x34AE	13486																							
MEVD17.2-BN2000	0x34AF	13487																							
MEVD17.2-BN2000	0x3520	13600	Idle speed control: Engine speed too high	The diagnostic function monitors the idle speed when the engine is warmed to normal operating temperature.	P0507	Idle Control System RPM Higher Than Expected	Idle Speed Control	RPM	the actual idle speed exceeds the specified idle speed by more than 100 rpm. Potential problem source(s): - Collateral fault from defective throttle valve - Leak in air-induction tract between throttle valve and	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 3 sec. after engine on Other conditions:	- Engine warmed to normal temperature, more than 80°C	- 3 sec. after engine on	none	none	N	- Collateral fault from defective throttle valve - Leak in air-induction tract between throttle valve and engine	- If faults related to the throttle valve have been logged, repair these first - Check for leaks in air-induction tract between throttle valve and engine	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: - Idle speed too high		Breakdown notice: None	None
MEVD17.2-BN2000	0x3521	13601	Idle speed control: Engine speed too low	The diagnostic function monitors the idle speed when the engine is warmed to normal operating temperature.	P0506	Idle Control System RPM Lower Than Expected	Idle Speed Control	RPM	the actual idle speed falls below the specified idle speed by more than 100 rpm. Potential problem source(s): - Collateral fault from defective throttle valve - Leak in air-induction tract between throttle valve and	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - 3 sec. after engine on Other conditions:	- Engine warmed to normal temperature, more than 80°C	- 3 sec. after engine on	none	none	N	- Collateral fault from defective throttle valve - Leak in air-induction tract between throttle valve and engine	- If faults related to the throttle valve have been logged, repair these first - Check for leaks in air-induction tract between throttle valve and engine	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: - In extreme cases the engine may stall.		Breakdown notice: None	None
MEVD17.2-BN2000	0x3524	13604	Idle speed control, cold start: Engine speed too high	The diagnostic function monitors the idle speed during the catalytic converter's warmup phase.	P1562	Cold Start Idle Air Control System RPM Higher Than Expected (Bank 1)	Idle Speed Control	Cold Start RPM	the actual idle speed exceeds the specified idle speed by more than 300 rpm. Potential problem source(s): - Collateral fault from defective throttle valve - Leak in air-induction tract between throttle valve and	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	none	none	N	- Collateral fault from defective throttle valve - Leak in air-induction tract between throttle valve and engine	- If faults related to the throttle valve have been logged, repair these first - Check for leaks in air-induction tract between throttle valve and engine	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: - Idle speed too high		Breakdown notice: None	None
MEVD17.2-BN2000	0x3525	13605	Idle speed control, cold start: Engine speed too low	The diagnostic function monitors the idle speed during the catalytic converter's warmup phase.	P1561	Cold Start Idle Air Control System RPM Lower Than Expected (Bank 1)	Idle Speed Control	Cold Start RPM	the actual idle speed falls below the specified idle speed by more than 300 rpm. Potential problem source(s): - Collateral fault from defective throttle valve - Leak in air-induction tract between throttle valve and	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	none	none	N	- Collateral fault from defective throttle valve - Leak in air-induction tract between throttle valve and engine	- If faults related to the throttle valve have been logged, repair these first - Check for leaks in air-induction tract between throttle valve and engine	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	US only	Possible apparent symptoms: - In extreme cases the engine may stall.		Breakdown notice: None	None
MEVD17.2-BN2000	0x3528	13608	Monitoring engine torque limitation: Maximum permitted nominal torque is continuously exceeded	The diagnostic function monitors the maximum approved specified torque.					The fault is recognized when the specified torque is above the allowed torque. Potential problem source(s): - DME defective	The diagnostic fault code is logged when the fault remains present for longer than 10 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Reprogram DME - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Reduction in engine power (limp-home mode) - Engine rpm limitation		Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the reduction in engine output.	None
MEVD17.2-BN2000	0x3529	13609	Engine-speed limitation with stationary vehicle: Idle speed too high for too long	The diagnostic function monitors the engine for overheating while the vehicle is stationary.					The fault is recognized when an engine speed of 2000 rpm is exceeded for more than 6.5 sec. while the vehicle is stationary. Potential problem source(s): - Abuse (driver revs engine while vehicle is stationary)	This fault is logged in the control module's fault memory immediately.	Terminal 15	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - 384 sec. Other conditions: - Engine on - Idle speed greater than 2000 rpm	- None	- 384 sec.	NO	none	Y	- Abuse (driver revs engine while vehicle is stationary)	- Clear ECU fault memory. No further measures necessary.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: When accelerator pedal is depressed at idle the engine speed is limited once the indicated time period elapses		Breakdown notice: - none	None
MEVD17.2-BN2000	0x352A	13610																							
MEVD17.2-BN2000	0x3584	13700	DME, internal fault, interior-temperature sensor: value too high	The diagnostic function monitors control module temperature for violation of an upper limit.	P0634	Control Module Internal Temperature 'A' Too High	ECM/TCM	Internal Temperature	The diagnostic fault code is logged when the voltage value for ECU temperature > 4.9 V. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Loss of power		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x3585	13701	DME, internal fault, interior-temperature sensor: value too low	The diagnostic function monitors control module temperature for violation of a lower limit.	P163A	PCM/ECM/TCM Internal Temperature Too Low	ECM/TCM	Internal Temperature	The fault is logged in the ECU fault memory when the voltage for the control module temperature is > 0.1 V. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Loss of power		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x3586	13702	DME temperature: excess temperature	The diagnostic function monitors the interior temperature of the DME.	P0634	Control Module Internal Temperature 'A' Too High	ECM/TCM	Internal Temperature	The fault is recognized when the temperature in the DME is too high. Potential problem source(s): - DME overheated - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	none	Temp, 0x5821	Y	- DME overheated - Defective DME	- Check E-box fan as indicated - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x36B0	14000	DME, internal fault, activation Valvetronic: malfunction	The diagnostic function monitors the current flow through the Valvetronic actuator motor when the driver circuit is switched off.	P10E5	Internal Control Module Error, Control Circuit VVT	ECM	Valvetronic (VVT) Control	The fault is logged in the ECU fault memory when the current draw in the driver circuit exceeds 4 amps while the driver circuit is deactivated. Potential problem source(s): - Defective wiring harness - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Voltage behind motor relay > 5 V	- None	- None	none	none	N	- Defective wiring harness - Defective DME	- Check wiring harness between Valvetronic actuator motor and DME - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: - none	If the fault occurs while the Valvetronic unit's stroke is not at full extension then the engine will stall and fail to restart. This is because the Valvetronic driver circuit is deactivated and the Valvetronic unit cannot return to minimum stroke. If the fault occurs at maximum stroke, unrestricted throttled operation is possible.
MEVD17.2-BN2000	0x36B5	14005	DME, internal fault: Delete EEPROM faulty	The diagnostic function monitors the EEPROM emulation's "delete sector."	P062F	Internal Control Module EEPROM Error	ECM/TCM	EEPROM	The fault is recognized by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	The fault position indicates a defective D-flash, or the D-flash service life has elapsed (30,000 write/delete cycles).	Possible apparent symptoms: Engine can fail to start when fault is active (electronic immobilizer).		Breakdown notice: - none	- none
MEVD17.2-BN2000	0x36B8	14008	DME, internal fault: Monitoring-module fault	The diagnostic function monitors the DME's internal monitor modules.	P060A	Internal Control Module Monitoring Processor Performance	ECM/TCM	Processor	The fault is recognized by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation		Breakdown notice: - It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x36BB	14011	DME, internal fault, watchdog output: malfunction	The diagnostic function monitors the internal ABE and WDA wire in the DME.	P16EA	Internal Control Module Watchdog Error	ECM	Watchdog	The fault is recognized by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Non-starter in extreme cases		Breakdown notice: Continued driving is not possible while fault is active. When the fault is no longer present continued driving is possible with no restrictions.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x36BC	14012	DME, internal fault, watchdog output: faulty question/answer communication	The diagnostic function monitors the internal WDA wire in the DME.	P16EB	Internal Control Module Watchdog Communication Error	ECM	Watchdog	The fault is recognized by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: - none	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x36BD	14013	DME, internal fault, watchdog output: Overvoltage detection	The diagnostic function monitors the internal ABE wire in the DME.	P16EC	Internal Control Module Watchdog Overvoltage Error	ECM	Watchdog	The fault is recognized by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: - none	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-BN2000	0x36BE	14014	Encoding: Version not found	The diagnostic function monitors the encoding.					The fault is recognized when the DME has not been encoded. Potential problem source(s): - DME not encoded	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	None	None	Y	- DME not encoded	- Encode DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	None	Possible apparent symptoms: - Power limited only in extreme cases		Breakdown notice: Because power may be reduced passing maneuvers should be avoided	None
MEVD17.2-BN2000	0x36BF	14015																							

MEVD17.2-8N2000	0x36C0	14016	DME, internal fault, electric accelerator pedal monitoring: A/D converter sifting test pulse check	The diagnostic function monitors the DME's internal status.	P225A	Control Module Monitoring Safety Function A/D Converter Error	ECM Monitoring	Safety Function	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C1	14017	DME, internal fault, electric accelerator pedal monitoring: A/D converter, test voltage check	The diagnostic function monitors the DME's internal status.	P225A	Control Module Monitoring Safety Function A/D Converter Error	ECM Monitoring	Safety Function	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C2	14018	DME, internal fault, electric accelerator pedal monitoring: Air quantity adjustment	The diagnostic function monitors the DME's internal status.	P229B	Control Module Monitoring Safety Function Air Flow Adjustment	ECM Monitoring	Safety Function	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON - Engine speed above 1200	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C3	14019	DME, internal fault: monitoring of signal plausibility, accelerator pedal module or pedal sensor	The diagnostic function monitors the DME's internal status.	P060D	Internal Control Module Accelerator Pedal Position Performance	ECM	Accelerator Pedal	The fault is recognised by the self-diagnosis. Potential problem source(s): - Accelerator pedal module defective - Wiring harness defective - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Accelerator pedal module defective - Wiring harness defective - DME defective	- Check wiring harness between DME and accelerator pedal module - Replace accelerator pedal module - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C4	14020	DME, internal fault, electric accelerator pedal monitoring: Speed sensor	The diagnostic function monitors the DME's internal status.	P225C	Control Module Monitoring Safety Function Speed Sensor Error	ECM Monitoring	Safety Function	The fault is recognised by the self-diagnosis. Potential problem source(s): - Crankshaft sensor defective - Wiring harness defective - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Crankshaft sensor defective - Defect in wiring harness - DME defective	- Check wiring harness between DME and crankshaft sensor - Replace crankshaft sensor - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C5	14021	DME, internal fault: Monitoring plausibility of mixture correction factors	The diagnostic function monitors the DME's internal status.	P2237	Control Module Monitoring Fuel Correction Error	ECM Monitoring	Fuel Correction	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C6	14022	DME, internal fault: Monitoring fuel injection quantity limit level 1	The diagnostic function monitors the DME's internal status.	P229D	Control Module Monitoring Injection Rate Limitation Error	ECM Monitoring	Injection Rate	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C7	14023	DME, internal fault: Monitoring injection-rate limitation level 2	The diagnostic function monitors the DME's internal status.	P229D	Control Module Monitoring Injection Rate Limitation Error	ECM Monitoring	Injection Rate	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C8	14024	DME, internal fault: Monitoring of the nominal oxygen sensor value	The diagnostic function monitors the DME's internal status.	P2337	Control Module Monitoring Lambda Plausibility	ECM Monitoring	Lambda Plausibility	The fault is recognised by the self-diagnosis. Potential problem source(s): - Wiring harness defective - Oxygen sensor defective - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Wiring harness defective - Oxygen sensor defective - DME defective	- Check wiring harness between oxygen sensor and DME - Replace oxygen sensor - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36C9	14025	DME, internal fault: Plausibility monitoring of the relative fuel mass	The diagnostic function monitors the DME's internal status.	P223F	Control Module Monitoring Fuel Volume Plausibility	ECM Monitoring	Fuel Volume Control	The fault is recognised by the self-diagnosis. Potential problem source(s): - Rail-pressure sensor defective - Wiring harness defective - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Rail-pressure sensor defective - Wiring harness defective - DME defective	- Check wiring harness between DME and rail-pressure sensor - Replace rail-pressure sensor - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36CA	14026	DME, internal fault: Torque comparison monitoring	The diagnostic function monitors the DME's internal status.	P0618	Internal Control Module Torque Calculation Performance	ECM	Torque	The fault is recognised by the self-diagnosis. Potential problem source(s): - Secondary fault from mixture formation - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Secondary fault from mixture formation - Defective DME	- Start by repairing faults related to logged ECU fault memory entries for mixture formation - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36CB	14027	DME, internal fault, electric accelerator pedal monitoring: Drive train transmission ratio implausible	The diagnostic function monitors the DME's internal status.	P229C	Control Module Monitoring Safety Function Ratio Error	ECM Monitoring	Safety Function	The fault is recognised by the self-diagnosis. Potential problem source(s): - Secondary fault from mixture formation - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- Secondary fault from mixture formation - Defective DME	- Start by repairing faults related to logged ECU fault memory entries for mixture formation - Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36CC	14028	DME, internal fault: Monitoring, variant coding	The diagnostic function monitors the DME's internal status.	P223b	Control Module Monitoring Version Coding Plausibility	ECM Monitoring	Coding	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36CD	14029	DME, internal fault, electric accelerator pedal monitoring: Ignition-timing monitoring	The diagnostic function monitors the DME's internal status.	P229E	Control Module Monitoring Safety Function Ignition Timing Error	ECM Monitoring	Safety Function	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36CE	14030	DME, internal fault: Switch-off path test by monitoring module	The diagnostic function monitors the DME's internal status.	P229D	Control Module Monitoring Shutdown Path Error	ECM Monitoring	Shutdown Path	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36CF	14031	DME, internal fault: Plausibility monitoring, fuel mass	The diagnostic function monitors the DME's internal status.	P223F	Control Module Monitoring Fuel Volume Plausibility	ECM Monitoring	Fuel Volume Control	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	NO	none	Y	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	lamp: on - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Loss of power - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- A terminal status switch must be conducted before this fault can be deleted.
MEVD17.2-8N2000	0x36D0	14032	DME, internal fault, monitoring MSC communication Malfunction in module KOS2/1	The diagnostic function monitors communications within the DME.	P1646	Internal Control Module Communication Error Output Stage	ECM	Output Stage Communication	The fault is recognised when interference occurs in communications between the CPU and a driver circuit. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none M/T11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Active fault can cause engine to stall or fail to start.	Breakdown notice: - none	- none
MEVD17.2-8N2000	0x36D1	14034	DME, internal fault, monitoring MSC communication Malfunction in module KOS2/2	The diagnostic function monitors communications of DME hardware components.	P1646	Internal Control Module Communication Error Output Stage	ECM	Output Stage Communication	The fault is recognised when interference occurs in communications between the CPU and a driver circuit. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none M/T11 US: - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Breakdown in extreme cases	Breakdown notice: - none	- none
MEVD17.2-8N2000	0x36D4	14038			P1585	Internal Control Module Error, Control Circuit VVT	ECM	Valve/trains (VVT) Control																	
MEVD17.2-8N2000	0x36E2	14050	DME, internal fault, monitoring 5V sensor supply: Voltage outside valid range	The diagnostic function monitors the sensor voltage supply G1.	P1587	Internal Control Module Volt Supply Voltage 1 Performance	ECM	Voltage	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on M/T11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced performance - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- none
MEVD17.2-8N2000	0x36E3	14051	DME, internal fault, monitoring 5V sensor supply 2: Voltage outside valid range	The diagnostic function monitors the internal sensor supply voltage G2.	P1588	Internal Control Module Volt Supply Voltage 2 Performance	ECM	Voltage	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on M/T11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced performance - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- none
MEVD17.2-8N2000	0x36E4	14052	DME, internal fault, monitoring 5V sensor supply 3: Voltage outside valid range	The diagnostic function monitors the internal sensor supply voltage G2.	P1589	Internal Control Module Volt Supply Voltage 3 Performance	ECM	Voltage	The fault is recognised by the self-diagnosis. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on M/T11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: - Reduced performance - Speed limitation	Breakdown notice: - It is possible to continue driving the vehicle, but passing manoeuvers should not be attempted owing to reduction in engine output.	- none
MEVD17.2-8N2000	0x36FA	14074	Starter motor, activation: Short circuit to B+	The diagnostic function monitors the starter control-activation wire (Terminal 50) from the DME to the CAS.	P0617	Starter Relay Circuit High			The fault is recognised when a short circuit to positive is present. Potential problem source(s): - Defect in wiring harness between CAS and DME - CAS defective - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U	N	- Defect in wiring harness between CAS and DME - CAS defective - DME defective	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None	Breakdown notice: None	None

MEVD17.2-8N2000	0x36F6	14075	Starter motor, activation: Short circuit to earth	The diagnostic function monitors the starter control-activation wire (Terminal 50) from the DME to the CAS.	P0616	Starter Relay Circuit Low			The fault is recognized when a short circuit to ground is present. Potential problem source(s) - Defect in wiring harness between CAS and DME - CAS defective - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U	N	- Defect in wiring harness between CAS and DME - CAS defective - DME defective	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Delayed engine start		Breakdown notice: None	None
MEVD17.2-8N2000	0x36FC	14079	Starter motor, activation: Line disconnection	The diagnostic function monitors the starter control-activation wire (Terminal 50) from the DME to the CAS.	P0615	Starter Relay Circuit			The fault is recognized when an open wire is present. Potential problem source(s) - Defect in wiring harness between CAS and DME - CAS defective - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U	N	- Defect in wiring harness between CAS and DME - CAS defective - DME defective	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x36FD	14077	DME main relay: implausibly open	The diagnostic function monitors the switch status of the main DME relay.					The fault is recognized when the switched status is implausible. Potential problem source(s) - Defect in wiring harness to DME main relay - Defective DME main relay	Allow DME to enter sleep mode 3 times	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U	N	- Defect in wiring harness to DME main relay - Defective DME main relay	- Check wiring harness to DME main relay - Replace DME main relay	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-8N2000	0x36FE	14078	DME main relay: activation Short circuit to earth	The diagnostic function monitors the switch status of the main DME relay.					The fault is recognized when a short circuit is present on the main relay activation wire. Potential problem source(s) - Defect in wiring harness to DME main relay - Defective DME main relay	Allow DME to enter sleep mode 3 times	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Shutdown phase	- None	- None	NO	U	N	- Defect in wiring harness to DME main relay - Defective DME main relay	- Check wiring harness to DME main relay - Replace DME main relay	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-8N2000	0x36FF	14079	DME main relay: implausibly closed	The diagnostic function monitors the switch status of the main DME relay.					The fault is recognized when power continues to flow to the DME after the DME relay is deactivated. Potential problem source(s) - Defect in wiring harness to DME main relay - Defective DME main relay	Allow DME to enter sleep mode 3 times	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Shutdown phase	- None	- None	NO	U	N	- Defect in wiring harness to DME main relay - Defective DME main relay	- Check wiring harness to DME main relay - Replace DME main relay	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - none		Breakdown notice: - none	- none
MEVD17.2-8N2000	0x3714	14100	Vehicle voltage, DME main relay: Voltage too high	The diagnostic function monitors the battery voltage relative to an upper limit.	P0687	ECM/PCM Power Relay Control Circuit High	ECM/PCM Power Relay	Electrical	Electrical system voltage above 16 V. Potential problem source(s) - Systematic fault, for instance, jump start with 24 V - Defect in power supply to DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - 2 min. after engine start Other conditions: - Speed > 20 km/h	- None	- 2 min. after engine start	NO	U_0x9815	N	- Systematic fault, for instance, jump start with 24 V - Defect in power supply to DME	- If an overvoltage fault is logged in the fault memories of multiple control modules then the source is a systematic malfunction in the vehicle (for instance, jump start with 24 V), - If the overvoltage fault is logged in the fault memory of only one control module, then the problem lies with the power supply to this specific control module.	lamp: off - ECE electronic engine power reduction: on - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - none		Breakdown notice: None	None
MEVD17.2-8N2000	0x371A	14105	Valvetronic relay, supply voltage: Short circuit to earth	The diagnostic function monitors the wire from the Valvetronic relay to the DME for short circuits to ground.	P10E3	VVT-Relay Supply Voltage Circuit Low	Valvetronic (VVT)	Power Supply Relay	The fault is recognized when the voltage in the control wire to the Valvetronic relay is less than 2 V. Potential problem source(s) - Defect in wiring harness between Valvetronic relay and DME - Valvetronic relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in wiring harness between Valvetronic relay and DME - Valvetronic relay defective - Defective DME	- Check wiring harness Valvetronic relay and DME (U_VVTR) - Replace Valvetronic relay - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, customer seeks		Breakdown notice: None	None
MEVD17.2-8N2000	0x371B	14106	Valvetronic relay, supply voltage: Line disconnection	The diagnostic function monitors the wire from the Valvetronic relay to the DME for open wires, and monitors the control wire to the Valvetronic relay for open wires and shorts to ground.	P10E4	VVT-Relay Supply Voltage Circuit/Open	Valvetronic (VVT)	Power Supply Relay	the difference between battery voltage and buffer capacitor exceeds 7 V. Potential problem source(s) - Valvetronic fuse defective - Defect in wiring harness between Valvetronic relay and DME - Valvetronic relay defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Valvetronic fuse defective - Defect in wiring harness between Valvetronic relay and DME - Valvetronic relay defective - Defective DME	- Inspect Valvetronic fuse - Check wiring harness between Valvetronic relay and DME (U_VVTR) - Check wiring harness between Valvetronic relay and DME (S_VVTR) - Replace Valvetronic relay - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: on - CC message: on MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: on - CC message: on	none	Possible apparent symptoms: CC message, customer seeks		Breakdown notice: None	None
MEVD17.2-8N2000	0x371C	14107	Relay, ignition and injection systems, activation: Short circuit to earth	The diagnostic function monitors the wire to the overload-protection relay for ignition and injection.					a short circuit to ground is present. Potential problem source(s) - Wiring harness between DME and overload-protection relay for ignition and injection - defective - Defect at ignition relay - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Wiring harness between DME and overload-protection relay for ignition and injection is defective - Defect at ignition relay - Defective DME	- Check wiring harness between DME and overload-protection relay for ignition and injection - Replace overload-protection relay for ignition and injection - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Engine continues to run and starts	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x371D	14108	Relay, ignition and injection systems, activation: Short circuit to B+	The diagnostic function monitors the wire to the overload-protection relay for ignition and injection.					a short circuit to positive is present. Potential problem source(s) - Wiring harness between DME and overload-protection relay for ignition and injection - defective - Defect at injection relay - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Wiring harness between DME and overload-protection relay for ignition and injection is defective - Defect at injection relay - Defective DME	- Check wiring harness between DME and overload-protection relay for ignition and injection - Replace overload-protection relay for ignition and injection - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Engine fails to start, or stalls	Possible apparent symptoms: - No longer possible to start engine		Breakdown notice: None	None
MEVD17.2-8N2000	0x371E	14110	Relay, ignition and injection systems, activation: Line disconnection	The diagnostic function monitors the wire to the overload-protection relay for ignition and injection.					The fault is recognized when an open wire is present. Potential problem source(s) - Wiring harness between DME and overload-protection relay for ignition and injection - defective - Defect at injection relay - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Wiring harness between DME and overload-protection relay for ignition and injection is defective - Defect at injection relay - Defective DME	- Check wiring harness between DME and overload-protection relay for ignition and injection - Replace overload-protection relay for ignition and injection - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Engine fails to start, or stalls	Possible apparent symptoms: - No longer possible to start engine		Breakdown notice: None	None
MEVD17.2-8N2000	0x375A	14170	CBS client: Output of substitute value	The diagnostic function monitors calculation of mileage remaining in the engine oil service interval.					The fault is recognized when the calculation of mileage remaining in the engine oil service interval uses a default value. Potential problem source(s) - Defective oil level sensor - Error in calculating CBS data	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Defective oil level sensor - Error in calculating CBS data	- Check operation of oil level sensor - Replace oil level sensor	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: Take vehicle to service facility within remaining mileage and have oil level sensor checked.	The diagnostic fault code can only be deleted once the oil level sensor is again fully operational.
MEVD17.2-8N2000	0x375B	14171	CBS client: Jump in availability	The diagnostic function monitors whether a jump in the availability has taken place.					The fault is recognized when the availability makes implausible jumps within a driving cycle. Potential problem source(s) - Tampering with system - Error in calculating CBS data	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Tampering with system - Error in calculating CBS data	- Conduct CBS system test	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x375C	14172	DME, protection against tampering: Program or data manipulation detected	The diagnostic function monitors the program status for signs of manipulation.					The fault is detected by the internal calculation algorithms. Potential problem source(s) - Software tampered with - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Software tampered with - Defective DME	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: - none	- The DME must be reprogrammed before this fault can be deleted.
MEVD17.2-8N2000	0x375F	14175	Incorrect data record: CAN timeout	The diagnostic function monitors the CAN bus between the CAS and DME.					the FAHRZEUGTYP (VEHICLE VERSION) message from the CAS is missing. Potential problem source(s) - Time limit violation transmitting FAHRZEUGTYP (VEHICLE VERSION) message from CAS	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Time limit violation transmitting FAHRZEUGTYP (VEHICLE VERSION) message from CAS - Defective CAS - Defective DME	- Continue fault diagnosis at the following ECU: CAS Replace CAS - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	Occurs when vehicle version message from CAS is missing	Possible apparent symptoms: - Possible power reduction caused by incorrect performance class.		Breakdown notice: Avoid passing maneuvers as engine power is reduced	None
MEVD17.2-8N2000	0x3760	14176	Incorrect data record: Variant monitoring	The diagnostic function monitors the software versions in the CAS and DME.					The fault is recognized when the software versions are not mutually compatible. Potential problem source(s) - DME programming error - DME encoded incorrectly - Defective CAS - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME programming error - DME encoded incorrectly - Defective CAS - Defective DME	- Continue fault diagnosis at the following ECU: CAS Reprogram and encode DME - Replace CAS - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	The code (upper/middle/lower performance class) for the CAS does not match the code in the datasetfor code in the DME.	Possible apparent symptoms: - Possible power reduction caused by incorrect performance class		Breakdown notice: Avoid passing maneuvers as engine power is reduced	None
MEVD17.2-8N2000	0x3778	14090	Coolant pump, shutdown: internal temperature too high	The diagnostic function monitors the temperature of the electric water pump's electronics.	P1502L	Coolant Pump Cut-Off, Internal Temperature Too High			the temperature of the water pump's electronics is > 126 °C. A power reduction is entered. Potential problem source(s) - Electric fan defective - Coolant thermostat defective - Insufficient coolant	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine on - No BSD fault	- None	- None	Yes (25) (BDBF)	none	N	- Electric fan defective - Coolant thermostat defective - Insufficient coolant - Defective water pump	- Continue testing with test modules focusing on problems with the electric fan and the thermostat - Start engine, set heat to maximum output, allow to run for 5 minutes and the check to determine whether the diagnostic fault code has been logged again - If the diagnostic fault code continues to appear despite correct engine temperature replace the water pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message if engine becomes too hot, breakdown in extreme cases		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3782 or 0x3A0A9: 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it -> Carry out tester job at Tmot=30°C
MEVD17.2-8N2000	0x3779	14091	Coolant pump, shutdown: Overvoltage detected	The diagnostic function monitors the power-supply voltage to the electric water pump.	P1502	Coolant Pump Cut-Off, Overvoltage			the electric water pump deactivates in a result of overvoltage. Potential problem source(s) - Jump-start with 24 V battery - Problem with electrical system voltage - Defective water pump	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine on - No BSD fault	- None	- None	Yes (25) (BDBF)	none	N	- Jump-start with 24 V battery - Problem with electrical system voltage - Defective water pump	- Continue test routine with test modules that deal with problems related to voltage in onboard electrical system - Start engine, set heat to maximum output, allow to run for one minute and the check to determine whether the diagnostic fault code has been logged again - If the diagnostic fault code continues to appear despite correct electrical system voltage replace the water pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message if engine becomes too hot, breakdown in extreme cases		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3782 or 0x3A0A9: 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it -> Carry out tester job at Tmot=30°C
MEVD17.2-8N2000	0x377A	14092	Coolant pump, shutdown: Pump blocked	The diagnostic function monitors the electric water pump for mechanical seizure.					the electric water pump deactivates in response to recognized seizure. Potential problem source(s) - Foreign matter/contamination in coolant - Incorrect coolant mixture ratio	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine on - No BSD fault	- None	- None	Yes (25) (BDBF) Activation at 100%	none	N	- Foreign matter/contamination in coolant - Incorrect coolant mixture ratio - Defective water pump	- Execute operational check - Check coolant mixture ratio - Check water pump and coolant for foreign matter/objects - Replace water pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message if engine becomes too hot, breakdown in extreme cases		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3782 or 0x3A0A9: 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it -> Carry out tester job at Tmot=30°C
MEVD17.2-8N2000	0x377B	14093	Coolant pump, operation with reduced output: Dry-running detected	The diagnostic function monitors the electric water pump for cavitation.	P1524	Coolant Pump Dry Run			The fault is recognized when the electric water pump recognizes cavitation. Potential problem source(s) - Coolant loss, leak in cooling system - Air in the cooling system	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine on - No BSD fault	- None	- None	Yes (25) (BDBF)	none	N	- Coolant loss, leak in cooling system - Air in the cooling system	- Check cooling system for leaks - Refill and then bleed cooling system as indicated - If the fault continues to appear although the cooling system is bled and no leaks are present, replace the water pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message if engine becomes too hot, breakdown in extreme cases		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3782 or 0x3A0A9: 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it -> Carry out tester job at Tmot=30°C
MEVD17.2-8N2000	0x377C	14094	Coolant pump, operation with reduced output: Undervoltage detected	The diagnostic function monitors the power-supply voltage to the electric water pump.	P1505	Coolant Pump Undervoltage			The fault is recognized when the voltage is <10 V. Potential problem source(s) - Battery charge status or electrical system voltage is not OK - Defective wiring harness - Defective water pump	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine on - No BSD fault	- None	- None	Yes (25) (BDBF)	none	Y	- Battery charge status or electrical system voltage is not OK - Defective wiring harness - Defective water pump	- Continue test routine with test modules that deal with problems related to voltage in onboard electrical system - Start engine, set heat to maximum output, allow to run for one minute and the check to determine whether the diagnostic fault code has been logged again - If the fault continues to appear despite correct electrical system voltage replace the water pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message if engine becomes too hot, breakdown in extreme cases		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3782 or 0x3A0A9: 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it -> Carry out tester job at Tmot=30°C
MEVD17.2-8N2000	0x377D	14095	Coolant pump, operation with reduced output: Temperature limit 1 exceeded	The diagnostic function monitors the temperature of the water pump's electronics.	P1506	Coolant Pump Temperature Threshold 1 Exceeded			the temperature of the water pump's electronics is >123 °C. A power reduction is entered. Potential problem source(s) - Electric fan defective - Coolant thermostat defective - Insufficient coolant	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine on - No BSD fault	- None	- None	Yes (25) (BDBF)	none	N	- Electric fan defective - Coolant thermostat defective - Insufficient coolant - Defective water pump	- Continue testing with test modules focusing on problems with the electric fan and the thermostat - Start engine, set heat to maximum output, allow to run for 5 minutes and the check to determine whether the diagnostic fault code has been logged again - If the diagnostic fault code continues to appear despite correct engine temperature replace the water pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message if engine becomes too hot, breakdown in extreme cases		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3782 or 0x3A0A9: 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it -> Carry out tester job at Tmot=30°C
MEVD17.2-8N2000	0x377E	14096	Coolant pump, operation with reduced output: Temperature limit 2 exceeded	The diagnostic function monitors the temperature of the water pump's electronics.	P1507	Coolant Pump Temperature Threshold 2 Exceeded			the temperature of the water pump's electronics is >133 °C. A power reduction is entered. Potential problem source(s) - Electric fan defective - Coolant thermostat defective - Insufficient coolant	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V. Temperature condition: - None Time condition: - None Other conditions: - Engine on - No BSD fault	- None	- None	Yes (25) (BDBF)	none	Y	- Electric fan defective - Coolant thermostat defective - Insufficient coolant - Defective water pump	- Continue testing with test modules focusing on problems with the electric fan and the thermostat - Start engine, set heat to maximum output, allow to run for 5 minutes and the check to determine whether the diagnostic fault code has been logged again - If the diagnostic fault code continues to appear despite correct engine temperature replace the water pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message if engine becomes too hot, breakdown in extreme cases		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3782 or 0x3A0A9: 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it -> Carry out tester job at Tmot=30°C

MEVD17.2-BN2000	0x378F	14223	BSD message from electric coolant pump: missing	The diagnostic function monitors BSD bus communications with the electric water pump.					the water pump fails to respond to communications from the DME for roughly 15 sec. Potential problem source(s): - Defect in wiring harness between water pump and DME - Communications problem	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	Yes (2F) (60BF) Activation at 100%	none	N	- Defect in wiring harness between water pump and DME - Communications problem on BSD bus - Electric water pump defective	- Check fault memories of other components on BSD bus - Check wiring harness between water pump and DME - Conduct system test - Replace water pump	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Breakdown in extreme cases, electric water pump stops operating - engine overheats		Breakdown notice: None	Observe sequence for fault rectification - If the pump is activated by tester job at TMOT>90 °C then the diagnostic fault code 0x3792 or 0x20AD08 'water pump: rotation speed implausible' can be logged, ignore this fault and delete it --> Carry out tester job at Tmot<90°C
MEVD17.2-BN2000	0x3791	14225	Coolant pump, emergency operation input: No voltage	The diagnostic function monitors the voltage level at the electric water pump's emergency backup input terminal.					no voltage level is present at the emergency default input terminal of the water pump. Potential problem source(s): - Defect in wiring harness to water pump - Communications problem on BSD bus - Defective water pump	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - No BSD fault	- None	- None	NO	none	N	- Defect in wiring harness to water pump - Communications problem on BSD bus - Defective water pump	- Continue test routine with test modules that deal with problems related to voltage in onboard electrical system - Check wiring harness between water pump and DME - Replace water pump	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3792 or 0x20AD08 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it --> Carry out tester job at Tmot<90°C
MEVD17.2-BN2000	0x3792	14226	Coolant pump, speed deviation: outside tolerance	The diagnostic function monitors the rotation speed of the electric water pump.					the specified and actual rotation speeds of the electric water pump fail to match. Potential problem source(s): - Air in the cooling system - Defect in wiring harness to water pump - Defective water pump	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - Engine warmed to normal temp, above 80 °C Time condition: - None Other conditions: - Engine on	- Engine warmed to normal temperature, more than 80°C	- None	Yes (2F) (60BF) Activation at 100%	none	Y	- Air in the cooling system - Defect in wiring harness to water pump - Defective water pump	- Check mixture ratio of coolant and inspect for contamination - Bleed air from cooling system - Transmit activation voltage to water pump and evaluate operation with visual inspection at the expansion tank - Check wiring harness between water pump and DME - Replace water pump	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: CC message if engine becomes too hot, breakdown in extreme cases		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3792 or 0x20AD08 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it --> Carry out tester job at Tmot<90°C
MEVD17.2-BN2000	0x3796	14230	Clutch switch, signal: No signal	The diagnostic function monitors the clutch switch.					The fault is recognized when more than 15 gear changes without clutch activation are detected. Potential problem source(s): - Defective wiring harness - Clutch switch defective	This fault is logged in the control module's fault memory immediately.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - Time between the gearshift executions is at least 15 sec. Other conditions: - Vehicle speed: > 30 km/h - No gearshift recognition while brake pedal is	- None	- Time between gearshifts at least 15 sec.	NO	none	N	- Defective wiring harness - Clutch switch defective	- Check wiring harness between DME and clutch switch - Replace clutch switch	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3840	14400	Alternator, electrical: malfunction	The diagnostic function monitors whether the alternator is supplying power.	P0620	Generator Control Circuit			complex self-diagnosis routines in the regulator and transmitted to the DME via the BSD bus. Potential problem source(s): - Positive wire not correctly connected to battery - Ground not correctly connected - Defective regulator	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Alternator not fully loaded	- None	- None	NO	Activation conditions: 0x4614: Alternator load factor 0x5898: Specified alternator voltage 0x5815: Battery voltage	N	- Positive wire not correctly connected to battery - Ground not correctly connected - Defective regulator - Alternator defect	- Check positive wire for correct installation - Check ground wire for correct installation - Check alternator - Fault frequency = 1: If the IMIB is available, perform an alternator test / If no IMIB is available, delete stored fault codes from control module fault memory and do not perform any other actions Fault frequency > 1: Replace alternator	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Charge indicator lamp lights up - Breakdown in extreme cases		Breakdown notice: None	Can occur during vehicle servicing when external power source is connected, etc.
MEVD17.2-BN2000	0x3841	14401			P0620	Generator Control Circuit																			
MEVD17.2-BN2000	0x3842	14402																							
MEVD17.2-BN2000	0x3843	14403																							
MEVD17.2-BN2000	0x3844	14404	Alternator, plausibility, electrical: Calculated	The diagnostic function monitors the voltage of the onboard electrical system and compares it with the specified alternator voltage.	P325A	Generator Electrical Error Calculated			the actual voltage of the onboard electrical system is below the specified voltage. Potential problem source(s): - Positive wire not correctly connected to battery - Ground not correctly connected - Defective battery - Defective regulator - Alternator defect	The diagnostic fault code is logged when the fault remains present for longer than 6 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Alternator not fully loaded	- None	- None	NO	Activation conditions: 0x4614: Alternator load factor 0x5898: Specified alternator voltage 0x5815: Battery voltage Relevant parameters: 0x5898: Specified alternator voltage 0x5815: Battery voltage	Y	- Positive wire not correctly connected to battery - Ground not correctly connected - Defective battery - Defective regulator - Alternator defect	- Check positive wire for correct installation - Check ground wire for correct installation - Check battery - If the IMIB is available, perform an alternator test - If no IMIB is available, replace alternator	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Charge indicator lamp lights up - Breakdown in extreme cases		Breakdown notice: None	Can occur during vehicle servicing when external power source is connected, etc.
MEVD17.2-BN2000	0x3845	14405																							
MEVD17.2-BN2000	0x3846	14406																							
MEVD17.2-BN2000	0x3848	14408	Alternator, temperature: excess temperature	The diagnostic function monitors the alternator temperature.	P0A3B	Generator Over Temperature			temperature measurement in the regulator and transmitted to the DME via the BSD bus. Potential problem source(s): - Alternator dirty - Airflow to alternator obstructed - Thermal overload from unfavorable driving profile	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Alternator not fully loaded	- None	- None	NO	Activation conditions: 0x4614: Alternator load factor 0x5898: Specified alternator voltage 0x5815: Battery voltage	N	- Alternator dirty - Airflow to alternator obstructed - Thermal overload from unfavorable driving profile possible	- Inspect alternator for unobstructed air current - If the IMIB is available, perform an alternator test - If no IMIB is available, delete stored fault codes from control module fault memory and take no further action	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Error debounce can lead to reduced availability of comfort and convenience accessories.	Possible apparent symptoms: Reduction in availability of comfort and convenience accessories		Breakdown notice: None	If no other faults related to the alternator have been logged, do not replace the alternator. This fault only indicates that the alternator's thermal protection function has assumed active status in response to excessive component temperature. This is not a case of a defective component.
MEVD17.2-BN2000	0x384C	14412	Alternator, plausibility, temperature: Excess temperature calculated	The diagnostic function monitors the alternator temperature.	P324C	Generator Over Temperature Calculated			the calculated diode temperature rises above a specified limit temperature. Potential problem source(s): - Alternator dirty - Airflow to alternator obstructed - Thermal overload from unfavorable driving profile	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Alternator not fully loaded	- None	- None	NO	Activation conditions: 0x4614: Alternator load factor 0x5898: Specified alternator voltage 0x5815: Battery voltage	Y	- Alternator dirty - Airflow to alternator obstructed - Thermal overload from unfavorable driving profile possible	- Inspect alternator for unobstructed air current - If the IMIB is available, perform an alternator test - If no IMIB is available, delete stored fault codes from control module fault memory and take no further action	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Error debounce can lead to reduced availability of comfort and convenience accessories.	Possible apparent symptoms: Reduction in availability of comfort and convenience accessories		Breakdown notice: None	If no other faults related to the alternator have been logged, do not replace the alternator. This fault only indicates that the alternator's thermal protection function has assumed active status in response to excessive component temperature. This is not a case of a defective component.
MEVD17.2-BN2000	0x3850	14416	Alternator, mechanical: malfunction	The diagnostic function monitors the alternator's rotation speed.	P3223	Generator Mechanical			The fault is recognized by complex self-diagnosis routines in the regulator and transmitted to the DME via the BSD bus. Potential problem source(s): - Alternator drive defective - Alternator defect (bearing damage)	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Alternator not fully loaded	- None	- None	NO	Activation conditions: 0x4614: Alternator load factor 0x5898: Specified alternator voltage 0x5815: Battery voltage	N	- Alternator drive defective - Alternator defect (bearing damage)	- Check alternator drive (belt) - Replace alternator	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Charge indicator lamp lights up - Breakdown in extreme cases		Breakdown notice: None	Can occur during vehicle servicing when external power source is connected, etc.
MEVD17.2-BN2000	0x3854	14420	Alternator, controller: Incorrect type	The diagnostic function monitors the regulator code and compares it with the specified value stored in the DME.	P324E	Generator Regulator Type Implausible			The fault is recognized when the regulator code does not match the code stored in the DME. Potential problem source(s): - Incorrect regulator installed	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Alternator not fully loaded	- None	- None	NO	Activation conditions: 0x4614: Alternator load factor 0x5898: Specified alternator voltage 0x5815: Battery voltage Relevant parameters: ident_gen	Y	- Incorrect regulator installed	- If the fault frequency is less than or equal to 3, clear the control module fault memory and do not take any further action - If the fault frequency is > 3, then replace the alternator	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	If detail number is identical to approved number, information through VP to EA	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3858	14424	Generator: Incorrect type	The diagnostic function monitors alternator's code and compares it with the specified value.	P324A	Generator Type Implausible			The fault is recognized when the regulator code does not match the code stored in the DME. Potential problem source(s): - Incorrect alternator installed	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	- Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Alternator not fully loaded	- None	- None	NO	Activation conditions: 0x4614: Alternator load factor 0x5898: Specified alternator voltage 0x5815: Battery voltage Relevant parameters: ident_gen	Y	- Incorrect alternator installed	- If the fault frequency is less than or equal to 3, clear the control module fault memory and do not take any further action - If the fault frequency is > 3, then replace the alternator	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	If detail number is identical with approved number => Information to EA through VP Alternator continues to supply vehicle.	Possible apparent symptoms: Mild roughness at idle can occur		Breakdown notice: None	Alternator continues to supply power to vehicle.
MEVD17.2-BN2000	0x385C	14428	Alternator, communication: no communication	The diagnostic function monitors communications between DME and alternator.					The fault is recognized when multiple DME attempts to establish communications with the alternator remain unanswered. Potential problem source(s): - Defect in BSD bus line between DME and alternator - Alternator defect	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in BSD bus line between DME and alternator - Alternator defect	- Check plug connection (detent) on alternator. - Check connection wire (BSD bus) between alternator and DME. - Alternator replacement required only if the DME detects a BSD fault with the alternator (not in response to global BSD fault)	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Breakdown in extreme cases		Breakdown notice: None	Alternator usually continues to supply vehicle (when BSD wire is open). If no communications are present the alternator will charge at 14.3 V after the alternator speed has risen beyond roughly 3300 rpm one time.
MEVD17.2-BN2000	0x385D	14429																							
MEVD17.2-BN2000	0x385F	14431																							
MEVD17.2-BN2000	0x3865	14437	BSD busCommunication fault	The diagnostic function monitors the BSD bus.					The fault is recognized when communications interference is present. Potential problem source(s): - One component on BSD bus is defective - Defective BSD	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Physical bus status	Y	- One component on BSD bus is defective - Defective BSD	oil condition sensor. Clear diagnostic fault codes from the ECU fault memory and then Terminal 15 off/on. If the diagnostic fault code is logged again this means that the oil condition sensor is defective. - Reconnect all of the remaining devices on the BSD one after the other, clear the ECU fault memory, and then switch the ignition off/on, continuing until the defective component is found. - If the fault is not found, check the BSD.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: Power management not operating correctly, as battery sensor data cannot be monitored. No oil level available.	None
MEVD17.2-BN2000	0x3866	14438	BSD busCommunication fault between DME and IBS	The diagnostic function monitors communications between the BSD bus and the DME/DDE.					communications between the IBS and DME break down. Potential problem source(s): - Defect in power-supply voltage to IBS - Defect in BSD bus between IBS and DME/DDE - Other defective components on BSD bus - BSD bus of other components defective - IBS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in power-supply voltage to IBS - Defect in BSD bus between IBS and DME/DDE - Other defective components on BSD bus - BSD bus of other components defective - IBS defective	- Check power-supply voltage to IBS - Check BSD bus between IBS and DME/DDE - Check fault memories of other components on BSD bus - Check BSD bus of other components - Replace IBS	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Anything from no symptoms to breakdown from undercharged battery		Breakdown notice: None	None
MEVD17.2-BN2000	0x3872	14450		The diagnostic function monitors aging of the vehicle battery.					The fault is recognized when the battery is extremely old, resulting in reduced capacity, or when another battery defect has occurred. Potential problem source(s): - Defective vehicle battery.	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Defective vehicle battery.	- Replace battery	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: - The vehicle battery is defective. Vehicle can be jump-started.	- A battery replacement must be registered before the diagnostic fault code can be deleted.
MEVD17.2-BN2000	0x3873	14451		The diagnostic function monitors deep-discharge events in the vehicle battery.					The fault is recognized when the battery has gone through several deep-discharge cycles and been damaged as a result. Potential problem source(s): - Defective vehicle battery.	The diagnostic fault code is logged after the battery has been damaged in a second deep discharge.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Defective vehicle battery.	- Replace battery	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Breakdown in extreme cases		Breakdown notice: None	None
MEVD17.2-BN2000	0x3875	14453																							
MEVD17.2-BN2000	0x3876	14454																							
MEVD17.2-BN2000	0x3877	14455	Power management, vehicle electrical system: Overvoltage	The diagnostic function monitors the onboard electrical system's voltage at the DME while the engine is running.	P160C	Powermanagement Overvoltage	Powermanagement	Electrical	the onboard electrical system's voltage exceeds 16 V. Potential problem source(s): - With engine running, excessive voltage from: - External charger/battery (jump-start from truck, 24 V) - Defective voltage regulator - PCU Power Control Unit defective, if present - DME/DDE voltage	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Electrical system voltage greater than 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	None	none	N	- With engine running, excessive voltage from: - External charger/battery (jump-start from truck, 24 V) - Defective voltage regulator - PCU Power Control Unit defective, if present - DME/DDE voltage measurement defective	- Ask customer if charge from external source/jump start has been performed - Check voltage regulator - Determine whether diagnostic fault codes are logged in the PCU. - Determine whether internal control module faults have been logged in the DME/DDE.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Flickering lights, - Functional failure (loss of functionality) - Possible destruction of electrical equipment.		Breakdown notice: None	None
MEVD17.2-BN2000	0x3878	14456	Power management, vehicle electrical system: Undervoltage	The diagnostic function monitors the electrical system voltage at the DME/DDE with the engine running.	P160D	Powermanagement Undervoltage	Powermanagement	Electrical	the onboard electrical system's voltage falls below 9 V. Potential problem source(s): - Defective battery - Defective voltage regulator - Defect in wiring harness (power supply wiring to DME/DDE) - DME/DDE voltage	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Electrical system voltage less than 9 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	None	none	N	- Defective battery - Defective voltage regulator - Defect in wiring harness (power supply wiring to DME/DDE) - DME/DDE voltage measurement defective	- Use battery tester to check battery condition - Check battery for damage (electrolyte loss, deformation, ?), replace as indicated - Check alternator, replace as indicated - Check power-supply voltage to DME/DDE, - Determine whether internal ECU errors are logged in the DME/DDE. - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Flickering lights - Functional failure (loss of functionality) - Electrical devices cease to operate - Breakdown in extreme cases		Breakdown notice: None	None
MEVD17.2-BN2000	0x3879	14457	Power management, vehicle electrical system: Battery-free operation	The diagnostic function monitors the electrical system voltage at the DME/DDE with the engine running.	P160E	Powermanagement Operation Without Charging of Battery	Powermanagement	Electrical	control module's fault memory when the electrical system voltage is less than 8.5 V or higher than 18 V. Potential problem source(s): - Battery not connected correctly (loose contact). - Defect in wiring harness (power supply wiring to DME/DDE) - DME/DDE voltage measurement defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Electrical system voltage less than 8.5 V - Electrical system voltage greater than 18 V Temperature condition: - None Time condition: - None Other conditions: - Engine ON	- None	- None	None	none	N	- Battery not connected correctly (loose contact). - Defect in wiring harness (power supply wiring to DME/DDE) - DME/DDE voltage measurement defective	- Check screws on battery terminals - Check DME/DDE power-supply voltage - Determine whether internal control module faults have been logged in the DME/DDE.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - Flickering lights - Functional failure (loss of functionality) - In extreme cases engine fails to operate owing to undervoltage.		Breakdown notice: None	None
MEVD17.2-BN2000	0x387C	14460	Power management, battery: Exhaustive battery charge	The diagnostic function monitors the electrical system voltage at the DME/DDE.	P160A	Powermanagement Exhaustive Discharge	Powermanagement	Electrical	The fault is recognized when the battery voltage is too low. Potential problem source(s): - Increased power consumption while stationary leading to battery damage, - Vehicle parked too long	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Electrical system voltage less than 9.5 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	None	none	N	- Increased power consumption while stationary leading to battery damage, - Vehicle parked too long	- Conduct (ABL) energy diagnosis test module - Ask customer if vehicle has remained parked for an extended period	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: None	None

MEVD17.2-8N2000	0x3E7D	14461	Power management, battery: Power management faulty	The diagnostic function monitors the battery's charge status in the transport mode.					The fault is recognized when the battery charge status is below 35 % while in the transport mode. Potential problem source(s): - Excessive battery discharge in transport mode	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	None	none	Y	- Excessive battery discharge in transport mode	- Note in dealer's delivery acceptance record - Conduct (ABL) energy diagnosis test module - Replace battery before delivery to customer and register battery change with service function	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	This fault position is not used in the L4. The fault class is set to '0' starting with production breakpoint 08/07. Retained in LI2	Possible apparent symptoms: CC message when battery replacement is not registered with the diagnostic system.		Breakdown notice: None	None
MEVD17.2-8N2000	0x3E7F	14463	Power management, closed-circuit current violation	The diagnostic function monitors the standby current draw.	P153F	Powermanagement No-Load Current Error	Powermanagement	Electrical	The fault is recognized when the discharge from excessively high standby currents is higher than 1 A/h. Potential problem source(s): - Closed-circuit current too high	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	None	none	Y	- Closed-circuit current too high	- Conduct (ABL) energy diagnosis test module - Conduct external standby current measurement	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on		Possible apparent symptoms: - Breakdown in extreme cases		Breakdown notice: None	None
MEVD17.2-8N2000	0x3B98	14476	System voltage: Voltage too high	The diagnostic function monitors the electrical system voltage relative to an upper limit value.	P0563	System Voltage High	System Voltage	Electrical	The diagnostic fault code is logged when the electrical system voltage exceeds 16V. Potential problem source(s): - Alternator voltage regulator is defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Electrical system voltage greater than 16 V Temperature condition: - None Time condition: - 2 min. after engine start Other conditions: - Engine on - Speed > 20 km/h	- None	- 2 min. after engine start	NO	U_0x5815	N	- Alternator voltage regulator is defective	- Replace alternator	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Power reduction, CC message for engine malfunction		Breakdown notice: None	None
MEVD17.2-8N2000	0x3B97	14471	System voltage: Voltage too low	The diagnostic function monitors the battery voltage relative to a lower limit.	P0562	System Voltage Low	System Voltage	Electrical	the ECU fault memory when the electrical system voltage is higher than 2.54 V but lower than 9.99 V. Potential problem source(s): - Plug or wiring harness on alternator defective - Plug or wiring harness on DME defective - Alternator defect - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 2.54 V and 9.99 V Temperature condition: - None Time condition: - 3 min. after engine start Other conditions: - Engine ON	- None	- 2 min. after engine start	NO	U_0x5815	N	- Plug or wiring harness on alternator defective - Plug or wiring harness on DME defective - Alternator defect - Defective DME	- Check alternator and power manager - Check plug and wiring harness at alternator - Check plug and wiring harness at DME - Replace alternator - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x3B98	14472	System voltage: Analogue-digital converter faulty	The diagnostic function monitors the voltage of the analog-digital converter.	P0560	System Voltage	System Voltage	Electrical	The fault is logged in the ECU fault memory when the voltage at the AD converter (inside DME) is less than 2.54 V. Potential problem source(s): - Defective DME (analog-digital converter)	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	U_0x5815	N	- Defective DME (analog-digital converter)	- Clear diagnostic fault codes from ECU fault memory. - If fault appears again replace the DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x3B9A	14505	Intelligent battery sensor (IBS): Communication fault	The diagnostic function monitors expanded communications between the IBS and DME on the LIN bus.					The fault is recognized when frequent interference occurs on the LIN bus. Potential problem source(s): - Intermittent open on LIN bus wire - Other defective components on LIN bus	The diagnostic fault code is logged when the fault remains present for longer than 1 min.		Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Intermittent open on LIN bus wire - Other defective components on LIN bus	- Check LIN bus and plug connector between IBS and DME/DDE - Note faults at other devices on the bus - Replace IBS	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Anything from no symptoms to breakdown from undercharged battery		Breakdown notice: None	None
MEVD17.2-8N2000	0x3BA7	14503	Intelligent battery sensor (IBS): Version not plausible	The diagnostic function monitors compatibility of the IBS version with the power management in the DME/DDE.	P151CF	Battery Sensor Variant Plausibility			The fault is recognized when the IBS and DME/DDE are not compatible. Potential problem source(s): - DME/DDE and IBS are not compatible	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME/DDE and IBS are not compatible	- Replace IBS.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: none		Breakdown notice: None	None
MEVD17.2-8N2000	0x3BA8	14504	Intelligent battery sensor (IBS): Internal fault	The diagnostic function monitors internal system functions in the IBS.					The fault is recognized when the IBS recognizes an internal system fault. Potential problem source(s): - IBS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- IBS defective	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the IBS	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Anything from no symptoms to breakdown from undercharged battery		Breakdown notice: None	None
MEVD17.2-8N2000	0x3BA9	14506	Intelligent battery sensor (IBS): Temperature measurement faulty	The diagnostic system plausibilizes the IBS temperature measurement.	P153D	Battery Sensor Temperature Error			The fault is recognized when a fault with the temperature measurement is present. Potential problem source(s): - IBS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- IBS defective	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the IBS	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Anything from no symptoms to breakdown from undercharged battery		Breakdown notice: None	None
MEVD17.2-8N2000	0x3BAA	14508	Intelligent battery sensor (IBS): Voltage measurement erroneous	The diagnostic system plausibilizes the IBS voltage measurement.	P153E	Battery Sensor Voltage Error			The fault is recognized when a fault with the voltage measurement is present. Potential problem source(s): - IBS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- IBS defective	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the IBS	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Anything from no symptoms to breakdown from undercharged battery		Breakdown notice: None	None
MEVD17.2-8N2000	0x3BAB	14507	Intelligent battery sensor (IBS): Current measurement erroneous	The diagnostic system plausibilizes the IBS current measurement.	P153F	Battery Sensor Current Error			The fault is recognized when the IBS current measurement is incorrect. Potential problem source(s): - IBS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- IBS defective	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the IBS	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Anything from no symptoms to breakdown from undercharged battery		Breakdown notice: None	None
MEVD17.2-8N2000	0x3BAC	14508	Intelligent battery sensor (IBS): Wake-up line, short to ground	L4: The diagnostic function monitors the wake-up wire L6: The diagnostic function monitors the wake-up wire to the junction box electronics.					The fault is recognized when the wake-up wire has a short circuit. Potential problem source(s): - L4: Defect in wake-up wire - L6: Defect in wake-up wire from IBS to junction box electronics	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- L4: Defect in wake-up wire - L6: Defect in wake-up wire from IBS to junction box electronics	- L4: Check wake-up wire - L6: Check wake-up wire between IBS and junction box electronics	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x3BAD	14514	Intelligent battery sensor (IBS): Wake-up line, level implausible	L4: The diagnostic function monitors the wake-up wire L6: The diagnostic function monitors the wake-up wire to the junction box electronics.	P151B	Battery Sensor Wakeup Circuit			when the signal level in the wake-up wire is implausible. L6: The fault is recognized when the wake-up wire is open. Potential problem source(s): - L4: Defect in wake-up wire or IBS - L6: Defect in wake-up wire from IBS to junction box	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- L4: Defect in wake-up wire or IBS - L6: Defect in wake-up wire from IBS to junction box electronics	- L4: Check wake-up wire, replace IBS - L6: Check wake-up wire between IBS and junction box electronics	ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x3B9E	14518	BSD: No message from intelligent battery sensor (IBS)	The diagnostic function monitors BSD bus communications with the DME.					The fault is recognized when communications between the IBS and DME break down. Potential problem source(s): - Open BSD wire/interference in wire between engine-management control module and battery sensor - Defective battery sensor	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Open BSD wire/interference in wire between engine-management control module and battery sensor - Defective battery sensor	- Check power-supply voltage to IBS - Check BSD bus between IBS and DME - Check fault memories of other components on BSD bus - Check IBS Bus of other components - Replace IBS	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Anything from no symptoms to breakdown from undercharged battery		Breakdown notice: None	none
MEVD17.2-8N2000	0x3B06	14550	Active engine mount, electrical: Short circuit to B+	The diagnostic function monitors the wire from the DME to the engine mount for shorts to positive.	P0A16	Engine Mount X Control Circuit High			The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defect in wiring harness between engine mount and DME - Defective engine mount - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Engine speed > 1200 rpm.	- None	- None	STEUERN_ENDE_MLS, STEUERN_MLS	U	N	- Defect in wiring harness between engine mount and DME - Defective engine mount - Defective DME	- Check wiring harness between DME and engine mount - Replace engine mount - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x3B07	14553	Active engine mount, electrical: Short circuit to earth	The diagnostic function monitors the wire from the DME to the engine mount for shorts to ground.	P0A15	Engine Mount X Control Circuit Low			The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defect in wiring harness between engine mount and DME - Defective engine mount - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Engine speed > 1200 rpm.	- None	- None	STEUERN_ENDE_MLS, STEUERN_MLS	U	N	- Defect in wiring harness between engine mount and DME - Defective engine mount - Defective DME	- Check wiring harness between DME and engine mount - Replace engine mount - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x3B08	14552	Active engine mount, electrical: Line disconnection	The diagnostic function monitors the electrical wire from the DME to the engine mount for opens.	P0A14	Engine Mount X Control Circuit/Open			The fault is recognized when an open wire is present. Potential problem source(s): - Defect in wiring harness between engine mount and DME - Defective engine mount - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - Engine speed > 1200 rpm.	- None	- None	STEUERN_ENDE_MLS, STEUERN_MLS	U	N	- Defect in wiring harness between engine mount and DME - Defective engine mount - Defective DME	- Check wiring harness between DME and engine mount - Replace engine mount - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-8N2000	0x38DF	14575	Enable line, MSA, activation Short circuit to B+	The diagnostic function monitors the enable wire for the MSA start request.					three test pulses to Terminal 15 or an MSA start request or confirmation of automatic Terminal 15 deactivation are not transmitted through the enable wire. Potential problem source(s): - Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - MSA non-starter on initial appearance of fault, - No MSA start after stalling internal-combustion powerplant, - MSA (automatic start-stop) function is not available - Automatic deactivation of Terminal 15 is not available		Breakdown notice: None	None
MEVD17.2-8N2000	0x38E0	14576	Enable line, MSA, activation Short circuit to earth	The diagnostic function monitors the enable wire for the MSA start request.					three test pulses to Terminal 15 or an MSA start request or confirmation of automatic Terminal 15 deactivation are not transmitted through the enable wire. Potential problem source(s): - Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - MSA non-starter on initial appearance of fault, - No MSA start after stalling internal-combustion powerplant, - MSA (automatic start-stop) function is not available - Automatic deactivation of Terminal 15 is not available		Breakdown notice: None	None
MEVD17.2-8N2000	0x38F1	14577	Enable line, MSA, activation Line disconnection	The diagnostic function monitors the enable wire for the MSA start request.					three test pulses to Terminal 15 or an MSA start request or confirmation of automatic Terminal 15 deactivation are not transmitted through the enable wire. Potential problem source(s): - Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	none	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Defect in wiring harness between CAS and DME - Defective CAS - Defective DME	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - MSA non-starter on initial appearance of fault, - No MSA start after stalling internal-combustion powerplant, - MSA (automatic start-stop) function is not available - Automatic deactivation of Terminal 15 is not available		Breakdown notice: None	None
MEVD17.2-8N2000	0x38F2	14578																								
MEVD17.2-8N2000	0x38F3	14579																								
MEVD17.2-8N2000	0x3908	14600		The diagnostic function monitors the 'auxiliary battery charging unit'					The fault is recognized when an internal fault for 'auxiliary battery charging unit' is present. Potential problem source(s): - 'Auxiliary battery charging unit' defective - Auxiliary battery is defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y and N	- 'Auxiliary battery charging unit' defective - Auxiliary battery is defective	- Check auxiliary battery - Replace 'auxiliary battery charging unit'	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Steering support from power steering limited		Breakdown notice: None	None
MEVD17.2-8N2000	0x3906	14601		The diagnostic function monitors the wire and its shielding between the 'auxiliary battery charging unit' and the auxiliary battery.					The fault is recognized when an open wire or short circuit is present. Potential problem source(s): - Defect in wiring harness between secondary battery and vehicle battery	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Defect in wiring harness between secondary battery and vehicle battery	- Check wires and wiring shield between secondary battery and vehicle battery	lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Steering support from power steering limited		Breakdown notice: None	none

MEVD17.2-BN2000	0x390A	14602		The diagnostic function monitors the auxiliary battery for the electric power steering.					The fault is recognized when the voltage at the battery separator's output terminal is less than 24V when Terminal 15 is on, or the steering itself has an internal voltage of less than 16 V. Potential problem source(s): - Auxiliary battery is defective	The diagnostic fault code is logged when the fault remains present for longer than 5 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Auxiliary battery is defective	- Check auxiliary battery	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Steering support from power steering limited		Breakdown notice: None	None
MEVD17.2-BN2000	0x390B	14603		The diagnostic function monitors the battery separator, the wires between vehicle battery and auxiliary battery, and the charge status of the auxiliary battery.					the voltage at the battery separator's output terminal is less than 24V when Terminal 15 is on, or the steering itself has an internal voltage of less than 16 V. Potential problem source(s): - Defect in plug or wiring harness at battery separator - Defective battery separator - Auxiliary battery deep-discharged, defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	Y	- Defect in plug or wiring harness at battery separator - Defective battery separator - Auxiliary battery deep-discharged, defective	- Check plug and wiring harness at battery separator - Replace battery separator - Check charge status of auxiliary battery	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Steering support from power steering limited		Breakdown notice: None	None
MEVD17.2-BN2000	0x390C	14604																							
MEVD17.2-BN2000	0x390D	14605																							
MEVD17.2-BN2000	0x390E	14606																							
MEVD17.2-BN2000	0x3B52	15186																							
MEVD17.2-BN2000	0x3B57	15191																							
MEVD17.2-BN2000	0x3B99	15257																							
MEVD17.2-BN2000	0x3B9A	15258	Coolant pump, LIN communication: Invalid message	The diagnostic function monitors BSD bus communications with the electric water pump.					The fault is recognized when the electric water pump fails to respond to BSD bus messages from the DME. Potential problem source(s): - Defect in wiring harness to water pump - Communications problem on BSD bus - Defective water pump	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - Engine on - No BSD fault	- None	- None	Yes, 0x2F60BF03_STEUERN_EWAP, activate electr. water pump (bit-serial data interface).	none	N	- Defect in wiring harness to water pump - Communications problem on BSD bus - Defective water pump	- Continue test routine with test modules that deal with problems related to voltage in onboard electrical system - Check wiring harness between water pump and DME - Conduct tester job - Replace water pump	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: on - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: Breakdown in extreme cases, electric water pump stops operating - engine overheats		Breakdown notice: None	Observe sequence for fault rectification: - If the pump is activated at TMOT>90 °C as tester job the diagnostic fault code 0x3792 or 0x20AD08 'Water pump: rotation speed implausible' can be logged, ignore this fault and delete it --> Carry out tester job at Tmot<90°C
MEVD17.2-BN2000	0x3B9B	15259																							
MEVD17.2-BN2000	0x3B9C	15260																							
MEVD17.2-BN2000	0x3B9D	15261																							
MEVD17.2-BN2000	0x3BC4	15300	PT-CAN, message (ARS control unit):Alive check	The diagnostic function monitors the currency of the message.					The fault is recognized when the keep-alive counter has not timed the message. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - ARS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BC5	15301	PT-CAN, message (ARS control unit):missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - ARS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BC6	15302	PT-CAN, message (ARS control unit):Checksum incorrect	The diagnostic function monitors the checksum of the message.					The diagnostic fault code is logged when the message has a checksum error. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - ARS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BC7	15303	PT-CAN, message (CAS control unit):missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BC8	15304	PT-CAN, message (CAS control unit):Checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message or the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BCC	15308	PT-CAN, message (IHKA control unit):missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Brief rpm drop when automatic climate control is activated at idle		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BCD	15309	PT-CAN, message (instrument panel control unit):Alive check	The diagnostic function monitors the currency of the message.					The fault is recognized when the keep-alive counter has not timed the message or the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BCE	15310	PT-CAN, message (instrument panel control unit):missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BCF	15311	PT-CAN, message (instrument panel control unit):MIL activation implausible	The diagnostic function monitors the status of the emissions warning lamp.					The fault is recognized when the status of the emissions warning lamp does not match the requested status. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD0	15312	PT-CAN, message (request torque DSC, 0B6): checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - DSC failure		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD1	15313	PT-CAN, no message (request torque DSC, 0B6):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: DSC failure		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD2	15314	PT-CAN, message (wheel speed, 0CE): missing	The diagnostic function monitors reception of the message.	U116D	Lost Communication With Wheel Speed	Communication	Wheel Speed	The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD3	15315	PT-CAN, message (transmission data 4, 10A): Checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD4	15316	PT-CAN, message (transmission data 4, 10A): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD5	15317	PT-CAN, message (status DSC, 19E) missing	The diagnostic function monitors reception of the message.	U1126	Lost Communication With DSC Status	Communication	DSC Status	The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD6	15318	PT-CAN, message (vehicle speed, 1A0): checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.	U11CA	Message Monitoring Speed Alive Check/Check Sum Error			The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD7	15319	PT-CAN, no message (vehicle speed, 1A0):	The diagnostic function monitors reception of the message.	U1118	Lost Communication With Speed	Communication	Speed	The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3BD8	15320	PT-CAN, no message (transmission data 2, 1A2):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None

MEVD17.2-BN2000	0x3B05	15321	PT-CAN; message (DKG status, 27D): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Only in vehicles with throttle valve sensor	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B0A	15322	PT-CAN; message (transmission data 3, 3B1): checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none M/V11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	Only active with throttle-valve sensor vehicles	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B0B	15323	PT-CAN; no message (transmission data 3, 3B1):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none M/V11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	Only active with throttle-valve sensor vehicles	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B0C	15324	PT-CAN; message (electronic transmission control torque request, B3): checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.	U11C9	Message Monitoring Torque Request ETC Check Sum Error/Alive Check	Communication	Torque Request AT	The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none M/V11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	Only in vehicles with EGS	Possible apparent symptoms: EGS limp-home program		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B0D	15325	PT-CAN; no message (electronic transmission control torque request, B3):	The diagnostic function monitors reception of the message.	U11SF	Lost Communication With Torque Request ETC	Communication	Torque Request AT	The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none M/V11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	Only in vehicles with EGS	Possible apparent symptoms: EGS limp-home program		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B0E	15326	PT-CAN; message (twin-clutch gearbox torque request, B8): checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Only in vehicles with throttle valve sensor	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B0F	15327	PT-CAN; no message (twin-clutch gearbox torque request, B8):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Only in vehicles with throttle valve sensor	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B10	15328	PT-CAN; no message (gearbox data, BA): Checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B81	15329	PT-CAN; message (gearbox data, BA): missing	The diagnostic function monitors the wire for voltage supply of Terminal 15N, 3 and Terminal KL87_3.					The fault is recognized when no voltage is present. Potential problem source(s): - Wiring harness defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Wiring harness defective	- Check wiring harness - Replace PDM (power supply module) - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B82	15330	PT-CAN; message (twin-clutch gearbox speed control, B8): monitoring intervention	The diagnostic function monitors the requested intervention force of the throttle valve sensor					The fault is recognized when the level of the intervention force is implausible Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	FR message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B87	15335																								
MEVD17.2-BN2000	0x3B8C	15340	PT-CAN; message (cruise control operation, 19A): Checksum wrong/ alive check	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Failure of internal DME cruise control		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B8D	15341	PT-CAN; message (cruise control operation, 19A): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Failure of internal DME cruise control		Breakdown notice: None	None
MEVD17.2-BN2000	0x3B91	15344																								
MEVD17.2-BN2000	0x3B91	15345																								
MEVD17.2-BN2000	0x3B94	15348																								
MEVD17.2-BN2000	0x2243	53611	Energy-saving mode: Active	The diagnostic function monitors whether the transport mode is active.					The fault is recognized when the transport mode is active. Potential problem source(s): - The transport mode has not been reset	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	End-of-line job Energy saving mode	status_energiesparmodus 0x5B0 to 0x5BFE	N	- The transport mode has not been reset	- Reset transport mode	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	This is only activated following production.	Possible apparent symptoms: Engine speed governed to 4500 rpm.		Breakdown notice: None	The fault self-heals when the energy saving mode is reset. It is not necessary to delete any diagnostic fault codes.
MEVD17.2-BN2000	0x2D05	52613	PT-CAN; message (terminal status, 13D): Checksum incorrect	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Next engine start may take longer - No automatic car wash function		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D06	52614	PT-CAN; message (terminal status, 13D): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: - Next engine start may take longer - No automatic car wash function		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D87	53615	PT-CAN communication fault; CAN bus Off or CAN bus faulty	The diagnostic function monitors the PT-CAN.	P2102	Powertrain CAN; CAN Chip Cut-Off	Communication	Powertrain	The fault is recognized when a short circuit is present. Potential problem source(s): - Plug or wiring harness on PT-CAN bus defective - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- Plug or wiring harness on PT-CAN bus defective - Defective DME	- Measure PT-CAN bus resistance (between CAN High and CAN Low > 60 ohms with battery disconnected) - Check plugs and wiring harness for PT-CAN - Replace DME	lamp: off - ECE electronic engine power reduction: off - CC message: none M/V11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - No tachometer display in the instrument cluster - GSC failure - Automatic transmission in limp-home mode - Brief rpm drop when IHKA automatic climate control is activated at idle		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D89	53617	PT-CAN; message (status, crash deactivation, electric fuel pump, 12B): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D8B	53619	PT-CAN; message (parking brake position request, 1A7): checksum wrong	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: - Never drive off with EMF electromechanical parking brake engaged!	None
MEVD17.2-BN2000	0x2D8C	53620	PT-CAN; no message (parking brake position request, 1A7):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: - Never drive off with EMF electromechanical parking brake engaged!	None
MEVD17.2-BN2000	0x2D8F	53623	PT-CAN; no message (gearbox data display, 22D):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0x2D91	53625	PT-CAN; message (parking brake status, 201): Checksum incorrect	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: - Never drive off with EMF electromechanical parking brake engaged!	None
MEVD17.2-BN2000	0x2D93	53628	PT-CAN; message (parking brake status, 201): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: - Never drive off with EMF electromechanical parking brake engaged!	None

MEVD17.2-BN2000	0xCD95	52629	PT-CAN, message (light status, 21A): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCD98	52632	PT-CAN, no message (trailer status, 2E4):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCD9B	52635	PT-CAN, no message (time/date, 2F8):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCD9D	52637	PT-CAN, message (vehicle mode, 315): Checksum incorrect	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the actuator for the radiator vent slats reports an internal electrical fault via the LIN bus. Potential problem source(s): - Defective radiator vent slat assembly (internal electrical fault H-bridge)	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Defective radiator vent slat assembly (internal electrical fault H-bridge)	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCD9E	52638	PT-CAN, message (vehicle mode, 315): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDA1	52641	PT-CAN, message (power management, charging voltage, 334): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDA2	52642	PT-CAN, message (soft top, convertible status, 0x27E): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	FR message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDA4	52644	PT-CAN, no message (reverse gear status, 3B0):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	Only relevant for manual transmission vehicles	Possible apparent symptoms: - Accelerator pedal progression failure		Breakdown notice: - none	- none
MEVD17.2-BN2000	0xCDA5	52645	PT-CAN, message (torque request, steering, B1): AFS/STE disabled or steering torque invalid	The diagnostic function monitors the requested torque.					The fault is recognized when the requested torque is invalid. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Torque request	Y	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: AFS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDA6	52646	PT-CAN, message (torque request, steering, B1): checksum wrong	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: AFS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDA7	52647	PT-CAN, no message (torque request, steering, B1):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: AFS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDA8	52648	PT-CAN, message (torque request, AFS, B9): AFS/STE disabled or steering torque invalid	The diagnostic function monitors the requested torque.					The fault is recognized when the requested torque is invalid. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Torque request	Y	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: AFS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDA9	52649	PT-CAN, message (torque request, AFS, B9): checksum wrong	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: AFS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDAA	52650	PT-CAN, no message (torque request, AFS, B9):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: AFS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDAB	52651	PT-CAN, message (wheel torque request, drive train, front passenger side): Alive check	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Cruise control failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDAC	52652	PT-CAN, message (wheel torque request, drive train, front passenger side): Checksum incorrect	The diagnostic function monitors the currency and the checksum of the message.					The fault is recognized when the keep-alive counter has not timed the message and the message checksum is incorrect. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Cruise control failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDAD	52653	PT-CAN, message (wheel torque request, drive train, front passenger side): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: Cruise control failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDB0	52656	PT-CAN, no message (steering wheel angle, C4):	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDB1	52657	PT-CAN communication fault: DPRAM CAN module faulty	The diagnostic function monitors the CAN controller in the DME.	P3201	Powertrain CAN, DPRAM-CAN Chip Defective	Communication	Powertrain	The fault is recognized when a hardware fault is present in the CAN controller. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	none	N	- DME defective	- Replace DME	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none MY11 US: - US emissions warning lamp: on - US electronic engine power reduction: off - CC message: on	none	Possible apparent symptoms: - No tachometer display in the instrument cluster - DSC failure - Automatic transmission in limp-home mode - Brief rpm drop when IHKA automatic climate control is activated at idle		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDB2	52658																							
MEVD17.2-BN2000	0xCDB3	52659	PT-CAN, message (torque request AFS, B9): torque loss too great	The diagnostic function monitors the requested torque.					The fault is recognized when the torque is greater than the requested torque. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Torque request	Y	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: AFS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDB4	52660	Service (0x5E0, OBD sensor, diagnostic status): missing	The diagnostic function monitors reception of the message.	U1169	Lost Communication with OBD-Sensor			The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDB6	52662	PT-CAN, message (torque request, steering, B1): torque loss too great	The diagnostic function monitors the requested torque.					The fault is recognized when the torque is greater than the requested torque. Potential problem source(s): - Fault with transmitting control module	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	Torque request	Y	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: AFS failure		Breakdown notice: None	None
MEVD17.2-BN2000	0xCDB7	52663	PT-CAN, message (fuel pump status, 335): missing	The diagnostic function monitors reception of the message.					The fault is recognized when the message is not received in the specified time. Potential problem source(s): - Fault with transmitting control module	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard electrical system voltage between 9 V and 16 V Temperature condition: - None Time condition: - None Other conditions: - none	- None	- None	NO	CAN message	N	- Fault with transmitting control module	- Carry out system analysis.	- ECE emissions warning lamp: off - ECE electronic engine power reduction: off - CC message: none - US emissions warning lamp: off - US electronic engine power reduction: off - CC message: none	none	Possible apparent symptoms: None		Breakdown notice: None	None

ME:v517.3-BN2000	0xC088	52664																								
ME:v517.3-BN2000	0xC089	52665																								
ME:v517.3-BN2000	0xC08A	52666																								