

Test plan for BMW Service (development status)																								
MEVD17.2-BN2020																								
ECU type	BMW Fault Code (hex)	BMW Fault Code (int)	BMW Fault Code Description VS-Test	Fault description	DTC (Diagnostic Trouble Code)	DTC Description	Component	Subcomponent	Monitoring criteria	Fault debouncing	Terminal conditions	Voltage conditions	Temperature conditions	Time conditions	System test	Signal information	Calculated value Y/N	Possible Fault Causes	Repair procedures (plant/service)	ML Illustration/CC message/emergency program	Remarks	Customer perception comments	Breakdown instruction	Service instruction
MEVD17.2-BN2020	0x021200	135880	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 elect	None	None	End-of-the-job: Energy saving mode status_energiesparmodus_0x0800	N		- The transport mode has not been reset	- Reset transport mode	- 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	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-BN2020	0x02FF12	136370	Dummy Application DTC: application DTC	No PP necessary					No PP necessary Potential problem source(s): - No PP necessary	No PP necessary	none	Voltage condition: -- Onboard elect	None	None	No PP necessary	No PP necessary	No PP necessary	- No PP necessary	- No PP necessary	- 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	No PP necessary	Possible apparent symptoms: No PP necessary	Breakdown notice: No PP necessary	No PP necessary
MEVD17.2-BN2020	0x100001	1048577	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	This fault is logged and the 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 actuator motor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: -- Onboard elect	None	None	STEUERN_OK, STEUERN_ENDE	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 regasification 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	none	Possible apparent symptoms: - Reduced power	Breakdown notice: Ability to continue driving is restricted because engine speed is limited to roughly 1300 rpm.	none
MEVD17.2-BN2020	0x101011	1048833	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	This fault is entered when the PWM signal used to control the throttle valve remains above 80% for longer than 10 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 actuator motor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: -- Onboard elect	None	None	STEUERN_OK, STEUERN_ENDE	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 regasification 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	none	Possible apparent symptoms: - Reduced power	Breakdown notice: Ability to continue driving is restricted because engine speed is limited to roughly 1300 rpm.	none
MEVD17.2-BN2020	0x102001	1046989	Throttle valve, function sluggish, too slow	The diagnostic function monitors the difference between specified and actual throttle-valve values. If the figure remains too high for a specified period, a fault is recognized and the throttle valve is deactivated	P11AA	Throttle light (Bank 1)	Throttle	Tight	The diagnostic fault code is 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 actuator motor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: -- Onboard elect	None	None	STEUERN_OK, STEUERN_ENDE	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	none	Possible apparent symptoms: - Reduced power	Breakdown notice: Ability to continue driving is restricted because engine speed is limited to roughly 1300 rpm.	none
MEVD17.2-BN2020	0x102010	1046104	Throttle valve-actuator, position monitoring: positional variation	The diagnostic function monitors the difference between specified and actual throttle-valve values. If the figure remains too high for a specified period, a fault is recognized and the throttle valve is deactivated	P1B37	Throttle Valve Position Control Control Deviation (Bank 1)	Throttle Actuator	Position Control	The diagnostic fault code is 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 actuator motor	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: -- Onboard elect	None	None	STEUERN_OK, STEUERN_ENDE	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	none	Possible apparent symptoms: - Reduced power	Breakdown notice: Ability to continue driving is restricted because engine speed is limited to roughly 1300 rpm.	none
MEVD17.2-BN2020	0x100402	1051136	Throttle valve, throttle potentiometer 1 and 2: Double fault	Collective fault: Throttle valve	P11D0	Throttle Position Sensor A and B Circuit Range/Performance (Bank 1)	Throttle Position Sensor	1-2	The fault is recognized when another fault related to the throttle valve (i.e. 104604, 104605, 104606, 104608, 104609, 104610, 104620, 104623, 105004, 105006, 105007, 105010, 105011, 105012, 105013, 105014, 105015, 105016, 105017, 105018, 105019, 105020, 105021, 105022, 105023, 105024, 105025, 105026, 105027, 105028, 105029, 105030, 105031, 105032, 105033, 105034, 105035, 105036, 105037, 105038, 105039, 105040, 105041, 105042, 105043, 105044, 105045, 105046, 105047, 105048, 105049, 105050, 105051, 105052, 105053, 105054, 105055, 105056, 105057, 105058, 105059, 105060, 105061, 105062, 105063, 105064, 105065, 105066, 105067, 105068, 105069, 105070, 105071, 105072, 105073, 105074, 105075, 105076, 105077, 105078, 105079, 105080, 105081, 105082, 105083, 105084, 105085, 105086, 105087, 105088, 105089, 105090, 105091, 105092, 105093, 105094, 105095, 105096, 105097, 105098, 105099, 105100, 105101, 105102, 105103, 105104, 105105, 105106, 105107, 105108, 105109, 105110, 105111, 105112, 105113, 105114, 105115, 105116, 105117, 105118, 105119, 105120, 105121, 105122, 105123, 105124, 105125, 105126, 105127, 105128, 105129, 105130, 105131, 105132, 105133, 105134, 105135, 105136, 105137, 105138, 105139, 105140, 105141, 105142, 105143, 105144, 105145, 105146, 105147, 105148, 105149, 105150, 105151, 105152, 105153, 105154, 105155, 105156, 105157, 105158, 105159, 105160, 105161, 105162, 105163, 105164, 105165, 105166, 105167, 105168, 105169, 105170, 105171, 105172, 105173, 105174, 105175, 105176, 105177, 105178, 105179, 105180, 105181, 105182, 105183, 105184, 105185, 105186, 105187, 105188, 105189, 105190, 105191, 105192, 105193, 105194, 105195, 105196, 105197, 105198, 105199, 105200, 105201, 105202, 105203, 105204, 105205, 105206, 105207, 105208, 105209, 105210, 105211, 105212, 105213, 105214, 105215, 105216, 105217, 105218, 105219, 105220, 105221, 105222, 105223, 105224, 105225, 105226, 105227, 105228, 105229, 105230, 105231, 105232, 105233, 105234, 105235, 105236, 105237, 105238, 105239, 105240, 105241, 105242, 105243, 105244, 105245, 105246, 105247, 105248, 105249, 105250, 105251, 105252, 105253, 105254, 105255, 105256, 105257, 105258, 105259, 105260, 105261, 105262, 105263, 105264, 105265, 105266, 105267, 105268, 105269, 105270, 105271, 105272, 105273, 105274, 105275, 105276, 105277, 105278, 105279, 105280, 105281, 105282, 105283, 105284, 105285, 105286, 105287, 105288, 105289, 105290, 105291, 105292, 105293, 105294, 105295, 105296, 105297, 105298, 105299, 105300, 105301, 105302, 105303, 105304, 105305, 105306, 105307, 105308, 105309, 105310, 105311, 105312, 105313, 105314, 105315, 105316, 105317, 105318, 105319, 105320, 105321, 105322, 105323, 105324, 105325, 105326, 105327, 105328, 105329, 105330, 105331, 105332, 105333, 105334, 105335, 105336, 105337, 105338, 105339, 105340, 105341, 105342, 105343, 105344, 105345, 105346, 105347, 105348, 105349, 105350, 105351, 105352, 105353, 105354, 105355, 105356, 105357, 105358, 105359, 105360, 105361, 105362, 105363, 105364, 105365, 105366, 105367, 105368, 105369, 105370, 105371, 105372, 105373, 105374, 105375, 105376, 105377, 105378, 105379, 105380, 105381, 105382, 105383, 105384, 105385, 105386, 105387, 105388, 105389, 105390, 105391, 105392, 105393, 105394, 105395, 105396, 105397, 105398, 105399, 105400, 105401, 105402, 105403, 105404, 105405, 105406, 105407, 105408, 105409, 105410, 105411, 105412, 105413, 105414, 105415, 105416, 105417, 105418, 105419, 105420, 105421, 105422, 105423, 105424, 105425, 105426, 105427, 105428, 105429, 105430, 105431, 105432, 105433, 105434, 105435, 105436, 105437, 105438, 105439, 105440, 105441, 105442, 105443, 105444, 105445, 105446, 105447, 105448, 105449, 105450, 105451, 105452, 105453, 105454, 105455, 105456, 105457, 105458, 105459, 105460, 105461, 105462, 105463, 105464, 105465, 105466, 105467, 105468, 105469, 105470, 105471, 105472, 105473, 105474, 105475, 105476, 105477, 105478, 105479, 105480,															

MEVD17.2-EN200	0x101401	105887	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	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 elec	Engine warmed to normal temper., 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	- 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 1300 rpm.	none	
MEVD17.2-EN200	0x101402	105898	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 7.8°) when no voltage is present	P1633	Throttle Valve Adaptation Limp Home Position (Bank 1)	Throttle Actuator	Adaptation	Potential problem source(s) - Defect in wiring harness between throttle valve actuator motor and DME - Discontamination on throttle valve - Throttle valve seized in open or fully-closed position - Defective throttle valve actuator motor	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	Engine warmed to normal temper., 30 sec. after Terminal 15 on	STUEVFN_OK, STUEVFN_ENDE	none	Y	- Defect in wiring harness between throttle valve actuator motor and DME - Discontamination on throttle valve - Visual inspection of throttle valve and an 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-EN200	0x101408	105704	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 (SMA) during a repeat throttle valve adaptation routine (after roughly 30 sec. Terminal 15 without engine start)	P168C	Throttle Valve Adaptation Lower Stop Not Learned (Bank 1)	Throttle Actuator	Adaptation	Potential problem source(s) - Fault during repeat initialization attempt: lower mechanical travel limit range violation: 1.a. Travel stop dirty 1.b. Foreign object/master 1.c. Sporadic contact resistance 1.d. Defective throttle valve	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	Engine warmed to normal temper., 30 sec. after Terminal 15 on	NO	none	Y	- Fault during repeat initialization attempt: lower mechanical travel limit range violation: 1.a. Travel stop dirty 1.b. Foreign object/master 1.c. Sporadic contact resistance 1.d. Defective throttle valve	1. Clear ECU fault memory 2. If fault remains 2.a. Check wiring harness DME - throttle valve (part of throttle valve voltages must equal 5 V) 2.b. Check to determine whether foreign object/master in the intake manifold or at the throttle valve are preventing the throttle valve from closing 2.c. Completely close the throttle valve by hand and measure the voltages on the two sensors (01: 0.5 V +/- tolerance, 02: 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 1300 rpm.	none
MEVD17.2-EN200	0x101410	105712	Throttle valve, adaptation: Marginal conditions not met, upper voltage too low	The diagnostic function monitors the throttle valve to determine whether it reaches the lower mechanical travel stop (SMA) during the initial adaptation	P168B	Throttle Valve Adaptation Conditions Not Met, Safety Voltage Too Low (Bank 1)	Throttle Actuator	Adaptation	Potential problem source(s) - Fault during repeat initialization attempt: lower mechanical travel stop range violation - Discontamination on travel stop - Foreign master/object(s) - Sporadic contact resistance - Defective throttle valve	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	Engine warmed to normal temper., 30 sec. after Terminal 15 on	NO	none	Y	- Fault during repeat initialization attempt: lower mechanical travel stop range violation - Discontamination on travel stop - Foreign master/object(s) - Sporadic contact resistance - Defective throttle valve	- Clear ECU fault memory 2. If fault is still present 2.a. Check wiring harness DME - throttle valve (part of throttle valve voltages must equal 5 V) 2.b. Check to determine whether foreign object/master in the intake manifold or at the throttle valve are preventing the throttle valve from closing 2.c. Completely close the throttle valve by hand and measure the voltages on the two sensors (01: 0.5 V +/- tolerance, 02: 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 1300 rpm.	none
MEVD17.2-EN200	0x101C08	105876	Throttle valve, throttle potentiometer: plausibility Testing fault between potentiometer 1 and potentiometer 2	The diagnostic function monitors the mutual deviation between the two sensor voltages	P118F	Throttle/Pedal Position Sensor/Switch 'X' / 'B' Synchronous Operation Correlation (Bank 1)	Throttle Position Sensor	Correlation	Potential problem source(s) - Defect in wiring harness between throttle valve potentiometer and DME - Throttle valve potentiometer defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	Accelerator pedal sensor 1 voltage	Pedal data sensor 1 voltage (DME)	- Defect in wiring harness between throttle valve potentiometer and DME - Throttle valve potentiometer defective	- ECE emissions warning lamp on - ECE electronic engine power reduction on - 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 (34.5% pedal) - In combination with fault in accelerator pedal sensor 1 and/or 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-EN200	0x101F01	105813	Throttle valve angle - intake manifold pressure, correlation: test 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	Potential problem source(s) - Measured value for intake manifold pressure (absolute) too high - Vacuum leak within induction tract/electronic - Incorrect throttle valve angle - Pressure sensor defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	30°C, + intake air temperature +/- None	NO	none	Y	- Measured value for intake manifold pressure (absolute) too high - Vacuum leak within induction tract/electronic - Incorrect throttle valve angle - Pressure sensor defective	- 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-EN200	0x101F02	105814	Throttle valve angle - intake manifold pressure, correlation: test value underflow	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	Potential problem source(s) - Measured value for intake manifold pressure (absolute) is too low - Defective plug or wiring harness - Vacuum leak within induction tract/electronic - Incorrect throttle valve angle - Pressure sensor defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	none	Y	- Measured value for intake manifold pressure (absolute) is too low - Defective plug or wiring harness - Vacuum leak within induction tract/electronic - Incorrect throttle valve angle - Pressure sensor defective	- 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-EN200	0x102001	105878	Mass or Volume Air Flow 'X' Circuit: Range/Performance - Air Flow Too High	Mass or Volume Air Flow 'X' Circuit: Compared to Model	P008D	Mass or Volume Air Flow 'X' Circuit: Range/Performance - Air Flow Too High	Mass Air Flow	Too High	Comparison to Model														None	
MEVD17.2-EN200	0x102001	105879	Mass or Volume Air Flow 'X' Circuit: Range/Performance - Air Flow Too Low	Mass or Volume Air Flow 'X' Circuit: Compared to Model	P118D	Mass or Volume Air Flow 'X' Circuit: Range/Performance - Air Flow Too Low	Mass Air Flow	Too Low	Comparison to Model															
MEVD17.2-EN200	0x102002	105870	Mass or Volume Air Flow 'X' Circuit: Range/Performance - Air Flow Too High	Mass or Volume Air Flow 'X' Circuit: Compared to Model	P008C	Mass or Volume Air Flow 'X' Circuit: Range/Performance - Air Flow Too High	Mass Air Flow	Too High	Comparison to Model															
MEVD17.2-EN200	0x102002	105870	Mass or Volume Air Flow 'X' Circuit: Range/Performance - Air Flow Too Low	Mass or Volume Air Flow 'X' Circuit: Compared to Model	P118C	Mass or Volume Air Flow 'X' Circuit: Range/Performance - Air Flow Too Low	Mass Air Flow	Too Low	Comparison to Model															
MEVD17.2-EN200	0x102010	105874	Air-mass sensor, plausibility: air mass too high in relation to model	The diagnostic function compares the calculated air mass with the measured air mass	P118D	Mass or Volume Air Flow 'X' Air Mass Too High Compared to Model	Mass Air Flow	Comparison to Model	Potential problem source(s) - Calculated fault caused by other components in the intake system: Valve/metric, turbocharger - Intake system leaking - HFM defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	Y	- Calculated fault caused by other components in the intake system: Valve/metric, turbocharger - Intake system leaking - HFM defective	- 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-EN200	0x102010	105874	Air-mass sensor, plausibility: air mass too low in relation to model	The diagnostic function compares the calculated air mass with the measured air mass	P118D	Mass or Volume Air Flow 'X' Air Mass Too Low Compared to Model	Mass Air Flow	Comparison to Model	Potential problem source(s) - Calculated fault caused by other components in the intake system: Valve/metric, turbocharger - Intake system leaking - HFM defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	Y	- Calculated fault caused by other components in the intake system: Valve/metric, turbocharger - Intake system leaking - HFM defective	- 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-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x102011	105875	Air-mass sensor, signal: implausible period duration, lower limit at low frequency	The diagnostic function monitors the upper limit of the digital HFM signal's period duration	P0103	Mass or Volume Air Flow Sensor 'X' Circuit: High	Mass Air Flow Sensor	Electrical	Potential problem source(s) - Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SBAE	N	- Defect in wiring harness between HFM and DME - Mass air-flow sensor defective - Defective 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: - Engine runs roughly	Breakdown notice: None	None
MEVD17.2-EN200	0x10																							

MEVD17.2- BN2020	0x103002	108086	Accelerator pedal module, pedal travel sensor 1, electric, short circuit to ground or open circuit	The diagnostic function monitors the voltage of sensor 1	P2122	Throttle/Pedal Position Sensor/Switch "V" Circuit Low	Pedal Position Sensor	D Electrical	The fault is recognized when the voltage at sensor 1 is less than 0.568 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 defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: --- Onboard elec. --- None	None	Accelerator pedal sensor 1 voltage	Accelerator pedal sensor 1 voltage	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	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 checking 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
MEVD17.2- BN2020	0x103101	108121	Accelerator pedal module, pedal travel sensor 2, electric, short circuit to positive	The diagnostic function monitors the voltage of sensor 2	P2128	Throttle/Pedal Position Sensor/Switch "E" Circuit High	Pedal Position Sensor	E Electrical	The fault is recognized when 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 elec. --- None	None	Accelerator pedal sensor 2 voltage	Accelerator pedal sensor 2 voltage	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	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 checking 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
MEVD17.2- BN2020	0x103102	108122	Accelerator pedal module, pedal travel sensor 2, electric, short circuit to ground or open circuit	The diagnostic function monitors the voltage of sensor 2	P2127	Throttle/Pedal Position Sensor/Switch "E" Circuit Low	Pedal Position Sensor	E Electrical	The fault is recognized when 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 - Defective DME	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: --- Onboard elec. --- None	None	Accelerator pedal sensor 2 voltage	Accelerator pedal sensor 2 voltage	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	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 checking 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
MEVD17.2- BN2020	0x103308	108164	Accelerator pedal module, pedal travel sensor, plausibility, synchronism fault between signal 1 and signal 2	The diagnostic function monitors the mutual deviation between the two sensor voltages	P2138	Throttle/Pedal Position Sensor/Switch "V"/"E" Voltage Correlation	Pedal Position Sensor	D/E Correlation	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 elec. --- None	None	Accelerator pedal sensor 1 voltage	Pedal data sensor 1 voltage (0/5V)		- Defective wiring harness - Accelerator pedal module defective	- Check wiring and plug connections - Check voltage supply at 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	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
MEVD17.2- BN2020	0x10351C	108212	Accelerator pedal module, pedal travel sensor Multiple fault	Collective fault: Accelerator pedal module's pedal travel sensor	P11C5	Pedal Position Sensor Substitute Operation			Potential problem source(s): - None	immediately	Terminal 15	Voltage condition: --- Onboard elec. --- None	None	Accelerator pedal sensor 1 voltage	none	Y	- None	- None	- ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on	Depending on fault source (0x103001, 103002, 103003, 103004, 102146, 0x103001, 0x103002, 0x103101, 0x103102, 0x103008)	Depending on fault source (0x103001, 103002, 103003, 103004, 102146, 0x103001, 0x103002, 0x103101, 0x103102, 0x103008)	Breakdown notice: None	None
MEVD17.2- BN2020	0x104301	108729			P1250	Manifold Absolute Pressure Too High	Manifold Absolute Pressure Sensor	Pressure															
MEVD17.2- BN2020	0x104301	108729			P1245	Manifold Absolute Pressure Sensor "X" Afterrunning Diagnosis Pressure Too High	Manifold Absolute Pressure Sensor	Afterrunning															
MEVD17.2- BN2020	0x104302	108730			P1255	Manifold Absolute Pressure Too Low	Manifold Absolute Pressure Sensor	Pressure															
MEVD17.2- BN2020	0x104302	108730			P1244	Manifold Absolute Pressure Sensor "X" Afterrunning Diagnosis Pressure Too Low	Manifold Absolute Pressure Sensor	Afterrunning															
MEVD17.2- BN2020	0x104401	108985			P0138	Manifold Absolute Pressure/Barometric Pressure Sensor Circuit High	Manifold Absolute Pressure Sensor	Electrical															
MEVD17.2- BN2020	0x104401	108985			P13A	Manifold Absolute Pressure Sensor Circuit High (Bank 1)																	
MEVD17.2- BN2020	0x104402	108986	Absolute pressure sensor, intake pipe, electrical, short circuit to earth	The diagnostic function monitors the intake-manifold pressure sensor's lower voltage line	P0137	Manifold Absolute Pressure/Barometric Pressure Sensor Circuit Low	Manifold Absolute Pressure Sensor	Electrical	The fault is recognized when 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 elec. --- None	None	NO	Read test data block: ID 448B (2N)		- 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: Best case economy: None	Breakdown notice: None	None
MEVD17.2- BN2020	0x104402	108986	Absolute pressure sensor, intake pipe, electrical, short circuit to earth	The diagnostic function monitors the intake-manifold pressure sensor's lower voltage line	P13B	Manifold Absolute Pressure Sensor Circuit Low (Bank 1)			The fault is recognized when 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 elec. --- None	None	NO	Read test data block: ID 448B (2N)		- 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- BN2020	0x104810	108951	Absolute pressure sensor, intake manifold, plausibility, intake-manifold pressure too high	During the shutdown phase the diagnostic 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	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 elec. --- 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 economy: None	Breakdown notice: None	none
MEVD17.2- BN2020	0x104811	108951	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 elec. --- 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 (leakage, etc.) - Check air induction tract between turbocharger and intake-air duct - 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 economy: None	Breakdown notice: None	none
MEVD17.2- BN2020	0x104A05	108704	Absolute pressure sensor, intake manifold, electric, short circuit to positive	The diagnostic function monitors the intake-manifold pressure sensor's upper voltage line	P13A	Manifold Absolute Pressure Sensor Circuit High (Bank 1)			The fault is recognized when 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 elec. --- None	None	NO	Read test data block: ID 448B (2N)		- 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- BN2020	0x104B01	108777	Absolute pressure sensor, intake manifold, collective error, electrical and plausibility	Collective fault: Intake manifold pressure sensor					Potential problem source(s): - None	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: --- Onboard elec. --- None	None	see individual fault	see individual fault	see individual fault	- None	- None	- 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	see individual fault	Possible apparent symptoms: see individual fault	Breakdown notice: see individual fault	see individual fault
MEVD17.2- BN2020	0x105001	108957	Ambient pressure sensor, electric, short circuit to positive or open circuit	The diagnostic function monitors the DME's barometric pressure sensor	P2228	Barometric Pressure Sensor "X" 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 elec. --- 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- BN2020	0x105002	108958	Ambient pressure sensor, electric, short circuit to ground	The diagnostic function monitors the DME's barometric pressure sensor	P2228	Barometric Pressure Sensor "X" Circuit Low	Ambient Pressure Sensor	Electrical	The fault is detected by the internal calculation algorithm. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: --- Onboard elec. --- 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- BN2020	0x105101	108913			P11C8	Barometric Pressure Too High	Ambient Pressure	General															
MEVD17.2- BN2020	0x105102	108914			P0129	Barometric Pressure Too Low	Ambient Pressure	General															
MEVD17.2- BN2020	0x105201	108959	Ambient pressure sensor, oxygen, 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.	P1289	Ambient Pressure Sensor Afterrunning Diagnosis Pressure Too High	Ambient Pressure Sensor	Afterrunning	Potential problem source(s): - Error in sensor measurement - Sensor defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: --- Onboard elec. --- 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 off - 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- BN2020	0x105202	1089570	Ambient pressure sensor, run-on, pressure too low	The diagnostic function monitors the voltage at the boost pressure sensor	P1289	Ambient Pressure Sensor Afterrunning Diagnosis Pressure Too Low	Ambient Pressure Sensor	Afterrunning	The fault is recognized when 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 elec. --- 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 off - CC message: none - 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- BN2020	0x105A30	107884	Ambient pressure sensor, collective error, electrical and plausibility	The diagnostic function monitors the DME's barometric pressure sensor	P2227	Barometric Pressure Sensor "X" Circuit Range/Performance	Ambient Pressure Sensor	Plausibility	The fault is recognized when the signal from the barometric pressure sensor is less than 0.5 V. Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: --- Onboard elec. --- None	None	NO	none	N	- DME defective	- If the fault is logged again, replace the 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	A terminal status switch must be conducted before this fault can be deleted

MEVD17.2 BNQD09	Ox165AAI	1071680	Ambient pressure sensor; plausibility: pressure too high	The diagnostic function monitors the barometric pressure sensor.	P11C8	Barometric Pressure Too High	Ambient Pressure	General	No electrical fault in barometric pressure sensor (PUEmax, PUElow)	Potential problem source(s) - Barometric pressure sensor installed in DME ECU; sensor voltage above threshold - DME defective wiring to external fault	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec.: None	- None	- None	NO	none	Y	- Barometric pressure sensor installed in DME ECU; sensor voltages above threshold - DME defective wiring to external fault	- Replace the DME if the fault code is currently present or has been logged more than three times	ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none MY10 US: - US emissions warning lamp on - UI 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 BNQD09	Ox165AAI	1071681	Ambient pressure sensor; plausibility: pressure too low	The diagnostic function monitors the barometric pressure sensor.	P12F9	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 elec.: 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 rather Terminal 15 is off than 0 V should be present at both screw connections (BMS) When actuated the relay should click loudly while virtually no resistance (5 ohms) should be measured between the screw connections - Replace cutoff relay	- ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none MY10 US: - US emissions warning lamp on - UI 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 BNQD09	Ox165AAZ	1071682	Ambient pressure sensor; plausibility: Pressure implausible	The diagnostic function monitors the plausability of the barometric pressure relative to that measured in the previous driving cycle.	P12AF	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 elec.: None	- None	- None	NO	none	Y	- Replace the DME if the fault code is currently present or has been logged more than three times	- Replace the DME if the fault code is currently present or has been logged more than three times	ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none MY10 US: - US emissions warning lamp on - UI 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 BNQD09	Ox165AAZ	1071682	Ambient pressure sensor; plausibility: Pressure implausible	The diagnostic function monitors the plausability of the barometric pressure relative to that measured in the previous driving cycle.	P12BC	Ambient Pressure Sensor Comparison Current to Last Driving Cycle Completion	Ambient Pressure Sensor	Driving Cycle Comparison	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 elec.: None	- None	- None	NO	none	Y	- Replace the DME if the fault code is currently present or has been logged more than three times	- Replace the DME if the fault code is currently present or has been logged more than three times	ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none MY10 US: - US emissions warning lamp on - UI 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 BNQD09	Ox165AAJ	1071683	Ambient pressure sensor; plausibility: Pressure implausible	The diagnostic function monitors variations in the barometric pressure reading for plausibility	P12AF	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 elec.: None	- None	- None	NO	none	Y	- Replace the DME if the fault code is currently present or has been logged more than three times	- Replace the DME if the fault code is currently present or has been logged more than three times	ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none MY10 US: - US emissions warning lamp on - UI 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 BNQD09	Ox165AAJ	1071683	Ambient pressure sensor; plausibility: Pressure implausible	The diagnostic function monitors variations in the barometric pressure reading for plausibility	P12BC	Ambient Pressure Sensor Comparison Current to Last Driving Cycle Completion	Ambient Pressure Sensor	Driving Cycle Comparison	The fault is recognized when a defect at sensor 2 or a clocking ramp (deviation between sensor 1 and sensor 2 > 6.3% throttle value) is detected and comparison between sensor 1 and default value is greater than 14.9% Potential problem source(s) - Defect in wiring harness between throttle valve actuator motor and DME - Throttle valve sensor defective - AD converter input in DME defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec.: None	- None	- None	NO	none	Y	- Defect in wiring harness between throttle valve actuator motor and DME - Throttle valve sensor defective - AD converter input in DME defective	- Replace the DME if the fault code is currently present or has been logged more than three times	- Replace the DME if the fault code is currently present or has been logged more than three times	ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none MY10 US: - US emissions warning lamp on - UI 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 BNQD09	Ox167AZZ	1076842	Throttle valve; throttle potentiometer 1: Signal implausible in relation to substitute value from fling	When a single fault occurs at the throttle valve, the diagnostic function monitors the operation of the remaining sensor. The deviation in the sensor signal is playabilized against the default value from air mass.	P0121	Throttle/Pedal Position Sensor/Switch "X" Circuit Range/Performance	Throttle Posidon Sensor	1	The fault is recognized when the signal from throttle valve sensor 2 lies 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 defective	This fault is logged in the ECU fault memory immediately 0.2 sec.	Terminal 15	Voltage condition: - Onboard elec.: None	- None	- None	STEUERN_OK, STEUERN_ENDE	Sensor 1 voltage: 0..5 V (vsd84G).	- 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	- US emissions warning lamp on - ECE 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 BNQD09	Ox167AZZ	1076856	Throttle valve; throttle-value potentiometer 2: electric short circuit to positive or open circuit	The diagnostic function checks the voltage of throttle valve sensor 2 for electrical faults.	P0223	Throttle/Pedal Position Sensor/Switch "W" Circuit High	Throttle Posidon Sensor	2	The fault is recognized when the signal from throttle valve sensor 2 lies 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 defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec.: None	- None	- None	STEUERN_OK, STEUERN_ENDE	Voltage sensor 2: 0..5 V (vsd84G).	- 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	- US emissions warning lamp off - UI 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 BNQD09	Ox167AZZ	1076857	Throttle valve; throttle-value potentiometer 2: electric short circuit to ground	The diagnostic function checks the voltage of throttle valve sensor 2 for electrical faults.	P0222	Throttle/Pedal Position Sensor/Switch "W" Circuit Low	Throttle Posidon Sensor	2	The fault is recognized when the signal from throttle valve sensor 2 lies 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 defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec.: None	- None	- None	STEUERN_OK, STEUERN_ENDE	Voltage sensor 2: 0..5 V (vsd84G).	- 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	- US emissions warning lamp on - ECE electronic engine power reduction on - CC message: on MY10 US DiVIO: - US emissions warning lamp on - UI electronic engine power reduction on - CC message: on MY10 US DiVIO: - US emissions warning lamp off - UI 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 BNQD09	Ox167AZZ	1076858	Throttle valve; throttle-value potentiometer 2: signal implausible in rel. to substitute value from change	When a single fault occurs at the throttle valve, the diagnostic function monitors the operation of the remaining sensor. The deviation in the sensor signal is playabilized against the default value from air mass.	P0221	Throttle/Pedal Position Sensor/Switch "W" Circuit Range/Performance	Throttle Posidon Sensor	2	No fault is recognized after another fault related to the throttle valve (04 10404, 10405, 10406, 10408, 10409, 10410, 10432, 10433, 10434, 10435, 10436, 10437, 10438, 10439, 10440, 10441, 10442, 10443, 10444, 10445, 10446, 10447, 10448, 10449, 10450, 10451, 10452, 10453, 10454, 10455, 10456, 10457, 10458, 10459, 10460, 10461, 10462, 10463, 10464, 10465, 10466, 10467, 10468, 10469, 10470, 10471, 10472, 10473, 10474, 10475, 10476, 10477, 10478, 10479, 10480, 10481, 10482, 10483, 10484, 10485, 10486, 10487, 10488, 10489, 10490, 10491, 10492, 10493, 10494, 10495, 10496, 10497, 10498, 10499, 10500, 10501, 10502, 10503, 10504, 10505, 10506, 10507, 10508, 10509, 10510, 10511, 10512, 10513, 10514, 10515, 10516, 10517, 10518, 10519, 10520, 10521, 10522, 10523, 10524, 10525, 10526, 10527, 10528, 10529, 10530, 10531, 10532, 10533, 10534, 10535, 10536, 10537, 10538, 10539, 10540, 10541, 10542, 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MEVD17.2- BN2020	0x107A8D	107936	Throttle valve actuator, closing spring check, short 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.	P1834	Throttle Valve Adaptation Spring Test Failed (Bank 1)	Throttle Actuator	Adaptation	The fault is recognized when the throttle valve does not return to an aperture of less than roughly 10% 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 elec	None	None	NO	none	Y	- 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- BN2020	0x107A81	107937	Throttle valve actuator, closing spring check, error 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.	P1831	Throttle Valve Actuator Spring Test (Bank 1)	Throttle Actuator	Spring Test	The fault is recognized when the throttle valve fails to achieve an effective aperture of roughly 30% 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 elec	None	None	NO	none	Y	- 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- BN2020	0x107A9D	107992	Throttle valve actuator, opening spring check, short 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.	P1829	Throttle Valve Actuator Spring Test Stop, Spring does not Open (Bank 1)	Throttle Actuator	Spring Test	The fault is recognized when the throttle valve does not return to an aperture of more than 74% within 500 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 elec	None	None	NO	none	Y	- 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- BN2020	0x107A91	107993	Throttle valve actuator, opening spring check, error during spring check	During the spring test the diagnostic function monitors the throttle valve to determine whether it reaches the specified position before the emergency air point within the specified time.	P1828	Throttle Valve Actuator Spring Test Malfunction during Opening (Bank 1)	Throttle Actuator	Spring Test	The diagnostic fault code is logged when the throttle valve fails to reach a position of less than 2.5 % and more than 94 % opening within 300 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 elec	None	None	NO	none	Y	- 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- BN2020	0x107AE5	108032	Throttle valve, adaptation: Re-learn, 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.	P1544	Throttle Valve Adaptation Stop Relearning Lower Mechanical Stop (Bank 1)	Throttle Actuator	Adaptation	This fault is recognized when 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 defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	Engine warmed to normal temp., 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 - 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- BN2020	0x107AF0	108048	Throttle valve actuator, amplifier adjustment: malfunction	During the throttle valve adaptation routine the diagnostic function monitors the offset and amplification of throttle valve potentiometer 1 in the amplified range.	P1643	Throttle Valve Actuator Start Test Amplifier Balancing Plausibility	Throttle Actuator	Adaptation	This fault is recognized when 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 defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	Engine warmed to normal temp., 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 - 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- BN2020	0x108001	1081345	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	This fault is recognized when the voltage of the intake-air temperature sensor exceeds 4.05 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 elec	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 - 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 on - CC message: none	none	Possible apparent symptoms: Engine runs roughly	Breakdown notice: None	None	
MEVD17.2- BN2020	0x108002	1081346	Intake air temperature sensor, electric: short circuit to ground	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	This fault is recognized when 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 elec	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 - 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 on - CC message: none	none	Possible apparent symptoms: Engine runs roughly	Breakdown notice: None	None	
MEVD17.2- BN2020	0x108010	1081360	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 limit.	P0111	Intake Air Temperature Sensor 1 Circuit Range/Performance (Bank 1)	Intake Air Temperature Sensor	1 Plausibility	The fault is recognized when the difference between the real voltage value and the low-pass-filtered voltage is greater than 0.8 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 elec	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 - 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 on - CC message: none	none	Possible apparent symptoms: Engine runs roughly	Breakdown notice: None	None	
MEVD17.2- BN2020	0x108050	1080880	Charge-air temperature sensor, cold start, multiple fault, electrical and plausibility	Collective fault: Charge-air temperature sensor					The response to the fault is specified for a different fault entry. Potential problem source(s): - see individual fault	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard elec	see individual fault for 10524108	see individual fault for 10524108	see individual fault TAYV00max 10	see individual fault TAYV00max 10	see individual fault TAYV00max 10	- see individual fault - Repair individual fault	- 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	- see individual fault for 10524108/5890	Possible apparent symptoms: - see individual fault for 10524108/5890	Breakdown notice: - see individual fault for 10524108/5890	- see individual fault for 10524108/5890	
MEVD17.2- BN2020	0x108050	1080890	Charge-air temperature sensor, cold start, multiple fault, electrical and plausibility	Collective fault: Charge-air temperature sensor					The response to the fault is specified for a different fault entry. Potential problem source(s): - see individual fault	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	None	None	see individual fault	see individual fault	see individual fault	- see individual fault - Repair individual fault	- 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	see individual fault	Possible apparent symptoms: see individual fault	Breakdown notice: see individual fault	see individual fault	
MEVD17.2- BN2020	0x108032	1080698	Intake air temperature sensor, cold start, multiple fault: electrical and plausibility	Collective fault: Intake-air temperature sensor					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 elec	see individual fault	see individual fault	see individual fault	see individual fault	see individual fault	- None - None	- 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	see individual fault	Possible apparent symptoms: see individual fault	Breakdown notice: see individual fault	see individual fault	
MEVD17.2- BN2020	0x108A01	1083905	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 fault is recognized when the voltage of the intake-air temperature sensor exceeds 4.05 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.	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID 5807	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 - 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 DME Test	None	
MEVD17.2- BN2020	0x108A02	1083906	Charge-air temperature sensor, electric: short circuit to ground	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 fault is recognized when 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 - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID 5807	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 - 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 DME Test	None	
MEVD17.2- BN2020	0x108A03	1083907	Charge-air temperature sensor, electric: short circuit to ground	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 limit.	P007E	Charge Air Cooler Temperature Sensor Circuit Range/Performance (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Plausibility	The fault is recognized when the difference between the real voltage value and the low-pass-filtered voltage > 0.8 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.	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID 5807	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 - 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 DME Test	None	
MEVD17.2- BN2020	0x108A04	1084147	Charge-air temperature sensor, plausibility: Signal	The diagnostic function monitors the charge-air	P1690	Charge Air Cooler Temperature Too High (Bank 1)	Charge Air Temperature	General	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	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	Engine warmed to normal temp.	None	None	NO	Read test data block: ID 5807	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 - 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: - 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- BN205	0x1B846	109256	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 'N' Range/Performance	Ambient Air Temperature Sensor	Plausibility	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 elec	Engine warmed to normal temper.	None	NO	none	Y	- Defect in wiring harness - Outside temperature sensor defective	- Check outside temperature - Check wiring harness between the instrument cluster and the outside temperature sensor	- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message : none MY10 US - US emissions warning lamp on - US electronic engine power reduction off - CC message : on	ML ON in US versions only	Possible apparent symptoms None	Breakdown notice None	- 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- BN205	0x1B846	109256	Outside temperature sensor, plausibility Ambient temperature higher than model temperature	The diagnostic function checks the plausibility of the outside temperature.	P10EA	Ambient Air Temperature Too High	Ambient Air Temperature	General	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 elec	Engine warmed to normal temper.	None	NO	none	Y	- Defect in wiring harness - Outside temperature sensor defective	- Check outside temperature - Check wiring harness between the instrument cluster and the outside temperature sensor	- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message : none MY10 US - US emissions warning lamp on - US electronic engine power reduction off - CC message : on	ML ON in US versions only	Possible apparent symptoms None	Breakdown notice None	- 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- BN205	0x1B841	109257	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 'N' Range/Performance	Ambient Air Temperature Sensor	Plausibility	Potential problem source(s) - Defective wiring harness - Outside temperature sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition : Onboard elec	Engine warmed to normal temper.	None	NO	none	Y	- Defect in wiring harness - Outside temperature sensor defective	- Check outside temperature - Check wiring harness between the instrument cluster and the outside temperature sensor	- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message : none MY10 US - US emissions warning lamp on - US electronic engine power reduction off - CC message : on	ML ON in US versions only	Possible apparent symptoms None	Breakdown notice None	- 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- BN205	0x1B841	109257	Outside temperature sensor, plausibility Ambient temperature less than model temperature	The diagnostic function checks the plausibility of the outside temperature.	P10EB	Ambient Air Temperature Too Low	Ambient Air Temperature	General	Potential problem source(s) - Defective wiring harness - Outside temperature sensor defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition : Onboard elec	Engine warmed to normal temper.	None	NO	none	Y	- Defect in wiring harness - Outside temperature sensor defective	- Check outside temperature - Check wiring harness between the instrument cluster and the outside temperature sensor	- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message : none MY10 US - US emissions warning lamp on - US electronic engine power reduction off - CC message : on	ML ON in US versions only	Possible apparent symptoms None	Breakdown notice None	- 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- BN205	0x1B842	109258	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	P10C3	Cold Start Intake Air Temperature Too High (Bank 1)	Intake Air Temperature	1 Cold Start	Potential problem source(s) - Defective wiring harness - Intake air temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition : Onboard elec	None	- 21 sec. after engine start	NO	Read test data block : ID B81F	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 off - ECE electronic engine power reduction off - CC message : none MY10 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- BN205	0x1B843	109259	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	P10C2	Cold Start Intake Air Temperature Too Low (Bank 1)	Intake Air Temperature	1 Cold Start	Potential problem source(s) - Defective wiring harness - Intake air temperature sensor defective - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition : Onboard elec	None	- 21 sec. after engine start	NO	Read test data block : ID B81F	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 off - ECE electronic engine power reduction off - CC message : none MY10 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- BN205	0x1B848	109264	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	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 elec	None	None	NO	Read test data block : ID B81F	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	Active in US only	Possible apparent symptoms Engine runs roughly	Breakdown notice None	None	
MEVD17.2- BN205	0x1B846	109265	Intake air temperature sensor, plausibility Intake air temperature too low	The diagnostic function monitors the intake air temperature to detect implausibly low figures	P11C3	Intake Air Temperature Too Low	Intake Air Temperature	1 General	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 elec	None	None	NO	Read test data block : ID B81F	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	Active in US only	Possible apparent symptoms Engine runs roughly	Breakdown notice None	None	
MEVD17.2- BN205	0x1B844	109266	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	P10D0	Cold Start Charge Air Temperature Too High (Bank 1)	Charge Air Temperature	Cold Start	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 elec	None	- 21 sec. after engine start	NO	Read test data block : ID B81E	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 off - ECE electronic engine power reduction off - CC message : on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message : on	none	Possible apparent symptoms Reduced power	Breakdown notice Standard DME Test	None	
MEVD17.2- BN205	0x1B84B	109267	Charge air temperature sensor, cold start charge air temperature too low	The diagnostic function monitors the charge air temperature to detect implausibly low values during cold starts	P10D1	Cold Start Charge Air Temperature Too Low	Charge Air Temperature	Cold Start	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 elec	None	- 21 sec. after engine start	NO	Read test data block : ID B81E	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 off - ECE electronic engine power reduction off - CC message : on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message : on	none	Possible apparent symptoms Reduced power	Breakdown notice Standard DME Test	None	
MEVD17.2- BN205	0x1B84F	109271	Charge air temperature sensor, plausibility Charge air temperature too high	The diagnostic function monitors the charge air temperature to detect implausibly high figures	P10B0	Charge Air Cooler Temperature Too High (Bank 1)	Charge Air Temperature	General	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 elec	None	None	NO	Read test data block : ID B81E	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 off - ECE electronic engine power reduction off - CC message : on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message : on	none	Possible apparent symptoms Reduced power	Breakdown notice Standard DME Test	None	
MEVD17.2- BN205	0x1B84F	109271	Charge air temperature sensor, plausibility Charge air temperature too high	The diagnostic function monitors the charge air temperature to detect implausibly high figures	P10D2	Charge Air Temperature Too High	Charge Air Temperature	General	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 elec	None	None	NO	Read test data block : ID B81E	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 off - ECE electronic engine power reduction off - CC message : on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message : on	none	Possible apparent symptoms Reduced power	Breakdown notice Standard DME Test	None	
MEVD17.2- BN205	0x1B8A5	109373	Charge air temperature sensor, cold start Multiple fault	Collective fault: Charge air temperature sensor at cold start					Potential problem source(s) - None	This fault is logged in the control module's fault memory immediately.	Terminal IS	Voltage condition : Onboard elec	None	None	see individual fault	see individual fault	see individual fault	- None	- None	- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message : none	see individual fault	Possible apparent symptoms see individual fault	Breakdown notice see individual fault	see individual fault	
MEVD17.2- BN205	0x1B8A2	109374	Charge air temperature sensor, group fault: Plausibility	Collective fault: Charge air temperature sensor					Potential problem source(s) - None	This fault is logged in the control module's fault memory immediately.	Terminal IS	Voltage condition : Onboard elec	None	None	see individual fault	Read test data block : ID B82C	see individual fault	- None	- None	- 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	see individual fault	Possible apparent symptoms see individual fault	Breakdown notice see individual fault	see individual fault	
MEVD17.2- BN205	0x10C001	109729			P007B	Charge Air Cooler Temperature Sensor Circuit Range/Performance (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Plausibility												- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message : on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message : on					
MEVD17.2- BN205	0x10C001	109729			P1084	Charge Air Cooler Temperature Sensor Gradient Too High (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Plausibility												- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message : on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message : on					
MEVD17.2- BN205	0x10C004	109730			P10D0	Cold Start Charge Air Temperature Too High (Bank 1)	Charge Air Temperature	Cold Start												- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message : on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message : on					
MEVD17.2- BN205	0x10C005	109733	Charge air temperature sensor, gradient Rise too high	The diagnostic function monitors the charge air temperature for excessively rapid rises	P10B4	Charge Air Cooler Temperature Sensor Gradient Too High (Bank 1)	Charge Air Temperature Sensor Charge Air Cooler	Plausibility	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 elec	None	None	NO	Read test data block : ID B81E	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 off - ECE electronic engine power reduction off - CC message : on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message : on	none	Possible apparent symptoms Reduced power	Breakdown notice Standard DME Test	None	
MEVD17.2- BN205	0x110001	111413			P142E	Cylinder Injection Cut-Off Pressure Pressure System	Injection Deactivation	Pressure																	
MEVD17.2- BN205	0x110001	111413			P309F	Fuel Rail Pressure, Minimum Pressure Fallen Below, Injection Cut-Off	Fuel Regulator / Valves / Sensors	Fuel Rail Pressure																	
MEVD17.2-			Injector, cylinder 1, activation: high-voltage side, short	The diagnostic function monitors control activation of		Cylinder 1 High Pressure Injector High Side Circuit			Potential problem source(s) - Defective wiring harness - Defective injector	The diagnostic fault code is entered when the fault occurs 3 times in sequence with no		Voltage condition : Onboard elec							- Defective wiring harness - Defective injector	- 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	- 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		Possible apparent symptoms	Breakdown notice	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.

MEVD17.2- BN2025	0x11043	118275	Injector cylinder 4, low-voltage side, activation: open circuit	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	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 elec: None	None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injector 4 and 5, replace injector 4, if fault remains switch the new injector to cylinder 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- BN2025	0x11044	118276	Injector cylinder 5, low-voltage side, activation: open circuit	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	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 elec: 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- BN2025	0x11045	118277	Injector cylinder 6, low-voltage side, activation: open circuit	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	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 elec: None	None	NO	none	N	- Defective wiring harness - Defective injector - Defective DME	- Check wiring harness between DME and injector's 1, although usually only one is defective. When interchanging positions use injectors operated by a DME driver circuit that only activates one injector!	- 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- BN2025	0x11110	118480	DME, internal fault, HDEV output stage module 1 SPI communication implausible	The diagnostic function monitors the driver circuit responsible for actuating the injector.	P16A5	Control Module Multiple Output Stage SPI Bus Communication Error	ECM	Multiple Output Stage	Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard elec: 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- BN2025	0x11111	118481	DME, internal fault, HDEV output stage module 2 SPI communication implausible	The diagnostic function monitors the driver circuit responsible for actuating the injector.	P16A5	Control Module Multiple Output Stage SPI Bus Communication Error	ECM	Multiple Output Stage	Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec: 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- BN2025	0x11112	118482	DME, internal fault, HDEV output stage module 1 SPI communication implausible	The diagnostic function monitors the driver circuit responsible for actuating the injector.	P16A5	Control Module Multiple Output Stage SPI Bus Communication Error	ECM	Multiple Output Stage	Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard elec: 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- BN2025	0x11113	118483	DME, internal fault, HDEV output stage module 2 SPI communication implausible	The diagnostic function monitors the driver circuit responsible for actuating the injector.	P16A5	Control Module Multiple Output Stage SPI Bus Communication Error	ECM	Multiple Output Stage	Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec: 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- BN2025	0x11114	118484	DME, internal fault, HDEV output stage module 1 SPI communication, signal error	The diagnostic function monitors the driver circuit responsible for actuating the injector.	P16A5	Control Module Multiple Output Stage SPI Bus Communication Error	ECM	Multiple Output Stage	Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard elec: 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- BN2025	0x11115	118485	DME, internal fault, HDEV output stage module 2 SPI communication, signal error	The diagnostic function monitors the driver circuit responsible for actuating the injector.	P16A5	Control Module Multiple Output Stage SPI Bus Communication Error	ECM	Multiple Output Stage	Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec: 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- BN2025	0x113025	1126437	Injection systems, voltage supply: Short circuit to B+	The diagnostic function monitors the wire for the injector voltage supply from the overvoltage protection relay for ignition and injector for short circuits to positive.					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	Voltage condition: - Onboard elec: None	None	8 sec. after deactivation of overvoltage	NO	U	- 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 on - 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: None	Breakdown notice: None	None
MEVD17.2- BN2025	0x113026	1126438	Injection systems, voltage supply: Short circuit to earth	The diagnostic function monitors the wire for the injector voltage supply from the overvoltage protection relay for ignition and injector for short circuits to ground.					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 elec: 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 on - 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: None, stop	Breakdown notice: None	none
MEVD17.2- BN2025	0x113027	1126439	Injection systems, voltage supply: Line disconnection	The diagnostic function monitors the wire for the injector voltage supply from the overvoltage protection relay for ignition and injector for an open circuit.					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 elec: 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 on - 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: None, starter	Breakdown notice: None	None
MEVD17.2- BN2025	0x118001	1148881			P0171	System Too Lean (Bank 1)	Fuel System	All Load Ranges															
MEVD17.2- BN2025	0x118001	1148881			P0177	System Too Lean Off Idle (Bank 1)	Fuel System	Off Idle															
MEVD17.2- BN2025	0x118002	1148882			P0172	System Too Rich (Bank 1)	Fuel System	All Load Ranges															
MEVD17.2- BN2025	0x118002	1148882			P0178	System Too Rich Off Idle (Bank 1)	Fuel System	Off Idle															
MEVD17.2- BN2025	0x118401	1147905			P0131	System Too Lean (Bank 1)	Fuel System	All Load Ranges															
MEVD17.2- BN2025	0x118401	1147905			P0980	Fuel Supply Closed Loop Fuel Control, Upper Limit Exceeded	Fuel Supply	Closed Loop Fuel Control															
MEVD17.2- BN2025	0x118402	1147906			P0172	System Too Rich (Bank 1)	Fuel System	All Load Ranges															
MEVD17.2- BN2025	0x118402	1147906			P0986	Fuel Supply Closed Loop Fuel Control, Lower Limit Failed Below	Fuel Supply	Closed Loop Fuel Control															
MEVD17.2- BN2025	0x118601	1148417	Oxygen sensor before catalytic converter, fine mixture control: exhaust gas after catalytic converter too rich	The diagnostic function monitors the oxygen sensor behind the catalytic converter to determine whether it displays a consistent deviation.	P2087	Post Catalyst Fuel Trim System Too Rich (Bank 1)	Fuel System	Post Catalyst	Potential problem source(s): - Defective wiring harness - Leak in exhaust system on engine-side of catalytic converter - 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	Voltage condition: - Onboard elec: Engine warmed to normal temperat	None	NO	none	N	- Defective wiring harness - Leak in exhaust system on engine-side of catalytic converter - Oxygen sensor behind catalytic converter defective - Defective DME	- If faults related to mixture control are present repair these first - Conduct system test for oxygen sensors in wrong mutual positions - Check muffler and before oxygen sensor behind catalytic converter for leaks - Check wiring harness between oxygen sensor and DME - Replace pre-catalytic 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 - Surge	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- BN2025	0x118602	1148418	Oxygen sensor before catalytic converter, fine mixture control: exhaust gas after catalytic converter too lean	The diagnostic function monitors the oxygen sensor behind the catalytic converter to determine whether it displays a consistent deviation.	P2098	Post Catalyst Fuel Trim System Too Lean (Bank 1)	Fuel System	Post Catalyst	Potential problem source(s): - Defective wiring harness - Leak in exhaust system on engine-side of catalytic converter - 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	Voltage condition: - Onboard elec: Engine warmed to normal temperat	None	NO	none	N	- Defective wiring harness - Leak in exhaust system on engine-side of catalytic converter - Oxygen sensor behind catalytic converter defective - Defective DME	- If faults related to mixture control are present repair these first - Conduct system test for oxygen sensors in wrong mutual positions - Check muffler and before oxygen sensor behind catalytic converter for leaks - Check wiring harness between oxygen sensor and DME - Replace pre-catalytic 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	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- BN2025			Mixture adaptation, injector ageing: cylinder bank 1.	The diagnostic function monitors the mixture correction required to dial in the specified lambda		Fuel Trim, Injector Aging Long-Term Adaptation Too			Potential problem source(s): - Collateral fault caused by malfunction in mixture	None, adaptation is updated every 500 km, if the fault threshold is exceeded following the update the diagnostic fault							- Collateral fault caused by malfunction in mixture		- 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		Possible apparent symptoms:	Breakdown notice: None, engine continues running without negative	

MEVD17.2- BN205	0x118E91	118485	Mixture adaptation, idle, mixture too lean	The diagnostic function monitors the air-fuel mixture at idle	P2187	System Too Lean at Idle (Bank 1)	Fuel System	Idle	Data adaptation/matching with Summary Table, as indicated PP → ST Mass airflow rate > 20 t/hg Engine speed > 1600 rpm Potential problem source(s) - Diagnostic fault code logged owing to defective: - Oxygen sensor (pre-catalyst) - HFMI - Injection nozzle - Intake-manifold pressure sensor - Leaks in and around induction system (positive crankcase ventilation, oil cap, oil dipstick, leak EVAP vent line, brake booster) - Leak in exhaust system (exhaust side cylinder head to post-catalyst oxygen sensor) Fuel pre-supply pump - Rail pressure sensor - Camshaft position sensor - Intake air temperature - Poor-quality gasoline The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	Mixture adaptation (ID: 0x6A85)	Y	- Diagnostic fault code logged owing to defective: - Oxygen sensor (pre-catalyst) - HFMI - Injection nozzle - Intake-manifold pressure sensor - Leaks in and around induction system (positive crankcase ventilation, oil cap, oil dipstick, leak EVAP vent line, brake booster) - Leak in exhaust system (exhaust side cylinder head to post-catalyst oxygen sensor) Fuel pre-supply pump - Rail pressure sensor - Camshaft position sensor - Intake air temperature - Poor-quality gasoline - Because this is a secondary fault, start by repairing the primary fault(s).	- 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 with power loss	Breakdown notice: It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the possible low engine output.	Always delete the mixture adaptation after repairing the problem source!		
MEVD17.2- BN205	0x118E92	118486	Mixture adaptation, idle, mixture too rich	The diagnostic function monitors the air-fuel mixture at idle	P2188	System Too Rich at Idle (Bank 1)	Fuel System	Idle	Data adaptation/matching with Summary Table, as indicated PP → ST Mass airflow rate > 20 t/hg Engine speed > 1600 rpm Potential problem source(s) - Diagnostic fault code logged owing to defective: - Oxygen sensor (pre-catalyst) - HFMI - Injection nozzle - Intake-manifold pressure sensor - Leaks in and around induction system (positive crankcase ventilation, oil cap, oil dipstick, leak EVAP vent line, brake booster) - Leak in exhaust system (exhaust side cylinder head to post-catalyst oxygen sensor) Fuel pre-supply pump - Rail pressure sensor - Camshaft position sensor - Intake air temperature - Poor-quality gasoline The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	Mixture adaptation (ID: 0x6A85)	Y	- Diagnostic fault code logged owing to defective: - Oxygen sensor (pre-catalyst) - HFMI - Injection nozzle - Intake-manifold pressure sensor - Leaks in and around induction system (positive crankcase ventilation, oil cap, oil dipstick, leak EVAP vent line, brake booster) - Leak in exhaust system (exhaust side cylinder head to post-catalyst oxygen sensor) Fuel pre-supply pump - Rail pressure sensor - Camshaft position sensor - Intake air temperature - Poor-quality gasoline - Because this is a secondary fault, start by repairing the primary fault(s).	- 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 with power loss	Breakdown notice: It is possible to continue driving the vehicle, but passing maneuvers should not be attempted owing to the possible low engine output.	Always delete the mixture adaptation after repairing the problem source!		
MEVD17.2- BN205	0x118F20	118792	Mixture adaptation, lower speed range: mixture at part load too lean	The diagnostic function monitors the mixture adaptation	P2177	System Too Lean Off Idle (Bank 1)	Fuel System	Off Idle	This fault 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 before oxygen sensor behind catalytic converter - Poor-quality gasoline The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	START SYSTEMCHECK, GRUND	Mixture adaptation (ID: 0x6A85)	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-reduction system for leaks (also checking the following components: Positive crankcase ventilation, oil cap, leak 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- BN205	0x118F21	118793	Mixture adaptation, lower speed range: mixture at part load too rich	The diagnostic function monitors the mixture adaptation	P2178	System Too Rich Off Idle (Bank 1)	Fuel System	Off Idle	The fault 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 before oxygen sensor behind catalytic converter - Poor-quality gasoline The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	START SYSTEMCHECK, GRUND	Mixture adaptation (ID: 0x6A85)	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	- Delete mixture adaptations following repair		
MEVD17.2- BN205	0x119001	119077	Rail pressure sensor, electrical: Short circuit to B+	The diagnosis function monitors the upper voltage limit of the rail-pressure sensor	P0183	Fuel Rail Pressure Sensor 'A' Circuit High	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	This fault is recognized when 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 elec	None	None	NO	Read test data block: ID 5B76	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 DME Test	None
MEVD17.2- BN205	0x119002	119078	Rail pressure sensor, electric: short circuit to ground	The diagnostic function monitors the rail-pressure sensor's lower voltage limit.	P0182	Fuel Rail Pressure Sensor 'A' Circuit Low	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	The fault is recognized when 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 elec	None	None	NO	Read test data block: ID 5B76	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 DME Test	None
MEVD17.2- BN205	0x119001	119489	Fuel low-pressure sensor, electric: short circuit to positive	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 elec	None	None	NO	Read test data block: ID 5B74	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- BN205	0x119002	119490	Fuel low-pressure sensor, electrical: Short 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 elec	None	None	NO	Read test data block: ID 5B74	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- BN205	0x119391	119745	Rail pressure sensor, voltage test: upper threshold exceeded	The diagnostic function monitors the voltage of the rail-pressure sensor	P18CE	Fuel Rail Pressure Sensor 'X' Voltage 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 - Defective DME	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID 5B76	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 DME Test	None
MEVD17.2- BN205	0x119392	119746	Rail pressure sensor, voltage test: lower threshold undershot	The diagnostic function monitors the voltage of the rail-pressure sensor	P18CF	Fuel Rail Pressure Sensor 'X' Voltage 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 0.32 V. Potential problem source(s) - Defect in wiring harness between DME and rail-pressure sensor - Defective rail-pressure sensor - Defect in high-pressure system - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID 5B76	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 DME Test	None
MEVD17.2- BN205	0x119394	119748	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 system - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	Engine warmed to normal temp.	10 sec. after engine start	NO	Read test data block: ID 5B76	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 DME Test	None
MEVD17.2- BN205	0x119398	119750	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 - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID 5B76	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 DME Test	None
									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	This fault is logged in the control		Voltage condition: - Onboard elec					- Defect in wiring harness between DME and rail-pressure sensor	- Check wiring harness between DME and rail-pressure 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					

MEVD17.2- BN200	0x1B211	118997	Fuel low-pressure system, control: actual pressure too low	The diagnostic function monitors the fuel low-pressure level's deviation from the specified value					Potential problem source(s): - Fuel tank empty - Leak in fuel system - Defect in wiring harness to low-pressure sensor - Defective pressure limiter valve in the fuel pump - Defect in wiring harness to fuel pump - Fuel pump defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	see EXP electric fuel pump module	see EXP electric fuel pump module	N		- Fuel tank empty - Defect in wiring harness to 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 sensor - Conduct pressure isolation 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 starvation	Breakdown notice: None	none	
MEVD17.2- BN200	0x1B212	118998	Fuel low-pressure system, control: actual pressure too high	The diagnostic function monitors the fuel low-pressure level's deviation from the specified value					Potential problem source(s): - Defect in wiring harness to low-pressure sensor - Defect in low-pressure sensor - Pressure limiter valve in EXP electric fuel pump - Defect in wiring harness to fuel pump - Fuel pump defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	see EXP electric fuel pump module	see EXP electric fuel pump module	N		- Defect in wiring harness to low-pressure sensor - Defective low-pressure sensor - Pressure limiter valve in EXP 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- BN200	0x11C401	1184289	Fuel supply control valve, activation: short circuit to positive	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	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 elec	None	None	STEUERN_MSV, STEUERN_ENC	PWM activation signal, 0uB25	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	- 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: None	None	
MEVD17.2- BN200	0x11C402	1184290	Fuel supply control valve, activation: short circuit to ground	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	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 elec	None	None	STEUERN_MSV, STEUERN_ENC	PWM activation signal, 0uB25	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	- 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: None	None	
MEVD17.2- BN200	0x11C404	1184292	Fuel supply control valve, activation: open circuit	The diagnostic function monitors the flow-control valve's control activation wire for an open circuit	P0001	Fuel Volume Regulator Control CircuitOpen	Fuel Regulators / Valves / Sensors	Fuel Volume Regulator	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 elec	None	None	STEUERN_MSV, STEUERN_ENC	PWM activation signal, 0uB25	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	- 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: None	None	
MEVD17.2- BN200	0x11CF30	1187182	Fuel supply system, collective error: mixture adaptation at idc and in lower speed range	Collective fault: Mixture adaptation					None Potential problem source(s): - None	none	none	Voltage condition: - None	Tempe	None	None	None	None	None	- None	- None	- 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- BN200	0x120208	1187185	Charge air pressure control, upper value: charge air pressure too high	The diagnostic function monitors the pressure measured by the boost-pressure sensor	P0234	Turbocharger/Supercharger 'X' Overboost Condition	Supercharger Boost Pressure	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 (stuck in closed position) - Vacuum line defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	steuern_systemtest_at	status	STAT_ATLSVC_DPVCHK_WERT	N		- Boost-pressure sensor is defective or has been tampered with - Electropneumatic pressure converter in wastegate valve is defective - Wastegate valve is defective (stuck 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- BN200	0x120308	1185424	Charge air pressure control, lower value: charge air pressure too low	The diagnostic function monitors the pressure measured by the boost-pressure sensor	P0209	Turbocharger/Supercharger 'X' Underboost Condition	Supercharger Boost Pressure	Pressure	Potential problem source(s): - Boost-pressure sensor defective - Defective electropneumatic pressure converter in wastegate valve - Wastegate valve is defective (stuck in open position) - Air induction tract between turbocharger and intake air plenum has leak - Vacuum line for controlling wastegate valve is defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	steuern_systemtest_at	status	STAT_ATLSVC_DPVCHK_WERT	N		- Boost-pressure sensor defective - Defective electropneumatic pressure converter in wastegate valve - Wastegate valve is defective (stuck 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- BN200	0x120408	1185888	Charge air pressure control, deactivation: charge air pressure buildup (stalled)	The diagnostic function monitors the DME's deactivation of active boost	P1360	Turbocharger/Supercharger Boost Control Cut-Off (B06 T)			Potential problem source(s): - None	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	NO	Y	- None	- None	- ECE emissions warning lamp on - ECE electronic engine power reduction on - 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- BN200	0x121001	1183748	Charge air pressure sensor, electric: short circuit to positive	The diagnostic function monitors the wire to the boost-pressure sensor	P0238	Turbocharger/Supercharger Boost Sensor 'X' Circuit High	Supercharger Boost Sensor	Electrical	Potential problem source(s): - Boost-pressure sensor defective - Defective electropneumatic pressure converter in wastegate valve - Wastegate valve is defective (stuck in open position) - Air induction tract between turbocharger and intake-air plenum has leak - Vacuum line for controlling wastegate valve is defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SIDC	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	- 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 DME Test	None	
MEVD17.2- BN200	0x121002	1183748	Charge air pressure sensor, electric: short circuit to ground	The diagnostic function monitors the wire to the boost-pressure sensor	P0237	Turbocharger/Supercharger Boost Sensor 'X' Circuit Low	Supercharger Boost Sensor	Electrical	Potential problem source(s): - Boost-pressure sensor defective - Defective electropneumatic pressure converter in wastegate valve - Wastegate valve is defective (stuck in open position) - Air induction tract between turbocharger and intake-air plenum has leak - Vacuum line for controlling wastegate valve is defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SIDC	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	- 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 DME Test	None	
MEVD17.2- BN200	0x121201	1184287	Boost Sensor 'X' Afterrunning Diagnose Pressure Too High		P1240	Boost Sensor 'X' Afterrunning Diagnose Pressure Too High	Supercharger Boost Sensor	Afterrunning																		
MEVD17.2- BN200	0x121202	1184288	Boost Sensor 'X' Afterrunning Diagnose Pressure Too Low		P1246	Boost Sensor 'X' Afterrunning Diagnose Pressure Too Low	Supercharger Boost Sensor	Afterrunning																		
MEVD17.2- BN200	0x121521	1185037	Charging pressure sensor, multiple fault: electrical and plausibility	Collective fault: Boost-pressure sensor	P0236	Turbocharger/Supercharger Boost Sensor 'X' Circuit Range/Performance			Potential problem source(s): - None	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	see individual fault	see individual fault	see individual fault	- None	- None	- ECE emissions warning lamp off - US emissions warning lamp: off - CC message: none	see individual fault	Possible apparent symptoms: see individual fault	Breakdown notice: see individual fault	see individual fault		
MEVD17.2- BN200	0x121530	1185072	Charge air pressure sensor, plausibility: pressure before throttle valve too high	The diagnostic function monitors the boost pressure	P0234	Turbocharger/Supercharger 'X' Overboost Condition	Supercharger Boost Pressure	Pressure	Potential problem source(s): - The fault is recognized when, 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. - 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 elec	None	None	NO	Read test data block: ID SIDC	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	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Reduced power	Breakdown notice: Standard DME Test	None	
MEVD17.2- BN200	0x121530	1185072	Charge air pressure sensor, plausibility: pressure before throttle valve too high	The diagnostic function monitors the boost pressure	P1240	Turbocharger/Supercharger Boost Pressure, Pressure Front Of Throttle Valve Too High	Supercharger Boost Pressure	Pressure Front of Throttle	Potential problem source(s): - The fault is recognized when, 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. - 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 elec	None	None	NO	Read test data block: ID SIDC	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	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Reduced power	Breakdown notice: Standard DME Test	None	
MEVD17.2- BN200	0x121531	1185073	Charge air pressure sensor, plausibility: pressure before throttle valve too low	The diagnostic function monitors the boost pressure sensor	P0209	Turbocharger/Supercharger 'X' Underboost Condition	Supercharger Boost Pressure	Pressure	Potential problem source(s): - None	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	Read test data block: ID SIDC	N		- None	- None	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Reduced power	Breakdown notice: Standard DME Test	None	

MEVD17.2- B2020	0x121532	118074	Boost pressure sensor, plausibility: Pressure before throttle valve too high when engine not running	The diagnostic function monitors the boost pressure.	P19F2	Charge Air Pressure in Comparison to Barometric Pressure Too High	Supercharger Boost Pressure/Ambient Pressure	Correlation	The fault is recognized when 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 elec.: None	-None	NO	Read test data block : ID: B202	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 (leakage, etc.) - Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Reduced power	Breakdown notice: Standard DME Test	None
MEVD17.2- B2020	0x121532	118074	Boost pressure sensor, plausibility: Pressure before throttle valve too high when engine not running	The diagnostic function monitors the boost pressure.	P12D4	Turbocharger/Supercharger Boost Pressure: Pressure Front Of Throttle Valve Too High during Engine Operating	Supercharger Boost Pressure	Pressure Front of Throttle	The fault is recognized when 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 elec.: None	-None	NO	Read test data block : ID: B202	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 (leakage, etc.) - Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Reduced power	Breakdown notice: Standard DME Test	None
MEVD17.2- B2020	0x121533	118075	Boost pressure sensor, plausibility: Pressure before throttle valve too low when engine not running	The diagnostic function monitors the boost pressure.	P19F3	Charge Air Pressure in Comparison to Barometric Pressure Too Low	Supercharger Boost Pressure/Ambient Pressure	Correlation	The fault is recognized when 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 elec.: None	-None	NO	Read test data block : ID: B202	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 (leakage, etc.) - Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Reduced power	Breakdown notice: Standard DME Test	None
MEVD17.2- B2020	0x121533	118075	Boost pressure sensor, plausibility: Pressure before throttle valve too low when engine not running	The diagnostic function monitors the boost pressure.	P12D5	Turbocharger/Supercharger Boost Pressure: Pressure Front Of Throttle Valve Too Low during Engine Operating	Supercharger Boost Pressure	Pressure Front of Throttle	The fault is recognized when 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 elec.: None	-None	NO	Read test data block : ID: B202	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 (leakage, etc.) - Check wiring harness between DME and boost-pressure sensor - Boost-pressure sensor - Replace DME	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Reduced power	Breakdown notice: Standard DME Test	None
MEVD17.2- B2020	0x121561	118281	Charge-air 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.	P0234	Turbocharger/Supercharger 'X' Overboost Condition	Supercharger Boost Pressure	Pressure	The fault is recognized when 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 elec.: None	-5 sec. after engine off	NO	none	N	- Defective wiring harness - Sensor has been tampered with - Sensor defective	- Check wiring harness - Replace sensor	- MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on - MY11 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: None	Breakdown notice: None	None
MEVD17.2- B2020	0x121561	118281	Charge-air 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.	P1240	Boost Sensor 'X' Afterrunning Diagnosis Pressure Too High	Supercharger Boost Sensor	Afterrunning	The fault is recognized when 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 elec.: None	-5 sec. after engine off	NO	none	N	- Defective wiring harness - Sensor has been tampered with - Sensor defective	- Check wiring harness - Replace sensor	- MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on - MY11 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: None	Breakdown notice: None	None
MEVD17.2- B2020	0x121562	118282	Charge-air pressure sensor: pressure too low	During the control module's shutdown phase the diagnostic function monitors the barometric pressure sensor, intake-manifold pressure sensor and the pressure sensor on the air intake side of the throttle valve to determine whether they are all measuring the same pressure.	P0299	Turbocharger/Supercharger 'X' Underboost Condition	Supercharger Boost Pressure	Pressure	The fault is recognized when 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 - Sensor has been tampered with	This fault is logged in the control module's fault memory immediately	none	Voltage condition: : Onboard elec.: 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	- MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on - MY11 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: None	Breakdown notice: None	None
MEVD17.2- B2020	0x121562	118282	Charge-air pressure sensor: pressure too low	During the control module's shutdown phase the diagnostic function monitors the barometric pressure sensor, intake-manifold pressure sensor and the pressure sensor on the air intake side of the throttle valve to determine whether they are all measuring the same pressure.	P1240	Boost Sensor 'X' Afterrunning Diagnosis Pressure Too Low	Supercharger Boost Sensor	Afterrunning	The fault is recognized when 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 - Sensor has been tampered with	This fault is logged in the control module's fault memory immediately	none	Voltage condition: : Onboard elec.: 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	- MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on - MY11 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: None	Breakdown notice: None	None
MEVD17.2- B2020	0x122001	118741	Bypass blow-off valve, activation: short circuit to positive	The diagnostic function monitors the wire to the compressor bypass valve.	P0035	Turbocharger/Supercharger Bypass Valve 'X' Control Circuit High	Supercharger Bypass Valve	Electrical	The fault is recognized by 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 elec.: None	-None	STEUFERN_UHV, STEUFERN_ENDE	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	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Power reduction, CC message for engine malfunction	Breakdown notice: None	None
MEVD17.2- B2020	0x122002	118742	Bypass blow-off valve, activation: short circuit to ground	The diagnostic function monitors the wire to the compressor bypass valve.	P0034	Turbocharger/Supercharger Bypass Valve 'X' Control Circuit Low	Supercharger Bypass Valve	Electrical	The fault is recognized by 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 elec.: None	-None	STEUFERN_UHV, STEUFERN_ENDE	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	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Power reduction, CC message for engine malfunction	Breakdown notice: None	None
MEVD17.2- B2020	0x122004	118744	Bypass blow-off valve, activation: open circuit	The diagnostic function monitors the wire to the compressor bypass valve.	P0033	Turbocharger/Supercharger Bypass Valve 'X' Control Circuit	Supercharger Bypass Valve	Electrical	The fault is recognized by 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 elec.: None	-None	STEUFERN_UHV, STEUFERN_ENDE	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	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Power reduction, CC message for engine malfunction	Breakdown notice: None	None
MEVD17.2- B2020	0x122158	118104	Blow-off valve, mechanic: jammed closed	The diagnostic function monitors the compressor bypass valve to determine if it is seating in its closed position.					Potential problem source(s): - Seized compressor bypass valve - Diaphragm valve defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: : Onboard elec.: 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, in additional action required: Replace compressor bypass valve - Replace turbocharger	- 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: Increased purging noise from turbocharger	Breakdown notice: None	None
MEVD17.2- B2020	0x123001	118137	Wastegate, activation: short circuit to positive	The diagnostic function monitors the electrical wire from the DME to the electro-pneumatic pressure converter.	P0246	Turbocharger/Supercharger Wastegate Solenoid 'X' High			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective wiring harness - Electro-pneumatic pressure converter is defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: : Onboard elec.: None	-None	Steuern_10V1, Steuern_ende_10V1	PWM activation signal, Default	N	- Defective wiring harness - Electro-pneumatic pressure converter is defective - Defective DME	- Check wiring harness - Replace electro-pneumatic 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- B2020	0x123002	118138	Wastegate, activation: short circuit to ground	The diagnostic function monitors the electrical wire from the DME to the electro-pneumatic pressure converter.	P0246	Turbocharger/Supercharger Wastegate Solenoid 'X' Low			The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective wiring harness - Electro-pneumatic pressure converter is defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: : Onboard elec.: None	-None	Steuern_10V1, Steuern_ende_10V1	PWM activation signal, Default	N	- Defective wiring harness - Electro-pneumatic pressure converter is defective - Defective DME	- Check wiring harness - Replace electro-pneumatic 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
				The diagnostic function monitors the electrical wire					The fault is recognized by the driver circuit's diagnostic function. Potential problem source(s): - Defective wiring harness - Electro-pneumatic pressure	This fault is logged in the control		Voltage condition: : Onboard elec.					- Defective wiring harness	- Check wiring harness	- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: on - US emissions warning lamp on - US electronic engine power		Possible apparent symptoms:		

MEVD17-3- BN2020	0x12B101	122491	Oxygen sensor heater before catalytic converter, activation: short circuit to positive	The diagnostic function monitors activation of the heater for the oxygen sensor before the catalytic converter	P0032	H025 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 - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	-10 sec. after engine start	While an appropriate tester service	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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B102	122492	Oxygen sensor heater before catalytic converter, activation: short circuit to ground	The diagnostic function monitors activation of the heater for the oxygen sensor before the catalytic converter	P0031	H025 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 - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	-10 sec. after engine start	While an appropriate tester service	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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B104	122494	Oxygen sensor heater before catalytic converter, activation: open circuit	The diagnostic function monitors activation of the heater for the oxygen sensor before the catalytic converter	P0030	H025 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 - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	-10 sec. after engine start	While an appropriate tester service	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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B301	122473	Oxygen sensor heater after catalytic converter, activation: short circuit to positive	The diagnostic function monitors activation of the heater for the oxygen sensor behind the catalytic converter	P0038	H025 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 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 - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	-10 sec. after engine start	STUEERN_LSHZ, STUEERN_ENZ	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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B302	122474	Oxygen sensor heater after catalytic converter, activation: short circuit to ground	The diagnostic function monitors activation of the heater for the oxygen sensor behind the catalytic converter	P0037	H025 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 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 - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	-10 sec. after engine start	STUEERN_LSHZ, STUEERN_ENZ	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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B304	122478	Oxygen sensor heater after catalytic converter, activation: open circuit	The diagnostic function monitors activation of the heater for the oxygen sensor behind the catalytic converter	P0036	H025 Heater Control Circuit (Bank 1 Sensor 2)	Oxygen Sensor: Rear	Heater Electrical	The fault is recognized when an activation signal is transmitted to 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 - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	-10 sec. after engine start	STUEERN_LSHZ, STUEERN_ENZ	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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B505	122589	Oxygen sensor heating before catalytic converter, function: heater fuel		P102A	O2 Sensor Heating, Heater Error (Bank 1 Sensor 1)	Oxygen Sensor: Front	Heater	Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME			Voltage condition: - Temperature	0	0	0	None	new for 1-10-03-450			- 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		Possible apparent symptoms:	Breakdown notice		
MEVD17-3- BN2020	0x12B701	122487	Oxygen sensor heater 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 catalytic converter defective - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	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)	
MEVD17-3- BN2020	0x12B020	122694	Oxygen sensor heater before catalytic converter, function: operating temperature not reached	The diagnostic function monitors the temperature of the oxygen sensor before the catalytic converter	P0308	O2 Sensor Temperature Measurement Operating Temperature not Reached (Bank 1 Sensor 1)	Oxygen Sensor: Front	Temperature Measurement	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 elec	Engine warmed to normal temperature	2 min. after engine start	While an appropriate tester service	none	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective	- 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 lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B021	122695	Oxygen sensor heater before catalytic converter, function: signal readiness	The diagnostic function monitors heating of the oxygen sensor before the catalytic converter	P0135	O2 Sensor Heater Circuit (Bank 1 Sensor 1)	Oxygen Sensor: Front	Heater Electrical	The fault is recognized when the calibrated resistance of the heater for the oxygen sensor before the catalytic converter fails to achieve the specified operating temperature although the heater is operating. 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 elec	Engine warmed to normal temperature	None	While an appropriate tester service	none	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective	- 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 lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption - Surge	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B022	122696	Oxygen sensor heater before catalytic converter, function: internal resistance of signal circuit too highly resistant	The diagnostic function monitors the calibrated resistance of the heater for the oxygen sensor before the catalytic converter in the DME	P0136	Internal Control Module O2 Sensor Calibration Resistance Error (Bank 1 Sensor 1)	Oxygen Sensor: Front	Internal Control Module Error	Potential problem source(s): - DME defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Engine warmed to normal temperature	None	NO	none	Y	- DME defective	- Replace DME 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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B033	122693	Oxygen sensor after catalytic converter, ageing: voltage threshold not reached	The diagnostic function monitors the voltage of the oxygen sensor behind the catalytic converter on sensor	P0139	O2 Sensor Circuit Slow Response (Bank 1 Sensor 2)	Oxygen Sensor: Rear	Slow Response	The fault is recognized when the voltage of the oxygen sensor behind the catalytic converter falls too slowly during trailing load-to-idle operation. Potential problem source(s): - Defect in wiring harness between DME and oxygen sensor behind catalytic converter - Oxygen sensor behind catalytic converter defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Engine warmed to normal temperature	At least 10 sec. in normal phase	none	none	N	- Defect in wiring harness between DME and oxygen sensor behind catalytic converter - Oxygen sensor behind catalytic converter defective	- 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: - None	Breakdown notice - None		none
MEVD17-3- BN2020	0x12B043	122698	Oxygen sensor after catalytic converter, electrical: short circuit to positive	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	Voltage condition: - Onboard elec	Engine warmed to normal temperature	Active heater activation more than 60 sec.	Read-out available from tester service	none		- 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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B043	122699	Oxygen sensor after catalytic converter, electrical: internal short circuit or oxygen sensor contaminated	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	Voltage condition: - Onboard elec	Engine switched off at temperature	Active heater activation more than 60 sec.	Read-out available from tester service	none		- 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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B043	122699	Oxygen sensor after catalytic converter, electrical: open circuit	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 before the catalytic converter. Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Defective DME	The diagnostic fault code is logged when the fault remains present for longer than 6 min.	none	Voltage condition: - Onboard elec	Engine warmed to normal temperature	Active heater activation more than 60 sec.	Read-out available from tester service	none		- Defective wiring harness - Oxygen sensor behind catalytic converter defective - Defective 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	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.	Breakdown notice	None
MEVD17-3- BN2020	0x12B050	122812	Oxygen sensor before catalytic converter, pump current line: sensor control state above threshold due to open pump current line	The diagnostic function monitors the voltage of the oxygen sensor before the catalytic converter	P0318	O2 Sensor Lambda Controller Value Above Threshold due to Open Pumping Current Circuit (Bank 1 Sensor 1)	Oxygen Sensor: Front	Positive Current	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 elec	Engine warmed to normal temperature	None	NO	Read-out available from tester service	- 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	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.	Breakdown notice	None	
MEVD17-3- BN2020	0x12B051	122813	Oxygen sensor before catalytic converter, pump current line: signal voltage in normal mode too low due to open pump current line	The diagnostic function monitors the voltage of the oxygen sensor before the catalytic converter	P0320	O2 Sensor Signal Voltage Too Low during Coast Down Fuel Cut-Off due to Open Pumping Current Circuit (Bank 1 Sensor 1)	Oxygen Sensor: Front	Positive Current	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 elec	Engine warmed to normal temperature	Overrun operation must be present	NO	Read-out available from tester service	- 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	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.	Breakdown notice	None	
MEVD17-3- BN2020	0x12B052	122814	Oxygen sensor before catalytic converter, line fault: open circuit, pump current test	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	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 elec	Engine warmed to normal temperature	None	NO	Read-out available from tester service	- 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	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.	Breakdown notice	None	
				The diagnostic function monitors the internal					Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective	This fault is logged in the control								- Defective wiring harness	- Check wiring harness between pre-catalyst oxygen sensor and 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		Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions	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.	Breakdown notice	

MEVD17.2- BN2025	0x128070	1228144	Oxygen sensor before catalytic converter, electrical Heater coil resistance or ceramic temperature exceeds/does not exceed fault	The diagnostic function monitors the temperature of the oxygen sensor before the catalytic converter.	P0130	O2 Sensor Circuit (Bank 1 Sensor 1)	Oxygen Sensor, Front	Electrical	Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective	This fault is recognized when the oxygen sensor before the catalytic converter fails to achieve the specified operating temperature although the heater is operating	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Engine warmed to normal temper.	None	NO	none	N	- Defective wiring harness - Oxygen sensor before catalytic converter defective	- 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 on	none	Possible apparent symptoms: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption	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- BN2025	0x128080	1228160	Oxygen sensor before catalytic converter, collective error	Collective fault: Oxygen sensor before catalytic converter					Potential problem source(s): - Composite fault (containing virtually all of the individual faults for the pre-catalyst oxygen sensor)	The response to the fault is specified for a different fault entry.	The diagnostic fault code is logged when the fault remains present for longer than 10 min.	Terminal 15	Voltage condition: - Onboard elec	Engine warmed to normal temper.	None	NO	none	N	- Composite fault (containing virtually all of the individual faults for the pre-catalyst oxygen sensor)	- see procedures and measures for responding to additional faults related together to the pre-catalyst oxygen 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: - MIL lamp lights up after 2nd driving cycle - Higher exhaust emissions - Higher fuel consumption	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- BN2025	0x128090	1228176	Oxygen sensor before catalytic converter, plausibility monitor after catalytic converter too 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).	P2097	Post Catalyst Fuel Trim System Too Rich (Bank 1)	Fuel System	Post Catalyst	Potential problem source(s): - Defective wiring harness - Defective oxygen sensors	The fault is recognized when the lambda signal from the pre-catalyst oxygen sensor deviates too much from the lambda signal from the oxygen sensor behind the catalytic converter.	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Engine warmed to normal temper.	None	NO	none	N	- Defective wiring harness - Defective oxygen sensors	- Inspect wiring harness between oxygen sensors - 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 on	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- BN2025	0x1280D0	1228177	Oxygen sensor before catalytic converter, plausibility monitor after catalytic converter too 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).	P2096	Post Catalyst Fuel Trim System Too Lean (Bank 1)	Fuel System	Post Catalyst	Potential problem source(s): - Leak in exhaust system before oxygen sensors - Defective wiring harness - Defective oxygen sensors	The fault is recognized when the lambda signal from the pre-catalyst oxygen sensor deviates too much from the lambda signal from the oxygen sensor behind the catalytic converter.	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Engine warmed to normal temper.	None	NO	none	N	- Leak in exhaust system before oxygen sensors - Check wiring harness between pre-catalyst oxygen sensor and DME - 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 on	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- BN2025	0x1280E0	1228178	Oxygen sensor before catalytic converter, plausibility fixed at lean	The diagnostic function monitors whether the voltage of the pre-catalyst oxygen sensor is within a plausible range	P2195	O2 Sensor Signal Based/Shock Lean (Bank 1 Sensor 1)	Oxygen Sensor, Front	Signal Check	Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Leak in exhaust system on engine-side of catalytic converter	The fault is recognized when the voltage of the pre-catalyst oxygen sensor remains consistently too high.	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	none	Voltage condition: - Onboard elec	Engine warmed to normal temper.	None	NO	none	N	- Defective wiring harness - Oxygen sensor before 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 - 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 on	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- BN2025	0x1280F0	1228179	Oxygen sensor before catalytic converter, plausibility fixed at rich	The diagnostic function monitors whether the voltage of the pre-catalyst oxygen sensor is within a plausible range	P2196	O2 Sensor Signal Based/Shock Rich (Bank 1 Sensor 1)	Oxygen Sensor, Front	Signal Check	Potential problem source(s): - Defective wiring harness - Oxygen sensor before catalytic converter defective - Leak in exhaust system on engine-side of catalytic converter	The fault is recognized when the voltage of the pre-catalyst oxygen sensor remains consistently too low.	The diagnostic fault code is logged when the fault remains present for longer than 2 min.	none	Voltage condition: - Onboard elec	Engine warmed to normal temper.	None	NO	none	N	- Defective wiring harness - Oxygen sensor before 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 - 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 on	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- BN2025	0x130001	1245185	VANOS solenoid valve, VME, activation: short circuit to positive	The diagnostic function monitors the wire to the VANOS solenoid valve	P2089	X/ Camshaft Position Actuator Control Circuit High (Bank 1)	Camshaft Position Actuator	Intake Electrical	Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	The fault is recognized by the driver circuit diagnostic function.	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	STUEJRN, ENWIS, STEUERN, EN	PWM activation signal, Out47a	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	- MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction, ECE on - CC message on	none	Possible apparent symptoms: CC message, performance reduction, turbo degradation	Breakdown notice: None	None
MEVD17.2- BN2025	0x130002	1245186	VANOS solenoid valve, VME, activation: short circuit to ground	The diagnostic function monitors the wire to the VANOS solenoid valve	P2088	X/ Camshaft Position Actuator Control Circuit Low (Bank 1)	Camshaft Position Actuator	Intake Electrical	Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	The fault is recognized by the driver circuit diagnostic function.	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	STUEJRN, ENWIS, STEUERN, EN	PWM activation signal, Out47a	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	- MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction, ECE on - CC message on	none	Possible apparent symptoms: CC message, performance reduction, turbo degradation	Breakdown notice: None	None
MEVD17.2- BN2025	0x130004	1245188	VANOS solenoid valve, VME, activation: open circuit	The diagnostic function monitors the wire to the VANOS solenoid valve	P0010	X/ Camshaft Position Actuator Circuit/Open (Bank 1)	Camshaft Position Actuator	Intake Electrical	Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	The fault is recognized by the driver circuit diagnostic function.	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	STUEJRN, ENWIS, STEUERN, EN	PWM activation signal, Out47a	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	- MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction, ECE on - CC message on	none	Possible apparent symptoms: CC message, performance reduction, turbo degradation	Breakdown notice: None	None
MEVD17.2- BN2025	0x130104	1245444	VANOS solenoid valve, VME, control fault, camshaft jammed	The diagnostic function monitors the camshaft timing adjustment	P1303	X/ Camshaft Duck	Camshaft	Intake Duck	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 - VANOS solenoid valve defective	The fault is recognized when the actual angle fails to conform to the specified angle while the engine is running.	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	Engine warmed to normal temper.	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	- MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction, ECE on - CC message on	Fail leads to ATCLTL error (FC Test L&A "Boost pressure control, deactivation Boost pressure generation disabled" (FC (Dac-Press) L&A 100860) 0120495 - FC (Dac-Press) L&A 111321 (N&C38)	Possible apparent symptoms: Engine runs poorly	Breakdown notice: The engine needs to be emergency limp home program, continued vehicle operation is possible, because power is reduced the driver should refrain from putting in demands	None
MEVD17.2- BN2025	0x130108	1245445	VANOS solenoid valve, VME, control fault, position not reached	The diagnostic function monitors the camshaft timing adjustment	P0012	X/ Camshaft Position - Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Intake	Potential problem source(s): - VANOS solenoid valve seized - VANOS solenoid valve defective	The fault is recognized when the actual angle assumes the specified angle too slowly while the engine is running.	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	Engine warmed to normal temper.	None	STUEJRN, ENWIS, STEUERN, EN	NO	N	- Contaminated oil passage at VANOS solenoid valve - Oil pressure too low - Defective wire 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	- MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction, ECE on - CC message on	Fail leads to ATCLTL error (FC Test L&A "Boost pressure control, deactivation Boost pressure generation disabled" (FC (Dac-Press) L&A 100860) 0120495 - FC (Dac-Press) L&A 111321 (N&C38)	Possible apparent symptoms: Engine runs poorly	Breakdown notice: The engine needs to be emergency limp home program, continued vehicle operation is possible, because power is reduced the driver should refrain from putting in demands	None
MEVD17.2- BN2025	0x130201	1245957	VANOS solenoid valve, exhaust, activation: short circuit to positive	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	Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	The fault is recognized by the driver circuit diagnostic function.	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	STUEJRN, ANWIS, STEUERN, EN	PWM activation signal, Out47b	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	- MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction, ECE on - CC message on	none	Possible apparent symptoms: CC message, performance reduction, turbo degradation	Breakdown notice: None	None
MEVD17.2- BN2025	0x130202	1245958	VANOS solenoid valve, exhaust, activation: short circuit to ground	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	Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective - Defective DME	The fault is recognized by the driver circuit diagnostic function.	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	STUEJRN, ANWIS, STEUERN, EN	PWM activation signal, Out47b	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	- MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction, ECE on - CC message on	none	Possible apparent symptoms: CC message, performance reduction, turbo degradation	Breakdown notice: None	None
MEVD17.2- BN2025									Potential problem source(s): - Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective	The fault is recognized by the driver circuit diagnostic function.	This fault is logged in the control					STUEJRN, ANWIS, STEUERN, EN		N	- Defect in wiring harness between DME and VANOS solenoid valve - VANOS solenoid valve defective	- Check wiring harness between DME and VANOS solenoid valve	- MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction, ECE on - CC message on		Possible apparent symptoms:		

MEVD17.2- B2020	0x10304	124056	VANOS, exhaust, control fault, camshaft permit	The diagnostic function monitors the camshaft timing adjustment	P1303	W Camshaft Slack	Camshaft	Exhaust Slack	The fault is recognized when 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 - VANOS solenoid valve defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	Engine returned to normal temper.	None	Yes	NO	N	- 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	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	Possible apparent symptoms: - Engine cuts 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- B2020	0x10308	124066	VANOS, exhaust, control fault, position not reached	The diagnostic function monitors the camshaft timing adjustment	P0016	W Camshaft Position - Timing Over/Advanced (Bank 1)	Camshaft Position Timing	Exhaust	The fault is recognized when the actual angle assumes the specified angle for 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 defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	Engine returned to normal temper.	None	STUEHRN ANWIS, STUEHRN ENO	NO	N	- 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	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	Possible apparent symptoms: - Engine cuts 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- B2020	0x103E11	124076	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 fault is recognized when 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 retractor ring - Sensor contaminated or defective	If the 'crankshaft revolutions' fault is present	none	Voltage condition: - Onboard elec	None	None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor - Incorrect gap between camshaft position sensor and camshaft sensor retractor ring - Sensor contaminated or defective - Check wiring harness between DME and camshaft position sensor - Check installation of camshaft position sensor and camshaft position sensor retractor ring - Replace sensor	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	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- B2020	0x103F20	124080	Intake camshaft, offset angle to crankshaft outside tolerance	The diagnostic function monitors the offset angle between camshaft and crankshaft	P1338	Camshaft Position Sensor 'A' Faulty Phase Position (Bank 1)	Camshaft Position Sensor	Intake Phase	The fault is recognized when the camshaft's reference position does not align with the specified position. Potential problem source(s): - Loose center bolt - Camshaft position sensor retractor ring out of adjustment - Timing chain has jumped time - Defective timing chain	Camshaft reference position has shifted by more than 1° or the camshaft has executed rotations	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- Loose center bolt - Camshaft position sensor retractor ring out of adjustment - Timing chain has jumped time - Defective timing chain (detected) - Check center bolt - Check camshaft position sensor retractor ring - Check timing chain - Check valve timing	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	Possible apparent symptoms: M11, opens up	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- B2020	0x103F11	124094	Exhaust camshaft sensor, signal implausible	The diagnostic function monitors the exhaust camshaft position sensor	P0336	Camshaft Position Sensor 'B' Circuit Range/Performance (Bank 1)	Camshaft Position Sensor	Exhaust Plausibility	The fault is recognized when 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 retractor ring - Sensor contaminated or defective	If the 'crankshaft revolutions' fault is present	none	Voltage condition: - Onboard elec	None	None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor - Incorrect gap between camshaft position sensor and camshaft position sensor retractor ring - Sensor contaminated or defective - Check wiring harness between DME and camshaft position sensor - Check installation of camshaft position sensor and camshaft position sensor retractor ring - Replace sensor	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	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- B2020	0x103F20	124096	Exhaust camshaft, offset angle to crankshaft outside tolerance	The diagnostic function monitors the offset angle between camshaft and crankshaft	P1339	Camshaft Position Sensor 'B' Faulty Phase Position (Bank 1)	Camshaft Position Sensor	Exhaust Phase	The fault is recognized when the camshaft's reference position does not align with the specified position. Potential problem source(s): - Loose center bolt - Camshaft position sensor retractor ring out of adjustment - Timing chain has jumped time - Defective timing chain	Camshaft reference position has shifted by more than 1° or the camshaft has executed rotations	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- Loose center bolt - Camshaft position sensor retractor ring out of adjustment - Timing chain has jumped time - Defective timing chain (detected) - Check center bolt - Check camshaft position sensor retractor ring - Check timing chain - Check valve timing	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	Possible apparent symptoms: M11, opens up	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- B2020	0x104140	125005	VANOS, exhaust, cold start not controllable	The diagnostic function monitors adjustment of the exhaust camshaft during the catalytic converter's warm-up phase	P0548	Cold Start 'B' Camshaft Position Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Cold Start	The fault is recognized when the engine is turning over and camshaft signals have been present. 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 defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	Engine cold start to ensure that oil	None	Yes	NO	N	- 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	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	Possible apparent symptoms: - Engine cuts 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- B2020	0x103F20	125006	Exhaust camshaft, offset angle to crankshaft outside tolerance	The diagnostic function monitors the offset angle between camshaft and crankshaft	P1339	Camshaft Position Sensor 'B' Faulty Phase Position (Bank 1)	Camshaft Position Sensor	Exhaust Phase	The fault is recognized when the camshaft's reference position does not align with the specified position. Potential problem source(s): - Loose center bolt - Camshaft position sensor retractor ring out of adjustment - Timing chain has jumped time - Defective timing chain	Camshaft reference position has shifted by more than 1° or the camshaft has executed rotations	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- Loose center bolt - Camshaft position sensor retractor ring out of adjustment - Timing chain has jumped time - Defective timing chain (detected) - Check center bolt - Check camshaft position sensor retractor ring - Check timing chain - Check valve timing	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	Possible apparent symptoms: M11, opens up	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- B2020	0x104140	125005	VANOS, exhaust, cold start not controllable	The diagnostic function monitors adjustment of the exhaust camshaft during the catalytic converter's warm-up phase	P0548	Cold Start 'B' Camshaft Position Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Cold Start	The fault is recognized when the engine is turning over and camshaft signals have been present. 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 defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	Engine cold start to ensure that oil	None	Yes	NO	N	- 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	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	Possible apparent symptoms: - Engine cuts 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- B2020	0x103F20	125006	Exhaust camshaft, offset angle to crankshaft outside tolerance	The diagnostic function monitors adjustment of the intake-side camshaft during the catalytic converter's warm-up phase	P0538	Cold Start 'A' Camshaft Position Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Cold Start	The fault is recognized when the engine is turning over and camshaft signals have been present. 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 defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	Engine cold start to ensure that oil	None	Yes	NO	N	- 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	MY10 ECE: - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on - MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on - MY11 ECE: - ECE emissions warning lamp on - ECE electronic engine output reduction, ECE: on - CC message: on Fault leads to ATILCT/Max (FC Test L6B4 '1800s: pressure control, distribution, Boost pressure generation disabled?; FC (Dec.Hen) L6: 1180880 / 0x120408; FC (Dec.Hen) L4: 11362 / 0x2C56)	Possible apparent symptoms: - Engine cuts 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- B2020	0x103201	125033	VANOS, exhaust, collective error: electrical or mechanical	Collective fault: Exhaust camshaft VANOS system					Potential problem source(s): - None	Dual fault (see individual fault)	none	Voltage condition: - Onboard elec	None	None	Dual fault (see individual fault)	Dual fault (see individual fault)	Dual fault (see individual fault)	- None	- None	- Dual fault - This means that these faults are logged when reduction off - CC message: none	Possible apparent symptoms: - Dual fault (see individual fault)	Breakdown notice: - Dual fault (see individual fault)	Dual fault (see individual fault)
MEVD17.2- B2020	0x103201	125039	VANOS, Intake, collective error: electrical or mechanical	Collective fault: Intake camshaft VANOS system					Potential problem source(s): - None	Dual fault (see individual fault)	none	Voltage condition: - Onboard elec	None	None	Dual fault (see individual fault)	Dual fault (see individual fault)	Dual fault (see individual fault)	- None	- None	- Dual fault - This means that these faults are logged when another camshaft actuator fault is entered. No self-diagnosis is behind these 3 faults.	Possible apparent symptoms: - Dual fault (see individual fault)	Breakdown notice: - Dual fault (see individual fault)	Dual fault (see individual fault)
MEVD17.2- B2020	0x103201	125415	VANOS, collective error: electrical or mechanical	Collective fault: VANOS system					Potential problem source(s): - None	Dual fault (see individual fault)	none	Voltage condition: - Onboard elec	None	None	Dual fault (see individual fault)	Dual fault (see individual fault)	Dual fault (see individual fault)	- None	- None	- Dual fault - This means that these faults are logged when another camshaft actuator fault is entered. No self-diagnosis is behind these 3 faults.	Possible apparent symptoms: - Dual fault (see individual fault)	Breakdown notice: - Dual fault (see individual fault)	Dual fault (see individual fault)
MEVD17.2- B2020	0x103201	125415	VANOS, collective error: electrical or mechanical	Collective fault: VANOS system					Potential problem source(s): - None	Dual fault (see individual fault)	none	Voltage condition: - Onboard elec	None	None	Dual fault (see individual fault)	Dual fault (see individual fault)	Dual fault (see individual fault)	- None	- None	- Dual fault - This means that these faults are logged when another camshaft actuator fault is entered. No self-diagnosis is behind these 3 faults.	Possible apparent symptoms: - Dual fault (see individual fault)	Breakdown notice: - Dual fault (see individual fault)	Dual fault (see individual fault)
MEVD17.2- B2020	0x103209	125409	VANOS, exhaust, camshaft not at locking position at start	The diagnostic function monitors camshaft position locking	P1325	B Camshaft Starting Position not Reached (Bank 1)			The fault is recognized when the camshaft is not locked during starting Potential problem source(s): - Engine idly, oil not or not to specification - VANOS adjustment unit idly - VANOS adjustment unit defective	The fault is logged immediately when it occurs during an engine start	none	Voltage condition: - Onboard elec	None	None	NO	NO	Y	- Check engine oil, replace engine oil and filter as required - Perform system test or as VANOS solenoid valves - Replace VANOS adjustment unit	- ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none - MY10 US: - 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- B2020	0x103209	125409	VANOS, Intake camshaft not at locking position at start	The diagnostic function monitors camshaft position locking	P1323	A Camshaft Starting Position not Reached (Bank 1)			The fault is recognized when the camshaft is not locked during starting Potential problem source(s): - Engine idly, oil not or not to specification - VANOS adjustment unit idly - VANOS adjustment unit defective	The fault is logged immediately when it occurs during an engine start	none	Voltage condition: - Onboard elec	None	None	NO	NO	Y	- Check engine oil, replace engine oil and filter as required - Perform system test or as VANOS solenoid valves - Replace VANOS adjustment unit	- ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none - MY10 US: - 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- B2020	0x103101	129729	Valvetronic, relay, activation, short circuit to positive	The diagnostic function monitors electrical control activation of the Valvetronic relay for a short circuit to positive	P1808	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	Terminale 16	Voltage condition: - Onboard elec	None	None	none	none	N	- Defective wiring harness - Valvetronic relay defective - Replace Valvetronic relay - Replace DME	- ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 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 repeated) Otherwise breakdown vehicle, as power is no longer transmitted to the VVT system, which thus closes.	Breakdown notice: None	None
									Potential problem source(s): The fault is recognized when a short circuit to ground is detected when activation voltage is transmitted to the Valvetronic relay			Voltage condition: - Onboard elec						- Check wiring harness between DME and Valvetronic	- ECE: - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on - MY10 US: - US emissions warning lamp: on				

MEVD17.2- BN2020	0x133104	125732	Valvetronic relay, activation: open circuit	The diagnostic function monitors electrical activation of the Valvetronic relay for open circuits	P1006	VVT-Relay Circuit	Valvetronic (VVT)	Relay	Potential problem source(s) - Defective wiring harness - Valvetronic relay defective - Defective DME	This fault is recognized if an open circuit is detected when activation voltage is transmitted to the Valvetronic relay	Terminal 15	Voltage condition: - Onboard elec	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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 US - 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 fast after CO, starting responses) Otherwise breakdown notice is possible, as power is no longer transmitted to the VVT system, which thus closes.	Breakdown notice: None	None	
MEVD17.2- BN2020	0x133201	125795	Valvetronic servomotor, activation: short circuit to positive	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	Potential problem source(s) - Defective wiring harness - Valvetronic actuator defective	The driver circuit is deactivated when a fault is suspected. The fault is logged when the measured diagnostic voltage is greater than 1.2 V / 2.3 V and the voltage behind the Valvetronic relay exceeds 10 V	Terminal 15	Voltage condition: - Onboard elec	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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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 stall/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- BN2020	0x133202	125796	Valvetronic servomotor, activation: short circuit to ground	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	Potential problem source(s) - Defective wiring harness - Valvetronic actuator defective	The driver circuit is deactivated when a fault is suspected. The fault is logged when the measured diagnostic voltage is less than 0.2 V and the voltage behind the Valvetronic relay is greater than 6 V	Terminal 15	Voltage condition: - Onboard elec	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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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 stall/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- BN2020	0x133208	125792	Valvetronic servomotor, activation: open circuit	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	Potential problem source(s) - Defective wiring harness - Valvetronic actuator defective	The driver circuit is deactivated when a fault is suspected. The fault is logged when the measured diagnostic voltage is less than 0.3 V / 2.6 V	Terminal 15	Voltage condition: - Onboard elec	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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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 stall/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- BN2020	0x133304	126244																							
MEVD17.2- BN2020	0x133702	126280	Valvetronic, eccentric shaft adaptation: Lower stop reached	Open	P1030	VVT-Actuator Monitoring Position Control, Tight, no Adjustment possible (Bank 1)	Valvetronic (VVT)	Position Control	Potential problem source(s) - ? - ?	The fault is recognized when ?		Voltage condition: - Temperature	- ? - ?	- ? - ?	None						- ECE emissions warning 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	new for 1-15-03-450	Possible apparent symptoms: Customer perception in phase at this juncture	Breakdown notice: - none	
MEVD17.2- BN2020	0x133904	126292			P1030		Valvetronic (VVT)	Position Control																	
MEVD17.2- BN2020	0x134002	1264130			P1058	VVT-Overload Protection Control Motor Overload	Valvetronic (VVT)	Overload Protection																	
MEVD17.2- BN2020	0x134F02	1265410	Valvetronic, adjustment range: stop not learned	The diagnostic function determines whether a valid travel limit is reached during initialization of the Valvetronic system	P1014	VVT-Self-Learning Function, Stops Not Learned	Valvetronic (VVT)	Self-Learning Function	Potential problem source(s) - Valvetronic system travel stops damaged - Sliding in the Valvetronic system	In order to initialize the 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 triggered when the system fails to recognize the travel stop correctly	none	Terminal 15	Voltage condition: - Onboard elec	Engine warmed to normal temper	None	SYSTEMCHECK_VVT_ANSCHL	rdumpgw_f = vntdtpgw_f	Y	- Valvetronic system travel stops damaged - Sliding 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	MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 US - US emissions warning lamp off - US electronic engine power reduction off - CC message: none MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: none	none	Possible apparent symptoms: Once the VVT has reached its emergency running position, unrestricted 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- BN2020	0x134F04	1265412	Valvetronic, adjustment range: error, 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	P1021	VVT-Self-Learning Function Faulty Adjustment Range (Bank 1)	Valvetronic (VVT)	Self-Learning Function	Potential problem source(s) - Wear at the travel stops - Wear in the Valvetronic mechanism	The fault is recognized when the adjustment range deviates from the base adjustment range by more than 2°	none	none	Voltage condition: - Onboard elec	Engine warmed to normal temper	Adjustment range check every 16	SYSTEMCHECK_VVT_ANSCHL	rdumpgw_f = vntdtpgw_f	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	- 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- BN2020	0x134F08	1265416	Valvetronic, adjustment range: range check, deviation from original learning	The diagnostic function monitors the adjustment range during the check of the Valvetronic's range	P1021	VVT-Self-Learning Function Faulty Adjustment Range (Bank 1)	Valvetronic (VVT)	Self-Learning Function	Potential problem source(s) - Wear at the travel stops - Wear in the Valvetronic mechanism	The fault is recognized when the adjustment range deviates from the base adjustment range by more than 1°	none	none	Voltage condition: - Onboard elec	Engine warmed to normal temper	Adjustment range check every 16	SYSTEMCHECK_VVT_ANSCHL	rdumpgw_f = vntdtpgw_f	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	- 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- BN2020	0x135301	1268433	Valvetronic, component protection, output stage: deactivation, system	The diagnostic function monitors the temperature of the driver circuit	P105F	VVT-Overload Protection Output Stage System Shutdown	Valvetronic (VVT)	Overload Protection	Potential problem source(s) - Valvetronic system consumes excessive energy owing to: - Sliding and high resistance in the Valvetronic system - Abuse ("lipping" the accelerator pedal, etc.) - Frequent open-loop operation (limp-home mode/learning routines)	The fault is recognized when the calculated driver circuit temperature rises above 120°C	none	Terminal 15	Voltage condition: - Onboard elec	None	None	STEUERN_VVT	rdumpgw_f = vntdtpgw_f	Y	- Valvetronic system consumes excessive energy owing to: - Sliding and high resistance in the Valvetronic system - Abuse ("lipping" 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 action (with external voltage source connected as required) - Replace components with mechanical wear	ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN2020	0x135302	1268434	Valvetronic, component protection, servomotor: deactivation, system	The diagnostic function monitors the temperature of the Valvetronic actuator motor	P105B	VVT-Overload Protection Control Motor System Shutdown	Valvetronic (VVT)	Overload Protection	Potential problem source(s) - Valvetronic system consumes excessive energy owing to: - Sliding and high resistance in the Valvetronic system - Abuse ("lipping" the accelerator pedal, etc.) - Frequent open-loop operation (limp-home mode/learning routines)	The fault is recognized when the calculated temperature of the Valvetronic actuator motor rises above 120°C / 155°C (temperature in the windings of the Valvetronic servo motor)	none	Terminal 15	Voltage condition: - Onboard elec	None	None	STEUERN_VVT	rdumpgw_f = vntdtpgw_f	Y	- Valvetronic system consumes excessive energy owing to: - Sliding and high resistance in the Valvetronic system - Abuse ("lipping" 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 action (with external voltage source connected as required) - Replace components with mechanical wear	ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN2020	0x135401	1268889	Valvetronic, overload protection: output stage: overload	The diagnostic function monitors the temperature of the driver circuit	P1057	VVT-Overload Protection Output Stage Overload	Valvetronic (VVT)	Overload Protection	Potential problem source(s) - Valvetronic system consumes excessive energy owing to: - Sliding and high resistance in the Valvetronic system - Abuse ("lipping" the accelerator pedal, etc.) - Frequent open-loop operation (limp-home mode/learning routines)	The fault is recognized when the calculated driver circuit temperature rises above 120°C	none	Terminal 15	Voltage condition: - Onboard elec	None	None	STEUERN_VVT	rdumpgw_f = vntdtpgw_f	Y	- Valvetronic system consumes excessive energy owing to: - Sliding and high resistance in the Valvetronic system - Abuse ("lipping" 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 action (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- BN2020	0x135402	1268990	Valvetronic, overload protection: servomotor: overload	The diagnostic function monitors the temperature of the Valvetronic actuator motor	P105B	VVT-Overload Protection Control Motor Overload	Valvetronic (VVT)	Overload Protection	Potential problem source(s) - Valvetronic system consumes excessive energy owing to: - Sliding and high resistance in the Valvetronic system - Abuse ("lipping" the accelerator pedal, etc.) - Frequent open-loop operation (limp-home mode/learning routines)	The fault is recognized when the calculated temperature of the Valvetronic actuator motor rises above 120°C (temperature in the windings of the Valvetronic actuator motor)	none	Terminal 15	Voltage condition: - Onboard elec	None	None	STEUERN_VVT	rdumpgw_f = vntdtpgw_f	Y	- Valvetronic system consumes excessive energy owing to: - Sliding and high resistance in the Valvetronic system - Abuse ("lipping" 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 action (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: on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on	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- BN2020	0x135604	1267204	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	Potential problem source(s) - Defective wiring harness - Valvetronic actuator defective - Valvetronic system idling - Defective DME	The fault is recognized when a counter rises above the fault threshold of 0.050. The counter is incremented when the closed-loop control difference exceeds a specified threshold while the Valvetronic actuator motor is stationary	none	Terminal 15	Voltage condition: - Onboard elec	None	None	STEUERN_VVT	rdumpgw_f = vntdtpgw_f	N	- Defective wiring harness - Valvetronic actuator defective - Valvetronic system idling - 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 action (with external voltage source connected as required) - Replace Valvetronic actuator motor - Replace components with mechanical wear - Replace DME	ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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
									Potential problem source(s) - Defective wiring harness	The fault is recognized when neither speed nor downward motion of it is possible during initialization of the Valvetronic system									- Defective wiring harness	- 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 action (with external voltage source connected as required)	ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message: on		Possible apparent symptoms: Once the VVT has reached its emergency running position, unrestricted throttled operation is possible. If it fails to reach the emergency running position, results ranging from a power loss to breakdown can occur depending on the VVT position that the system does reach		

MEVD17.2- BN2020	0x145054	112054	Malfunction, 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).	P0305	Cylinder 6 Malfunction Detected	Malfunction	Cyl 5	<p>The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defect in mixture formation- Defect in ignition system- Mechanical defect- Defective DME	<p>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.</p>	none	Voltage condition: - Onboard elect	None	None	NO	None	Y	<ul style="list-style-type: none">- Defect in mixture formation- Defect in ignition system- Mechanical defect- Defective DME	- Because this is a secondary fault, start by repairing the primary faults.	<ul style="list-style-type: none">- 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- BN2020	0x145061	112257	Malfunction, cylinder 6: injection is cut out	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 Malfunction Detected	Malfunction	Cyl 6	<p>The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defect in mixture formation- Defect in ignition system- Mechanical defect- Defective DME	<p>The diagnostic fault code is logged when a specific number of combustion miss events are recognized within 200 crankshaft revolutions.</p>	none	Voltage condition: - Onboard elect	None	None	NO	None	Y	<ul style="list-style-type: none">- Defect in mixture formation- Defect in ignition system- Mechanical defect- Defective DME	- Because this is a secondary fault, start by repairing the primary faults.	<ul style="list-style-type: none">- 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: none	none	Possible apparent symptoms: Reduced engine power	Breakdown notice: The engine reverts to its limp-home program; continuous vehicle operation is possible but drivability is restricted, because power is reduced; the driver should refrain from passing maneuvers.	None
MEVD17.2- BN2020	0x145062	112258	Malfunction, cylinder 6: damaging exhaust gas after starting	The diagnostic function monitors the duration of the combustion strokes and compares them with the remaining cylinders by assessing the rpm signals (segment periods).	P0308	Cylinder 6 Malfunction Detected	Malfunction	Cyl 6	<p>The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defect in mixture formation- Defect in ignition system- Mechanical defect- Defective DME	<p>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.</p>	none	Voltage condition: - Onboard elect	None	None	NO	None	Y	<ul style="list-style-type: none">- Defect in mixture formation- Defect in ignition system- Mechanical defect- Defective DME	- Because this is a secondary fault, start by repairing the primary faults.	<ul style="list-style-type: none">- 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- BN2020	0x145064	112260	Malfunction, 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).	P0308	Cylinder 6 Malfunction Detected	Malfunction	Cyl 6	<p>The fault is recognized when the combustion stroke in a particular cylinder is slower than the combustion strokes on the other cylinders.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defect in mixture formation- Defect in ignition system- Mechanical defect- Defective DME	<p>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.</p>	none	Voltage condition: - Onboard elect	None	None	NO	None	Y	<ul style="list-style-type: none">- Defect in mixture formation- Defect in ignition system- Mechanical defect- Defective DME	- Because this is a secondary fault, start by repairing the primary faults.	<ul style="list-style-type: none">- 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- BN2020	0x152102	137654	Ignition, cylinder 1: combustion duration too short	The diagnostic function monitors the spark duration.	P1301	Ignition Monitoring Cylinder 1 Spark Duration Too Short			<p>The fault is recognized when the spark duration is below a value stored in the program map.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defective spark plug- Defect in wiring harness between ignition coil and DME- Defective ignition coil- Defective DME	<p>The diagnostic fault code is logged when the fault counter total is above 320.</p>	none	Voltage condition: - Onboard elect	None	None	NO	none	N	<ul style="list-style-type: none">- 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.	<ul style="list-style-type: none">- M110 ECE- ECE emissions warning lamp off- ECE electronic engine power reduction off- CC message: none- M110 US- US emissions warning lamp: off- US electronic engine power reduction on- CC message: on- M111 ECE- ECE emissions warning lamp off- ECE 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- BN2020	0x152103	137670	Ignition, cylinder 2: combustion duration too short	The diagnostic function monitors the spark duration.	P1302	Ignition Monitoring Cylinder 2 Spark Duration Too Short			<p>The fault is recognized when the spark duration is below a value stored in the program map.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defective spark plug- Defect in wiring harness between ignition coil and DME- Defective ignition coil- Defective DME	<p>The diagnostic fault code is logged when the fault counter total is above 320.</p>	none	Voltage condition: - Onboard elect	None	None	none	none	N	<ul style="list-style-type: none">- 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.	<ul style="list-style-type: none">- M110 ECE- ECE emissions warning lamp off- ECE electronic engine power reduction off- CC message: none- M110 US- US emissions warning lamp: off- US electronic engine power reduction on- CC message: on- M111 ECE- ECE emissions warning lamp off- ECE 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- BN2020	0x152104	137726	Ignition, cylinder 3: combustion duration too short	The diagnostic function monitors the spark duration.	P1303	Ignition Monitoring Cylinder 3 Spark Duration Too Short			<p>The fault is recognized when the spark duration is below a value stored in the program map.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defective spark plug- Defect in wiring harness between ignition coil and DME- Defective ignition coil- Defective DME	<p>The diagnostic fault code is logged when the fault counter total is above 320.</p>	none	Voltage condition: - Onboard elect	None	None	NO	none	N	<ul style="list-style-type: none">- 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.	<ul style="list-style-type: none">- M110 ECE- ECE emissions warning lamp off- ECE electronic engine power reduction off- CC message: none- M110 US- US emissions warning lamp: off- US electronic engine power reduction on- CC message: on- M111 ECE- ECE emissions warning lamp off- ECE 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- BN2020	0x152105	137732	Ignition, cylinder 4: combustion duration too short	The diagnostic function monitors the spark duration.	P1304	Ignition Monitoring Cylinder 4 Spark Duration Too Short			<p>The fault is recognized when the spark duration is below a value stored in the program map.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defective spark plug- Defect in wiring harness between ignition coil and DME- Defective ignition coil- Defective DME	<p>The diagnostic fault code is logged when the fault counter total is above 320.</p>	none	Voltage condition: - Onboard elect	None	None	none	none	N	<ul style="list-style-type: none">- 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.	<ul style="list-style-type: none">- M110 ECE- ECE emissions warning lamp off- ECE electronic engine power reduction off- CC message: none- M110 US- US emissions warning lamp: off- US electronic engine power reduction on- CC message: on- M111 ECE- ECE emissions warning lamp off- ECE 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- BN2020	0x152106	137738	Ignition, cylinder 5: combustion duration too short	The diagnostic function monitors the spark duration.	P1305	Ignition Monitoring Cylinder 5 Spark Duration Too Short			<p>The fault is recognized when the spark duration is below a value stored in the program map.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defective spark plug- Defect in wiring harness between ignition coil and DME- Defective ignition coil- Defective DME	<p>The diagnostic fault code is logged when the fault counter total is above 320.</p>	none	Voltage condition: - Onboard elect	None	None	NO	none	N	<ul style="list-style-type: none">- 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.	<ul style="list-style-type: none">- M110 ECE- ECE emissions warning lamp off- ECE electronic engine power reduction off- CC message: none- M110 US- US emissions warning lamp: off- US electronic engine power reduction on- CC message: on- M111 ECE- ECE emissions warning lamp off- ECE 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- BN2020	0x152107	137794	Ignition, cylinder 6: combustion duration too short	The diagnostic function monitors the spark duration.	P1306	Ignition Monitoring Cylinder 6 Spark Duration Too Short			<p>The fault is recognized when the spark duration is below a value stored in the program map.</p> <p>Potential problem source(s):</p> <ul style="list-style-type: none">- Defective spark plug- Defect in wiring harness between ignition coil and DME- Defective ignition coil- Defective DME	<p>The diagnostic fault code is logged when the fault counter total is above 320.</p>	none	Voltage condition: - Onboard elect	None	None	NO	none	N	<ul style="list-style-type: none">- 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.	<ul style="list-style-type: none">- M110 ECE- ECE emissions warning lamp off- ECE electronic engine power reduction off- CC message: none- M110 US- US emissions warning lamp: off- US electronic engine power reduction on- CC message: on- M111 ECE- ECE emissions warning lamp off- ECE 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- BN2020	0x151001	138363	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.	P0308	Cold Start Ignition Timing Performance	Ignition Timing	Cold Start	<p>Potential problem source(s):</p> <ul style="list-style-type: none">- Poor fuel quality	<p>The diagnostic fault code is logged when the fault remains present for longer than 2 min.</p>	none	Voltage condition: - Onboard elect	None	5 sec. after engine on	None	None	Y	- Poor fuel quality	- Replace fuel	US only, fault based on legislative requirement, probably will never occur	Possible apparent symptoms: none	Breakdown notice: none	none	
MEVD17.2- BN2020	0x151101	138606	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	<p>Potential problem source(s):</p> <ul style="list-style-type: none">- Poor fuel quality	<p>The diagnostic fault code is logged when the fault remains present for longer than 2 min.</p>	none	Voltage condition: - Onboard elect	None	5 sec. after engine on	None	None	Y	- Poor fuel quality	- Replace fuel	US only, fault based on legislative requirement, probably will never occur	Possible apparent symptoms: none	Breakdown notice: none	none	
MEVD17.2- BN2020	0x152001	138449	Ignition, voltage supply: Short circuit to B+	The diagnostic function monitors the power supply when providing voltage to the individual ignition coils from the overload protection relay for ignition and injection, checking for open wires and shorts to ground.					<p>Potential problem source(s):</p> <ul style="list-style-type: none">- 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	<p>This fault is logged in the control module's fault memory immediately.</p>	none	Voltage condition: - Onboard elect	None	5 sec. after deactivation of overloa	NO	U	N	<ul style="list-style-type: none">- 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	<ul style="list-style-type: none">- 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
				The diagnostic function monitors the power supply when providing voltage to the individual ignition coils					<p>Potential problem source(s):</p> <ul style="list-style-type: none">- Fuse defective- Defect in wiring harness between overload protection relay for ignition and injection, and DME			Voltage condition: - Onboard elect	None	5 sec. after deactivation of overloa	NO	U	N	<ul style="list-style-type: none">- Fuse defective- Check fuse- Inspect wiring harness between overload protection relay for ignition and injection, and DME		<ul style="list-style-type: none">- 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				

MEVD17.2- BN205	0x184031	149225	Exhaust camshaft sensor signal low	The diagnostic function monitors the exhaust camshaft position sensor	P0307	Camshaft Position Sensor 'W' Circuit Low (Bank 1)	Camshaft Position Sensor	Exhaust Electrical	The fault is recognized when the engine is running over and no fault related to the camshaft sensor is present. Potential problem source(s): - Defect in wiring harness between DME and camshaft position sensor or camshaft sensor	1 Camshaft rotates but no signal from camshaft reluctor	none	Voltage condition: - Onboard elec- None	None	NO	NO	N	- Defect in wiring harness between DME and camshaft position sensor or camshaft sensor	- Check wiring harness between DME and camshaft position sensor - Camshaft sensor defective	MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on MY10 US: - US emissions warning lamp: on - US electronic engine power reduction on - CC message: on MY11 ECE - ECE emissions warning lamp on - Electronic engine output reduction: ECE: on - CC message: on	Fault leads to AT/CTL,max (FC Test L&A.4 "Boost- pressure control, deactivation: Boost pressure generation disabled": FC (Din/Max) L6 "180880" / 0x120456, FC (Din/Max) L4, 11192 / 0x0250	Extended starting times and power loss, if it appears in combination with an intake camshaft sensor fault then no repair is possible	Possible apparent symptoms: None	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	Breakdown notice: None	None
MEVD17.2- BN205	0x184040	149240	Intake camshaft mechanism installation 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 stops on through the adaptation routine during cold start or following programming. Potential problem source(s): - incorrect installation of intake camshaft	When assembly test is performed	none	Voltage condition: - Onboard elec- None	None	NO	NO	N	- Incorrect installation of intake camshaft	- Install intake camshaft correctly - Adjust valve timing	MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on MY10 US: - US emissions warning lamp: off - US electronic engine power reduction on - CC message: on MY11 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on	Fault leads to AT/CTL,max (FC Test L&A.4 "Boost- pressure control, deactivation: Boost pressure generation disabled": FC (Din/Max) L6 "180880" / 0x120456, FC (Din/Max) L4, 11192 / 0x0250	Possible apparent symptoms: None	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	Breakdown notice: None	None	
MEVD17.2- BN205	0x184041	149241	Exhaust camshaft mechanism installation 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 stops on through the adaptation routine during cold start or following programming. Potential problem source(s): - incorrect installation of exhaust camshaft	When assembly test is performed	none	Voltage condition: - Onboard elec- None	None	NO	NO	N	- Incorrect installation of exhaust camshaft	- Install exhaust camshaft correctly - Adjust valve timing	MY10 ECE - ECE emissions warning lamp on - ECE electronic engine power reduction off - CC message: on MY10 US: - US emissions warning lamp: off - US electronic engine power reduction on - CC message: on MY11 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on	Fault leads to AT/CTL,max (FC Test L&A.4 "Boost- pressure control, deactivation: Boost pressure generation disabled": FC (Din/Max) L6 "180880" / 0x120456, FC (Din/Max) L4, 11192 / 0x0250	Possible apparent symptoms: None	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	Breakdown notice: None	None	
MEVD17.2- BN205	0x188A20	1477152	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 elec- 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	MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none MY10 US: - US emissions warning lamp: off - US electronic engine power reduction on - CC message: on MY11 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on	none	Possible apparent symptoms: Engine runs poorly with power loss	Breakdown notice: None	None		
MEVD17.2- BN205	0x188A30	1477185	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 'X' 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 elec- 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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A31	1477185	Knock sensor, electrical: signal input A, short circuit to ground	The diagnostic function monitors the sensor wire for short circuits	P13AF	Knock Sensor 1 Circuit 'X' 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 elec- 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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A40	1477184	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 'X' 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 elec- 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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A41	1477185	Knock sensor, electrical: signal input B, short circuit to ground	The diagnostic function monitors the sensor wire for short circuits	P13B9	Knock Sensor 1 Circuit 'X' 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 elec- 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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A50	1477200	Knock sensor 2, electrical: signal input A, short circuit to positive	The diagnostic function monitors the sensor wire for short circuits	P13B9	Knock Sensor 2 Circuit 'X' 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 elec- 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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A51	1477201	Knock sensor 2, electrical: signal input A, short circuit to ground	The diagnostic function monitors the sensor wire for short circuits	P13B9	Knock Sensor 2 Circuit 'X' 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 elec- 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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A60	1477216	Knock sensor 2, electrical: signal input B, short circuit to positive	The diagnostic function monitors the sensor wire for short circuits	P13CB	Knock Sensor 2 Circuit 'X' 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 elec- 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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A61	1477217	Knock sensor 2, electrical: signal input B, short circuit to ground	The diagnostic function monitors the sensor wire for short circuits	P13CB	Knock Sensor 2 Circuit 'X' 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 elec- 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 - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A70	1477232	Knock sensor, signal: engine mechanically too loud or RS 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 recognized 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	Voltage condition: - Onboard elec- Engine warmed to normal temper- None	None	NO	0x5A37 0x5A38 0x5A39 0x5B15	- 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	ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A71	1477233	Knock sensor, signal: electrical fault RS (noise contact) or RS inside tolerance (sensitivity)	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 recognized 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	Voltage condition: - Onboard elec- Engine warmed to normal temper- None	None	NO	0x5A37 0x5A38 0x5A39 0x5B15	- 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	ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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- BN205	0x188A80	1477248	Knock sensor 2, signal: engine mechanically too loud or RS 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 recognized when the reference level is too low 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	Voltage condition: - Onboard elec- Engine warmed to normal temper- None	None	NO	0x5A37 0x5A38 0x5A39 0x5B15	- 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	ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 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			
									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								- Check wiring harness	ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: on MY10 US:							

MEV017.2- BN2020	01/18/2021	1572865	Catalytic converter efficiency below test value	The diagnostic function monitors the ability of the catalytic converter to store oxygen	P0420	Catalytic System Efficiency Below Threshold (Bank 1)	Catalyst	Efficiency	Potential problem source(s) - Catalytic fault stemming from defective oxygen sensor or intake adaptation fault - Leak in exhaust system - Catalytic converter defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Engine warmed to normal temp.	None	STEUERN_OKAT STEUERN_ENC	none	Y	- Catalytic fault stemming from defective oxygen sensor or intake adaptation fault - Leak in exhaust system - Catalytic converter defective	- If faults related to the oxygen sensor or intake adaptation have been logged, repair them first (intake/fault) - Check exhaust system for leaks - If the fault is continuously present or has multiple log entries respond by replacing the 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	none	Possible apparent symptoms: - none	Breakdown notice: - none	none
MEV017.2- BN2020	01/18/2021	1639401	DMTL solenoid valve, activation: short circuit to positive	The diagnostic function monitors electrical activation of the DMTL solenoid valve	P0420	Evaporative Emission System Switching Valve Control Circuit High	EVAP System	Switching Valve	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2022	1639402	DMTL solenoid valve, activation: short circuit to ground	The diagnostic function monitors electrical activation of the leakage diagnosis pump	P0419	Evaporative Emission System Switching Valve Control Circuit Low	EVAP System	Switching Valve	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2024	1639404	DMTL solenoid valve, activation: open circuit	The diagnostic function monitors electrical activation of the DMTL solenoid valve	P0418	Evaporative Emission System Switching Valve Control Circuit/Open	EVAP System	Switching Valve	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2021	1639413	Fuel tank ventilation system and purge air system, minor leak (Leak greater than 1.0 mm)	The diagnostic function monitors the leakage diagnosis pump's current draw within a time window	P0442	Evaporative Emission System Leak Detected (small leak)	EVAP System	Leak Detection	Potential problem source(s) - Leakage > 1 mm in tank - evaporative emissions and purge air system - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 18 °C - None	Yes: DMTL function test	none	Y	- Leakage > 1 mm in tank evaporative emissions and purge air system - Check tank for leaks - Replace DMTL	- If diagnostic fault codes for the DMTL are logged, then clear the ECU fault memory. Should it prove impossible to reproduce the fault using the DMTL function test then terminate the repair session - Check tank for leaks	- 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	Only for US and Korea	Possible apparent symptoms: None	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2022	1639170	Fuel tank ventilation system and purge air system, minor leak (Leak greater than 1.0 mm)	The diagnostic function monitors the leakage diagnosis pump's current draw during the reference current measurement	P0448	Evaporative Emission System Leak Detected (very small leak)	EVAP System	Leak Detection	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 15 °C - 10 min. in shutdown phase	DMTL system test	none	Y	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: None	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2021	1639425	DMTL system fault: pump current too high during reference measurement	The diagnostic function monitors the leakage diagnosis pump's current draw during the DMTL solenoid valve's switching process	P1449	Diagnostic Module Tank Leakage (DM-TL) Pump Current Too High	EVAP System	Pump Current	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 18 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: To be submitted by end of week 44	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2022	1639426	DMTL system fault: pump current too low during reference measurement	The diagnostic function monitors the leakage diagnosis pump's current draw during the reference current measurement	P1448	Diagnostic Module Tank Leakage (DM-TL) Pump Current Too Low	EVAP System	Pump Current	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 18 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: To be submitted by end of week 44	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2024	1639428	DMTL system fault: short due to current fluctuations during reference measurement	The diagnostic function monitors the leakage diagnosis pump's current draw during the reference current measurement	P1434	Diagnostic Module Tank Leakage (DM-TL)	EVAP System	Pump Current	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 15 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2028	1639432	DMTL system fault: pump current reaches limit value during valve test	The diagnostic function monitors the leakage diagnosis pump's current draw during the DMTL solenoid valve's switching process	P1447	Diagnostic Module Tank Leakage (DM-TL) Pump Current Too High during Switching Solenoid Test	EVAP System	Pump Current	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 15 °C - 10 min. in shutdown phase	DMTL system test	none	Y	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: None	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2021	1639881	DMTL heating, activation: short circuit to positive	The diagnostic function monitors the electrical connection between the DME and the DMTL heater	P040C	Evaporative Emission System Leak Detection Pump Heater Control Circuit High	EVAP System	DMTL Heater	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. after engine off	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: To be submitted by end of week 44 L6 (MDS4) - None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2022	1639882	DMTL heating, activation: short circuit to ground	The diagnostic function monitors the electrical connection between the DME and the DMTL heater	P040B	Evaporative Emission System Leak Detection Pump Heater Control Circuit Low	EVAP System	DMTL Heater	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. after engine off	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: To be submitted by end of week 44 L6 (MDS4) - None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2024	1639884	DMTL heating, activation: open circuit	The diagnostic function monitors the electrical connection between the DME and the DMTL heater	P040A	Evaporative Emission System Leak Detection Pump Heater Control Circuit/Open	EVAP System	DMTL Heater	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. after engine off	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: To be submitted by end of week 44 L6 (MDS4) - None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2021	1639397	DMTL leak diagnosis pump, activation: Short circuit to Gv	The diagnostic function monitors electrical activation of the leakage diagnosis pump	P0402	Evaporative Emission System Leak Detection Pump Control Circuit High	EVAP System	Pump	Potential problem source(s) - Defective wiring harness - DMTL defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Defect in wiring harness - DMTL defective	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: CC message, customer seeks	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2022	1640134	DMTL leak diagnosis pump, activation: Short to earth	The diagnostic function monitors electrical activation of the leakage diagnosis pump	P0401	Evaporative Emission System Leak Detection Pump Control Circuit Low	EVAP System	Pump	Potential problem source(s) - Fault in wiring harness between DME and low-pressure sensor - Defective in-tank condensate valve - Defect in low-pressure sensor - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Fault in wiring harness between DME and low-pressure sensor - Defective in-tank condensate valve - Defective DME	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/18/2024	1640136	DMTL leak diagnosis pump, activation: Open circuit	The diagnostic function monitors electrical activation of the leakage diagnosis pump	P0400	Evaporative Emission System Leak Detection Pump Control Circuit/Open	EVAP System	Pump	Potential problem source(s) - Fault in 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	none	Voltage condition: - Onboard elec	Ambient temperature between 4 °C - 10 min. in shutdown phase	DMTL system test	none	N	- Fault in wiring harness between DME and low-pressure sensor - Defect in low-pressure sensor - Defective DME	- Check wiring harness between DME and DMTL - Replace DMTL	- 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	Only installed in US vehicles	Possible apparent symptoms: ML on, customer proceeds to service facility	Breakdown notice: None	Function testing on the DMTL (Diagnostic Module Tank Leakage) can only be carried out provided that no faults related to the DMTL have been logged. The conditions for fault detection apply to the function test, but not to diagnosis in the course of normal operation		
MEV017.2- BN2020	01/19/2021	1640497	Tank-venting valve, activation: short circuit to positive	The diagnostic function monitors the control wire to the EVAP valve for short circuits to positive	P0409	Evaporative Emission System Purge Control Valve 'K' Circuit High	EVAP System	Valve	Potential problem source(s) - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	STEUERN_TEV STEUERN_ENC	PWM activation signal 0/val77	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	- 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: ML on, customer proceeds to service facility	Breakdown notice: None	None	
MEV017.2- BN2020	01/19/2022	1640498	Tank-venting valve, activation: short circuit to ground	The diagnostic function monitors the control wire to the EVAP valve for short circuits to ground	P0408	Evaporative Emission System Purge Control Valve 'K' Circuit Low	EVAP System	Valve	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 elec	None	None	STEUERN_TEV STEUERN_ENC	PWM activation signal 0/val77	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	- 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: ML on, customer proceeds to service facility	Breakdown notice: None	None	

MEVD17.2- BN2025	0x181A21	144589	Tank venting 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	The fault is recognized when there is no drop in the current consumed by the leakage diagnosis pump. Potential problem source(s): - EVAP evaporative emissions valve sticks 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 elec	None	None	START SYSTEMCHECK TEV	none	N	- EVAP evaporative emissions valve sticks in closed position - Obstruction in path between intake manifold and tank - Replace EVAP evaporative emissions valve - Check flow in line between intake manifold and tank	- 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 1-10-20-300	Possible apparent symptoms None	Breakdown notice None	None
MEVD17.2- BN2025	0x181B01	1445313	Tank safety valve shut-off valve, activation: Short circuit to G+	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 PTC CAN (OBD service message) from the TFE1 ECU (ECU for tank's electronic functions). Potential problem source(s): - Global LIN bus fault LIN bus communications: signal missing (pins:Indicable, 0x28B7) - Defective fuse - Defect in the LIN bus wire, ground wire or Terminal 20 wire (open wire, short to ground, short to GND) - Corrosion on plug - Electric water pump component fault	This fault is logged in the ECU fault memory if it remains present for longer than 45 sec.	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	N	- Global LIN bus fault LIN bus communications: signal missing (pins:Indicable, 0x28B7) - Defective fuse - Defect in the LIN bus wire, ground wire or Terminal 35 wire (open wire, short to ground, short to GND) - Corrosion on plug - Electric water pump component 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 MIL comes on	Breakdown notice None	None
MEVD17.2- BN2025	0x181B02	1445314	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	Potential problem source(s): - Defective wiring harness - Tank cutoff valve defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	N	- Defective wiring harness - Tank cutoff valve defective	- 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- BN2025	0x181B04	1445316	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	Potential problem source(s): - Defective wiring harness - Tank cutoff valve defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	N	- Defective wiring harness - Tank cutoff valve defective	- 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- BN2025	0x181C21	1445569	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 1, then it is logged.	none	Voltage condition: - Temperature				None	None	- None	- 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 1-10-03-450, diagnosis is currently in preparation.	Possible apparent symptoms Customer perception in price at this juncture	Breakdown notice	
MEVD17.2- BN2025	0x181C32	1445570	Tank safety valve malfunction	Open	P048D	Evaporative Emission System	EVAP System	Flow Check	Potential problem source(s): - ? - ?	If the fault 1, then it is logged.	none	Voltage condition: - Temperature				None	- ? - ?	- ? - ?	- 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 1-10-03-450, diagnosis is currently in preparation.	Possible apparent symptoms Customer perception in price at this juncture	Breakdown notice	
MEVD17.2- BN2025	0x181C33	1445571	Tank safety valve after-run malfunction	Open	P145F	Evaporative Emission System Alternating Diagnosis	EVAP System	Leak Detection	Potential problem source(s): - ? - ?	If the fault 1, then it is logged.	none	Voltage condition: - Temperature				None	- ? - ?	- ? - ?	- 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 1-10-03-450, diagnosis is currently in preparation.	Possible apparent symptoms Customer perception in price at this juncture	Breakdown notice	
MEVD17.2- BN2025	0x181D01	1445525	Tank safety valve malfunction	The diagnostic function monitors the flow through the fuel tank's EVAP vent line	P048E	Evaporative Emission System	EVAP System	Flow Check	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 when the fault appears four times	none	Voltage condition: - Onboard elec	Engine warmed to normal temperature	None	START SYSTEMCHECK TEV	none	N	- Tank evaporative emissions valve sticks in closed position - Check flow in line between intake manifold and tank and replace as indicated	- 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	Data content defined	Possible apparent symptoms None	Breakdown notice None	None
MEVD17.2- BN2025	0x183002	1450690	Fuel level sensor, left, signal: Short 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	P048D	Fuel Level Sensor 'K' Circuit Low	Fuel Level Sensor	Electrical	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 elec	None	None	Yes + JBSEF raw values for tank to	none	N	- Defective wiring harness - Tank fuel-level sensor on left (looking toward front) is 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	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- BN2025	0x183008	1450696	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	Potential problem source(s): - Problem with CAN communication 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 elec	None	None	NO	none	Y	- Problem with CAN communications between instrument cluster, junction box and 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 Possible problem with fuel gauge display in i-cluster	Breakdown notice Tank may be empty. Please refill using fuel canister and proceed to nearest service station. Then proceed to BMW Service facility.	None
MEVD17.2- BN2025	0x183011	1450705	Fuel level sensor, right, signal: Short circuit to G+	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	P008B	Fuel Level Sensor 'R' Circuit High	Fuel Level Sensor	Electrical	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 elec	None	None	Yes + JBSEF raw values for tank to	none	N	- Open electrical circuit to fuel-level sensor on right (looking toward front)	- 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 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- BN2025	0x183102	1450946	Fuel level sensor, right, signal: Short 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	P0087	Fuel Level Sensor 'R' Circuit Low	Fuel Level Sensor	Electrical	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 elec	None	None	Yes + JBSEF raw values for tank to	none	N	- Open electrical circuit to fuel-level sensor on right (looking toward front)	- 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 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- BN2025	0x183108	1450952	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	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 elec	None	None	NO	none	Y	- Problem with CAN communications between instrument cluster, junction box and 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 Possible problem with fuel gauge display in i-cluster	Breakdown notice Tank may be empty. Please refill using fuel canister and proceed to nearest service station. Then proceed to BMW Service facility.	None
MEVD17.2- BN2025	0x183111	1450961	Fuel level sensor, left, signal: Short circuit to G+	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	P048D	Fuel Level Sensor 'K' Circuit High	Fuel Level Sensor	Electrical	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 elec	None	None	Yes + JBSEF raw values for tank to	none	N	- Defective wiring harness - Tank fuel-level sensor on left (looking toward front) is 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	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- BN2025	0x183221	1451230	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	P14AB	Fuel Level / Fuel Consumption Correlation	Fuel Level	Correlation	Potential problem source(s): - Fuel level sensor sticking - Fuel level sensor mechanically damaged - Fuel 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 FCI) and then confirmed the second time (confirmed fault code)	none	Voltage condition: - Onboard elec	None	None	NO	none	Y	- Fuel level sensor sticking - Fuel level sensor mechanically damaged - Fuel on fuel level sensor is damaged - Frequent refueling with quantities of less than 5 liters (as with rental vehicles)	- 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 react full after refueling - Tank is empty although gauge indicates that fuel is still present	Breakdown notice Tank may be empty. Please refill using fuel canister and proceed to nearest service station. Then proceed to BMW Service facility.	None
MEVD17.2- BN2025	0x1A2001	1712129	Electric fan, activation: short circuit to positive	The diagnostic function monitors the wire between the electric fan and the DME	P0682	Fan 1 Control Circuit High	Cooling System	Fan 1	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 elec	None	None	Yes + STEUERN_E_LUEFTER, ST	PWM activation signal - 0A4A7B	N	- Defect in wiring harness - Electric fan 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	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- BN2025	0x1A2002	1712130	Electric fan, activation: short circuit to ground	The diagnostic function monitors the wire between the electric fan and the DME	P0691	Fan 1 Control Circuit Low	Cooling System	Fan 1	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 elec	None	None	Yes + STEUERN_E_LUEFTER, ST	PWM activation signal - 0A4A7B	N	- Defect in wiring harness - Electric fan 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	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
Yes + STEUERN_E_LUEFTER, ST																							

MEVD17.2 IN200	0/142108	1712392	Electric fan, self-diagnosis, stage 1: minor fan fault	The diagnostic function monitors operation of the electric fan.	P14C2	Fan 1 Mechanical or Hardware Defect	Cooling System	Fan 1	The fault is recognized when and 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 elec	None	None	Yes, 0x2F6DA03, STEUER_N_E	None	N	- Fan shows resistance to rotation - Electric fan is defective (electronics)	- Disconnect plug from fan (to prevent injury hazard). Check freedom of movement of fan. Remove any foreign objects/obstacles as required. - Fan is physically actuated. 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 IN200	0/142109	1712394	Electric fan, self-diagnosis, stage 2: fan fault with interrupted stage 1 fan	The diagnostic function monitors operation of the electric fan.	P14C2	Fan 1 Mechanical or Hardware Defect	Cooling System	Fan 1	The fault is recognized when and 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 elec	None	None	Yes, 0x2F6DA03, STEUER_N_E	None	N	- Fan shows resistance to rotation - Electric fan is defective (electronics)	- Disconnect plug from fan (to prevent injury hazard). Check freedom of movement of fan. Remove any foreign objects/obstacles that may be present. - Fan is physically actuated. 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 IN200	0/142408	1713140	Electric fan, self-diagnosis, stage 3: fan fault with restricted motor function	The diagnostic function monitors operation of the electric fan.	P14C2	Fan 1 Mechanical or Hardware Defect	Cooling System	Fan 1	The fault is recognized when the electric fan fails to turn. Potential problem source(s): - Fan is seized - Electric fan is defective (electronics)	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: ... Onboard elec	None	None	Yes, 0x2F6DA03, STEUER_N_E	None	N	- Fan is seized - Electric fan is defective (electronics)	- Disconnect plug from fan (to prevent injury hazard). Check freedom of movement of fan. Remove any foreign objects/obstacles that may be present. - Fan is physically actuated. 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: on - US electronic engine power reduction off - US electronic engine power reduction off - CC message: on	An inoperative electric fan can 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 IN200	0/142608	1713416	Electric fan, self-diagnosis, stage 4: serious fan fault	The diagnostic function monitors the electric fan's electronics components	P14C2	Fan 1 Mechanical or Hardware Defect	Cooling System	Fan 1	The fault is recognized when a hardware fault is present in the electric fan. Potential problem source(s): - Electric fan electronics defect - Multiple entries of another electric fan fault	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: ... Onboard elec	None	None	Yes, 0x2F6DA03, STEUER_N_E	None	N	- Electric fan electronics defect - Multiple entries of another electric fan fault	- Disconnect plug from fan (to prevent injury hazard). Check freedom of movement of fan. Remove any foreign objects/obstacles that may be present. - Fan is physically actuated. 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: on - US emissions warning lamp: off - US electronic engine power reduction off - CC message: on	An inoperative electric fan can cause the engine to overheat.	Possible apparent symptoms: Engine can overheat, breakdown in extreme cases	Breakdown notice: Electric fan failed, vehicle should not be driven	A terminal status switch must be conducted before the fault can be deleted
MEVD17.2 IN200	0/142601	1713685	Fuse relay, electric fan, activation: short circuit to positive	The diagnostic function monitors the wire between the electric fan cutoff relay and the DME.	P144E	Fan Safety Relay Circuit High			The fault is recognized when a short circuit to positive is present. Potential problem source(s): - Defect in wiring harness - Cutoff relay for electric fan defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	None	None	Yes+ stream + heater	none	N	- Defect in wiring harness - Cutoff relay for electric fan defective	- Check wiring harness between DME and electric fan cutoff relay - Check cutoff relay (with Terminal 15 off: 0 V at both screw connections, 12V at both screw connections when voltage is applied. Relay makes a loud click and the measured resistance between the two screw connections is roughly 6 ohms) - Replace cutoff relay	- 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 IN200	0/142602	1713686	Fuse relay, electric fan, activation: short circuit to ground	The diagnostic function monitors the wire between the electric fan cutoff relay and the DME.	P144D	Fan Safety Relay Circuit Low			The fault is recognized when a short circuit to ground is present. Potential problem source(s): - Defect in wiring harness - Cutoff relay for electric fan defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	None	None	Yes+ stream + heater	none	N	- Defect in wiring harness - Cutoff relay for electric fan defective	- Check wiring harness between DME and electric fan cutoff relay - Check cutoff relay (with Terminal 15 off: 0 V at both screw connections, 12V at both screw connections when voltage is applied. Relay makes a loud click and the measured resistance between the two screw connections is roughly 6 ohms) - Replace cutoff relay	- 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 IN200	0/142604	1713688	Fuse relay, electric fan, activation: open circuit	The diagnostic function monitors the wire between the electric fan cutoff relay and the DME.	P144C	Fan Safety Relay Circuit			The fault is recognized when the electric fan has no power supply. 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	none	Voltage condition: ... Onboard elec	None	None	Yes+ stream + heater	none	N	- Defect in wiring harness - Cutoff relay for electric fan defective	- Check wiring harness between DME and electric fan cutoff relay - Check cutoff relay (with Terminal 15 off: 0 V at both screw connections, 12V at both screw connections when voltage is applied. Relay makes a loud click and the measured resistance between the two screw connections is roughly 6 ohms) - Replace cutoff relay	- 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 IN200	0/142604	1714180	Electric fan, operating readiness: limited	The diagnostic function monitors the electric fan's readiness for operation.					The fault is recognized when attempt at data synchronization between DME and electric fan fails. Potential problem source(s): - Electric fan defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: ... Onboard elec	None	None	Yes+ stream + heater	none	N	- Electric fan defective	- Transmit activation signal to electric fan - If fan starts clear the ECU fault memory to further action required - 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 IN200	0/142604	1714436	Electric fan, operating readiness: not given	The diagnostic function monitors the electric fan's readiness for operation.					The fault is recognized when attempt at data synchronization between DME and electric fan fails repeatedly. Potential problem source(s): - Electric fan defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: ... Onboard elec	None	None	Yes+ stream + heater	none	N	- Electric fan defective	- Transmit activation signal to electric fan - If fan starts clear the ECU fault memory to further action required - 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 IN200	0/18040	1712004	Poor road surface detection: wheel speed too high	The diagnostic function monitors the signals from the wheel speed sensors. It determines if they are valid.	P1518	Rough Road Detection Wheel Speed Too High			- Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	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 IN200	0/18041	1712005	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			- Signal error from at least one wheel speed sensor	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	None	None	NO	none	N	- Signal error from at least one wheel speed 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 IN200	0/18044	1712096	Vehicle speed signal too high	The diagnostic function determines whether the speed signal is within a plausible range	P0553	Vehicle Speed Sensor 'X' Intermittent/Erratic/High	Vehicle Speed Sensor	Electrical	- Speed signal too high (possible tampering)	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	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 - 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 IN200	0/18044	1712112	Vehicle speed, collective error: signal and plausibility	Collective fault: Vehicle speed					- see individual fault	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	None	None	see individual fault	see individual fault	see individual fault	- see individual fault	- see individual fault	- 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: see individual fault	Breakdown notice: see individual fault	None
MEVD17.2 IN200	0/18044	1712218	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	- Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	Engine warmed to normal temper.	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 - 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 IN200	0/18044	1712129	Vehicle speed, plausibility: minimum speed in overrun 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	- Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	Engine warmed to normal temper.	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 - 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 IN200	0/18044	1712130	Vehicle speed, plausibility: implausible speed signal	The diagnostic function monitors the difference in signal from the left and right wheel speed sensors	P0551	Vehicle Speed Sensor 'X' Range/Performance	Vehicle Speed Sensor	Plausibility	- Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	Engine warmed to normal temper.	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 - 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 IN200	0/18044	1712132	Vehicle speed, wheel sensor reinitial, plausibility signal implausible	The diagnostic function monitors the signals from the wheel speed sensors for plausibility	P152C	Wheel Speed Sensor Rear/Left Range/Performance	Wheel Speed Sensor	Plausibility	- Vehicle speed signal implausible	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	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: on - US electronic engine power reduction off - CC message: on	none	Possible apparent symptoms: Driver assistance systems failed	Breakdown notice: None	None
												Voltage condition: ... Onboard elec								- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none				

MEVD17.2-BN200	0x180466	1772134	Vehicle speed, wheel sensor no/light, plausibility signal implausible	The diagnostic function monitors the signals from the wheel speed sensors for plausibility.	P160D	Wheel Speed Sensor Rear/Right Range/Performance	Wheel Speed Sensor	Plausibility	The fault is recognized when the signal from one wheel speed 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	Voltage condition: - Onboard elec	None	None	NO	NO	Y	- Vehicle speed signal implausible	- Continuous 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 system failed	Breakdown notice: None	None
MEVD17.2-BN200	0x180467	1772135	Vehicle speed, wheel sensor no/light, plausibility signal implausible	The diagnostic function monitors the signals from the wheel speed sensors for plausibility.	P160B	Wheel Speed Sensor Front/Right Range/Performance	Wheel Speed Sensor	Plausibility	The fault is recognized when the signal from one wheel speed 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	Voltage condition: - Onboard elec	None	None	NO	NO	Y	- Vehicle speed signal implausible	- Continuous 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 system failed	Breakdown notice: None	None
MEVD17.2-BN200	0x182002	177666	EWS anti-tampering protection: no starting 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 elec	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 in the production line, or when later it is supplied as spare part, prior to shipment from the charging plant!	Possible apparent symptoms: None, as this fault occurs only on new units	Breakdown notice: None	None
MEVD17.2-BN200	0x182006	177676	EWS anti-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	Voltage condition: - Onboard elec	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-setpoint to initially incorrect position!	Possible apparent symptoms: Starter turns, engine fails to start	Breakdown notice: None	None
MEVD17.2-BN200	0x182101	177621	Interface EWS-DME: 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	Voltage condition: - Onboard elec	None	None	NO	CAN 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-BN200	0x182102	177632	Interface EWS-DME: frame fault	The diagnostic function monitors the electronic immobilizer messages	P166B	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	Voltage condition: - Onboard elec	None	None	NO	CAN 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-BN200	0x182104	177634	Interface EWS-DME: 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	Voltage condition: - Onboard elec	None	None	NO	CAN 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-BN200	0x182109	177659	Interface EWS-DME: receive fault, 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	Voltage condition: - Onboard elec	None	None	NO	CAN 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-BN200	0x182201	177617	DME internal fault, EWS data: no available memory possibility	The diagnostic function monitors the electronic immobilizer messages	P166C	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 elec	None	None	NO	none	N	- DME defective	- 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-BN200	0x182202	177678	DME internal fault, EWS data: fault activation-code storage	The diagnostic function monitors the electronic immobilizer messages	P166D	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 elec	None	None	NO	none	N	- DME defective	- 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-BN200	0x182208	1776184	DME internal fault, EWS data: checksum fault	The diagnostic function monitors the electronic immobilizer messages	P166E	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 elec	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 - 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-BN200	0x182209	1776185	DME internal fault, EWS data: write error, second 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 elec	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 - 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-BN200	0x182302	1778434	Message, EWS-DME, incorrect frame fault	The diagnostic function monitors communications on the CAN bus to assess electronic immobilizer messages	U1186	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 elec	None	None	NO	CAN 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-BN200	0x182304	1778436	Message, EWS-DME, 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	Voltage condition: - Onboard elec	None	None	NO	CAN bus telegram	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-BN200	0x185101	179209	Terminal 15_3, line from CAS, electrical short circuit to positive	The diagnostic function monitors the redundant "Terminal 15 off" wire from the CAS to the DME for short circuits to positive.	P158D	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 elec	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	- 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: None	Breakdown notice: None	None
MEVD17.2-BN200	0x185102	179210	Terminal 15N_3, line from CAS, electrical short circuit to ground or open circuit	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 elec	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	- 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: None	Breakdown notice: None	None
MEVD17.2-BN200	0x185302	1792486	Terminal 15N_1 power supply switched by CAS, electrical short to earth or open circuit	The diagnostic function monitors the voltage supply wire to Terminals 15N_1 and KLE7_2 for an open wire or short circuit to ground.	P15D9	Terminal 15N_1 / 87_1 Power Supply Circuit	Terminal 15 / 87	Electrical	The fault is recognized when no voltage is present at the DME input (KLE7_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 elec	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
									The diagnostic fault code is logged when no voltage is present at the DME input (KLE7_2 or 15N_2) although the main relay has closed. Potential problem source(s): - Fuse defective		Terminal 15	Voltage condition: - Onboard elec						- Fuse defective		- ECE emissions warning lamp on - ECE electronic engine power reduction on - CC message: on				

MEVD17.2- BN200	0x185403	178079	Terminal 19N_3 power supply switched by CAS, electrical. Fault is open or short circuit to ground	The diagnostic function monitors the voltage supply wire to Terminals 19N_3 and KLB7_3 for an open wire or short circuit to ground	P15F8	Terminal 19N_3 / KLB7_3 Power Supply Circuit	Terminal 15 / B7	Electrical	The diagnostic fault code is logged when no voltage is present at the DME input (Terminal B7_3 or 19N_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 elec - 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 relayed power to downstream vehicle	Breakdown notice: None	None
MEVD17.2- BN200	0x186009	179498	Brake light switch, plausibility signal implausible	The diagnostic function monitors the plausibility of the brake light switch	P0571	Brake Switch 'X' 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	Voltage condition: - Onboard elec - None	2 min. continuous open circuit at DME	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- BN200	0x186608	180764	Engine switch-off time, plausibility: time too 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	P15E9	External Engine Off Timer Engine Off Time Too Short in Correlation to Cooling Down Of Engine Coolant	Engine Off Timer, External	Computation	The fault is recognized when 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 instrument cluster	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec - Engine temperature at engine stop - None	None	NO	none	Y	- Instrument cluster disconnected from Terminal 30 during stationary phase (battery change) - Collateral fault stemming from a defective engine temperature sensor - Note any toggled faults related to the coolant temperature sensor - Collateral fault from incorrect time signal from the instrument cluster - Check whether the instrument cluster time is correct	- If Terminal 30 was disconnected, no further action required - Note any toggled faults related to the 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	US only	Possible apparent symptoms: None	Breakdown notice: None	None
MEVD17.2- BN200	0x186608	180780	Engine switch-off time, plausibility: time too 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	Computation	The fault is recognized when 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 from instrument cluster	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec - Engine temperature at engine stop - None	None	NO	none	Y	- Collateral fault stemming from a defective engine temperature sensor - Collateral fault stemming from incorrect time signal from instrument cluster - Check whether the instrument cluster time is correct	- 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- BN200	0x186701	180930	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 Incrimination Too Fast During Engine Running	Engine Off Timer, External	Incrimination	The fault is recognized in 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 elec - 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 off - CC message: on - M10 US: - 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- BN200	0x186702	180930	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 Incrimination Too Slow During Engine Running	Engine Off Timer, External	Incrimination	The fault is recognized in 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 elec - 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	None
MEVD17.2- BN200	0x186804	180938	Engine switch-off time, signal: no signal	The diagnostic function monitors transmission of the CAN time signal from the instrument cluster. Diagnosis is interrupted 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 elec - 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	- 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: No display of time and date	Breakdown notice: None	None
MEVD17.2- BN200	0x186A01	180997	Engine switch-off time: too fast during run-on	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 Incrimination Too Fast During ECM Afterrunning	Engine Off Timer, External	Incrimination	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 elec - 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- BN200	0x186A02	180998	Engine switch-off time: too slow during run-on	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 Incrimination Too Slow During ECM Afterrunning	Engine Off Timer, External	Incrimination	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 elec - 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- BN200	0x18C004	181828	Zero-gear sensor, adaptation: not learned (MSA deactivated)	The diagnostic function monitors adaptation of the neutral sensor					This fault is recognized when the neutral sensor has not been initialized or its adaptation value has been lost. Potential problem source(s): - Neutral sensor defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec - None	None	NO	None	N	- Neutral sensor defective	- Repeat learning routine for neutral sensor - Replace neutral 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: MSA fails to operate	Breakdown notice: MSA fails to operate	None
MEVD17.2- BN200	0x1C1001	182000	Engine oil pressure control, dynamic: pressure fluctuations	The diagnostic function monitors the oscillation characteristics of the oil pressure	P15FE	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 elec - Engine warmed to normal temper. - 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 3 Hz and 7 Hz	Breakdown notice: none	none	
MEVD17.2- BN200	0x1C3101	182385	Engine oil pressure control, static: engine oil pressure too high, limp-home operation	The diagnostic function monitors the oil pressure	P15FF	Engine Oil Pressure Control, Static: Switchover To Limp Home Operation Because Engine Oil Pressure Too High in Map Operation			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): - Defect in wiring harness between oil-pressure sensor and DME - Defective oil-pressure sensor - Oil pressure control valve defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec - Engine warmed to normal temper. - 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- BN200	0x1C3102	182386	Engine oil pressure control, static: engine oil pressure too low, limp-home operation	The diagnostic function monitors the oil pressure	P15AD	Engine Oil Pressure Control, Static: Switchover To Limp Home Operation Because Engine Oil Pressure Too Low in Map Operation			The fault is recognized when 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 defective - Oil pump defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec - Engine warmed to normal temper. - 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- BN200	0x1C3201	182521	Oil pressure regulating valve, activation: short circuit to positive	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			Potential problem source(s): - Defective plug or wiring harness - Oil pressure control valve/pump defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec - None	None	steuern_0dr, steuern_ende_0dr	PWM activation signal, Debaas	N	- Defective plug or wiring harness - Oil pressure control valve/pump defective - Defective DME	- Check wiring harness between oil pump and DME - Replace oil pressure control valve/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- BN200	0x1C3202	182522	Oil pressure regulating valve, activation: short circuit to ground	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			Potential problem source(s): - Defective plug or wiring harness - Oil pressure control valve/pump defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec - None	None	steuern_0dr, steuern_ende_0dr	PWM activation signal, Debaas	N	- Defective plug or wiring harness - Oil pressure control valve/pump defective - Defective DME	- Check wiring harness between oil pump and DME - Replace oil pressure control valve/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- BN200	0x1C3204	182524	Oil pressure regulating valve, activation: open circuit	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			Potential problem source(s): - Defective plug or wiring harness - Oil pressure control valve/pump defective - Defective DME	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec - None	None	steuern_0dr, steuern_ende_0dr	PWM activation signal, Debaas	N	- Defective plug or wiring harness - Oil pressure control valve/pump defective - Defective DME	- Check wiring harness between oil pump and DME - Replace oil pressure control valve/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- BN200	0x1C3301	182777	Oil pressure regulating valve, mechanical: valve in fully engaged position (maximum oil pressure)	The diagnostic function monitors the oil pressure	P15A1	Engine Oil Pressure Control, Mechanical: Solenoid Valve Sticking in Fully Engaged Position (Maximum Oil Pressure)			Potential problem source(s): - Oil pressure control valve defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec - Engine warmed to normal temper. - None	yes* SGBD job name	None	N	- Oil pressure control valve defective	- Replace oil pressure control valve	- 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: none	none	Possible apparent symptoms: none	Breakdown notice: - Engine damage possible: further oil engine, continued driving is not possible.	none	
									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	Voltage condition: - Onboard elec - Engine warmed to normal temper. - None	yes* SGBD job name	None	N	- Oil pressure control valve defective	- Replace oil pressure control valve	- 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: none	none	Possible apparent symptoms: none	Breakdown notice: None	none	

MEVD17.2- BN2020	0x1C3001	184301	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 problem: variable - Mechanical defect in oil pump	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elect	Engine warmed to normal temperature	-None	yes+ S0BD job name	-None	N	- Mechanical defect in oil pump	- 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- BN2020	0x1C3002	184302	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 problem: variable - Mechanical defect in oil pump	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elect	Engine warmed to normal temperature	-None	yes+ S0BD job name	-None	N	- Mechanical defect in oil pump	- Replace oil 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: none	Breakdown notice: - Engine damage possible. Switch off engine, continued driving is not possible.	- none
MEVD17.2- BN2020	0x1C3001	184297	Engine oil pressure sensor, electric: short circuit to positive	The diagnostic function monitors the upper voltage limit of the engine oil-pressure sensor	P0523	Engine Oil Pressure Sensor/Switch 'X' High				- 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 elect	-None	-None	NO	Read test data block: - ID S8F	N	- Fault in wiring harness between sensor and DME - Sensor defective - Replace sensor - Replace DME	- Check wiring harness between DME and sensor - Replace sensor - Replace DME	- 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- BN2020	0x1C3002	184298	Engine oil pressure sensor, electrical: Short to earth	The diagnostic function monitors the engine oil-pressure sensor's lower voltage limit	P0522	Engine Oil Pressure Sensor/Switch 'X' Low				- 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 elect	-None	-None	NO	Read test data block: - ID S8F	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- BN2020	0x1C3108	184260	Engine oil pressure sensor, plausibility: signal hangs	The diagnostic function monitors the oil pressure	P0521	Engine Oil Pressure Sensor/Switch 'X' Range/Performance				- 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 elect	-None	-None	yes+ S0BD 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	- 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- BN2020	0x1C4002	185194	Engine oil level too low	The diagnostic function monitors the engine oil level	P252F	Engine Oil Level Top Low	Engine Oil Level	Level		The fault is recognized when the oil pressure falls to change by more than 12 Pa for longer than 2.5 sec. Potential problem source(s): - Defect in wiring harness between oil-pressure sensor and DME - Defective oil-pressure sensor	The diagnostic fault code is triggered when + TRUE is recognized 10 times	none	Voltage condition: - Onboard elect	-None	-None	NO	none	N	- Engine operated with oil level too low	- Top up engine oil - Check oil level	- 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- BN2020	0x1C4110	185184	Oil-condition sensor, electrical: malfunction	The diagnostic function monitors the signal from the oil condition sensor for electrical faults	P053A	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 plug 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 elect	-None	-None	NO	none	N	- Defect in plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	- Check plug and wiring harness between oil condition sensor and DME - 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- BN2020	0x1C4111	185185	Oil condition sensor, plausibility: level implausible	The diagnostic function monitors the plausibility of the oil level signal	P1587	Engine Oil Quality Sensor Level Measurement	Engine Oil Quality Sensor	Level		The fault is recognized when the signal remains constant, implausible signal jumps are present, and when the signal's mean value leaves the specified range. Potential problem source(s): - Defect in plug 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	none	Voltage condition: - Onboard elect	-None	-None	NO	none	N	- Defect in plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	- Check plug and wiring harness between oil condition sensor and DME - 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- BN2020	0x1C4112	185186	Oil-condition sensor, plausibility: temperature implausible	The diagnostic function monitors the plausibility of the oil temperature signal	P1586	Engine Oil Quality Sensor Temperature Measurement	Engine Oil Quality Sensor	Temperature		The fault is recognized when the signal remains constant, implausible signal jumps are present, and when the signal's mean value leaves the specified range. Potential problem source(s): - Defect in plug 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	none	Voltage condition: - Onboard elect	-None	-None	NO	none	N	- Defect in plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	- Check plug and wiring harness between oil condition sensor and DME - 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- BN2020	0x1C4113	185187	Oil-condition sensor, plausibility: level implausible	The diagnostic function monitors the plausibility of the oil level signal	P1587	Engine Oil Quality Sensor Level Measurement	Engine Oil Quality Sensor	Level		The fault is recognized when the signal remains constant, implausible signal jumps are present, and when the signal's mean value leaves the specified range. Potential problem source(s): - Defect in plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	The diagnostic fault code is triggered when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elect	-None	-None	NO	none	N	- Defect in plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	- Check plug and wiring harness between oil condition sensor and DME - 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- BN2020	0x1C4115	185188	Oil-condition sensor, plausibility: temperature implausible	The diagnostic function monitors the oil temperature signal to assess plausibility	P1586	Engine Oil Quality Sensor Temperature Measurement	Engine Oil Quality Sensor	Temperature		The fault is recognized when the oil condition sensor reports a fault. Potential problem source(s): - Defect in plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	The diagnostic fault code is triggered when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elect	-None	-None	NO	none	N	- Defect in plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	- Check plug and wiring harness between oil condition sensor and DME - 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- BN2020	0x1C4116	185170	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 plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	The diagnostic fault code is triggered when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard elect	-None	-None	NO	none	N	- Defect in plug or wiring harness between oil condition sensor and DME - Oil condition sensor defective	- Check plug and wiring harness between oil condition sensor and DME - 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- BN2020	0x1C4117	185171	Oil-condition sensor, electrical: permeability, malfunction	The diagnostic function detects an electrical fault in the oil quality signal	P1588	Engine Oil Quality Sensor Permeability Measurement	Engine Oil Quality Sensor	Permeability		The fault is recognized when the oil condition sensor reports a fault over the bus. Potential problem source(s): - Defect in plug or wiring harness at oil condition sensor - Sensor defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elect	Engine oil temperature greater than	Longer than 15 min.	NO	none	N	- Water in oil - Defect in plug or wiring harness at oil condition sensor - Sensor defective	- Check plug and wiring harness and oil condition sensor - Replace engine oil - Replace oil condition sensor	- 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- BN2020	0x1C4118	185172	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 plug or wiring harness between oil condition sensor and DME - Water in oil - Oil condition sensor defective	The diagnostic fault code is triggered when the fault remains present for longer than 1 min.	Terminal 15	Voltage condition: - Onboard elect	Engine oil temperature greater than	Longer than 15 min.	NO	none	N	- Defect in plug or wiring harness between oil condition sensor and DME - Water in oil - Oil condition sensor defective	- Check plug 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- BN2020	0x1C4119	185173	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 'X' Circuit				The fault is recognized when the signal voltage exceeds 3.6 V. Potential problem source(s): - Defect in plug or wiring harness between engine oil temperature sensor and DME - Defective engine oil temperature sensor	The diagnostic fault code is triggered when the fault remains present for longer than 2 min.	Terminal 15	Voltage condition: - Onboard elect	-None	-None	NO	none	N	- Defect in plug or wiring harness between engine oil temperature sensor and DME - Defective engine oil temperature sensor	- Check plug and wiring harness between engine oil temperature sensor and DME - Replace engine oil temperature 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- BN2020	0x1C4120	185180	Engine oil temperature sensor, plausibility: temperature implausible	The diagnostic function monitors the plausibility of the oil temperature signal	P0196	Engine Oil Temperature Sensor 'X' Range/Performance	Engine Oil Temperature Sensor	Plausibility		The fault is recognized when the signal is frozen, implausible signal jumps are present, and when the signal's mean value leaves the specified range. Potential problem source(s): - Defect in plug or wiring harness between engine oil temperature sensor and DME - Defective engine oil temperature sensor	The diagnostic fault code is triggered when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elect	-None	-None	NO	none	N	- Defect in plug or wiring harness between engine oil temperature sensor and DME - Defective engine oil temperature sensor	- Check plug and wiring harness between engine oil temperature sensor and DME - Replace engine oil temperature 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- BN2020	0x1C4A20	185880	BSD message from oil-condition sensor: no message	The diagnostic function monitors the BSD message from the oil level sensor (Qx.T)	P1521	Engine Oil Quality Sensor Communication Error	Engine Oil Quality Sensor	Communication		- Problem with BSD wire between DME and oil quality sensor (Qx.T) - Defective DME	The diagnostic fault code is triggered when the fault remains present for longer than 2 min.	Terminal 15	Voltage condition: - Onboard elect	-None	-None	NO	BSD CAN (Qx.T) indicates relevant	N	- Problem with BSD wire between DME and oil quality sensor (Qx.T) - replace oil quality sensor (Qx.T) - replace DME	- Check wiring harness between DME and oil quality sensor (Qx.T) - replace oil quality sensor (Qx.T) - replace DME	- US emissions warning lamp off - US electronic engine power reduction off - CC message: none	Only relevant for EEx, as it is only vehicle with a QLT Quality-Level-Temperature unit, all other vehicles are equipped with a TQENS thermal oil level sensor	Possible apparent symptoms: Adaptation (reduction) of engine oil service interval	Breakdown notice: None	None
MEVD17.2- BN2020	0x1C0308	128744	Map thermostat, mechanical: jammed open	The diagnostic function monitors the rise in coolant temperature at the engine's discharge connection	P0128			Thermostat	Functional Check	- Defective wiring harness - Characteristic map thermostat defective	The diagnostic fault code is triggered when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elect	Coolant temperature lower than 4°C	-None	No	none	Y	- Defect in wiring harness - Characteristic map thermostat defective	- Check wiring harness - Replace map-controlled thermostat	- ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message: none	ML 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
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MEVD17.2- BN200	0x12445	190762	Map thermostat, activation short circuit to ground	The diagnostic function monitors activation of the program map thermostat	P0568	Thermostat Heater Control Circuit Low	Thermostat	Electrical	The fault is recognized by the silver 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 elec	None	None	STEUERN_KFT, STEUERN_ENDE	PWM activation signal, bus474	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	- ECE emissions warning 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- BN200	0x12404	190764	Map thermostat, activation open circuit	The diagnostic function monitors activation of the program map thermostat	P0567	Thermostat Heater Control Circuit Open	Thermostat	Electrical	The fault is recognized by the silver 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 elec	None	None	STEUERN_KFT, STEUERN_ENDE	PWM activation signal, bus474	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	- ECE emissions warning 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- BN200	0x12371	191425	Shift point Adaptation	The diagnostic function monitors whether a downshift is requested by the BMW automatic climate control or DME (AEP or GEN)					Regarding AEP: When the vehicle's operating profile is not conducive to a satisfactory battery charge status, the automatic transmission's shift points are moved to occur at a higher average engine speed. Regarding alternator (GEN): The objective is to enhance cooling system in tanking mode. Regarding HVA: The objective is to achieve the requested cooling level. Potential problem source(s): - Vehicle's operating profile fails to provide optimal battery charging, for instance: Frequent short-distance trips, too many electrical accessories in use	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	None	None	None	none	N	- Vehicle's operating profile fails to provide optimal battery charging, for instance: Frequent short-distance trips, too many electrical accessories in use	- No actual vehicle defect is present. The customer should equitably drive a longer distance	- ECE emissions warning 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: The automatic transmission inoperability characteristically eng gear	Breakdown notice: No actual vehicle defect is present	No actual vehicle defect is present
MEVD17.2- BN200	0x12391	191537	Electronic transmission control (EGS): signal evaluation (rurbo speed): Invalid signal content	The diagnostic function monitors the message					The fault is recognized when the message is invalid and undervoltage has been detected. 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 elec	None	None	NO	CAN signal	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- BN200	0x12451	191593	Electronic transmission control (EGS): signal evaluation (rurbo speed): Invalid signal content	The diagnostic function monitors the message					The fault is recognized when the message 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 elec	None	None	NO	CAN signal	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- BN200	0x12391	191549	Electronic transmission control (EGS): signal evaluation (gear information): Invalid signal content	The diagnostic function monitors the message					The fault is recognized when the message 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 elec	None	None	NO	CAN signal	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- BN200	0x12391	191595	Electronic transmission control (EGS): signal evaluation (rurbo speed): Invalid signal content	The diagnostic function monitors the message					The fault is recognized when the message 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 elec	None	None	NO	CAN signal	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- BN200	0x1E001	198081	Idle speed control: 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 fault is recognized when the actual idle speed exceeds the specified idle speed by more than 100 rpm. Potential problem source(s): - Catalytic fault from defective throttle valve - Leak in air induction tract between throttle valve and engine	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	Engine warmed to normal temperat	3 sec. after engine on	none	none	N	- Catalytic 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	- 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: - Idle speed too high	Breakdown notice: None	None
MEVD17.2- BN200	0x1E002	198082	Idle speed control: 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 fault is recognized when the actual idle speed exceeds the specified idle speed by more than 50 rpm. Potential problem source(s): - Catalytic fault from defective throttle valve - Leak in air induction tract between throttle valve and engine	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	Engine warmed to normal temperat	3 sec. after engine on	none	none	N	- Catalytic 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	- 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: - In extreme cases the engine may stall	Breakdown notice: None	None
MEVD17.2- BN200	0x1E101	198037	Idle speed control: cold start engine speed too high during the catalytic converter's warmup phase	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 fault is recognized when the actual idle speed falls below the specified idle speed by more than 50 rpm. Potential problem source(s): - Catalytic fault from defective throttle valve - Leak in air induction tract between throttle valve and engine	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	None	None	none	none	N	- Catalytic 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	- 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: - Idle speed too high	Breakdown notice: None	None
MEVD17.2- BN200	0x1E102	198038	Idle speed control: cold start engine speed too low during the catalytic converter's warmup phase	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 fault is recognized when the actual idle speed falls below the specified idle speed by more than 50 rpm. Potential problem source(s): - Catalytic fault from defective throttle valve - Leak in air induction tract between throttle valve and engine	This fault is logged in the control module's fault memory immediately	none	Voltage condition: ... Onboard elec	None	None	none	none	N	- Catalytic 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	- 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: - In extreme cases the engine may stall	Breakdown notice: None	None
MEVD17.2- BN200	0x1E301	198773	Engine speed limitation with vehicle stationary: idle speed too high for too long	The diagnostic function monitors the engine for idling too long 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	Voltage condition: ... Onboard elec	None	204 sec.	NO	none	Y	- Abuse (driver revs engine while vehicle is stationary)	- Clear ECU fault memory. No further measures	- 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: When accelerator pedal is depressed at idle the engine speed is limited once the indicated time period elapses	Breakdown notice: None	None
MEVD17.2- BN200	0x1E5A0	198152	Monitoring engine torque limitation: maximum permissible output torque is constantly 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 elec	None	None	NO	none	Y	- DME defective	- Reprogram DME - 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: - Reduction in engine power (limp-home mode) - Engine rpm limitation	Breakdown notice: - If it is possible to continue driving the vehicle, but passing measures should not be attempted owing to the reduction in engine output.	None
MEVD17.2- BN200	0x1F014	202016	Valvetronic relay, supply voltage: Short 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 elec	None	None	NO	none	N	- Defect in wiring harness between Valvetronic relay and DME (S_VVTR) - Valvetronic relay defective - Defective DME	- 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	- 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- BN200	0x1F015	202017	Valvetronic relay, supply voltage: Open circuit	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 fault is recognized when the difference between battery voltage and buffer capacitor exceeds 1 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 elec	None	None	NO	none	N	- ECE - Defect in wiring harness between Valvetronic relay and DME (S_VVTR) - Valvetronic fuse defective - Defect in wiring harness between Valvetronic relay and DME (S_VVTR) - Valvetronic relay defective - Defective DME	- Check wiring harness between Valvetronic relay and DME (S_VVTR) - Replace Valvetronic relay - Replace DME	- ECE - ECE emissions warning lamp off - 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, customer seeks	Breakdown notice: None	None
MEVD17.2- BN200	0x1F016	202018	DME, internal fault: electric accelerator pedal monitoring: AD converter, test pulses check	The diagnostic function monitors the DME's internal status	P129A	Control Module Monitoring Safety Function AD Converter Error	ECM Monitoring	Safety Function	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 elec	None	None	NO	none	Y	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- 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: - If it is possible to continue driving the vehicle, but passing measures 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- BN200	0x1F017	202019	DME, internal fault: electric accelerator pedal monitoring: AD converter, test voltage check	The diagnostic function monitors the DME's internal status	P129A	Control Module Monitoring Safety Function AD Converter Error	ECM Monitoring	Safety Function	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 elec	None	None	NO	none	Y	- Only replace the DME if the fault remains present continuously or if the fault frequency is greater than 3	- 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: - If it is possible to continue driving the vehicle, but passing measures 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-BN205	0x1F519	202921	DME, internal fault: monitoring, signal stabilization, accelerator pedal module or pedal sensor	The diagnostic function monitors the DME's internal status	P0600	Internal Control Module Accelerator Pedal Position Performance	ECM	Accelerator Pedal	The fault is recognized 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 elec	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	- ECE emissions warning lamp on - ECE electronic engine power reduction on - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - ECE 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-BN205	0x1F520	202926	DME, internal fault, electric accelerator pedal monitoring, Speed sensor	The diagnostic function monitors the DME's internal status	P325C	Control Module Monitoring Safety Function Speed Sensor Error	ECM Monitoring	Safety Function	The fault is recognized 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 elec	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	- 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 - 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-BN205	0x1F521	202929	DME, internal fault: monitoring, classification of mixture-correction factors	The diagnostic function monitors the DME's internal status	P3237	Control Module Monitoring Fuel Correction Error	ECM Monitoring	Fuel Correction	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 elec	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 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-BN205	0x1F522	202930	DME, internal fault: monitoring, injection-rate limitation, level 1	The diagnostic function monitors the DME's internal status	P32D0	Control Module Monitoring Injection Rate Limitation Error	ECM Monitoring	Injection Rate	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 elec	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 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-BN205	0x1F523	202931	DME, internal fault: monitoring, injection-rate limitation, level 2	The diagnostic function monitors the DME's internal status	P32D2	Control Module Monitoring Injection Rate Limitation Error	ECM Monitoring	Injection Rate	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 elec	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 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-BN205	0x1F524	202932	DME, internal fault: Monitoring of the nominal oxygen sensor value	The diagnostic function monitors the DME's internal status	P3337	Control Module Monitoring Lambda Plausibility	ECM Monitoring	Lambda Plausibility	The fault is recognized 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 elec	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	- 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 - 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-BN205	0x1F525	202933	DME, internal fault: monitoring, classification of relative fuel mass	The diagnostic function monitors the DME's internal status	P325F	Control Module Monitoring Fuel Volume Plausibility	ECM Monitoring	Fuel Volume Control	The fault is recognized 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 elec	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	- 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 - 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-BN205	0x1F526	202934	DME, internal fault: monitoring, torque comparison	The diagnostic function monitors the DME's internal status	P0B1B	Internal Control Module Torque Calculation Performance	ECM	Torque	The fault is recognized 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 elec	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	- ECE emissions warning lamp on - ECE electronic engine power reduction on - CC message on - MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on - MY11 ECE - ECE emissions warning lamp on - ECE 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-BN205	0x1F527	202936	DME, internal fault, electric accelerator pedal monitoring, Drive shaft transmission ratio implausible	The diagnostic function monitors the DME's internal status	P326C	Control Module Monitoring Safety Function Ratio Error	ECM Monitoring	Safety Function	The fault is recognized 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 elec	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	- 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 - 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-BN205	0x1F528	202938	DME, internal fault: monitoring, variant coding	The diagnostic function monitors the DME's internal status	P323E	Control Module Monitoring Version Coding Plausibility	ECM Monitoring	Coding	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 elec	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 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-BN205	0x1F529	202937	DME, internal fault, electric accelerator pedal monitoring, Ignition timing monitoring	The diagnostic function monitors the DME's internal status	P325E	Control Module Monitoring Safety Function Ignition Timing Error	ECM Monitoring	Safety Function	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 elec	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 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-BN205	0x1F530	202944	DME, internal fault: Switch-off path test by monitoring module	The diagnostic function monitors the DME's internal status	P326D	Control Module Monitoring Shutdown Path Error	ECM Monitoring	Shutdown Path	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 elec	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 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-BN205	0x1F531	202945	DME, internal fault: Plausibility monitoring, fuel mass	The diagnostic function monitors the DME's internal status	P325F	Control Module Monitoring Fuel Volume Plausibility	ECM Monitoring	Fuel Volume Control	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 elec	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 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-BN205	0x1F532	202946	DME, internal fault: monitoring MSC communication malfunction in module R2521	The diagnostic function monitors communications within the DME	P1646	Internal Control Module Communication Error Output Stage	ECM	Output Stage Communication	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	none	Voltage condition: - Onboard elec	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 - MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message on - MY10 US - US emissions warning lamp on - US electronic engine power reduction on - CC message on	none	Active fault on open engine or light or light to light	Breakdown notice - none	- none
MEVD17.2-BN205	0x1F533	202947	DME, internal fault: monitoring MSC communication malfunction in module R2522	The diagnostic function monitors communications of DME hardware components	P1646	Internal Control Module Communication Error Output Stage	ECM	Output Stage Communication	The fault is recognized 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 elec	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 - MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message on - MY10 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	- none
MEVD17.2-BN205	0x1F564	203924	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	P16E5	Internal Control Module Error, Control Circuit VVT	ECM	ValveTronic (VVT) Control	The fault is recognized when interference occurs in communications between the CPU and a driver circuit 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 elec	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 on - ECE electronic engine power reduction on - CC message on - MY10 ECE - ECE emissions warning lamp off - ECE electronic engine power reduction on - CC message on - MY10 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- BN2020	0x1F1A62	203834	DME internal fault: write EEPROM faulty	The diagnostic function monitors the EEPROM encryption "write block"	P063F	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 elec	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	Data content defined	Possible apparent symptoms: - none	Breakdown notice: - none	- none
MEVD17.2- BN2020	0x1F1A62	203838	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 elec	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 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- BN2020	0x1F1A62	203840	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 elec	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 on - CC message on	none	Possible apparent symptoms: - Non-start 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- BN2020	0x1F1A61	203841	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 elec	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 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- BN2020	0x1F1A62	203842	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 elec	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 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- BN2020	0x1F1A62	203846	DME internal fault: monitoring IV sensor supply: voltage outside valid range	The diagnostic function monitors the sensor voltage supply G1.	P16E7	Internal Control Module Volt Supply Voltage 1 Performance	ECM	Voltage	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 elec	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 - MY10 ECE - ECE emissions warning lamp off	none	Possible apparent symptoms: - Reduced performance - 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.	- none
MEVD17.2- BN2020	0x1F1A61	203847	DME internal fault: monitoring IV sensor supply 2: voltage outside valid range	The diagnostic function monitors the internal sensor supply voltage G2.	P16E8	Internal Control Module Volt Supply Voltage 2 Performance	ECM	Voltage	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 elec	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 - MY10 ECE - ECE emissions warning lamp off	none	Possible apparent symptoms: - Reduced performance - 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.	- none
MEVD17.2- BN2020	0x1F1A62	203848	DME internal fault: monitoring IV sensor supply 3: voltage outside valid range	The diagnostic function monitors the internal sensor supply voltage G3.	P16E9	Internal Control Module Volt Supply Voltage 3 Performance	ECM	Voltage	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 elec	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 - MY10 ECE - ECE emissions warning lamp off	none	Possible apparent symptoms: - Reduced performance - 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.	- none
MEVD17.2- BN2020	0x1F1B40	203852	Starter activation: short circuit to positive	The diagnostic function monitors the starter control-activation wire (Terminal B1) from the DME to the CAS.	P0617	Starter Relay Circuit High			The fault is recognized 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 elec	None	None	NO	U	N	- Defect in wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- 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- BN2020	0x1F1B41	203853	Starter activation: short circuit to ground	The diagnostic function monitors the starter control-activation wire (Terminal B1) 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 elec	None	None	NO	U	N	- Defect in wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- US emissions warning lamp off - US electronic engine power reduction off - CC message: none	none	Possible apparent symptoms: - Defect engine start	Breakdown notice: None	None
MEVD17.2- BN2020	0x1F1B42	203854	Starter activation: open circuit	The diagnostic function monitors the starter control-activation wire (Terminal B1) 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 elec	None	None	NO	U	N	- Defect in wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- Check wiring harness between CAS and DME - Continue fault diagnosis with CAS - Replace DME	- 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- BN2020	0x1F1B60	203868	System voltage, DME master relay: voltage too high	The diagnostic function monitors the battery voltage up until to an upper limit.	P06B7	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 elec	None	2 min. after engine start	NO	U, >4915	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.	- 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- BN2020	0x1F2104	204098	Incorrect data record: CAN timeout	The diagnostic function monitors the CAN bus between the CAS and DME.	P32B8	Control Module Monitoring Engine Variant CAN-Timed			FAHRZEUGTYP (VEHICLE VERSION) message from the CAS is missing. Potential problem source(s): - Time limit violation transmitting FAHRZEUGTYP (VEHICLE VERSION) message from CAS - Defective CAS - Defective DME	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	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	- ECE emissions warning lamp off - 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- BN2020	0x1F2106	204072	Incorrect data record: Variant monitoring	The diagnostic function monitors the software versions in the CAS and DME.	P32B9	Control Module Monitoring Engine Variant Plausibility			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 elec	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	- 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	The code (upper/middle/lower performance class) for the CAS does not match the code in the database 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- BN2020	0x1F2146	204146	Encoding: Wrong coded code	The diagnostic function monitors the encoding.					The fault is recognized when the encoding is not correct. Potential problem source(s): - DME encoded incorrectly	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	None	None	None	None	N	- DME encoded incorrectly	- If diagnostic fault code is logged again: Replace DME	- ECE emissions warning lamp off - US emissions warning lamp off - US electronic engine power reduction off - CC message on	none	Possible apparent symptoms: Possible output limitation: Throttle too low	Breakdown notice: Because power may be reduced passing maneuvers should be avoided	None
MEVD17.2- BN2020	0x1F2148	204148	Encoding: Vehicle identification number not coded	The diagnostic function monitors the encoding.					The fault is recognized when the encoding is not correct. Potential problem source(s): - DME encoded incorrectly	This fault is logged in the control module's fault memory immediately.	Terminal 15	Voltage condition: - Onboard elec	None	None	None	None	N	- DME encoded incorrectly	- If diagnostic fault code is logged again: 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: Possible output limitation: Throttle too low	Breakdown notice: Because power may be reduced passing maneuvers should be avoided	None
									The fault is recognized when the			Voltage condition: - Onboard elec							- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message on					

[illegible]

[illegible]

[illegible]

MEVD17.2- BN200	0d210701	2184481	Alternator, regulator, model incorrect	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	Voltage condition: - Onboard elec	None	None	NO	Activation conditions: - 0v4614_Alt_V	- Incorrect regulator installed	- 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	If detail number is identical to approved number, information through VP is EA	Possible apparent symptoms: None	Breakdown notice: None	None
MEVD17.2- BN200	0d210801	2184737	Alternator, model incorrect	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	Voltage condition: - Onboard elec	None	None	NO	Activation conditions: - 0v4614_Alt_V	- Incorrect alternator installed	- 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	If detail number is identical with approved number ==> information to EA through VP Alternator continues to supply vehicle.	Possible apparent symptoms: Misdiagnosis at the car owner	Breakdown notice: None	Alternator continues to supply power to vehicle.
MEVD17.2- BN200	0d210901	2184993	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 elec	None	None	NO	none	- Defect in BSD bus line between DME and alternator - Alternator defect	- 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: 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- BN200	0d211A21	2189377	BSD bus Communication 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 elec	None	None	NO	Physical bus status	- One component on BSD bus is defective - Defective BSD	- 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: Breakdown in extreme cases	Power management not operating correctly, as battery sensor data cannot be monitored. No oil level available.	None
MEVD17.2- BN200	0d213301	2175745	Power management, 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 fault is recognized when 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/ECU voltage measurement defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Electrical syst	None	None	None	none	- 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/ECU voltage measurement 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	Possible apparent symptoms: - Fluctuating lights - Functional failure (loss of functionality) - Possible destruction of electrical equipment	Breakdown notice: None	None	
MEVD17.2- BN200	0d213401	2176001	Power management, Undervoltage	The diagnostic function monitors the electrical system voltage at the DME/ECU with the engine running.	P160D	Powermanagement Undervoltage	Powermanagement	Electrical	The fault is recognized when 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/ECU) - DME/ECU voltage measurement defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Electrical syst	None	None	None	none	- Use battery tester to check battery condition - Check battery for damage (electrolyte loss, deformation, T), replace as indicated - Check alternator, replace as indicated - Check power supply voltage to DME/ECU - Determine whether internal control module faults have been logged in the DME/ECU. - 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	Possible apparent symptoms: - Fluctuating lights - Functional failure (loss of functionality) - Electrical device ceases to operate - Breakdown in extreme cases	Breakdown notice: None	None	
MEVD17.2- BN200	0d213501	2176257	Power management, Exhaustive battery charge	The diagnostic function monitors the electrical system voltage at the DME/ECU.	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 syst	None	None	None	none	- Increased power consumption while stationary leading to battery damage. - Vehicle parked too long.	- 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: Breakdown in extreme cases	Breakdown notice: None	None
MEVD17.2- BN200	0d213604	2176516	Power management, Closed-circuit current fault	The diagnostic function monitors the standby current draw.	P160F	Powermanagement No-Load Current Error	Powermanagement	Electrical	The fault is recognized when the discharge from excessively high standby currents is higher than 1 Ah.	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 elec	None	None	None	none	- Closed-circuit current too high - Conduct (AEL) energy diagnosis test module - Conduct external standby current measurement	- 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: Breakdown in extreme cases	Breakdown notice: None	None
MEVD17.2- BN200	0d213701	2176760	Power management, Ripples in system voltage too high	The diagnostic function monitors the electrical system voltage at the DME/ECU with the engine running.	P160E	Powermanagement Operation Without Charging of Battery	Powermanagement	Electrical	The fault is logged in the control module's fault memory when the electrical system voltage is less than 8.5 V or higher than 16 V.	Potential problem source(s): - Battery not connected correctly (loose contact) - Defect in wiring harness (power supply wiring to DME/ECU) - DME/ECU voltage measurement defective	This fault is logged in the control module's fault memory immediately.	none	Voltage condition: - Electrical syst	None	None	None	none	- Battery not connected correctly (loose contact) - Defect in wiring harness (power supply wiring to DME/ECU) - DME/ECU voltage measurement 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	Possible apparent symptoms: - Fluctuating lights - Functional failure (loss of functionality) - In extreme cases engine fails to operate owing to undervoltage.	Breakdown notice: None	None	
MEVD17.2- BN200	0d213801	2177025	Power management, Battery damaged during transport	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 elec	None	None	None	none	- Excessive battery discharge in transport mode	- 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	This fault position is not used in the L4. The fault class is set to 'Y' starting with production. Breakdown B007. Retained in L6!	Possible apparent symptoms: CC message when battery replacement is not registered with the diagnostic system.	Breakdown notice: None	None
MEVD17.2- BN200	0d213901	2177281	Power management, Reduction or shutdown of individual current consumers	The diagnostic function monitors the limits on functionality that occur when availability of electrical devices is reduced or devices are deactivated.					The fault is recognized when availability of electrical equipment is reduced or power consumers are deactivated.	Potential problem source(s): - Poor charge balance owing to driving conditions or excessive number of activated electrical power consumers - Battery aging has occurred	The diagnostic fault code is logged when the fault remains present for longer than 8 min.	Terminal 15	Voltage condition: - Onboard elec	None	None	None	STATUS_VERBODEN	- Poor charge balance owing to driving conditions or excessive number of activated electrical power consumers - Battery aging has occurred	- 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	Possible apparent symptoms: Limitations on functionality owing to reduced availability and deactivation of electrical power consumers.	Breakdown notice: None	None	
MEVD17.2- BN200	0d213A01	2177537	Power management, Battery discharged during transport	The diagnostic function monitors the battery's charge status in the transport mode.					The fault is recognized when the battery charge status is below 60 % 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 elec	None	None	None	none	- Excessive battery discharge in transport mode	- 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	Possible apparent symptoms: CC message if the transport mode has not been deactivated.	Breakdown notice: None	None	
MEVD17.2- BN200	0d213A20	2177568	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 syst	None	- 2 min. after engine start	NO	U_0d5815	- Alternator voltage regulator is 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	none	Possible apparent symptoms: Power reduction, CC message for engine malfunction	Breakdown notice: None	None
MEVD17.2- BN200	0d213A21	2177569	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 fault code is logged in 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 in 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 elec	None	- 3 min. after engine start	NO	U_0d5815	- Plug or wiring harness on alternator defective - Plug or wiring harness on DME defective - Alternator defect - Defective 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- BN200	0d213A22	2177570	System voltage, analogue-digital converter faulty	The diagnostic function monitors the voltage of the analogue-digital converter.	P0560	System Voltage	System Voltage	Electrical	The fault is logged in the ECU fault memory when the voltage at the A/D 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 elec	None	None	NO	U_0d5815	- Defective DME (analog-digital converter)	- 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- BN200	0d213B08	2177800	Power management, battery condition: Battery faulty	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 elec	None	None	NO	none	- Defective vehicle battery	- 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: Breakdown in extreme cases	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- BN200	0d213C08	2178060	Power management, battery condition: Exhaustive battery charge	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 elec	None	None	NO	none	- Defective vehicle battery	- 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: Breakdown in extreme cases	Breakdown notice: None	None
									The fault is recognized when frequent interference occurs on the LIN bus	Potential problem source(s):			Voltage condition: - Onboard elec	None				- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none					

MEVD17.2- BN2025	02/215101	2183428	Intelligent battery sensor (BS): Internal temperature measurement infeasible	The diagnostic system pluralizes the BS temperature measurement	P150D	Battery Sensor Temperature Error	The fault is recognized when a fault with the temperature measurement is present. Potential problem source(s): - BS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- BS defective	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the BS	- 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- BN2025	02/215104	2183428	Intelligent battery sensor (BS): Internal voltage measurement infeasible	The diagnostic system pluralizes the BS voltage measurement	P150E	Battery Sensor Voltage Error	The fault is recognized when a fault with the voltage measurement is present. Potential problem source(s): - BS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- BS defective	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the BS	- 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- BN2025	02/215108	2183432	Intelligent battery sensor (BS): Internal current measurement infeasible	The diagnostic system pluralizes the BS current measurement	P150F	Battery Sensor Current Error	The fault is recognized when the BS current measurement is incorrect. Potential problem source(s): - BS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- BS defective	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the BS	- 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- BN2025	02/215801	2183217	Intelligent battery sensor (BS): Wake-up line, short circuit to 0 V or earth	L4: The diagnostic function monitors the wake-up wire L6: The diagnostic function monitors the wake-up wire to the junction box electronics	P15CE	Battery Sensor Wakeup Cable Circuit Electrical	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 BS to junction box electronics	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- L4: Defect in wake-up wire - L6: Defect in wake-up wire from BS to junction box electronics	- L4: Check wake-up wire - L6: Check wake-up wire between BS 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- BN2025	02/215801	2185471	Intelligent battery sensor (BS): Incorrect version	The diagnostic function monitors compatibility of the BS version with the power management in the DME/ECDE	P15CF	Battery Sensor Variant Plausibility	The fault is recognized when the BS and DME/ECDE are not compatible. Potential problem source(s): - DME/ECDE and BS are not compatible	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- DME/ECDE and BS are not compatible	- Replace BS	- 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- BN2025	02/215801	2185729	Intelligent battery sensor (BS): Wake-up line, line disconnection	L4: The diagnostic function monitors the wake-up wire L6: The diagnostic function monitors the wake-up wire to the junction box electronics	P15CJ	Battery Sensor Wakeup Cable Circuit	L4: The fault is recognized 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 BS - L6: Defect in wake-up wire from BS to junction box electronics	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- L4: Defect in wake-up wire or BS - L6: Defect in wake-up wire from BS to junction box electronics	- L4: Check wake-up wire, replace BS - L6: Check wake-up wire between BS 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- BN2025	02/215801	2186985	Intelligent battery sensor (BS): LIN bus, communication fault	The diagnostic function monitors LIN bus communications with the DME			The fault is recognized when communications between the BS and DME break down. Potential problem source(s): - Defect in power supply voltage to BS - Defect in bus connection (LIN bus) - Interference caused by other devices on LIN bus	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- Defect in power supply voltage to BS - Defect in bus connection (LIN bus) - Communications interference caused by other devices on LIN bus	- Check power supply voltage to BS - Check LIN bus between BS and DME/ECDE - Check fault memories of other devices on the LIN bus - Check LIN bus of other components, replace BS as indicated	- 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- BN2025	02/215801	2186241	Intelligent battery sensor (BS) faulty	The diagnostic function monitors internal system functions in the BS			The fault is recognized when the BS recognizes an internal system fault. Potential problem source(s): - BS defective	The diagnostic fault code is logged when the fault remains present for longer than 1 min.	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- BS defective	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the BS	- 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- BN2025	02/218001	2195457	Charging controller for auxiliary battery: Internal fault	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 elec	None	None	NO	none	Y and N	- Auxiliary battery charging unit defective - Auxiliary battery is defective	- Check auxiliary battery - Replace auxiliary battery charging unit	- 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- BN2025	02/218101	2195713	Charging controller for auxiliary battery: Shielding monitoring, line fault	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 elec	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	- 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- BN2025	02/218201	2199980	Charging controller for auxiliary battery: Auxiliary battery faulty	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 leaf 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 elec	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- BN2025	02/218301	2196225	Charging controller for auxiliary battery: Fault in cut-off relay or line fault	The diagnostic function monitors the battery separator, the wire between vehicle battery and auxiliary battery, and the charge status of the auxiliary battery			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 leaf 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 elec	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- BN2025	02/219001	2196553	Active engine mount, electric: short circuit to positive	The diagnostic function monitors the wire from the DME to the engine mount for shorts to positive	PG416	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 elec	None	None	STUEVERN_ENDE_MLS, STUEVERN	none	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	- 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- BN2025	02/219002	2196554	Active engine mount, electric: short circuit to ground	The diagnostic function monitors the wire from the DME to the engine mount for shorts to ground	PG415	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 elec	None	None	STUEVERN_ENDE_MLS, STUEVERN	none	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	- 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- BN2025	02/219004	2196556	Active engine mount, electric: open circuit	The diagnostic function monitors the electrical wire from the DME to the engine mount for opens	PG414	Engine Mount 'X' Control CircuitOpen	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 elec	None	None	STUEVERN_ENDE_MLS, STUEVERN	none	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	- 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- BN2025	02/21A210	2204176	CAN, message (status, transmission control unit, RS485) in case of undervoltage: Communication fault at PT-CAN2	The diagnostic function monitors reception, currency and checksum of the message when undervoltage is present			The fault is recognized when the message is not received within the defined period, the keep-alive counter did not fire the message, or the message had a checksum error. Underbracketage must also be present. 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 elec	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- BN2025	02/218102	2200162	CAN, message (data, transmission train, bitAF) in case of undervoltage: Communication fault at PT-CAN2	The diagnostic function monitors reception, currency and checksum of the message when undervoltage is present			The fault is recognized when the message is not received within the defined period, the keep-alive counter did not fire the message, or the message had a checksum error. Underbracketage must also be present. 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 elec	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- BN2025	02/21F134	2201700	Electronic transmission control (ES): PT-CAN, PT-CAN2, Communication fault	The diagnostic function monitors the two communication paths A CAN and FA CAN between BS, Transmission and the engine-implementer (ECU)	U1136	Last Communication With TCM via A and FA CAN	The fault is recognized when communications BS, ECU via A and FA CAN	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	Bus status (signal redundancy)	N	- Interference in communications to ECU via A and FA CAN	- 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: - Trip computer is emergency program	Breakdown notice: None	None
							The fault is recognized when the message is not received in the			Voltage condition: - Onboard elec								- ECE emissions warning lamp off - ECE electronic engine power reduction off - CC message: none				

MEVD17.2- BN2020	0x028454	1348862	DME/DEE PT-CAN Communication fault	The diagnostic function monitors the FA-CAN	U1185	Lost Communication with FA-CAN	Communication	FA-CAN	The fault is recognized when a short circuit is present. Potential problem source(s): - Defect in FA-CAN plug(s) or wiring harness	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	N	- Defect in FA-CAN plug(s) or wiring harness	- Carry out system analysis	- 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	Possible apparent symptoms: - No tachometer display in the instrument cluster - Brief rpm drop when IMRA automatic climate control is activated etc.	Breakdown notice: None	None	
MEVD17.2- BN2020	0x028426	1348704	DME/DEE FlexRay bus Communication fault	The diagnosis monitors the FlexRay	U118E	Lost Communication With FlexRay	Communication	FlexRay	The fault is recognized when a short circuit is present. Potential problem source(s): - Defective FlexRay plug or wiring harness	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	Physical bus status	N	- Defective FlexRay plug or wiring harness	- Carry out system analysis	- ECE emissions warning 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	Possible apparent symptoms: - DSC Failure - Cruise control failure	Breakdown notice: None	None	
MEVD17.2- BN2020	0x028486	1348866	DME/DEE PT-CAN2 Communication fault	The diagnostic function monitors the A-CAN	U1184	Lost Communication with A-CAN			The fault is recognized when a short circuit is present. Potential problem source(s): - Defect in A-CAN plug(s) or wiring harness	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	N	- Defect in A-CAN plug(s) or wiring harness	- 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	Possible apparent symptoms: None	Breakdown notice: None	None	
MEVD17.2- BN2020	0x028BFF	1347019	Dummy network DTC network DTC	No PP necessary					No PP necessary Potential problem source(s): - No PP necessary	No PP necessary	none	Voltage condition: - Onboard elec	None	None	No PP necessary	No PP necessary	No PP necessary	- No PP necessary	- No PP necessary	- 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	Possible apparent symptoms: No PP necessary	Breakdown notice: No PP necessary	No PP necessary	
MEVD17.2- BN2020	0x028C10	1347016																						
MEVD17.2- BN2020	0x028C11	1347017																						
MEVD17.2- BN2020	0x028C12	1347018																						
MEVD17.2- BN2020	0x028D10	1347092	LIN message (radiator shutter, 0x3): communication fault from radiator shutter drive	The diagnostic function monitors the connection between the DME and the radiator vent solenoid actuator					The fault is recognized when interference occurs on the LIN bus. Potential problem source(s): - Defect in wiring harness to radiator vent solenoid assembly - Radiator vent solenoid assembly defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	systemcheck_gf	status_systemcheck_gf	N	- Defect in wiring harness to radiator vent solenoid assembly - Radiator vent solenoid assembly defective	- Check wiring harness to radiator vent solenoid assembly - Replace radiator vent solenoid 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	Possible apparent symptoms: Engine could overheat if the vent solenoid remains closed while demand for engine power is high.	Continued driving possible, avoid subjecting engine to major loads (mountain driving, full throttle, etc.)	Breakdown notice: None	None
MEVD17.2- BN2020	0x028D15	1347097	LIN message (battery charger, auxiliary battery): Discharge fault	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 10 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 elec	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	Possible apparent symptoms: Steering support from power steering limited	Breakdown notice: None	None	
MEVD17.2- BN2020	0x028E16	1347098	LIN message (battery charging unit, H-bridge): Charging mode not possible	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 elec	None	None	NO	none	Y and N	- "Auxiliary battery charging unit" defective - Auxiliary battery is defective	- Check auxiliary battery - Replace auxiliary battery charging unit	- 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	Possible apparent symptoms: Steering support from power steering limited	Breakdown notice: None	None	
MEVD17.2- BN2020	0x028D17	1347099	LIN message (charging regulator for auxiliary battery, status, power generation, electrical system 2, 0x5): Missing	The diagnostic function monitors LIN communications with the "auxiliary battery charging unit"					The fault is recognized when the status of the "auxiliary battery charging unit" is missing. Potential problem source(s): - Defective wiring harness - Poor screw connection at battery terminal - Interference from other devices on LIN bus - "Auxiliary battery charging unit" defective	This fault is logged in the control module's fault memory immediately	none	Voltage condition: - Onboard elec	None	None	NO	none	N	- Defective wiring harness - Poor screw connection at battery terminal - Interference from other devices on LIN bus - "Auxiliary battery charging unit" defective	- Check wiring harness - Check screw connections at battery terminals - Watch for faults in other devices on the bus - Check "auxiliary battery charging unit"	- 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	Possible apparent symptoms: Breakdown in extreme cases	Breakdown notice: None	None	
MEVD17.2- BN2020	0x028D18	1347100	LIN message (battery charger, cut-off relay or line): Electrical fault	The diagnostic function monitors the battery separator, the wires between vehicle battery and auxiliary battery, and the charge status of the auxiliary battery					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 10 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 elec	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	Possible apparent symptoms: Steering support from power steering limited	Breakdown notice: None	None	
MEVD17.2- BN2020	0x028D19	1347101	LIN message (battery charging unit, second voltage level): malfunction	Open					The fault is recognized when ? Potential problem source(s): - ?		none	Voltage condition: - Onboard elec			None	- ?	- ?	- ?	new for 1-11-03-300	Possible apparent symptoms	Breakdown notice			
MEVD17.2- BN2020	0x028E10	1347348	LIN bus, communication: No signal	The diagnostic function monitors the LIN bus					The fault is recognized when no LIN message is received. Potential problem source(s): - LIN bus defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	N	- LIN bus defective	- Check LIN bus	- 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	Possible apparent symptoms: None	Breakdown notice: None	None	
MEVD17.2- BN2020	0x028E11	1347349																						
MEVD17.2- BN2020	0x028F01	1347489	Intelligent battery sensor (IBS), LIN bus: not correct	The diagnostic function monitors LIN communications with the IBS					The fault is recognized when the IBS fails to respond. Potential problem source(s): - Defective wiring harness - Check screws on battery terminals - Interference from other devices on LIN bus - IBS defective	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	NO	none	N	- Defective wiring harness - Check screws on battery terminals - Interference from other devices on LIN bus - IBS defective	- Check wiring harness - Watch for faults related to other devices on LIN bus - 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	Possible apparent symptoms: Breakdown in extreme cases	Breakdown notice: None	None	
MEVD17.2- BN2020	0x029011	1347191	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 - Communication 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 elec	None	None	Yes, 0x2F8BF03_STEUERN_ERK	none	N	- Defect in wiring harness to water pump - Communication problem on BSD bus - Defective water pump	- 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	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 130/130 °C as before job the diagnostic fault code 0x2F702 or 0x26A08 "Water pump" (radiator speed regulator) can be triggered. Ignore this fault and delete it → Carry out tester job at 130/130 °C
MEVD17.2- BN2020	0x029021	1347207	Radiator shutter, LIN communication: Timeout	The diagnostic function monitors communications between DME and the radiator vent solenoid					The fault is recognized when interference occurs on the LIN bus. Potential problem source(s): - Interference on the LIN bus	This fault is logged in the control module's fault memory immediately	Terminal 15	Voltage condition: - Onboard elec	None	None	systemcheck_gf	status_systemcheck_gf	N	- Interference on the LIN bus	- If the diagnostic fault code has been entered with a frequency > 3 or is present continuously then replace the radiator vent solenoid assembly - Otherwise clear ECU fault memory, no further action required	- 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	Possible apparent symptoms: Engine could overheat if the vent solenoid remains closed while demand for engine power is high.	Continued driving possible, avoid subjecting engine to major loads (mountain driving, full throttle, etc.)	Breakdown notice: None	None
MEVD17.2- BN2020	0x029403	1347270	Message (request, torque, crankshaft, driving dynamics, SE 1.4) not correct, receiver DME/DEE, transmitter ICM	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 elec	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	Possible apparent symptoms: - The engine can stall in response to rapid steering motion to full-lock.	Breakdown notice: None	None	
MEVD17.2- BN2020	0x029404	1347272	No message (request, torque, crankshaft, driving dynamics, SE 1.4) not correct, receiver DME/DEE, transmitter ICM	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 elec	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	Possible apparent symptoms: - The engine can stall in response to rapid steering motion to full-lock.	Breakdown notice: None	None	
MEVD17.2- BN2020	0x029406	1347278	Message (request, torque, crankshaft, driving dynamics, SE 1.4) checksum error, receiver DME/DEE, transmitter ICM	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 elec	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	Possible apparent symptoms: Cruise control failure	Breakdown notice: None	None	
									The fault is recognized when the message is not received within the defined period, the keep-alive counter did not time the message, or the message had a			Voltage condition: - Onboard elec								- ECE emissions warning lamp off - ECE electronic engine power reduction off				

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