This file contains information transposed from the BMW Car Club of Bulgaria forum site (Errors and omissions excluded) –

ABS 1

0	Unidentified Error
1	ABS Hydro aggregate
2	Throttle Valve Signal
3	Ignition Time Error
4	Rear left speed sensor faulty or ABS inlet valve
5	Right rear speed sensor faulty or ABS inlet valve
6	Right front speed sensor faulty or ABS inlet valve
7	Left front speed sensor faulty or ABS inlet valve
В	Rear left ABS valve faulty
9	Rear right ABS valve faulty
10	Front right ABS valve faulty
11	Front left ABS valve faulty
12	Gearbox intervention
13	Idle speed RPM increasing
14	Valve relay fault
15	ABS Back-delivery pump fault
16	Throttle valve reduction
17	Front left wheel sensor
18	Front left wheel sensor
19	Accumulator pressure limit
20	Front left wheel sensor or EGS intervention error
21	Front left wheel sensor or ABS/ASC control unit defect
22	Speed signal sensor faulty
23	Equipment error (Automatic/Manual)
24	Incorrect gear wheel on one of the four wheels

25	Line interruption – brake light switch
27	Idle speed feed back signal
30	Left rear wheel speed sensor cable
31	Right rear wheel speed sensor cable
32	Right front wheel speed sensor cable
33	Left front (E38/E39) or Right (E46) wheel speed sensor cable
34	Wheel sensor, front right or ASC switch over valve
35	Brake fluid level signal error
36	Front right wheel sensor or ignition signal error
37	Front right wheel sensor or ABS/ASC Control unit internal error
38	Gas valve adjustment error
39	Servo motor electrical error
40	Gas valve potentiometer error
41	Steering angle error
47	Fault, outlet valve, rear left
48	Fault, outlet valve, rear right
49	Wheel sensor, rear left or outlet valve front right
50	Wheel sensor, rear left or outlet valve front left
51	Fault, inlet valve, rear left
52	Wheel sensor rear left or inlet valve rear right
53	Wheel sensor rear left or inlet valve front right
54	Fault, inlet valve, front left
55	Fault, ASC shutoff valve
56	CAN Error (short circuit)
57	Throttle valve signal from the DME faulty
58	CAN Error (Open circuit to DME)
59	Fault, ASC shutoff valve

Signal, terminal 30 faulty

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61 Central blocking 62 Max. ABD adjustment time 63 Processor fault in the control unit 64 Continuous control due to undefined signal interference 65 Wheel sensor rear right or bad feedback signal 66 Wheel sensor rear right or wheel speed sensor power supply 67 **CAN Error** 68 Wheel sensor rear right 69 Wheel sensor rear right 75 ASC indicator lamp 81 Inlet valve front left 82 Inlet valve front right 83 Inlet valve rear left Inlet valve rear right 84 85 Outlet valve front left 86 Outlet valve front right 87 Outlet valve rear left 88 Outlet valve rear right 89 Power supply too low 90 Time limitation: passive switching 91 **CAN Error** 92 Pressure sensor (pre charging pump) 94 RPM sensor (Test) 95 Activation 96 Actuator test 97 ASC intake valve / Steering angle sensor 98 Separate valve

Electromagnetic switch over valve

99

- 100 Electromagnetic switch over valve
- 103 Brake light switch
- 104 Steering angle sensor
- 105 Brake light switch
- 106 Lateral acceleration sensor
- 107 RPM sensor (Gradient)
- 113 ABS/ASC feed back pump
- 115 ABS/ASC control unit internal error
- 118 Electromagnetic or mechanical influence on the wheel speed signals
- 120 Power supply voltage too high (>18V)
- 129 ABS/ASC Main relay circuit faulty
- 130 Power supply fault at the magnetic valves
- 131 Wrong current at magnetic valves
- 133 Power supply > too high
- 145 CAN chip in the ABS/ASC control unit
- 146 CAN Error
- 147 CAN Error engine intervention
- 148 CAN Error engine speed (RPM)
- 149 CAN Error DME/DDE connection
- 150 CAN Error EGS
- 151 Coding Error
- 152 DSC button
- 161 RPM sensor
- 162 RPM Signal
- 163 Lateral acceleration sensor
- 164 Lateral acceleration sensor
- 165 Pressure sensor 1
- 166 Pressure sensor 2

167	Pressure sensors	
168	Pressure sensors power s	supply
177	Pre charge pump	
178	Pre charge pump	
180	Steering angle sensor (sig	gnal 1)
181	Steering angle sensor (identification)	
182	Steering angle sensor (CAN)	
183	Steering angle sensor (internal)	
184	Steering angle sensor (of	fset)
		ABS 2
0	Unidentified error – erase	the error memory
2	EML interface fault –	Check the connecting lines from Pins 6, 8 & 14 of the EML. If the fault cannot be located, reset the error memory and run an EGS Diagnostic check.
3	DME interface fault –	Check control line Pin Check the size of tyres on all rims, check wheel bearing clearance, pulse wheels, rotational speed sensor (visual check for damage and dirt) 39 to the DME
4	Sensor fault rear left -	Check the size of tyres on all rims, check wheel bearing clearance, pulse wheels, rotational speed sensor (visual check for damage and dirt)
5	Sensor fault rear right	-Check the size of tyres on all rims, check wheel bearing clearance, pulse wheels, rotational speed sensor (visual check for damage and dirt)
6	Sensor fault front right	-Check the size of tyres on all rims, check wheel bearing clearance, pulse wheels, rotational speed sensor (visual check for damage and dirt)
7	Sensor fault front left -	Check the size of tyres on all rims, check wheel bearing clearance, pulse wheels, rotational speed sensor (visual check for damage and dirt)
8	ABS valve fault rear left	- Check the plug and socket connection on the ABS hydraulic aggregates for correct seating and corrosion. Check the wire from Pin 2 of the ABS/ASC unit to Pin 5 of the ABS hydraulic aggregate. If no fault is found, erase the stored fault codes and re-diagnose. If fault reoccurs replace the control unit.

9 ABS valve fault rear right - Check the plug and socket connection on the ABS hydraulic aggregates for correct seating and corrosion. Check the wire from Pin 36 of the ABS/ASC unit to Pin 7 of the ABS hydraulic aggregate. If no fault is found, erase the stored fault codes and re-diagnose. If fault reoccurs replace the control unit. 10 ABS valve fault front right - Check the plug and socket connection on the ABS hydraulic aggregates for correct seating and corrosion. Check the wire from Pin 22 of the ABS/ASC unit to Pin 3 of the ABS hydraulic aggregate. If no fault is found, erase the stored fault codes and re-diagnose. If fault reoccurs replace the control unit. 11 ABS valve fault front left - Check the plug and socket connection on the ABS hydraulic aggregates for correct seating and corrosion. Check the wire from Pin 19 of the ABS/ASC unit to Pin 1 of the ABS hydraulic aggregate. If no fault is found, erase the stored fault codes and re-diagnose. If fault reoccurs replace the control unit. 12 Plunger valve fault rear left - Check supply voltage on the magnetic valve is 12v. Check magnetic valve for visible damage and corrosion, if damaged replace the magnetic valve. 13 Plunger valve fault - Check supply voltage on the magnetic valve is 12v. Check magnetic valve for visible damage and corrosion, if damaged replace the magnetic valve. 14 - Reset the fault code and test drive the vehicle before re-ABS valve relay fault diagnosing. If fault code resets check the valve relay for correct seating and contacts for corrosion. Check relay operation by switching ignition on and off to ensure relay pulls in and check supply voltage at valve relay. 15 Rear feed pump fault - Check engine relay for correct seating and contacts for corrosion. Check ABS hydraulic aggregates earth connection and earth connection and function of pump motor. 16 ASC+T storage load valve fault - Check function of magnetic valve plunger on hydraulic aggregate. 17 Wheel sensor front/Inlet valve front left - Check connection between valve and master relay and that master relay and valve are functioning properly. 18 Wheel sensor outlet/valve front left - Check connection between valve and master relay and that master relay and valve are functioning properly. Wheel sensor/inlet valve front right - Check connection between valve and master relay 20 and that master relay and valve are functioning properly. 24 Wheel sensor/outlet valve front right - Check connection between valve and master relay and that master relay and valve are functioning properly. 33 Wheel sensor/Inlet valve rear left - Check connection between valve and master relay and that master relay and valve are functioning properly.

Wheel sensor/outlet valve rear left - Check connection between valve and master relay

and that master relay and valve are functioning properly.

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36	Inlet valve rear right	
37	Front right wheel speed sensor	
40	Rear output valve function	
49	Power supply to magnetic valves	
50	Throttle valve mechanical defect	
56	ASC separate valve function faulty	
65	ASC computer faulty	
66	DME RPM signal faulty	
68	Control unit defect – Replace ABS control unit	
72	Internal fault - Replace ABS control unit	
81	Rotational speed sensor front left - Check c and control unit for	onnection between rotational speed sensor short circuits or a broken connection
82	Rotational speed sensor front right - Check of and control unit for	onnection between rotational speed sensor short circuits or a broken connection
84	Rotational speed sensor rear left - Check co and control unit for	onnection between rotational speed sensor short circuits or a broken connection
88	Rotational speed sensor rear right - Check c and control unit for	onnection between rotational speed sensor short circuits or a broken connection
97	and pulse wheel a	plug and socket connections of rotational ack air-gap between rotational speed sensor and reduce if necessary. Pulse wheel may about the property of teeth or rotational speed sensor
98	and pulse wheel a	plug and socket connections of rotational ock air-gap between rotational speed sensor and reduce if necessary. Pulse wheel may on the speed sensor of teeth or rotational speed sensor
100	pulse wheel and re	and socket connections of rotational speed gap between rotational speed sensor and duce if necessary. Pulse wheel may have f teeth or rotational speed sensor possibly
104		plug and socket connections of rotational ock air-gap between rotational speed sensor and reduce if necessary. Pulse wheel may

have incorrect number of teeth or rotational speed sensor possibly defective.

- 113 Rotational speed information front left Check plug and socket connections of rotational speed sensor. Check air-gap between rotational speed sensor and pulse wheel and reduce if necessary. Pulse wheel may have incorrect number of teeth or rotational speed sensor possibly defective.
- 114 Rotational speed information front right Check plug and socket connections of rotational speed sensor. Check air-gap between rotational speed sensor and pulse wheel and reduce if necessary. Pulse wheel may have incorrect number of teeth or rotational speed sensor possibly defective.
- 116 Rotational speed information rear left Check plug and socket connections of rotational speed sensor. Check air-gap between rotational speed sensor and pulse wheel and reduce if necessary. Pulse wheel may have incorrect number of teeth or rotational speed sensor possibly defective.
- 120 Rotational speed information rear right Check plug and socket connections of rotational speed sensor. Check air-gap between rotational speed sensor and pulse wheel and reduce if necessary. Pulse wheel may have incorrect number of teeth or rotational speed sensor possibly defective.
- 129 DME connection faulty
- 130 Throttle valve potentiometer
- 132 Pedal travel sensor Check for sensor defect short circuits and/or interruption to power supply
- 133 Valve power supply voltage too high
- 136 Fault in brake hydraulic system Check for leaks or air in brake hydraulic system.
- Failure in pump power supply Check lines to the ABS control unit and pump motor relay. Check ABS master relay for short circuit and/or interruption to power supply. Fault may result from one or all of the above conditions.
- 146 Coding fault
- 148 Motor temperature over CAN Bus
- Hydraulic pedal travel sensor Check brake system for leaks and/or air in system. Check pedal travel sensor for intermittent contact.
- Outlet valve front left or front left RPM sensor Check inlet and outlet valve connections for tightness. Ensure that rotational speed sensors have not been mixed up and if necessary, replace outlet valve.
- Outlet valve front right or front right RPM sensor Check inlet and outlet valve connections for tightness. Ensure that rotational speed

sensors have not been mixed up and if necessary, replace outlet valve.

- Outlet valve rear left or rear left RPM sensor Check inlet and outlet valve connections for tightness. Ensure that rotational speed sensors have not been mixed up and if necessary, replace outlet valve.
- Outlet valve rear right or rear right RPM sensor Check inlet and outlet valve connections for tightness. Ensure that rotational speed sensors have not been mixed up and if necessary, replace outlet valve.
- 177 Fault valve load circuit fuse Check ABS circuit fuses and relay
- 184 CAN Error
- 193 DME ignition signal faulty
- 255 Accumulator fault Replace control unit.

ABS3

5090	Left front wheel speed sensor; accident recognition
5d91	Left front wheel speed sensor; extrapolation
5d92	Left front wheel speed sensor; periodical control
5d93	Left front wheel speed sensor; accident recognition
5d94	Left front wheel speed sensor; long term control
5dA0	Right front wheel speed sensor; accident recognition
5dA1	Right front wheel speed sensor; Extrapolation
5dA2	Right front wheel speed sensor; periodical control
5dA3	Right front wheel speed sensor; accident recognition
5dA4	Right front wheel speed sensor; long term control
5dB0	Left rear wheel speed sensor; accident recognition
5dB1	Left rear wheel speed sensor; extrapolation
5dB2	Left rear wheel speed sensor; periodical control
5dB3	Left rear wheel speed sensor; accident recognition
5dB4	Left rear wheel speed sensor; long term control

5dC0	Right rear wheel speed sensor; accident recognition
5dC1 5dC2	Right rear wheel speed sensor; extrapolation Right rear wheel speed sensor; periodical control
5dC3	Right rear wheel speed sensor; accident recognition
5dC4	Right rear wheel speed sensor; long term control
5dF0	Pump engine
5dF2	Internal error Valve/ECU Hardware error, ROM/RAM check
5dF4	Power Supply < 9 volts
5dF5	Control unit internal error
5dF7	Power supply > 18 volts
5e00	Tyre test active
5e01	Tyre test timeout
5e02	Tyre test gyration sensor justification error
5e03	Tyre test gyration sensor error
5e04	Tyre test lateral acceleration sensor error
5e05	Tyre test lateral acceleration sensor error and gyration sensor
5e06	Tyre test gyration sensor wrong construction
5e07	Tyre test lateral acceleration sensor error and gyration sensor wrong construction
5e08	Tyre test steering wheel sensor error
5e11	Internal error CAN Controller
5e14	CAN Timeout DME/DDE
5e15	CAN Timeout EGS
5e16	CAN Timeout Instrument Cluster
5e18	CAN DME/DDE message faulty
5e19	CAN DME/DDE
5e1A	CAN DME/DDE Signal Error
5e1E	CAN Timeout LWS
5e1F	Steering wheel sensor; not initialized
5e59	Coding error

5e5B	Switch pressed longer than 10 seconds or faulty
5e5D	Brake fluid level switch
5e5E	Brake light switch
5e20	Pressure sensor 1 accident recognition
5e21	Pressure sensor 2 accident recognition
5e24	Pressure sensors not plausible; pressure sensor 1 / 2 not plausible
5e26	Sensor power supply
5e2F	Temperature sensor
5e30	Lateral acceleration sensor accident recognition
5e32	Lateral acceleration signal not plausible
5e38	Wheel speed sensor accident recognition
5e3C	Wheel speed not plausible
5e40	Lateral acceleration signal not plausible, offset
5e43	Lateral acceleration internal error
5e4E	DSC sensor offset check
5e4F	Long time regulation DSC