

BMW Code HEx

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0x00000000 Please check service notebook!
/**M1.3 M40*/ ENG_MODEL_ID
0x01010000 0 No Description
0x01010001 1 DME control unit
0x01010003 3 EKP relay
0x01010004 4 Idle control actuator (open)
0x01010005 5 Tank venting valve
0x01010007 7 Air-mass flow sensor
0x0101000a 10 Oxygen-sensor control
0x0101000f 15 Fault lamp
0x01010010 16 Fuel injectors, cyls. 2+4 (as of '89 model, 1+3)
0x01010011 17 Fuel injectors, cyls. 1+3 (as of '89 model, 2+4)
0x01010016 22 Idle actuator switch
0x01010017 23 Relay, oxygen-sensor heater
0x0101001c 28 Oxygen sensor
0x0101001d 29 Road-speed signal
0x01010021 33 Solenoid valve, kickdown prevention
0x01010025 37 Control-unit power supply
0x01010026 38 Immobiliser system/Body stable monitor
0x01010028 40 A/C compressor
0x0101002b 43 Idle CO potentiometer
0x0101002c 44 Intake-air temperature sensor (LMM)
0x0101002d 45 Coolant-temperature sensor (engine)
0x01010032 50 Engine torque control
0x01010033 51 Ignition timing intervention
0x01010034 52 Idle-speed switch (DKS)
0x01010035 53 Full-load switch (DSK)
0x01010036 54 Converter lockup clutch
0x01010064 100 Output stage
0x01010065 101 Engine cannot operation
/**M1.7 M40*/
0x01020000 0 No fault find
0x01020001 1 Electric fuel-pump relay EKP
0x01020003 3 Fuel injectors, cylinders 1+3
0x01020008 8 Fault lamp (US only)
0x0102000c 12 Throttle-valve potentiometer
0x0102000f 15 Knock sensor
0x01020010 16 Ignition system
0x01020012 18 Output Pin 18
0x0102001d 29 Idle-speed actuator, opening angle
0x01020020 32 Fuel injectors, cylinders 2+4
0x01020024 36 Tank venting valve
0x01020025 37 Oxygen-sensor-heating relay
0x01020029 41 Air-flow sensor
0x01020030 48 Air-conditioning compressor
0x01020036 54 Control-unit supply
0x01020037 55 1-4 cylinder ignition fault
0x0102003f 63 Torque convertor clutch lock
0x01020040 64 Ignition-timing intervention
0x01020046 70 Oxygen sensor
0x01020049 73 Road-speed signal
0x0102004c 76 Idle CO potentiometer
0x0102004d 77 Intake-air-temperature sensor
0x0102004e 78 Coolant-temperature sensor (engine)
0x01020052 82 Engine torque control-MSR
0x01020053 83 Body stable monitor/immobiliser/ASC system
0x01020055 85 Air-conditioning compressor
0x01020064 100 Output stage
0x01020098 152 Knock sensor
0x01020099 153 Knock sensor voltage fault
0x010200c8 333 DME control unit

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0x010200c9 201 Oxygen-sensor control
/**M1.7 M42 */
0x01030000 0 No fault find
0x01030001 1 Electric fuel-pump relay EKP
0x01030003 3 Fuel injectors, cylinder 1+3
0x01030008 8 Fault pump (US only)
0x0103000c 12 Throttle-valve potentiometer
0x0103000f 15 Knock sensor 1
0x01030010 16 Camshaft pulse generator
0x01030012 18 Output stage, pin 18
0x0103001d 29 Idle-speed actuator, opening angle
0x01030020 32 Fuel-injectors, cylinders 2+4
0x01030024 36 Tank venting valve
0x01030025 37 Oxygen-sensor-heating relay
0x01030029 41 Air-flow sensor
0x0103002a 42 Knock sensor 2
0x01030030 48 Air-conditioning compressor cutoff
0x01030036 54 Control-unit supply
0x01030037 55 Firing, cylinders 1-4
0x0103003f 63 Converter lockup clutch
0x01030040 64 Ignition-timing intervention
0x01030046 70 Oxygen sensor
0x01030049 73 Road-speed signal
0x0103004c 76 Idle CO potentiometer
0x0103004d 77 Intake-air-temperature sensor
0x0103004e 78 Coolant-temperature sensor (engine)
0x01030055 85 Air-conditioning compressor
0x01030064 100 Output stage
0x01030096 150 Knock sensor 1
0x01030097 151 Knock sensor 2
0x01030098 152 Evaluation circuit of knock control
0x01030099 153 Control voltage of knock control
0x010300c8 333 DME control unit
0x010300c9 201 Oxygen-sensor control
0x010300ce 206 Knock control test pulse, control modules, fault
0x010300ed 207 Knock control, regulated voltage
/**M1.7.2 M42*/
0x01040000 0 No fault find
0x01040001 1 Fuel pump relay
0x01040003 3 Injector cyl 1+3
0x01040008 8 Fault indicator lamp
0x0104000c 12 Throttle position sensor or circuit
0x0104000f 15 Knock sensor 1
0x01040010 16 Crankshaft pulse generator
0x01040012 18 Change over valve, DISA butterfly
0x0104001d 29 Idle control actuator
0x01040020 32 Injector cyl 2+4
0x01040024 36 Fuel tank evaporation ventilation valve
0x01040025 37 O2 sensor heating relay
0x01040029 41 Air flow meter(LMM)
0x0104002a 42 Knock sensor 2
0x01040030 48 Air conditioner compressor cutoff
0x01040036 54 Control system unit power supply B+
0x01040037 55 Injector cyl 1+4
0x01040040 64 Ignition timing intervention
0x01040046 70 O2 sensor signal
0x01040049 73 Vehicle speed sensor
0x0104004c 76 Idle CO potentiometer
0x0104004d 77 Intake air temperature signal
0x0104004e 78 Engine temperature signal
0x01040055 85 Air conditioner compressor
0x01040064 100 Engine control system
0x01040098 152 Control voltage of knock control

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0x01040099 153 Control voltage of knock control
0x010400c9 201 O2 sensor control
0x010400ff 255 DME control unit
/*M1.7.2 M43 */
0x01050001 1 Electric fuel-pump relay pump
0x01050002 2 Idle-speed actuator, closing coil
0x01050003 3 Fuel injectors, cylinders 1+3
0x01050008 8 Fault lamp (US only)
0x0105000C 12 Throttle-valve potentiometer
0x0105000F 15 Knock sensor 1
0x01050010 16 Camshaft pluse generator
0x01050012 18 Change-over valve, DISA butterfly
0x0105001D 29 Idle-speed actuator, opening angle
0x01050020 32 Fuel injectors, cylinders 2+4
0x01050024 36 Tank venting valve
0x01050025 37 Oxygen-sensor-heating relay
0x01050029 41 Air-flow sensor
0x0105002A 42 Knock sensor 2
0x0105002E 46 Electric fan
0x01050030 48 Air-conditioning compressor cutoff
0x01050036 54 Control-unit supply
0x01050037 55 Ignition, cylinders 1-4
0x01050040 64 Ignition-timingg intervention
0x01050046 70 Oxygen sensor
0x01050049 73 Road-speed signal
0x0105004C 76 Idle CO potentiometer
0x0105004D 77 Intake-air-temperature sensor
0x0105004E 78 Coolant-temperature sensor (engine)
0x01050051 81 Electronic anti-theft vehicle disable EWS II
0x01050052 82 A/C-compressor control
0x01050055 85 Air-conditioning compressor
0x01050064 100 Output stage
0x010500C8 333 DME control unit
0x010500C9 201 Oxygen-sensor control
0x010500CE 152 Evaluation circuit of knock control
0x010500CF 153 Control voltage of knock control
0x010500DC 220 Electronic anti-theft vehicle disable EWS II
/*M1.1 M20/M30 */
0x01060000 0 No fault find
0x01060001 1 DME control unit
0x01060003 3 EKP relay
0x01060004 4 Idle actuator
0x01060005 5 Tank venting valve
0x01060007 7 Air-mass flow sensor
0x01060008 8 Fault indicator lamp
0x0106000A 10 Oxygen-sensor control
0x0106000c 12 Throttle position sensor or circuit
0x0106000f 15 Fault lamp
0x01060010 16 Fuel injectors, cyl. 1+3+5
0x01060011 17 Fuel injectors, cyl. 2+4+6
0x01060016 22 Idle actuator
0x0106001C 28 Oxygen sensor
0x01060012 18 Change over valve, DISA butterfly
0x0106001d 29 Idle control actuator
0x01060020 32 Injector cyl 2+4
0x01060024 36 Fuel tank evaporation ventilation valve
0x01060025 37 Control-unit power supply
0x01060029 41 Air flow meter(LMM)
0x0106002a 42 Knock sensor 2
0x0106002C 44 Intake-air temperature sensor (LMM)
0x0106002D 45 Coolant-temperature sensor (engine)
0x01060030 48 Air conditioner compressor cutoff
0x01060033 51 Ignition-timing intervention

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0x01060034 52 Idle-speed switch (DKS)
0x01060035 53 Full-load switch (DKS)
0x01060036 54 Control system unit power supply B+
0x01060037 55 Injector cyl 1+4
0x01060040 64 Ignition timing intervention
0x01060046 70 O2 sensor signal
0x01060049 73 Vehicle speed sensor
0x0106004c 76 Idle CO potentiometer
0x0106004d 77 Intake air temperature signal
0x0106004e 78 Engine temperature signal
0x01060055 85 Air conditioner compressor
0x01060064 100 Engine control system
0x01060098 152 Control voltage of knock control
0x01060099 153 Control voltage of knock control
0x010600c9 201 O2 sensor control
0x010600ff 255 DME control unit
/*M1.3 M20/M30*/
0x01070000 0 No Description
0x01070001 1 DME control unit
0x01070003 3 EKP relay
0x01070004 4 Idle actuator
0x01070005 5 Tank venting valve
0x01070006 6 Air flow sensor circuit
0x01070007 7 Air-mass flow sensor
0x0107000a 10 Oxygen-sensor control
0x0107000f 15 Fault pump
0x01070010 16 IFuel injectors, cyl. 1+3+5
0x01070011 17 IFuel injectors, cyl. 2+4+6
0x01070016 22 Idle actuator
0x01070017 23 Oxygen-sensor heater relay
0x0107001c 28 Oxygen sensor
0x0107001d 29 Road-speed signal
0x01070021 33 Solenoid valve, kickdown prevention
0x01070025 37 Control-unit power supply
0x01070026 38 DWA/ASC
0x01070028 40 A/C compressor
0x0107002b 43 Idle CO potentiometer
0x0107002c 44 Intake-air temperature sensor (LMM)
0x0107002d 45 Coolant-temperature sensor (engine)
0x01070032 50 MSR
0x01070033 51 Ignition-timing intervention
0x01070034 52 Idle-speed switch (DKS)
0x01070035 53 Full-load switch (DKS)
0x01070036 54 Converter lockup clutch
0x01070064 100 Output stage
0x01070065 101 Engine cannot operation
/*M3.1 M50B20/25*/
0x01080000 0 No fault found
0x01080001 1 Fuel pump relay
0x01080002 2 Idle speed control
0x01080003 3 Injector cylinder 1
0x01080004 4 Injector cylinder 3
0x01080005 5 Injector cylinder 2
0x01080006 6 Fuel injector output stage
0x01080007 7 No Description
0x01080008 8 Fault indicator lamp
0x0108000c 12 Throttle position sensor or circuit
0x01080010 16 Crankshaft pulse generator
0x01080012 18 Control unit, pin 18 stage
0x01080013 19 Engine running output stage
0x01080017 23 DIS Ignition cylinder 2
0x01080018 24 DIS Ignition cylinder 3
0x01080019 25 DIS Ignition cylinder 1

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# Bmw Code Sheet.txt

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0x0108001a 26 Control unit supply voltage
0x0108001d 29 Idle speed control valve opening winding
0x0108001f 31 Injector cylinder 5
0x01080020 32 Injector cylinder 6
0x01080021 33 Injector cylinder 4
0x01080024 36 Fuel tank evaporation ventilation valve
0x01080025 37 O2 sensor heating relay
0x01080029 41 Air mass meter
0x0108002e 46 Engine running output stage
0x01080030 48 Air conditioner compressor cutoff
0x01080032 50 DIS Ignition cylinder 5
0x01080033 51 DIS Ignition cylinder 6
0x01080034 52 DIS Ignition cylinder 4
0x01080036 54 Control system unit power supply B+
0x01080037 55 DIS ignition system output stage
0x0108003e 62 EML intervention signal
0x0108003f 63 Receive transmission road signal
0x01080040 64 Ignition timing intervention
0x01080043 67 Crankshaft pulse generator
0x01080046 70 O2 sensor signal
0x01080049 73 Vehicle speed sensor
0x0108004d 77 Intake air temperature signal
0x0108004e 78 Engine temperature signal
0x01080051 81 Anti-theft system control signal
0x01080052 82 MSR Intervention signal
0x01080053 83 ASC intervention signal
0x01080055 85 Air conditioner compressor
0x01080064 100 Output stage
0x01080099 153 Control voltage of knock control
0x010800c8 200 Control unit internal fault
0x010800c9 201 O2 sensor control
0x010800ca 202 Control unit memory illogical
0x010800cb 203 DIS primary circuit monitoring
0x010800cc 204 Idle-speed increases during MSR operation
0x0108000e 206 Knock control test pulse
0x010800ff 255 Control unit internal fault
/*M3.3.1 M50B25 */
0x01090000 0 No fault found
0x01090001 1 Fuel pump relay(/EKP)
0x01090002 2 Idle speed control valve closing winding
0x01090003 3 Injector cylinder 5
0x01090004 4 Injector cylinder 6
0x01090005 5 Injector cylinder 4
0x01090006 6 Fuel-injector output stage without cylinder assignment
0x01090007 7 VANOS solenoid valve
0x01090008 8 Fault indicator lamp (US model only)
0x0109000d 13 Oxygen sensor
0x0109000f 15 Ignition-circuit monitoring
0x01090010 16 Crankshaft pulse generator
0x01090011 17 Crankshaft sensor
0x01090017 23 Ignition cylinder 4
0x01090018 24 Ignition cylinder 6
0x01090019 25 Ignition cylinder 5
0x0109001a 26 Control unit supply voltage(B+)
0x0109001d 29 Idle speed control valve opening winding
0x0109001f 31 Fuel injector, cylinder 3
0x01090020 32 Fuel injector, cylinder 2
0x01090021 33 Fuel injector, cylinder 1
0x01090024 36 Fuel tank evaporation ventilation valve
0x01090025 37 O2 sensor heating relay
0x01090029 41 Air-mass flow sensor (HFM)
0x0109002a 42 Road-speed sensor
0x01090030 48 Air conditioner compressor cutoff

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# Bmw Code Sheet.txt

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0x01090032 50 Ignition cylinder 1
0x01090033 51 Ignition cylinder 2
0x01090034 52 Ignition cylinder 3
0x01090036 54 Control-unit power supply via main relay (DME)
0x01090039 57 Gearbox intervention for shifts (only with EGS)
0x0109003e 62 Signal, electronic engine-power control (EML)
0x01090042 66 Signal, burglar-alarm system(DWA)
0x01090045 69 Knock sensor 2
0x01090046 70 Knock sensor 1
0x01090049 73 Throttle-valve potentiometer
0x0109004d 77 Intake air temperature signal
0x0109004e 78 Engine-temperature sensor (coolant)
0x01090051 81 Anti-theft system control signal
0x01090052 82 Intervention, engine-dragtorque control (MSR)
0x01090053 83 Intervention, Automatic Stability control (ASC)
0x01090064 100 Unknown output stage
0x01090065 101 Output stage, group 2
0x010900c8 200 DME Control unit (RAM,ROM/EPROM)
0x010900c9 201 O2 sensor control
0x010900ca 202 Fault memory
0x010900cc 204 Idle-speed increases during MSR operation
0x010900ce 206 Knock control test pulse
0x010900dc 220 Electronic immobilizer EWS II
0x010900ff 255 Control unit internal fault
//MS40.0 M50B20 */
0x010A0001 1 Ignition, cylinder 1
0x010A0002 2 Ignition, cylinder 3
0x010A0003 3 Ignition, cylinder 5
0x010A0005 5 Fuel injector, cylinder 6
0x010A0006 6 Fuel injector, cylinder 4
0x010A000a 10 A/C compressor signal
0x010A000c 12 Road-speed signal
0x010A000e 14 Gearbox intervention
0x010A000f 15 Electronic immobilizer EWS II
0x010A0016 22 Fuel injector, cylinder 3
0x010A0017 23 Fuel injector, cylinder 1
0x010A0018 24 A/C compressor control
0x010A0019 25 Variable camshaft setting (VANOS)
0x010A001b 27 Idle-actuator electrics
0x010A001d 29 Ignition, cylinder 2
0x010A001e 30 Ignition, cylinder 4
0x010A001f 31 Ignition, cylinder 6
0x010A0021 33 Fuel injector, cylinder 5
0x010A0031 49 Control-unit supply terminal 15
0x010A0032 50 Fuel injector, cylinder 2
0x010A0033 51 Tank-ventilation electrics
0x010A0034 52 Fuel-pump relay
0x010A0035 53 Oxygen-sensor heating
0x010A003e 62 Ignition-signal acknowledgement
0x010A003f 63 Knock sensor 2, cylinders 4+5+6
0x010A0040 64 Knock sensor 1, cylinders 1+2+3
0x010A0044 68 Hot-film air-mass flow sensor
0x010A004b 75 Oxygen-sensor voltage
0x010A004d 77 Throttle-valve potentiometer
0x010A004f 79 Crankshaft pulse generator
0x010A0051 81 Coolant-temperature sensor (engine)
0x010A0054 84 Camshaft pulse generator
0x010A0055 85 Intake-air temperature sensor
0x010A0061 97 Tank-venting-valve mechanics
0x010A0062 98 Idle-actuator mechanics
0x010A0063 99 Oxygen-sensor control
0x010A0064 100 Control unit
0x010A00c8 200 Oxygen-sensor control

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# Bmw Code Sheet.txt

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0x010A00C9 201 Idle-actuator mechanics
0x010A00CB 203 Adaptation, throttle-valve potentiometer
0x010A00CC 204 Measuring path, ignition-signal acknowlegem
0x010A00CE 206 Mechanics-variable camshaft setting (VANOS)
0x010A00CF 207 Speed signal
0x010A00D1 209 Electronic immobilizer EWS II
/*MS40.1 M50B20*/
0x010B0001 1 Ignition, cylinder 1
0x010B0002 2 Ignition, cylinder 3
0x010B0003 3 Ignition, cylinder 5
0x010B0005 5 Fuel injector, cylinder 6
0x010B0006 6 Fuel injector, cylinder 4
0x010B000a 10 A/C compressor signal
0x010B000c 12 Road-speed signal
0x010B000E 14 Gearbox intervention
0x010B000F 15 Electronic immobilizer EWS II
0x010B0016 22 Fuel injector, cylinder 3
0x010B0017 23 Fuel injector, cylinder 1
0x010B0018 24 A/C compressor control
0x010B0019 25 Variable camshaft setting (VANOS)
0x010B001b 27 Idle-actuator electrics
0x010B001D 29 Ignition, cylinder 2
0x010B001E 30 Ignition, cylinder 4
0x010B001F 31 Ignition, cylinder 6
0x010B0021 33 Fuel injector, cylinder 5
0x010B0031 49 Control-unit supply terminal 15
0x010B0032 50 Fuel injector, cylinder 2
0x010B0033 51 Tank-ventilation electrics
0x010B0034 52 Fuel-pump relay
0x010B0035 53 Oxygen-sensor heating
0x010B003E 62 Ignition-signal acknowlegem
0x010B003F 63 Knock sensor 2, cylinders 4+5+6
0x010B0040 64 Knock sensor 1, cylinders 1+2+3
0x010B0044 68 Hot-film air-mass flow sensor
0x010B004B 75 Oxygen-sensor voltage
0x010B004D 77 Throttle-valve potentiometer
0x010B004F 79 Crankshaft pulse generator
0x010B0051 81 Coolant-temperature sensor (engine)
0x010B0054 84 Camshaft pulse generator
0x010B0055 85 Intake-air temperature sensor
0x010B0061 97 Tank-venting-valve mechanics
0x010B0062 98 Idle-actuator mechanics
0x010B0063 99 Oxygen-sensor control
0x010B0064 100 Control unit
0x010B00C8 200 Oxygen-sensor control
0x010B00C9 201 Idle-actuator mechanics
0x010B00CB 203 Adaptation, throttle-valve potentiometer
0x010B00CC 204 Measuring path, ignition-signal acknowlegem
0x010B00CE 206 Mechanics-variable camshaft setting (VANOS)
0x010B00CF 207 Speed signal
0x010B00D1 209 Electronic immobilizer EWS II
/*M3.3.1 M50B30*/
0x010C0000 0 No fault found
0x010C0001 1 Fuel pump relay(/EKP)
0x010C0002 2 Idle speed control valve closing winding
0x010C0003 3 Injector cylinder 5
0x010C0004 4 Injector cylinder 6
0x010C0005 5 Injector cylinder 4
0x010C0006 6 Fuel-injector output stage without cylinder assignment
0x010C0007 7 VANOS solenoid valve
0x010C0008 8 Fault indicator lamp (US model only)
0x010C000d 13 Oxygen sensor
0x010C000f 15 Ignition-circuit monitoring

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0x010C0010 16 Crankshaft pulse generator
0x010C0011 17 Crankshaft sensor
0x010C0017 23 Ignition cylinder 4
0x010C0018 24 Ignition cylinder 6
0x010C0019 25 Ignition cylinder 5
0x010C001a 26 Control unit supply voltage(B+)
0x010C001d 29 Idle speed control valve opening winding
0x010C001f 31 Fuel injector, cylinder 3
0x010C0020 32 Fuel injector, cylinder 2
0x010C0021 33 Fuel injector, cylinder 1
0x010C0024 36 Fuel tank evaporation ventilation valve
0x010C0025 37 O2 sensor heating relay
0x010C0029 41 Air-mass flow sensor (HFM)
0x010C002a 42 Road-speed sensor
0x010C0030 48 Air conditioner compressor cutoff
0x010C0032 50 Ignition cylinder 1
0x010C0033 51 Ignition cylinder 2
0x010C0034 52 Ignition cylinder 3
0x010C0036 54 Control-unit power supply via main relay (DME)
0x010C0039 57 Gearbox intervention for shifts (only with EGS)
0x010C003e 62 Signal, electronic engine-power control (EML)
0x010C0042 66 Signal, burglar-alarm system(DWA)
0x010C0045 69 Knock sensor 2
0x010C0046 70 Knock sensor 1
0x010C0049 73 Throttle-valve potentiometer
0x010C004d 77 Intake air temperature signal
0x010C004e 78 Engine-temperature sensor (coolant)
0x010C0051 81 Anti-theft system control signal
0x010C0052 82 Intervention, engine-dragtorque control (MSR)
0x010C0053 83 Intervention, Automatic Stability control (ASC)
0x010C0064 100 Unknown output stage
0x010C0065 101 Output stage, group 2
0x010C00C8 200 DME Control unit (RAM,ROM/EPROM)
0x010C00C9 201 O2 sensor control
0x010C00CA 202 Fault memory
0x010C00CC 204 Idle-speed increases during MSR operation
0x010C00CE 206 Knock control test pulse
0x010C00DC 220 Electronic immobilizer EWS II
0x010C00ff 255 Control unit internal fault
//0x01010D00 //M1.2 S38*/
0x010D0001 1 DME control unit
0x010D0003 3 TR signal
0x010D0004 4 Idle actuator (opening)
0x010D0005 5 Tank venting valve
0x010D0007 7 Air-mass flow sensor
0x010D000A 10 Oxygen-sensor control
0x010D000F 15 Fault pump
0x010D0010 16 Fuel injectors, cyl. 1+3+5
0x010D0011 17 Fuel injectors, cyl. 2+4+6
0x010D0016 22 Idle actuator (Closing)
0x010D0017 23 Relay, secondary air pump
0x010D001C 28 Oxygen sensor
0x010D001D 29 Road-speed signal
0x010D0025 37 Control-unit power supply
0x010D0026 38 ASC Intervention
0x010D0028 40 A/C compressor
0x010D002B 43 Idle CO potentiometer
0x010D002C 44 Intake-air temperature sensor
0x010D002D 45 Coolant-temperature sensor(engine)
0x010D0033 51 Ignition-timing intervention
0x010D0034 52 Idle-speed switch
0x010D0035 53 Full-load switch
0x010D0064 100 Output stage

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0x010D0065 101 Engine cannot operation
/**M3.3 S38 */
0x010E0000 0 No Description
0x010E0001 1 EKP relay
0x010E0002 2 Idle-actuator closing winding
0x010E0003 3 Fuel injector, cylinder 1
0x010E0004 4 Fuel injector, cylinder 3
0x010E0005 5 Fuel injector, cylinder 2
0x010E0006 6 Fuel injector output stage
0x010E0008 8 Fault lamp (US only)
0x010E000c 12 Oxygen sensor 2
0x010E000d 13 Oxygen sensor
0x010E000f 15 Ignition-circuit monitoring
0x010E0010 16 Crankshaft pluse generator
0x010E0011 17 Pulse genrator, camshaft
0x010E0016 22 Ignition, cylinder 7
0x010E0017 23 Ignition, cylinder 6
0x010E0018 24 Ignition, cylinder 4
0x010E0019 25 Ignition, cylinder 1
0x010E001a 26 Control-unit supply B+
0x010E001d 29 Idle-actuator opening winding
0x010E001f 31 Fuel injector, cylinder 5
0x010E0020 32 Fuel injector, cylinder 6
0x010E0021 33 Fuel injector, cylinder 4
0x010E0022 34 Ignition, cylinder 2
0x010E0024 36 Tank ventilation
0x010E0025 37 Oxygen-sensor heating
0x010E0029 41 Air-mass flow sensor (LMM)
0x010E002a 42 Road-speed sensor
0x010E002e 46 Free SG output stage
0x010E0030 48 Air-conditioning compressor cutoff
0x010E0031 49 Ignition, cylinder 2
0x010E0032 50 Ignition, cylinder 3
0x010E0033 51 Ignition, cylinder 8
0x010E0034 52 Ignition, cylinder 5
0x010E0036 54 Control-unit power supply via main relay (DME)
0x010E003e 62 EML intervention signal
0x010E0041 65 Air-conditioning compressor
0x010E0042 66 Signal, burglar-alarm system DWA
0x010E0043 67 Knock sensor 4
0x010E0044 68 Knock sensor 3
0x010E0045 69 Knock sensor 2
0x010E0046 70 Knock sensor 1
0x010E0049 73 Throttle-valve potentiometer
0x010E004d 77 Intake-air-temperature sensor
0x010E004e 78 Engine-temperature sensor (coolant)
0x010E0053 83 ASC intervention signal
0x010E0064 100 Output stage, group 1
0x010E0065 101 Output stage, group 2
0x010E00c8 333 DME control unit(RAM,ROM/EPROM)
0x010E00c9 201 Oxygen-sensor control
0x010E00ca 202 Fault memory
0x010E00cb 203 O2 sensor control 2
0x010E00cc 204 Idle-speed increases during MSR operation
0x010E00cd 205 Transmission intervention during shifts
0x010E00ce 206 Knock control test pulse
0x010E00d2 210 CAN interface, transmission intervention
0x010E00DC 220 Electronic immobilizer EWS II
//0x01010F00 /**M3.3 S50*/
0x010F0000 0 No Description
0x010F0001 1 EKP relay
0x010F0002 2 Idle-actuator closing winding
0x010F0003 3 Fuel injector, cylinder 1

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0x010F0004 4 Fuel injector, cylinder 3
0x010F0005 5 Fuel injector, cylinder 2
0x010F0006 6 Fuel injector output stage
0x010F0008 8 Fault lamp (US only)
0x010F000c 12 Oxygen sensor 2
0x010F000d 13 Oxygen sensor
0x010F000f 15 Ignition-circuit monitoring
0x010F0010 16 Crankshaft pluse generator
0x010F0011 17 Pulse gengrator, camshaft
0x010F0016 22 Ignition, cylinder 7
0x010F0017 23 Ignition, cylinder 6
0x010F0018 24 Ignition, cylinder 4
0x010F0019 25 Ignition, cylinder 1
0x010F001a 26 Control-unit supply B+
0x010F001d 29 Idle-actuator opening winding
0x010F001f 31 Fuel injector, cylinder 5
0x010F0020 32 Fuel injector, cylinder 6
0x010F0021 33 Fuel injector, cylinder 4
0x010F0022 34 Ignition, cylinder 2
0x010F0024 36 Tank ventilation
0x010F0025 37 Oxygen-sensor heating
0x010F0029 41 Air-mass flow sensor (LMM)
0x010F002a 42 Road-speed sensor
0x010F002e 46 Free SG output stage
0x010F0030 48 Air-conditioning compressor cutoff
0x010F0031 49 Ignition, cylinder 2
0x010F0032 50 Ignition, cylinder 3
0x010F0033 51 Ignition, cylinder 8
0x010F0034 52 Ignition, cylinder 5
0x010F0036 54 Control-unit power supply via main relay (DME)
0x010F003e 62 EML intervention signal
0x010F0041 65 Air-conditioning compressor
0x010F0042 66 Signal, burglar-alarm system DWA
0x010F0043 67 Knock sensor 4
0x010F0044 68 Knock sensor 3
0x010F0045 69 Knock sensor 2
0x010F0046 70 Knock sensor 1
0x010F0049 73 Throttle-valve potentiometer
0x010F004d 77 Intake-air-temperature sensor
0x010F004e 78 Engine-temperature sensor (coolant)
0x010F0053 83 ASC intervention signal
0x010F0064 100 Output stage, group 1
0x010F0065 101 Output stage, group 2
0x010F00c8 333 DME control unit(RAM,ROM/EPROM)
0x010F00c9 201 Oxygen-sensor control
0x010F00ca 202 Fault memory
0x010F00cb 203 O2 sensor control 2
0x010F00cc 204 Idle-speed increases during MSR operation
0x010F00cd 205 Transmission intervention during shifts
0x010F00ce 206 Knock control test pulse
0x010F00d2 210 CAN interface, transmission intervention
0x010F00DC 220 Electronic immobilizer EWS II
/*M3.3 M60 */
0x01100001 1 EKP relay
0x01100002 2 Idle-actuator closing winding
0x01100003 3 Fuel injector, cylinder 1
0x01100004 4 Fuel injector, cylinder 4
0x01100005 5 Fuel injector, cylinder 6
0x01100006 6 Fuel-injector, output stage
0x01100007 7 Fuel-injector, cylinder 7
0x01100008 8 Fault lamp (US only)
0x0110000c 12 Oxygen sensor 2
0x0110000D 13 Oxygen sensor 1

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# Bmw Code Sheet.txt

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0x0110000F 15 Ignition-circuit monitoring
0x01100010 16 Crankshaft pulse generator
0x01100011 17 Camshaft sensor
0x01100016 22 Ignition, cylinder 7
0x01100017 23 Ignition, cylinder 6
0x01100018 24 Ignition, cylinder 4
0x01100019 25 Ignition, cylinder 1
0x0110001A 26 Control-unit supply B+
0x0110001D 29 Idle-actuator opening winding
0x0110001F 31 Fuel injector, cylinder 5
0x01100020 32 Fuel injector, cylinder 8
0x01100021 33 Fuel injector, cylinder 3
0x01100023 35 Fuel injector, cylinder 2
0x01100024 36 Tank ventilation
0x01100025 37 Oxygen-sensor heating
0x01100026 38 O2 sensor heating relay
0x01100029 41 Air-mass flow sensor (HFM)
0x0110002A 42 Road-speed sensor
0x0110002e 46 Free SG output stage
0x01100030 48 Air-conditioning compressor cutoff
0x01100031 49 Ignition, cylinder 2
0x01100032 50 Ignition, cylinder 3
0x01100033 51 Ignition, cylinder 8
0x01100034 52 Ignition, cylinder 5
0x01100036 54 Control-unit power supply via main relay (DME)
0x0110003E 62 Signal, electronic engine-power control (EML)
0x01100042 66 Signal, burglar-alarm system DWA
0x01100043 67 Knock sensor 4
0x01100044 68 Knock sensor 3
0x01100045 69 Knock sensor 2
0x01100046 70 Knock sensor 1
0x01100049 73 Throttle-valve potentiometer
0x0110004D 77 Intake-air-temperature sensor
0x0110004E 78 Engine-temperature sensor (coolant)
0x01100052 82 Intervention, engine-drag-torque control (MSR)
0x01100053 83 Intervention Automatic Stability Control (ASC)
0x01100064 100 Output stage, Group 1
0x01100065 101 Output stage, Group 2
0x011000C8 333 DME control unit
0x011000C9 201 Oxygen-sensor control 1
0x011000CA 202 Fault memory
0x011000CB 203 Oxygen-sensor control 2
0x011000CC 204 Idle-speed increase during MSR increase
0x011000CD 205 Gearbox intervention during gearshifts (with EGS only)
0x011000CE 206 Knock-control test pulse
0x011000D2 210 CAN interface, gearbox intervention
0x011000DC 220 Electronic immobilizer EWS II
/*M1.2 70 */
0x01110000 0 No Description
0x01110001 1 DME control unit
0x01110003 3 TR signal
0x01110004 4 Idle control actuator(open)
0x01110005 5 Tank venting valve
0x01110007 7 Air-mass flow sensor
0x0111000a 10 Oxygen-sensor control
0x0111000f 15 Fault lamp
0x01110010 16 Fuel injectors, cyl. 1+3+5 or 7+9+11
0x01110011 17 Fuel injectors, cyl. 2+4+6 or 8+10+12
0x01110016 22 Idle control actuator(close)
0x01110017 23 Relay, oxygen-sensor heater
0x0111001c 28 Oxygen sensor
0x0111001d 29 Vehicle speed sensor signal
0x01110025 37 Control-unit power supply

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# Bmw Code Sheet.txt

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0x01110026 38 Intervention, ASC/DWA
0x01110028 40 Air conditioner compressor operation
0x0111002b 43 Idle CO potentiometer
0x0111002c 44 Intak-air temperature sensor
0x0111002d 45 Coolant-temperature sensor (engine)
0x01110032 50 Intervention, MSR
0x01110033 51 Ignition-timing intervention
0x01110034 52 Idle switch
0x01110035 53 Throttle position switch(open)
0x01110036 54 Converter lockup clutch
0x01110064 100 Output stage
0x01110063 101 Engine cannot operation
//*M1.7 M70*/
0x01120000 0 No Description
0x01120001 1 Fuel pump relay
0x01120003 3 Injector cyl.2+4+6 or 8+10+12
0x01120008 8 Fault indicator lamp
0x01120010 16 Ignition system
0x01120012 18 Control unit,pin18 stage
0x01120020 32 Injector cyl.1+3+5 or 7+9+11
0x01120024 36 Fuel tank evaporation ventilation valve
0x01120025 37 O2 sensor heating relay
0x01120029 41 Air flow meter(HLM)
0x01120030 48 air conditioner compressor cutoff
0x01120036 54 control system unit power supply(B+)
0x0112003f 63 Torque converter clutch
0x01120040 64 Ignition timing intervention
0x01120046 70 O2 sensor signal
0x01120049 73 Vehicle speed sensor
0x0112004c 76 Idle CO potentiometer
0x0112004d 77 Intake air temperature signal
0x0112004e 78 Engine temperature signal
0x01120052 82 Engine drag-torque control
0x01120053 83 Automatic stability control(ASC)
0x01120064 100 Engine control system
0x011200c8 200 DME control unit
0x011200c9 201 2 sensor control
//*M1.7.1 S70B56*/
0x01130000 0 No Description
0x01130001 1 Fuel pump relay
0x01130003 3 Injector cyl.2+4+6 or 8+10+12
0x01130004 4 Idle control actuator (OPEN)
0x01130008 8 Fault indicator lamp
0x01130010 16 Ignition system
0x01130012 18 Control unit,pin18 stage
0x01130020 32 Injector cyl.1+3+5 or 7+9+11
0x01130024 36 Fuel tank evaporation ventilation valve
0x01130025 37 O2 sensor heating relay
0x01130029 41 Air flow meter(HLM)
0x01130030 48 air conditioner compressor cutoff
0x01130036 54 control system unit power supply(B+)
0x0113003f 63 Torque converter clutch
0x01130040 64 Ignition timing intervention
0x01130046 70 O2 sensor signal
0x01130049 73 Vehicle speed sensor
0x0113004c 76 Idle CO potentiometer
0x0113004d 77 Intake air temperature signal
0x0113004e 78 Engine temperature signal
0x01130052 82 Engine drag-torque control
0x01130053 83 Automatic stability control(ASC)
0x01130064 100 Engine control system
0x011300c8 200 DME control unit
0x011300c9 201 2 sensor control

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# BMW Code Sheet.txt

//\*DME M5.2 M70\*/

0x01140001 1 leakage diagnosis pump output stage  
 0x01140002 2 Fuel circuit changeover  
 0x01140003 3 leakage diagnosis pump  
 0x01140004 4 O2 sensor heater after cat. converter cylinders 5-8  
 0x01140005 5 O2 sensor heater before cat. converter cylinders 5-8  
 0x01140006 6 CAN instrumentation  
 0x01140008 8 Misfire detection, tank run empty  
 0x0114000A 10 Oxygen sensor upstream of catalytic converter  
 0x0114000C 12 Oxygen sensor downstream of catalytic converter  
 0x0114000D 13 Oxygen sensor heater before catalytic converter  
 0x0114000E 14 Oxygen sensor heater after catalytic converter  
 0x0114000F 15 Oxygen-sensor ageing TP  
 0x01140010 16 O2 sensor ageing TV before cat. Converter  
 0x01140011 17 O2 sensor ageing after cat. converter cylinders 1-4  
 0x01140012 18 O2 sensor before catalytic converter cylinders 5-8  
 0x01140014 20 O2 sensor after catalytic converter cylinders 5-8  
 0x01140015 21 O2 sensor ageing TP before cat. converter cylinders 5-8  
 0x01140016 22 O2 sensor ageing TV before cat. converter cylinders 5-8  
 0x01140017 23 O2 sensor ranging after cat. converter cylinders 5-8  
 0x01140018 24 diagnosis A/C compressor function  
 0x0114001A 26 Multiplicative mixt. adaptation (part load control limit reached)  
 0x0114001B 27 Additive mixture adaptation (idle) Control limit reached  
 0x0114001C 28 Additive mixture adaptation (idle) Control limit reached  
 0x01140020 32 Idle speed control valve blocked  
 0x01140022 34 Multiplicative mixture adaptation (part load)Cylinders 5-8,control limit reached  
 0x01140024 36 Multiplicative mixture adaptation (idle)Cylinders 1-4,control limit reached  
 0x01140027 39 Electronic engine immobilize EWS  
 0x01140028 40 Catalytic-converter conversion  
 0x0114002c 45 CAT. converter conversion, cylinder 5-8  
 0x01140032 50 Misfiring detection cyl. 1, relevant to exhaust gas  
 0x01140033 51 Misfiring detection cyl. 2, relevant to exhaust gas  
 0x01140034 52 Misfiring detection cyl. 3, relevant to exhaust gas  
 0x01140035 53 Misfiring detection cyl. 4, relevant to exhaust gas  
 0x01140036 54 Misfiring detection cyl. 5, relevant to exhaust gas  
 0x01140037 55 Misfiring detection cyl. 6, relevant to exhaust gas  
 0x01140038 56 Misfiring detection cyl. 7, relevant to exhaust gas  
 0x01140039 57 Misfiring detection cyl. 8, relevant to exhaust gas  
 0x0114003A 58 Misfiring detection cyl. 9, relevant to exhaust gas  
 0x0114003B 59 Misfiring detection cyl. 10, relevant to exhaust gas  
 0x0114003C 60 Misfiring detection cyl. 11, relevant to exhaust gas  
 0x0114003D 61 Misfiring detection cyl. 12, relevant to exhaust gas  
 0x0114003E 62 Misfiring detection, sum, relevant to exhaust gas  
 0x0114003F 63 Misfiring with cylinder cutout, cyl. 1  
 0x01140040 64 Misfiring with cylinder cutout, cyl. 2  
 0x01140041 65 Misfiring with cylinder cutout, cyl. 3  
 0x01140042 66 Misfiring with cylinder cutout, cyl. 4  
 0x01140043 67 Misfiring with cylinder cutout, cyl. 5  
 0x01140044 68 Misfiring with cylinder cutout, cyl. 6  
 0x01140045 69 Misfiring with cylinder cutout, cyl. 7  
 0x01140046 70 Misfiring with cylinder cutout, cyl. 8  
 0x01140047 71 Misfiring with cylinder cutout, cyl. 9  
 0x01140048 72 Misfiring with cylinder cutout, cyl. 10  
 0x01140049 73 Misfiring with cylinder cutout, cyl. 11  
 0x0114004A 74 Misfiring with cylinder cutout, cyl. 12  
 0x0114004B 75 Misfiring with cylinder cutout, total  
 0x0114004E 78 Speed sensor, one tooth too many  
 0x0114004f 79 Secondary air pump, stage 2(output stage)  
 0x01140050 80 Secondary air system  
 0x01140054 84 Secondary air pump (output stage)  
 0x01140055 85 Secondary air valve (output stage)

# Bmw Code Sheet.txt

0x0114005B 91 Tank-ventilation valve, output stage, bank 2  
 0x0114005D 93 Tank-ventilation system  
 0x01140061 97 Tank leak detection: minor leak  
 0x01140062 98 Tank-ventilation-valve output stage  
 0x01140065 101 Control unit faulty (Master iRAM)  
 0x01140066 102 Control unit faulty (xRAM)  
 0x01140067 103 Control unit faulty (Master ROM)  
 0x01140068 104 Wrong values in fault memory  
 0x0114006B 107 Terminal 15 power supply  
 0x0114006C 108 Continuous voltage (+)  
 0x0114006F 111 Crankshaft position sensor  
 0x01140070 112 Camshaft position sensor  
 0x01140073 115 Air mass  
 0x01140075 117 Throttle valve potentiometer  
 0x01140078 120 Road speed  
 0x01140079 121 Load detection  
 0x0114007B 123 Engine-temperature sensor (coolant)  
 0x0114007C 124 Intake-air temperature sensor  
 0x01140082 130 O2 sensors before catalytic converter mixed up  
 0x01140086 134 Tank fuel level  
 0x01140087 135 Engine intervention / Specified engine torque (gearbox intervention)  
 0x0114008A 138 Compressor intervention  
 0x0114008B 139 Output stage, map cooling  
 0x0114008C 140 Engine torque, bank comparison  
 0x0114008D 141 Dynamic Stability Control (DSC) intervention with fadeout  
 0x0114008F 143 Engine drag-torque control (MSR) intervention  
 0x01140090 144 Dynamic Stability Control (DSC) intervention  
 0x01140093 147 Function, map cooling  
 0x01140094 148 Burglar alarm system  
 0x01140096 150 Fuel injector, cyl. 1  
 0x01140097 151 Fuel injector, cyl. 2  
 0x01140098 152 Fuel injector, cyl. 3  
 0x01140099 153 Fuel injector, cyl. 4  
 0x0114009A 154 Fuel injector, cyl. 5  
 0x0114009B 155 Fuel injector, cyl. 6  
 0x0114009C 156 Fuel injector, cyl. 7  
 0x0114009D 157 Fuel injector, cyl. 8  
 0x0114009E 158 Fuel injector, cyl. 9  
 0x0114009F 159 Fuel injector, cyl. 10  
 0x011400A0 160 Fuel injector, cyl. 11  
 0x011400A1 161 Fuel injector, cyl. 12  
 0x011400A3 163 Electric-fuel-pump relay  
 0x011400A5 165 Exhaust-gas warning lamp ('CHECK ENGINE' lamp is fitted in US vehicle only)  
 0x011400A7 167 Electric-fuel-pump relay output stage  
 0x011400A8 168 Idle speed control valve, opening coil  
 0x011400A9 169 Idle speed control valve, closing coil  
 0x011400AA 170 A/C-compressor control  
 0x011400AE 174 Camshaft control, bank 1  
 0x011400B2 178 Camshaft control, bank 2  
 0x011400B3 179 A/C-compressor control, bank 2  
 0x011400BC 188 Exhaust-gas warning lamp, bank 2 ('CHECK ENGINE' lamp is fitted in US vehicle fitted)  
 0x011400BD 189 inlet camshaft setting, bank 1  
 0x011400CB 203 Ignition-circuit monitoring  
 0x011400CC 204 EWS random code storage  
 0x011400D0 208 Secondary air system  
 0x011400D2 210 Knock sensor 1  
 0x011400D3 211 Knock sensor 2  
 0x011400D4 212 Knock sensor 3  
 0x011400D5 213 Knock sensor 4  
 0x011400D6 214 Controller Area Network (CAN) interface, version No.  
 0x011400D7 215 Controller Area Network (CAN) interface, Digital Motor Electronics

# BMW Code Sheet.txt

(DME) timeout  
0x011400D8 216 Controller Area Network (CAN) interface, Dynamic Stability Control (DSC) timeout  
0x011400D9 217 Controller Area Network (CAN) interface, Electronic engine-power control (EML) timeout  
0x011400DC 220 Knock control  
0x011400DE 222 Knock-control test pulse  
0x011400E4 228 Automatic excess-fuel starting device output stage, bank 2  
0x011400E9 233 Automatic excess-fuel starting device output stage  
0x011400EA 234 Starting signal  
0x011400EC 236 Controller Area Network (CAN) interface, Electronic gearbox control (EGS) timeout  
0x011400ED 237 Automatic excess-fuel starting device  
/\*DME M5.2 M73 (ÖDME M5.2 M700»Ñù)\*/  
0x01150001 1 leakage diagnosis pump output stage  
0x01150002 2 Fuel circuit changeover  
0x01150003 3 leakage diagnosis pump  
0x01150004 4 O2 sensor heater after cat. converter cylinders 5-8  
0x01150005 5 O2 sensor heater before cat. converter cylinders 5-8  
0x01150006 6 CAN instrumentation  
0x01150008 8 Misfire detection, tank run empty  
0x0115000A 10 Oxygen sensor upstream of catalytic converter  
0x0115000C 12 Oxygen sensor downstream of catalytic converter  
0x0115000D 13 Oxygen sensor heater before catalytic converter  
0x0115000E 14 Oxygen sensor heater after catalytic converter  
0x0115000F 15 Oxygen-sensor ageing TP  
0x01150010 16 O2 sensor ageing TV before cat. Converter  
0x01150011 17 O2 sensor ageing after cat. converter cylinders 1-4  
0x01150012 18 O2 sensor before catalytic converter cylinders 5-8  
0x01150014 20 O2 sensor after catalytic converter cylinders 5-8  
0x01150015 21 O2 sensor ageing TP before cat. converter cylinders 5-8  
0x01150016 22 O2 sensor ageing TV before cat. converter cylinders 5-8  
0x01150017 23 O2 sensor ranging after cat. converter cylinders 5-8  
0x01150018 24 diagnosis A/C compressor function  
0x0115001A 26 Multiplicative mixt. adaptation (part load control limit reached)  
0x0115001B 27 Additive mixture adaptation (idle) Control limit reached  
0x0115001C 28 Additive mixture adaptation (idle) Control limit reached  
0x01150020 32 Idle speed control valve blocked  
0x01150022 34 Multiplicative mixture adaptation (part load)cylinders 5-8,control limit reached  
0x01150024 36 Multiplicative mixture adaptation (idle)cylinders 1-4,control limit reached  
0x01150027 39 Electronic engine immobilize EWS  
0x01150028 40 Catalytic-converter conversion  
0x0115002c 45 CAT. converter conversion, cylinder 5-8  
0x01150032 50 Misfiring detection cyl. 1, relevant to exhaust gas  
0x01150033 51 Misfiring detection cyl. 2, relevant to exhaust gas  
0x01150034 52 Misfiring detection cyl. 3, relevant to exhaust gas  
0x01150035 53 Misfiring detection cyl. 4, relevant to exhaust gas  
0x01150036 54 Misfiring detection cyl. 5, relevant to exhaust gas  
0x01150037 55 Misfiring detection cyl. 6, relevant to exhaust gas  
0x01150038 56 Misfiring detection cyl. 7, relevant to exhaust gas  
0x01150039 57 Misfiring detection cyl. 8, relevant to exhaust gas  
0x0115003A 58 Misfiring detection cyl. 9, relevant to exhaust gas  
0x0115003B 59 Misfiring detection cyl. 10, relevant to exhaust gas  
0x0115003C 60 Misfiring detection cyl. 11, relevant to exhaust gas  
0x0115003D 61 Misfiring detection cyl. 12, relevant to exhaust gas  
0x0115003E 62 Misfiring detection, sum, relevant to exhaust gas  
0x0115003F 63 Misfiring with cylinder cutout, cyl. 1  
0x01150040 64 Misfiring with cylinder cutout, cyl. 2  
0x01150041 65 Misfiring with cylinder cutout, cyl. 3  
0x01150042 66 Misfiring with cylinder cutout, cyl. 4  
0x01150043 67 Misfiring with cylinder cutout, cyl. 5

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0x01150044 68 Misfiring with cylinder cutout, cyl. 6  
 0x01150045 69 Misfiring with cylinder cutout, cyl. 7  
 0x01150046 70 Misfiring with cylinder cutout, cyl. 8  
 0x01150047 71 Misfiring with cylinder cutout, cyl. 9  
 0x01150048 72 Misfiring with cylinder cutout, cyl. 10  
 0x01150049 73 Misfiring with cylinder cutout, cyl. 11  
 0x0115004A 74 Misfiring with cylinder cutout, cyl. 12  
 0x0115004B 75 Misfiring with cylinder cutout, total  
 0x0115004E 78 Speed sensor, one tooth too many  
 0x0115004F 79 Secondary air pump, stage 2(output stage)  
 0x01150050 80 Secondary air system  
 0x01150054 84 Secondary air pump (output stage)  
 0x01150055 85 Secondary air valve (output stage)  
 0x0115005B 91 Tank-ventilation valve, output stage, bank 2  
 0x0115005D 93 Tank-ventilation system  
 0x01150061 97 Tank leak detection: minor leak  
 0x01150062 98 Tank-ventilation-valve output stage  
 0x01150065 101 Control unit faulty (Master iRAM)  
 0x01150066 102 Control unit faulty (xRAM)  
 0x01150067 103 Control unit faulty (Master ROM)  
 0x01150068 104 Wrong values in fault memory  
 0x0115006B 107 Terminal 15 power supply  
 0x0115006C 108 Continuous voltage (+)  
 0x0115006F 111 Crankshaft position sensor  
 0x01150070 112 Camshaft position sensor  
 0x01150073 115 Air mass  
 0x01150075 117 Throttle valve potentiometer  
 0x01150078 120 Road speed  
 0x01150079 121 Load detection  
 0x0115007B 123 Engine-temperature sensor (coolant)  
 0x0115007C 124 Intake-air temperature sensor  
 0x01150082 130 O2 sensors before catalytic converter mixed up  
 0x01150086 134 Tank fuel level  
 0x01150087 135 Engine intervention / Specified engine torque (gearbox intervention)  
 0x0115008A 138 Compressor intervention  
 0x0115008B 139 Output stage, map cooling  
 0x0115008C 140 Engine torque, bank comparison  
 0x0115008D 141 Dynamic Stability Control (DSC) intervention with fadeout  
 0x0115008F 143 Engine drag-torque control (MSR) intervention  
 0x01150090 144 Dynamic Stability Control (DSC) intervention  
 0x01150093 147 Function, map cooling  
 0x01150094 148 Burglar alarm system  
 0x01150096 150 Fuel injector, cyl. 1  
 0x01150097 151 Fuel injector, cyl. 2  
 0x01150098 152 Fuel injector, cyl. 3  
 0x01150099 153 Fuel injector, cyl. 4  
 0x0115009A 154 Fuel injector, cyl. 5  
 0x0115009B 155 Fuel injector, cyl. 6  
 0x0115009C 156 Fuel injector, cyl. 7  
 0x0115009D 157 Fuel injector, cyl. 8  
 0x0115009E 158 Fuel injector, cyl. 9  
 0x0115009F 159 Fuel injector, cyl. 10  
 0x011500A0 160 Fuel injector, cyl. 11  
 0x011500A1 161 Fuel injector, cyl. 12  
 0x011500A3 163 Electric-fuel-pump relay  
 0x011500A5 165 Exhaust-gas warning lamp ('CHECK ENGINE' lamp is fitted in US vehicle only)  
 0x011500A7 167 Electric-fuel-pump relay output stage  
 0x011500A8 168 Idle speed control valve, opening coil  
 0x011500A9 169 Idle speed control valve, closing coil  
 0x011500AA 170 A/C-compressor control  
 0x011500AE 174 Camshaft control, bank 1  
 0x011500B2 178 Camshaft control, bank 2



# Bmw Code Sheet.txt

0x011500B3 179 A/C-compressor control, bank 2  
 0x011500BC 188 Exhaust-gas warning lamp, bank 2 ('CHECK ENGINE' lamp is fitted in US vehicle fitted)  
 0x011500BD 189 inlet camshaft setting, bank 1  
 0x011500CB 203 Ignition-circuit monitoring  
 0x011500CC 204 EWS random code storage  
 0x011500D0 208 Secondary air system  
 0x011500D2 210 Knock sensor 1  
 0x011500D3 211 Knock sensor 2  
 0x011500D4 212 Knock sensor 3  
 0x011500D5 213 Knock sensor 4  
 0x011500D6 214 Controller Area Network (CAN) interface, version No.  
 0x011500D7 215 Controller Area Network (CAN) interface, Digital Motor Electronics (DME) timeout  
 0x011500D8 216 Controller Area Network (CAN) interface, Dynamic Stability Control (DSC) timeout  
 0x011500D9 217 Controller Area Network (CAN) interface, Electronic engine-power control (EML) timeout  
 0x011500DC 220 Knock control  
 0x011500DE 222 Knock-control test pulse  
 0x011500E4 228 Automatic excess-fuel starting device output stage, bank 2  
 0x011500E9 233 Automatic excess-fuel starting device output stage  
 0x011500EA 234 Starting signal  
 0x011500EC 236 Controller Area Network (CAN) interface, Electronic gearbox control (EGS) timeout  
 0x011500ED 237 Automatic excess-fuel starting device  
 //0x01011600 //M3.1 M50B20/25R\*/  
 0x01160000 0 No fault found  
 0x01160001 1 Fuel pump relay  
 0x01160002 2 Idle speed control  
 0x01160003 3 Injector cylinder 1  
 0x01160004 4 Injector cylinder 3  
 0x01160005 5 Injector cylinder 2  
 0x01160006 6 Fuel injector output stage  
 0x01160007 7 No Description  
 0x01160008 8 Fault indicator lamp  
 0x0116000c 12 Throttle position sensor or circuit  
 0x01160010 16 Crankshaft pulse generator  
 0x01160012 18 Control unit, pin 18 stage  
 0x01160013 19 Engine running output stage  
 0x01160017 23 DIS Ignition cylinder 2  
 0x01160018 24 DIS Ignition cylinder 3  
 0x01160019 25 DIS Ignition cylinder 1  
 0x0116001a 26 Control unit supply voltage  
 0x0116001d 29 Idle speed control valve opening winding  
 0x0116001f 31 Injector cylinder 5  
 0x01160020 32 Injector cylinder 6  
 0x01160021 33 Injector cylinder 4  
 0x01160024 36 Fuel tank evaporation ventilation valve  
 0x01160025 37 O2 sensor heating relay  
 0x01160029 41 Air mass meter  
 0x0116002e 46 Engine running output stage  
 0x01160030 48 Air conditioner compressor cutoff  
 0x01160032 50 DIS Ignition cylinder 5  
 0x01160033 51 DIS Ignition cylinder 6  
 0x01160034 52 DIS Ignition cylinder 4  
 0x01160036 54 Control system unit power supply B+  
 0x01160037 55 DIS ignition system output stage  
 0x0116003e 62 EML intervention signal  
 0x0116003f 63 Receive transmission road signal  
 0x01160040 64 Ignition timing intervention  
 0x01160043 67 Crankshaft pulse generator  
 0x01160046 70 O2 sensor signal

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0x01160049 73 Vehicle speed sensor
0x0116004d 77 Intake air temperature signal
0x0116004e 78 Engine temperature signal
0x01160051 81 Anti-theft system control signal
0x01160052 82 MSR Intervention signal
0x01160053 83 ASC intervention signal
0x01160055 85 Air conditioner compressor
0x01160064 100 Output stage
0x01160099 153 Control voltage of knock control
0x011600c8 200 Control unit internal fault
0x011600c9 201 O2 sensor control
0x011600ca 202 Control unit memory illogical
0x011600cb 203 DIS primary circuit monitoring
0x011600cc 204 Idle-speed increases during MSR operation
0x0116000e 206 Knock control test pulse
0x011600ff 255 Control unit internal fault

```

//mode2

//0x01210000 DME M5.2 M44

```

0x01210002 2 Fuel-circuit changeover
0x01210008 8 Misfiring detection, tank run dry
0x0121000A 10 Oxygen sensor upstream of catalytic converter
0x0121000C 12 Oxygen sensor downstream of catalytic converter
0x0121000D 13 Oxygen sensor heater before catalytic converter
0x0121000E 14 Oxygen sensor heater after catalytic converter
0x0121000F 15 Oxygen sensor ageing TP
0x01210010 16 Oxygen sensor ageing TV
0x01210011 17 Oxygen sensor ageing after catalytic converter
0x01210018 24 Diagnosis of air conditioning compressor function
0x0121001A 26 Multiplicative mixture adapt'n (part load) control limit reached
0x0121001B 27 Additive mixture adaptation (idle) control limit reached
0x0121001C 28 Oxygen sensor control adaptation, ti-additive (injection)
0x01210020 32 Idle speed actuator blocked
0x01210027 39 Electronic car immobilisation system (EWS)
0x01210028 40 Catalytic-converter conversion
0x01210032 50 Misfiring cyl.1, relevant to exhaust gas
0x01210033 51 Misfiring cyl.2, relevant to exhaust gas
0x01210034 52 Misfiring cyl.3, relevant to exhaust gas
0x01210035 53 Misfiring cyl.4, relevant to exhaust gas
0x0121003E 62 Misfiring, sum, relevant to exhaust gas
0x0121003F 63 Misfiring with cylinder cutout, cyl. 1
0x01210040 64 Misfiring with cylinder cutout, cyl. 2
0x01210041 65 Misfiring with cylinder cutout, cyl. 3
0x01210042 66 Misfiring with cylinder cutout, cyl. 4
0x0121004B 75 Misfiring with cylinder cutout, total
0x0121004F 79 Secondary-air pump, stage 2 (output stage)
0x01210050 80 Secondary-air system
0x01210054 84 Secondary-air pump (output stage)
0x01210055 85 Secondary-air valve (output stage)
0x0121005D 93 Tank-ventilation system
0x0121005E 94 Tank_leak detection: major leak
0x0121005F 95 Activated-charcoal-filter shut-off valve
0x01210060 96 Activation. carbon-canister shut-off valve
0x01210061 97 Tank-leak detection: minor leak
0x01210062 98 Tank-ventilation-valve output stage
0x01210063 99 Tank-Differential-pressure sensor
0x01210065 101 Control module defective (internal RAM)
0x01210066 102 Control module defective (external RAM)
0x01210067 103 Control module defective (ROM)
0x01210068 104 Wrong values in fault memory
0x0121006B 107 Terminal 15 power supply
0x0121006C 108 Continuous voltage (+)
0x0121006F 111 Crankshaft position sensor

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0x01210070 112 Camshaft position sensor  
 0x01210073 115 Hot-film air-mass flow sensor  
 0x01210075 117 Throttle-valve potentiometer  
 0x01210078 120 Road speed  
 0x01210079 121 Load measurement  
 0x0121007B 123 Engine-temperature sensor (Coolant)  
 0x0121007C 124 Intake-air temperature sensor  
 0x01210086 134 Tank fill level  
 0x01210087 135 Engine intervention/ Specified engine  
 0x0121008A 138 Compressor intervention  
 0x0121008C 140 Engine torque, bank comparison  
 0x0121008F 143 Engine drag-torque control (MSR)  
 0x01210090 144 Automatic Stabilit Control ASC intervention  
 0x01210094 148 Interface, electronic engine immobiliser  
 0x01210096 150 Fuel injector, cyl. 1  
 0x01210097 151 Fuel injector, cyl. 2  
 0x01210098 152 Fuel injector, cyl. 3  
 0x01210099 153 Fuel injector, cyl. 4  
 0x012100A3 163 Electric-fuel-pump relay  
 0x012100A5 165 Exhaust-gas warning lamp ("CHECK ENGINE" lamp is fitted in US vehicles only)  
 0x012100A7 167 Electric-fuel-pump relay  
 0x012100A8 168 Idle speed actuator for opening coil  
 0x012100A9 168 Idle speed actuator for closing coil  
 0x012100AA 170 A/C-compressor control  
 0x012100AE 174 Camshaft control unit  
 0x012100AF 175 Intake-pipe changeover  
 0x012100BC 188 Exhaust-gas warning lamp, bank 2 ("CHECK ENGINE" lamp is fitted in US vehicles only)  
 0x012100CB 203 Ignition-Circuit monitoring  
 0x012100D2 210 Knock sensor 1  
 0x012100D3 211 Knock sensor 2  
 0x012100D6 214 Controlled Area Network (CAN) interface, Version NO.  
 0x012100D7 215 CAN bus timeout DME  
 0x012100D8 216 CAN bus timeout ABS/ASC/DSC  
 0x012100DC 220 Knock control  
 0x012100DE 222 Knock-control test pulse  
 0x012100E4 228 Automatic excess-fuel starting device output stage, bank 2  
 0x012100E9 233 Automatic excess-fuel starting device output stage  
 0x012100EA 234 Starting signal  
 0x012100EC 236 CAN bus timeout EGS/AGS  
 0x012100ED 237 Automatic excess-fuel starting device  
 0x012100FD 253 Fan for output stage  
 //0x01220000 DME BMS43 M43  
 0x01220001 1 Fuel-pump relay (EKP relay)  
 0x01220002 2 Idle-speed actuator, closing coil  
 0x01220003 3 Fuel injector, cylinder 2  
 0x01220004 4 Fuel injector, cylinder 4  
 0x0122000C 12 Throttle-valve potentiometer  
 0x0122000F 15 Knock sensor 1  
 0x01220012 18 Manifold changeover  
 0x01220018 24 Ignition stage, cylinder 3  
 0x01220019 25 Ignition stage, cylinder 1  
 0x0122001D 29 Idle-speed actuator, opening coil  
 0x0122001F 31 Fuel injector, cylinder 3  
 0x01220020 32 Fuel injector, cylinder 1  
 0x01220024 36 Tank venting valve  
 0x01220025 37 Relay for oxygen-sensor heater  
 0x01220029 41 Air-flow sensor  
 0x0122002A 42 Knock sensor 2  
 0x0122002C 44 Crankshaft sensor  
 0x0122002E 46 Relay for electric fan  
 0x01220030 48 Relay for A/C compressor

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0x01220033 51 Ignition stage, cylinder 4  
 0x01220034 52 Ignition stage, cylinder 2  
 0x01220036 54 Battery voltage  
 0x0122003B 59 Supply voltage for sensor  
 0x01220043 67 Crankshaft sensor  
 0x01220046 70 Oxygen sensor  
 0x01220049 73 Road-speed signal  
 0x0122004C 76 CO potentiometer  
 0x0122004D 77 Temperature sensor for intake air  
 0x0122004E 78 Temperature sensor for coolant  
 0x01220051 81 Signal, EWS  
 0x01220053 83 Signal, A/C button  
 0x012200C8 200 DME Control unit, self-test  
 0x012200C9 201 Oxygen-sensor control, Control stop  
 0x012200CE 206 Knock control, test pulse, zero test  
 0x012200D8 216 CAN bus: no transmission to ASC  
 0x012200D9 216 CAN bus: no transmission to ASC  
 0x012200DC 220 EWS function  
 0x012200EC 236 CAN bus: no transmission to EGS  
 0x012200ED 236 CAN bus: no transmission to EGS  
 //0x01230000 DME BMS46 M43  
 0x01230064 100 Activation, ignition coil, cylinder 1  
 0x01230065 101 Activation, ignition coil, cylinder 2  
 0x01230066 102 Activation, ignition coil, cylinder 3  
 0x01230067 103 Activation, ignition coil, cylinder 4  
 0x01230068 104 Activation, fuel injector, cylinder 1  
 0x01230069 105 Activation, fuel injector, cylinder 2  
 0x0123006A 106 Activation, fuel injector, cylinder 3  
 0x0123006B 107 Activation, fuel injector, cylinder 4  
 0x0123006C 108 Activation, electric fan  
 0x0123006E 110 Activation, A/C compressor  
 0x0123006F 111 Activation, fuel-pump relay  
 0x01230070 112 Activation, DISA valve  
 0x01230071 113 Activation, tank-venting valve  
 0x01230072 114 Activation, suction-jet-pump valve  
 0x01230073 115 Activation, map cooling  
 0x01230075 117 Activation, idle-speed control valve  
 0x01230076 118 Activation, ox.-sensor heater before cat. conv.  
 0x01230077 119 Signal, throttle potentiometer  
 0x01230078 120 Signal, hot-film mass air flow sensor  
 0x01230079 121 Signal, intake-air temperature  
 0x0123007A 122 Signal, coolant temperature  
 0x0123007B 123 Signal, coolant outlet temperature  
 0x0123007C 124 Battery positive voltage, main relay  
 0x0123007D 125 Signal, oxygen sensor before catalytic converter  
 0x0123007E 126 Signal, CAN ASC  
 0x0123007E 127 Request, CAN ASC  
 0x01230080 128 Signal, CAN EGS  
 0x01230081 129 Request, CAN EGS  
 0x01230082 130 Signal, CAN IKE  
 0x01230083 131 Signal, road speed  
 0x01230084 132 Ref. voltage for hot-film mass air flow sensor  
 0x01230085 133 Reference voltage for throttle potentiometer  
 0x01230087 135 Signal, camshaft sensor  
 0x01230088 136 Signal, crankshaft sensor  
 0x01230089 137 Signal, knock sensor 1  
 0x0123008A 138 Signal, knock sensor 2  
 0x0123008B 139 Signal, oxygen sensor after catalytic converter  
 0x0123008C 140 DME-EWS 3.3 interface  
 0x0123008D 141 Oxygen-sensor control, control limit  
 0x0123008E 142 Knock control, self-test  
 0x0123008F 143 Control modules, self-test  
 0x01230090 144 Anti-tampering protection EWS 3.3

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0x01230095 149 Activation, secondary-air valve  
 0x01230096 150 Activation, secondary-air pump  
 0x01230099 153 Activation, ox.-sensor heater after cat. conv.  
 //0x01240000 DME MS41.0 M52  
 0x01240001 1 Ignition,cylinder 2  
 0x01240002 2 Ignition,cylinder 4  
 0x01240003 3 Ignition,cylinder 6  
 0x01240005 5 Fuel injector,cylinder 2  
 0x01240006 6 Fuel injector,cylinder 1  
 0x01240008 8 Air-mass flow sensor  
 0x0124000a 10 Coolant-temperature sensor  
 0x0124000B 11 Tank pressure sensor  
 0x0124000c 12 Throttle valve potentiometer  
 0x0124000E 14 Intake air temperature sensor  
 0x01240010 16 Line for controlled air conditioning compressor  
 0x01240012 18 EWS signal defective  
 0x01240014 20 Fault lamp (MIL)  
 0x01240015 21 VANOS: electrical fault  
 0x01240016 22 Fuel injector,cylinder 3  
 0x01240017 23 Fuel injector,cylinder 6  
 0x01240018 24 Fuel injector,cylinder 4  
 0x01240019 25 Output stage, oxygen-sensor heater, sensor 1,cylinder 1-3 before cat.  
 conv. Z3 and 323i US only: this fault affects cylinder 1-6  
 0x0124001B 27 Idle actuator: closing winding  
 0x0124001D 29 Ignition,cylinder 1  
 0x0124001E 30 Ignition,cylinder 3  
 0x0124001F 31 Ignition,cylinder 5  
 0x01240021 33 Fuel injector,cylinder 5  
 0x01240023 35 Relay on secondary air pump  
 0x0124002e 46 Signal, "Fuel reserve"  
 0x01240032 50 Solenoid valve for fuel evaporation system (running losses)  
 0x01240033 51 Shutoff valve, activated charcoal filter  
 0x01240034 52 Solenoid valve, exhaust flap  
 0x01240035 53 Idle actuator: opening winding  
 0x01240037 55 Output stage for oxygen sensor heating, sensor 2 (cylinder 4-6; before  
 cat')  
 0x01240038 56 Open circuit, ignition-current-feedback resistor  
 0x01240039 57 Knock sensor 1  
 0x0124003B 59 Knock sensor 2  
 0x0124003D 61 Oxygen sensor heating, sensor 4 (cylinder 4-6; after cat')  
 0x0124003E 62 Secondary air valve (electrically operated change-over valve)  
 0x01240041 65 Camshaft sensor  
 0x01240044 68 Tank-ventilation valve, electrical fault  
 0x01240045 69 Electric-fuel-pump relay  
 0x0124004A 74 A/C-Compressor relay  
 0x0124004B 75 Oxygen-sensor voltage 1, cylinders 1-3; before cat. conv. Z3 and 323i  
 US only: this fault affects cylinders 1-6  
 0x0124004C 76 Oxygen sensor voltage 2 (cylinder 4-6; before cat')  
 0x0124004D 77 Oxygen-sensor voltage 3, cylinders 1-3; after cat, conv, Z3 and 323i  
 US only: this fault affects cylinder 1-6  
 0x0124004E 78 Oxygen-sensor voltage 4 (cylinder 4-6; after cat')  
 0x0124004F 79 Oxygen-sensor heater, sensor 3, cylinders 1-3; after cat. conv. Z3 and  
 323i US only: this fault affects cylinder 1-6  
 0x01240050 80 ABS/ASC interface, ignition fadeout  
 0x01240051 81 ABS/ASC interface, idle-speed increase  
 0x01240052 82 ABS/ASC interface, ignition-timing adjustment  
 0x01240053 83 Crankshaft sensor  
 0x01240064 100 DME control unit self-test  
 0x012400BE 190 Tank-leakage diagnosis pump: reed contact does not close  
 0x012400BF 191 Tank-leakage diagnosis pump: reed contact does not open  
 0x012400C0 192 Tank-leakage diagnosis pump: reed contact no longer closes  
 0x012400C1 193 Reed contact, tank-leak diagnosis pump: hose pinched  
 0x012400C2 194 Tank-leakage detection: major leak

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0x012400C3 195 Tank-leakage detection: minor leak  
 0x012400C4 196 Activation, solenoid valve, tank-leakage diagnosis pump  
 0x012400C5 197 Ambient-pressure sensor  
 0x012400C8 200 Oxygen-sensor voltage 1-3; before cat. conv. Z3 and 323i US only: this fault affects cylinders 1-6  
 0x012400C9 201 Oxygen sensor voltage stroke, sensor 2 (cylinder 4-6; before cat')  
 0x012400CA 202 Oxygen sensor control limit, cylinders 1-3; Z3 and 323i US only: this fault affects cylinder 1-6  
 0x012400CB 203 Oxygen-sensor control limit, cylinder 4-6  
 0x012400CC 204 Idle speed deviates significantly from nominal value  
 0x012400D1 209 Signal, EWS manipulated  
 0x012400D2 210 Ignition-current-feedback fault: at more than 2 cylinders  
 0x012400D3 211 Idle actuator: mechanical jamming  
 0x012400D4 212 VANOS: mechanical jamming  
 0x012400D6 214 Road-speed signal  
 0x012400D7 215 ASC/MSR/EML: signal combination  
 0x012400D8 216 Speed-range signal , EGS  
 0x012400D9 217 CAN-bus: no EGS transmission  
 0x012400DA 218 CAN module: warning level reached  
 0x012400DB 219 CAN module: bus off  
 0x012400DC 220 Function, oxygen-sensor control,bank 1  
 0x012400DD 221 Function, oxygen-sensor control,bank 2  
 0x012400DE 223 Oxygen sensor control not active after specified time  
 0x012400E3 227 Mixture deviation, cylinders 1-3; Z3 and 323i US only: this fault affects cylinders 1-6  
 0x012400E4 228 Mixture deviation, cylinders 4-6;  
 0x012400E5 229 Control frequency, oxygen sensor 1, cylinders 1-3; before cat. conv. Z3 and 323i US only this fault affects cylinders 1-6  
 0x012400E6 230 Control frequency, oxygen sensor 2 (cylinder 4-6; before cat')  
 0x012400E7 231 Operating time, oxygen sensor 1, cylinders 1-3; before cat. conv. Z3 and 323i US only: this fault concerns cylinders 1-6  
 0x012400E8 232 Operating time, oxygen sensor 2, (cylinders 4-6; before cat. conv.)  
 0x012400E9 233 Total CAT. Conv. efficiency, cylinders 1-3; Z3 and 323i US only: this fault affects cylinders 1-6  
 0x012400EA 234 CAT overall efficiency rating, cylinder 4-6  
 0x012400EB 235 Heat output, oxygen sensor 3, cylinders 1-3; after cat. conv. Z3 and 323i US only: this fault affects cylinders 1-6  
 0x012400EC 236 Heating power, oxygen sensor 4 (cylinder 4-6; after cat')  
 0x012400EE 238 Misfire, cylinder 1  
 0x012400EF 239 Misfire, cylinder 2  
 0x012400F0 240 Misfire, cylinder 3  
 0x012400F1 241 Misfire, cylinder 4  
 0x012400F2 242 Misfire, cylinder 5  
 0x012400F3 243 Misfire, cylinder 6  
 0x012400F4 244 Crankshaft segment timing  
 0x012400F5 245 Secondary-air system, cylinders 1-3 Only Z3 and 323i US and E36/5 from 12/98: This fault affects cylinder 1-6  
 0x012400F6 246 Secondary air system, cylinders 4-6  
 0x012400F7 247 Secondary air valve jams in open position  
 0x012400FA 250 Function fault, tank vent valve  
 0x012400FB 251 Tank-leak detection: minor leak  
 0x012400FC 252 Tank-ventilation system: suction fault  
 0x012400FD 253 Shut-off valve, activated-charcoal filter, jammed shut  
 0x012400FE 254 Tank-leak detection: major leak  
 0x012400FF 255 Tank-ventilation system: tank-ventilation valve jams open  
 //0x01250000 MS S50  
 0x01250001 1 Fuel Pump relay  
 0x01250002 2 Idle Speed actuator, closing coil  
 0x01250003 3 Fuel injection valve, cylinder 1  
 0x01250004 4 Fuel injection valve, cylinder 3  
 0x01250005 5 Fuel injector, cylinder 2  
 0x01250007 7 Inductive sensor on intake camshaft  
 0x01250008 8 Fault lamp (MIL)

# Bmw Code Sheet.txt

0x01250009 9 Ignition current, cylinder bank 2 (cylinders 4-6)  
 0x0125000A 10 Inductive sensor on exhaust camshaft  
 0x0125000C 12 Oxygen sensor 1  
 0x0125000D 13 Oxygen sensor 2  
 0x0125000F 15 Ignition current, cylinder bank 1 (cylinders 1-3)  
 0x01250013 19 Secondary air pump relay  
 0x01250015 21 Retard valve, VANOS exhaust  
 0x01250016 22 Advance valve, VANOS exhaust  
 0x01250017 23 Ignition coil, cylinder 2  
 0x01250018 24 Ignition coil, cylinder 3  
 0x01250019 25 Ignition coil, cylinder 1  
 0x0125001D 29 Idle speed actuator: opening coil  
 0x0125001F 31 Fuel injector, cylinder 5  
 0x01250020 32 Fuel injector, cylinder 6  
 0x01250021 33 Fuel injector, cylinder 4  
 0x01250024 36 Tank venting valve  
 0x01250025 37 Relay, oxygen sensor heating  
 0x01250029 41 Mass air flow sensor  
 0x0125002A 42 Roadspeed signal  
 0x0125002C 44 Oil level sensor  
 0x0125002E 46 Fuel-consumption signal  
 0x0125002F 47 Engine speed signal  
 0x01250030 48 A/C compressor relay  
 0x01250032 50 Ignition coil, cylinder 4  
 0x01250033 51 Ignition coil, cylinder 6  
 0x01250034 52 Ignition coil, cylinder 5  
 0x01250035 53 Electric fan relay  
 0x01250036 54 Vehicle circuit voltage  
 0x01250040 48 Air conditioning compressor relay  
 0x01250043 67 Advance valve, VANOS intake  
 0x01250044 68 Knock sensor 3  
 0x01250045 69 Knock sensor 2  
 0x01250046 70 Knock sensor 1  
 0x01250048 72 Retard valve, VANOS intake  
 0x01250049 73 Throttle valve potentiometer  
 0x0125004D 77 Temperature sensor for intake air  
 0x0125004E 78 Temperature sensor, engine coolant  
 0x01250050 80 Switch for gear recognition  
 0x01250052 82 Switch on starter motor (terminal 50)  
 0x01250056 86 CAN: signal missing  
 0x01250042 66 EWS signal faulty  
 0x01250082 130 Signal for electronic immobilizer EWS  
 0x01250088 136 Fault, idle-speed control valve  
 0x01250089 137 CAN protocol fault  
 0x0125008A 138 CAN timeout message 1  
 0x0125008B 139 CAN-timeout message 2  
 0x0125008C 140 CAN timeout message 3  
 0x01250090 144 Oxygen sensor control limit, bank 1; cylinders 1-3  
 0x01250091 145 Oxygen sensor control limit, bank 2; cylinders 4-6  
 0x01250096 150 MSS50 control module fault (memory test, RAM master)  
 0x01250097 151 MSS50 control module fault (driver fault)  
 0x01250098 152 MSS50 control module fault (internal communication fault, master)  
 0x0125009B 155 MSS50 control module fault, fault memory, master  
 0x0125009C 156 MSS50 control module fault (fault memory, slave)  
 0x0125009D 157 MSS50 control module fault (memory test, RAM slave)  
 0x0125009E 158 MSS50 control module fault (internal communication fault, slave)  
 0x0125009F 159 Internal SG fault (knock conditioning 1)  
 0x012500A0 160 Internal SG fault (knock conditioning 2)  
 0x012500A1 161 Internal SG fault (knock conditioning 3)  
 0x012500A2 162 Camshaft synchronisation  
 0x012500A3 163 MSS50 control module fault (internal resers)  
 //0x01260000 DME MS41.2 M52B32  
 0x01260001 1 Ignition coil, cylinder 1

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0x01260002 2 Ignition coil, cylinder 4  
 0x01260003 3 Ignition coil, cylinder 6  
 0x01260005 5 Fuel injector, cylinder 2  
 0x01260006 6 Fuel injection valve, cylinder 1  
 0x01260008 8 Air-mass flow sensor  
 0x0126000A 10 Coolant temperature sensor  
 0x0126000B 11 Tank pressure sensor  
 0x0126000C 12 throttle-valve potentiometer  
 0x0126000E 14 Intake-air temperature sensor  
 0x01260010 16 Line for controlled A/C compressor  
 0x01260012 18 Signal, EWS faulty  
 0x01260014 20 Fault lamp (MIL)  
 0x01260015 21 VANOS: electrical fault  
 0x01260016 22 Fuel injector, cylinder 3  
 0x01260017 23 Fuel injector, cylinder 6  
 0x01260018 24 Fuel injector, cylinder 4  
 0x01260019 25 Output stage of oxygen-sensor heater, sensor 1 (cylinder 1-3 before cat. conv.)  
 0x0126001B 27 Idle-speed actuator: closing coil  
 0x0126001D 29 Ignition coil, cylinder 1  
 0x0126001E 30 Ignition coil, cylinder 3  
 0x0126001F 31 Ignition coil, cylinder 5  
 0x01260021 33 Fuel injector, cylinder 5  
 0x01260023 35 Relay, secondary air pump  
 0x0126002E 46 signal, "Fuel reserve"  
 0x01260032 50 Solenoid valve for fuel evaporation system (running loss)  
 0x01260033 51 Shut-off valve, activated charcoal filter  
 0x01260034 52 Solenoid valve, exhaust flap  
 0x01260035 53 Idle-speed actuator: opening coil  
 0x01260037 55 Output stage of oxygen-sensor heater, sensor 2 (cylinder 4-6; before cat. conv.)  
 0x01260038 56 Open circuit ignition-current-feedback resistor  
 0x01260039 57 Knock sensor 1  
 0x0126003B 59 Knock sensor 2  
 0x0126003D 61 Oxygen-sensor heater, sensor 4 (cylinder 4-6; after cat. conv.)  
 0x0126003E 62 Secondary air, electric changeover valve  
 0x01260041 65 Camshaft sensor  
 0x01260044 68 Tank-ventilation valve, electrical fault  
 0x01260045 69 Electric-fuel-pump relay  
 0x0126004A 74 A/C-Compressor relay  
 0x0126004B 75 Oxygen-sensor voltage 1 (cylinder 1-3; before cat. conv.)  
 0x0126004C 76 Oxygen sensor voltage 2 (cylinder 4-6; before cat. conv.)  
 0x0126004D 77 Oxygen-sensor voltage 3 (cylinder 1-3; after cat. conv.)  
 0x0126004E 78 Oxygen-sensor voltage 4 (cylinder 4-6; after cat. conv.)  
 0x0126004F 79 Oxygen-sensor heater, sensor 3 (cylinders 1-3; after cat. conv.)  
 0x01260050 80 ABS/ASC interface, ignition fadeout  
 0x01260051 81 ABS/ASC interface, raised idle-speed  
 0x01260052 82 ABS/ASC interface, ignition-timing adjustment  
 0x01260053 83 Crankshaft sensor  
 0x01260064 100 DME control unit self-test  
 0x012600C8 200 Oxygen-sensor voltage range, sensor 1 (cylinder 1-3; before cat. conv.)  
 0x012600C9 201 Oxygen sensor voltage range, sensor 2 (cylinder 4-6; before cat. conv.)  
 0x012600CA 202 Oxygen sensor control limit, cylinder 1-3  
 0x012600CB 203 Oxygen-sensor control limit, cylinder 4-6  
 0x012600CC 204 Idle speed deviates markedly from nominal value  
 0x012600D1 209 Signal, EWS manipulated  
 0x012600D2 210 ZSR fault: at more than 2 cylinders  
 0x012600D3 211 Idle-speed actuator: mechanical jamming  
 0x012600D4 212 VANOS: mechanical jamming  
 0x012600D6 214 Road-speed signal  
 0x012600D7 215 ASC/MSR/EML: signal combination



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0x012600D8 216 EGS driving-position signal  
 0x012600D9 217 CAN-bus: no EGS transmission  
 0x012600DA 218 CAN module: warning level reached  
 0x012600DB 219 CAN module: bus off  
 0x012600DE 223 Oxygen sensor control not active after specified time  
 0x012600E3 227 Mixture deviation, cylinders 1-3  
 0x012600E4 228 Mixture deviation, cylinders 4-6  
 0x012600E5 229 Control frequency, oxygen sensor 1 (cylinder 1-3; before cat. converter)  
 0x012600E6 230 Control frequency, oxygen sensor 2 (cylinder 4-6; before cat. converter)  
 0x012600E7 231 jump time, oxygen sensor 1 (cylinder 1-3; before cat. conv.)  
 0x012600E8 232 jump time, oxygen sensor 2 (cylinder 4-6; before cat. conv.)  
 0x012600E9 233 CAT.-CONV. overall efficiency rating, cylinder 1-3  
 0x012600EA 234 CAT.-CONV. overall efficiency rating, cylinder 4-6  
 0x012600EB 235 Heat output, oxygen sensor 3 (cylinder 1-3; after cat. conv.)  
 0x012600EC 236 Heat output, oxygen sensor 4 (cylinder 4-6; after cat. conv.)  
 0x012600EE 238 Misfire, cylinder 1  
 0x012600EF 239 Misfire, cylinder 2  
 0x012600F0 240 Misfire, cylinder 3  
 0x012600F1 241 Misfire, cylinder 4  
 0x012600F2 242 Misfire, cylinder 5  
 0x012600F3 243 Misfire, cylinder 6  
 0x012600F4 244 Crankshaft segment timing  
 0x012600F5 245 Secondary-air system, cylinders 1-3  
 0x012600F6 246 Secondary air system, cylinders 4-6  
 0x012600F7 247 Secondary air valve jammed open  
 0x012600FA 250 Function fault, tank venting valve  
 0x012600FB 251 Tank-leak detection: minor leak  
 0x012600FC 252 Tank-Ventilation system: suction fault  
 0x012600FD 253 Shut-off valve, activated-charcoal filter, jammed shut  
 0x012600FE 254 Tank-leak detection: major leak  
 0x012600FF 255 Tank-Ventilation system: tank-Ventilation valve jammed open  
 //0x01270000 DME MS42.0 M52TU  
 0x01270001 1 Activation, ignition cylinder 2  
 0x01270002 2 Activation, ignition cylinder 4  
 0x01270003 3 Activation, ignition cylinder 6  
 0x01270005 5 Activation, fuel injector, cylinder 2 (OBDII:P0202; EUIII:P0202)  
 0x01270006 6 Activation, fuel injector, cylinder 1 (OBDII:P0201; EUIII:P0201)  
 0x01270008 8 Signal, air-mass flow sensor (OBDII:P0101; EUIII:P0101)  
 0x0127000A 10 Signal, sensor, engine coolant temperature (OBDII:P0116; EUIII:P0116)  
 0x0127000B 11 Signal, sensor, radiator-outlet coolant temperature  
 0x0127000C 12 Plausibility, maximum coolant temperature (OBDII:P1115)  
 0x0127000E 14 Signal, sensor, intake-air temperature (OBDII:P0111; EUIII:P0111)  
 0x01270012 18 Signal, exhaust-camshaft sensor (OBDII:P1397; EUIII:P0340)  
 0x01270013 19 Activation, VANOS Solenoid valve, exhaust (OBDII: P1529)  
 0x01270015 21 Activation, VANOS solenoid valve, inlet (OBDII: P1525)  
 0x01270016 22 Activation, fuel injector, cylinder 3 (OBDII:P0203; EUIII:P0203)  
 0x01270017 23 Activation, fuel injector, cylinder 6 (OBDII:P0206; EUIII:P0206)  
 0x01270018 24 Activation, fuel injector, cylinder 4 (OBDII:P0204; EUIII:P0204)  
 0x01270019 25 Activation, OX,-sensor heater before cat. conv., bank 1 (OBDII:P0135; EUIII:P0135)  
 0x0127001B 27 Activation, idle-speed control valve/closing coil (OBDII:P1550; EUIII:P0505)  
 0x0127001D 29 Activation, ignition, cylinder 1  
 0x0127001E 30 Activation, ignition, cylinder 3  
 0x0127001F 31 Activation, ignition, cylinder 5  
 0x01270021 33 Activation, fuel injector, cylinder 5 (OBDII:P0205; EUIII:P0205)  
 0x01270026 38 Clutch switch  
 0x01270027 39 Plausibility, signal, brake-light switch/brake test switch  
 0x01270028 40 Plausibility, signal, brake-light switch/pedal-travel switch  
 0x0127002A 42 Multifunction steering wheel, plausibility, signal  
 0x0127002B 43 Multifunction steering wheel, plausibility, rocker switch

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0x0127002D 45 Multifunction steering wheel, monitoring, interface  
 0x01270032 50 Activation, solenoid valve, fuel-circuit changeover (OBDII:P1145)  
 0x01270035 53 Activation, idle-speed control valve/opening coil (OBDII:P1509; EUIII:P0505)  
 0x01270037 55 Activation, OX.-sensor heater before cat. conv., bank 2 (OBDII:P0155; EUIII:P0155)  
 0x01270038 56 Signal, ignition-current measurement, resistance  
 0x01270039 57 Signal, knock sensor 1 (OBDII:P0325; EUIII:P0325)  
 0x0127003B 59 Signal, knock sensor 2 (OBDII:P0330; EUIII:P0330)  
 0x0127003D 61 Activation, OX-sensor heater after cat. conv., bank 2 (OBDII:P0141; EUIII:P0141)  
 0x01270041 65 Signal, inlet-camshaft sensor (OBDII:P0340; EUIII:P0340)  
 0x01270044 68 Activation, solenoid valve, tank ventilation (OBDII:P0443; EUIII:P0443)  
 0x01270045 69 Activation, fuel-pump relay  
 0x0127004A 74 Activation, A/C compressor  
 0x0127004F 79 Activation, OX.-sensor heater after cat. conv., bank 1 (OBDII:P0161; EUIII:P0161)  
 0x01270053 83 Signal, crankshaft sensor (OBDII:P0335; EUIII:P0335)  
 0x01270064 100 Control units, self-test (OBDII:P0601; EUIII:P0601)  
 0x01270067 103 Control VANOS, end-pos. fault, inlet camshaft (OBDII:P1519)  
 0x01270068 104 Control VANOS, end-pos. fault, exhaust camshaft (OBDII:P1520)  
 0x01270069 105 Control VANOS, position, inlet camshaft (OBDII:P1522)  
 0x0127006A 106 Control VANOS, position, exhaust camshaft (OBDII:P1523)  
 0x0127006D 109 Engine throttle, plausibility, activation duty factor (OBDII:P1580; EUIII:P0505)  
 0x0127006E 110 Signal, pedal-travel sensor (in thr.), pot. 1 (OBDII:P1542; EUIII:P0220)  
 0x0127006F 111 Signal, pedal-travel sensor (in thr.), pot. 2 (OBDII:P1542; EUIII:P0220)  
 0x01270070 112 Signal, throttle sensor, potentiometer 1 (OBDII:P0120; EUIII:P0120)  
 0x01270071 113 Signal, throttle sensor, Potentiometer 2 (OBDII:P0120; EUIII:P0120)  
 0x01270072 114 Activation, engine throttle (OBDII:P1580; EUIII:P0505)  
 0x01270073 115 Reference voltage 1, pedal-travel sensor/throttle sensor 1 (OBDII:P1623; EUIII:P0608)  
 0x01270074 116 Reference voltage 2, pedal-travel sensor/throttle sensor 2 (OBDII:P1623; EUIII:P0608)  
 0x01270075 117 Plausibility, signal, pedal-travel sensor (in thr.) pot. 1/2 (OBDII:P1542; EUIII:P0220)  
 0x01270076 118 Plausibility, signal, engine-throttle sensor, potentiometer (OBDII:P0120; EUIII:P0120)  
 0x01270077 119 Engine throttle, mechanical fault (sluggish/stuck) (OBDII:P1580; EUIII:P0505)  
 0x01270078 120 Plausibility, pedal-travel sensor (in thr.), throttle sensor (OBDII:P1542; EUIII:P0220)  
 0x0127007A 122 Signal, engine-oil temperature sensor (OBDII:P1161)  
 0x0127007B 123 Activation, map cooling (OBDII:P1622)  
 0x0127007C 124 Activation, solenoid valve, intake manifold (OBDII:P1593)  
 0x0127007D 125 Activation, electric fan  
 0x0127007E 126 Activation, solenoid valve, tank-leak diagnosis pump (OBDII:P1479; EUIII:P0440)  
 0x01270080 128 DME-EWS interface  
 0x0127008C 140 Tank-leak diagnosis pump, reed switch not closed (OBDII:P1475; EUIII:P0440)  
 0x0127008D 141 Tank-leak diagnosis pump, reed switch not open (OBDII:P1477; EUIII:P0440)  
 0x01270091 145 Fuel system, minor leak detected; fuel cap possibly not secured (OBDII:P0455)  
 0x01270095 149 Plausibility fault, air mass to pedal-tr. sensor (in eng. thr.) (OBDII:P1140; EUIII:P0101)  
 0x01270096 150 Signal, ox.sensor before cat. conv., bank 1, max. value exceeded (OBDII:P0130; EUIII:P0130)  
 0x01270097 151 Signal, ox.sensor before cat. conv., bank 1, min. value undershot

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(OBDII:P0130; EUIII:P0130)  
0x01270098 152 Signal, ox.sensor before cat. conv., bank 1, no signal (OBDII:P0130; EUIII:P0130)  
0x01270099 153 Signal, ox.sensor before cat. conv., bank 2, max. value exceeded (OBDII:P0150; EUIII:P0150)  
0x0127009A 154 Signal, ox.sensor before cat. conv., bnak 2, min. value undershot (OBDII:P1050; EUIII:P0150)  
0x0127009B 155 Signal, ox.sensor before cat. conv., bank 2, no signal (OBDII:P0150; EUIII:P0150)  
0x0127009C 156 Signal, ox.sensor after cat. conv., bank 1, max. value exceeded (OBDII:P0136; EUIII:P0136)  
0x0127009D 157 Signal, ox.sensor after cat. conv., bank 1, min. value undershot (OBDII:P0136; EUIII:P0136)  
0x0127009F 159 Signal, ox.sensor after cat. conv., bank 2, max. value exceeded (OBDII:P0156; EUIII:P0156)  
0x012700A0 160 Signal, ox.sensor after cat. conv., bank 2, min. value undershot (OBDII:P0156; EUIII:P0156)  
0x012700A8 168 Thermostat, map cooling, mechanical, stuck open (OBDII:P1624)  
0x012700A9 169 Engine-throttle output-stage shutoff after diagn. error  
0x012700aa 170 Control-unit self-test, engine throttle or internal fault (OBDII:P0601; EUIII:P0601)  
0x012700AB 171 Plausibility, system, engine throetle (OBDII:P0601; EUIII:P0601)  
0x012700AC 172 Signal, pedal-travel sensor (in thr.), pot. 1/2, short circuit (OBDII:P1542; EUIII:P0220)  
0x012700AD 173 Singal, throttle sensor, pot. 1/2, short circuit (OBDII:P0120; EUIII:P0120)  
0x012700AE 174 Throttle sensor, potentiometer 1/2, adaptation (OBDII:P0120; EUIII:P0120)  
0x012700AF 175 Pedal-travel sensor 1 (in thr.), adaptation (OBDII:P1542; EUIII:P0220)  
0x012700B0 176 Pedal-travel sensor 2 (in thr.), adaptation (OBDII:P1542; EUIII:P0220)  
0x012700BA 186 voltage excursion before cat. sensor, bank 1 (OBDII:P0134; EUIII:P0134)  
0x012700BB 187 voltage excursion before cat. sensor, bank 2 (OBDII:P0154; EUIII:P0154)  
0x012700BC 188 Heat output, ox.sensor before cat. conv., bank 1 (OBDII:P1132; EUIII:P0135)  
0x012700BD 189 Heat output, ox,sensor before cat. conv., bank 2 (OBDII:P1133; EUIII:P0155)  
0x012700BE 190 Heat output, ox.sensor after cat. conv., bank 1 (OBDII:P1186; EUIII:P0141)  
0x012700BF 191 Heat output, ox.sensor after car. conv., bank 2 (OBDII:P1187; EUIII:P0161)  
0x012700CA 202 Fuel trim bank 1 control limit (OBDII:P0170; EUIII:P0170)  
0x012700CB 203 Fuel trim bank 2 control limit (OBDII:P0173; EUIII:P0173)  
0x012700CC 204 Plausibility, idle speed (leakage air) (OBDII:P0505; EUIII:P0505)  
0x012700D0 208 speed monitoring not plausible EWS  
0x012700D1 209 Anti-tampering protection EWS  
0x012700D2 210 Error, ign.-current measurement at more than 2 cylinders  
0x012700D3 211 Idle-speed control valve, mechanical fault (OBDII:P1510; EUIII:P0505)  
0x012700D6 214 Signal, road speed (OBDII:P0500; EUIII:P0500)  
0x012700D7 215 Signal, ox.sensor after cat. conv., bank 1, no signal (OBDII:P0136; EUIII:P0136)  
0x012700D8 216 Signal, ox.sensor after cat. conv., bank 2, no signal (OBDII:P0156; EUIII:P0156)  
0x012700D9 217 signal, CAN EGS (OBDII:P0600; EUIII:P0600)  
0x012700DC 220 voltage, ox.sensor 1 after cat. conv., sensor too slow (OBDII:P1184; EUIII:P0140)  
0x012700DD 221 voltage, ox.sensor 2 after cat., sensor to slow (OBDII:P1185; EUIII:P0160)  
0x012700DE 222 Plausibility, coolant temperature (OBDII:P0125; EUIII:P0125)  
0x012700DF 223 Jump time, ox.sensor after cat. conv., bank 1 (OBDII:P1180;

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EUIII:P0139)  
 0x012700E0 224 Jump time, ox.sensor after cat. conv., bank 2 (OBDII:P1181;  
 EUIII:P0159)  
 0x012700E1 225 Function, ox.sensor control after cat. conv., bank 1 (OBDII:P1192;  
 EUIII:P0170)  
 0x012700E2 226 Function, ox.sensor control after cat., bank 2 (OBDII:P1193;  
 EUIII:P0173)  
 0x012700E3 227 Fuel trim bank 1, permissible range exceeded (OBDII:P1188;  
 EUIII:P0170)  
 0x012700E4 228 Fuel trim bank 2, permissible rang exceeded (OBDII:P1189;  
 EUIII:P0173)  
 0x012700E5 229 Control frequency, ox.sensor, bank 1, faulty (OBDII:P0133;  
 EUIII:P0133)  
 0x012700E6 230 Control frequency, ox,sensor, bank 2, faulty (OBDII:P0153;  
 EUIII:P0153)  
 0x012700E7 231 Switch time, ox.sensor, bank 1 (OBDII:P1178; EUIII:P0133)  
 0x012700E8 232 Switch time, ox.sensor, bank 2 (OBDII:P1179; EUIII:P0153)  
 0x012700E9 233 Cat.-conv. efficiency, bank 1 (OBDII:P0420; EUIII:P0420)  
 0x012700EA 234 Cat.-conv. efficiency, bank 2 (OBDII:P0430; EUIII:P0430)  
 0x012700EB 235 Function, ox.sensor control before cat. conv., bank 1 (OBDII:P1190;  
 EUIII:P0170)  
 0x012700EC 236 Function, ox.sensor control before cat. conv., bank 2 (OBDII:P1191;  
 EUIII:P0173)  
 0x012700EE 238 Misfire, cylinder 1 (OBDII:P0301; EUIII:P0301)  
 0x012700EF 239 Misfire, cylinder 2 (OBDII:P0302; EUIII:P0302)  
 0x012700F0 240 Misfire, cylinder 3 (OBDII:P0303; EUIII:P0303)  
 0x012700F1 241 Misfire, cylinder 4 (OBDII:P0304; EUIII:P0304)  
 0x012700F2 242 Misfire, cylinder 5 (OBDII:P0305; EUIII:P0305)  
 0x012700F3 243 Misfire, cylinder 6 (OBDII:P0306; EUIII:P0306)  
 0x012700F4 244 Segment timing, ture running disturbed  
 0x012700F8 248 ACAT sensor, signal after SA, implausible, bank 1 (OBDII:P1184;  
 EUIII:P0140)  
 0x012700F9 249 ACAT sensor, signal after SA, implausible, bank 2 (OBDII:P1185;  
 EUIII:P0160)  
 0x012700FA 250 Function check, tank ventilation (OBDII:P0440)

//0x01280000 DDE 2.2 M52  
 0x01280001 1 Delivery-controller control deviation  
 0x01280003 3 Electric shutoff valve  
 0x01280005 5 Needle-motion sensor  
 0x01280006 6 Exhaust gas recirculation, control deviation  
 0x01280008 8 Glow-duration control  
 0x0128000A 10 Start-of-injection control deviation  
 0x01280010 16 Supply voltage (batt. +)  
 0x01280015 21 controller sensor, distributor-type injection pump  
 0x0128001A 26 Brake-light switch/break-light test switch  
 0x0128001D 29 Road-speed signal  
 0x01280020 32 Control panel, cruise control, on multifunction steering wheel  
 0x01280023 35 Fuel temperature sensor  
 0x01280024 36 Engine-oil temperature sensor  
 0x01280025 37 Pedal-travel sensor  
 0x01280026 38 Hot-film air-mass flow sensor  
 0x0128002D 45 Electronic anti-theft vehicle disable (EWS II)  
 0x0128002F 47 Engine-speed sensor  
 0x01280035 53 Engine-coolant temperature sensor  
 0x01280036 54 Charge-air-pressure sensor  
 0x01280065 101 Charging-pressure control deviation  
 0x01280066 102 Control-module faults  
 0x01280067 103 Control-module faults  
 0x01280068 104 Control-module faults  
 0x01280069 105 Control-module faults  
 0x0128006A 106 Power output stages  
 0x0128006C 108 Variant coding

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0x0128006D 109 Variant coding  
 0x0128006F 111 Adjustment,engine control module pairing  
 0x01280070 112 CAN bus to EGS control unit  
 0x01280071 113 CAN bus to ASC control unit  
 0x01280072 114 CAN bus to instrument cluster  
  
 //0x01290000 DME M5.2 M62  
 0x01290001 1 Activation, leakage diagnosis pump  
 0x01290002 2 Fuel-circuit changeover  
 0x01290003 3 Leakage diagnosis pump  
 0x01290004 4 Oxygen-sensor heater after cat. converter cylinder 5-8  
 0x01290005 5 Oxygen-sensor heater before cat. converter cylinder 5-8  
 0x01290006 6 CAN instrumentation  
 0x01290008 8 Misfiring was caused by tank having been run dry  
 0x0129000A 10 Oxygen sensor before catalytic converter cylinder 1-4  
 0x0129000C 12 Oxygen sensor after catalytic converter cylinder 1-4  
 0x0129000D 13 Oxygen-sensor heater before cat. converter cylinder 1-4  
 0x0129000E 14 Oxygen-sensor heater after cat. converter cylinder 1-4  
 0x0129000F 15 Oxygen-sensor ageing TP before cat. conv. cylinder 1-4  
 0x01290010 16 Oxygen-sensor ageing TV before cat. conv. cylinder 1-4  
 0x01290011 17 Oxygen-sensor ageing after cat. converter cylinder 1-4  
 0x01290012 18 Oxygen-sensor ageing before cat. conv. cyl. 5-8  
 0x01290014 20 Oxygen sensor after catalytic converter cylinder 5-8  
 0x01290015 21 Oxygen sensor ageing TP before cat. conv. cylinder 5-8  
 0x01290016 22 Oxygen sensor ageing TV before cat. conv. cylinder 5-8  
 0x01290017 23 Oxygen sensor ageing after cat. converter cylinder 5-8  
 0x01290018 24 Diagnosis of function air conditioner compressor  
 0x0129001A 26 Multiplicative mixture adapt'n (Part load) cylinder 1-4, control limit reached  
 0x0129001B 27 Additive mixture adaptation (idle) cylinder 1-4, control limit reached  
 0x0129001C 28 Additive mixture adaptation (idle) cylinder 1-4, control limit reached  
 0x01290020 32 Idle speed actuator blocked  
 0x01290022 34 Multiplicative mixture adapt'n (part load) cylinder 5-8, control limit reached  
 0x01290023 35 Additive mixture adaptation (idle) cylinder 5-8, control limit reached  
 0x01290024 36 Additive mixture adaptation (idle) cylinder 5-8, control limit reached  
 0x01290027 39 Electronic car immobilisation system (EWS)  
 0x01290028 40 Cat. -converter conversion, cylinder 1-4  
 0x0129002D 45 Cat. -converter conversion, cylinder 5-8  
 0x01290032 50 Misfire, cyl. 1  
 0x01290033 51 Misfire, cyl. 2  
 0x01290034 52 Misfire, cyl. 3  
 0x01290035 53 Misfire, cyl. 4  
 0x01290036 54 Misfire, cyl. 5  
 0x01290037 55 Misfire, cyl. 6  
 0x01290038 56 Misfire, cyl. 7  
 0x01290039 57 Misfire, cyl. 8  
 0x0129003E 62 Misfiring, sum, relevant to exhaust gas  
 0x0129003F 63 Misfiring with cylinder cutout, cyl. 1  
 0x01290040 64 Misfiring with cylinder cutout, cyl. 2  
 0x01290041 65 Misfiring with cylinder cutout, cyl. 3  
 0x01290042 66 Misfiring with cylinder cutout, cyl. 4  
 0x01290043 67 Misfiring with cylinder cutout, cyl. 5  
 0x01290044 68 Misfiring with cylinder cutout, cyl. 6  
 0x01290045 69 Misfiring with cylinder cutout, cyl. 7  
 0x01290046 70 Misfiring with cylinder cutout, cyl. 8  
 0x0129004B 75 Misfiring with cylinder cutout, total  
 0x0129004E 78 Speed-sensor signal  
 0x0129004F 79 Secondary-air pump, stage 2 (output stage)  
 0x01290050 80 Secondary-air system  
 0x01290054 84 Secondary-air pump (output stage)  
 0x01290055 85 Secondary-air valve (output stage)  
 0x0129005B 91 Tank-ventilation valve,output stage, bank 2

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0x0129005D 93 Tank-ventilation system  
 0x01290061 97 Tank-leak detection: minor leak  
 0x01290062 98 Tank-ventilation-valve output stage  
 0x01290065 101 Control module defective (internal RAM)  
 0x01290066 102 Control module faulty (external RAM)  
 0x01290067 103 Control module defective (ROM)  
 0x01290068 104 Wrong values in fault memory  
 0x0129006B 107 Terminal 15 power supply  
 0x0129006C 108 Continuous voltage (+)  
 0x0129006F 111 Crankshaft position sensor  
 0x01290070 112 Camshaft position sensor  
 0x01290073 115 Hot film mass air flow sensor  
 0x01290075 117 Throttle-valve potentiometer  
 0x01290078 120 Road speed  
 0x01290079 121 Load measurement  
 0x0129007B 123 Engine-temperature sensor (coolant)  
 0x0129007C 124 Intake-air temperature sensor  
 0x01290082 130 Oxygen sensors before catalytic converter inverted  
 0x01290086 134 Tank fill level  
 0x01290087 135 Engine intervention /specified engine torque (gearbox intervention)  
 0x0129008A 138 Compressor intervention  
 0x0129008B 139 Activation, map cooling  
 0x0129008C 140 Engine torque, bank comparison  
 0x0129008D 141 Dynamic stability control (SDC) intervention with fadeout  
 0x0129008F 143 Engine drag-torque control (MSR) intervention  
 0x01290090 144 Automatic stability control ASC intervention  
 0x01290093 147 Function, map cooling  
 0x01290094 148 Interface, electronic engine immobilizer  
 0x01290095 149 Inlet-camshaft setting, bnak 2  
 0x01290096 150 Fuel injector, cyl. 1  
 0x01290097 151 Fuel injector, cyl. 2  
 0x01290098 152 Fuel injector, cyl. 3  
 0x01290099 153 Fuel injector, cyl. 4  
 0x0129009A 154 Fuel injector, cyl. 5  
 0x0129009B 155 Fuel injector, cyl. 6  
 0x0129009C 156 Fuel injector, cyl. 7  
 0x0129009D 157 Fuel injector, cyl. 8  
 0x012900A3 163 Electric-fuel-pump relay  
 0x012900A5 165 Exhaust-gas warning lamp ("CHECK ENGINE" lamp is fitted in US vehicles only)  
 0x012900A7 167 Electric-fuel-pump relay output stage  
 0x012900A8 168 Idle speed actuator for opening coil  
 0x012900A9 169 Idle speed actuator for closing coil  
 0x012900AA 170 A/C-compressor control  
 0x012900AE 174 Camshaft control, bank 1  
 0x012900B2 178 Camshaft control, bnak 2  
 0x012900B3 179 A/C-compressor control, bank 2  
 0x012900BC 188 Exhaust-gas warning lamp, bank 2 ("CHECK ENGINE" lamp is fitted is UD vehicles only)  
 0x012900BD 189 Inlet-camshaft setting, bnak 1  
 0x012900CB 203 Ignition-circuit monitoring  
 0x012900CC 204 EWS random-code storage  
 0x012900D0 208 Secondary-air system  
 0x012900D2 210 Knock sensor 1  
 0x012900D3 211 Knock sensor 2  
 0x012900D4 212 Knock sensor 3  
 0x012900D5 213 Knock sensor 4  
 0x012900D6 214 Controller Area Network (CAN) interface, version No.  
 0x012900D7 215 Controller Area Network (CAN) interface, Digital Motor Electronics (DME) timeout  
 0x012900D8 216 Controller Area Network (CAN) interface, Dynamic Stability Control (DSC) timeout  
 0x012900D9 217 Controller Area Network (CAN) interface, Electronic engine-power

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control (EML) timeout  
0x012900DC 220 Knock control  
0x012900DE 222 Knock-control test pulse  
0x012900E4 228 Automatic excess-fuel starting device output stage, bank 2  
0x012900E9 233 Automatic excess-fuel starting device output stage  
0x012900EA 234 Starting signal  
0x012900EC 236 Controller Area Network (CAN) interface, Electronic gearbox control (EGS) timeout  
0x012900ED 237 Automatic excess fuel starting device  
//0x012A0000 DME M5.2.1 M73  
0x012A0001 1 Activation, solenoid valve, leakage diagnosis pump  
0x012A0002 2 Activation, solenoid valve, fuel system changeover  
0x012A0003 3 Function, tank leakage diagnosis pump  
0x012A0004 4 Oxygen-sensor heater after catalytic converter, bank 2  
0x012A0005 5 Oxygen-sensor heater before catalytic converter, bank 2  
0x012A0006 6 CAN instrument cluster  
0x012A0008 8 Misfiring was caused by tank having been run dry  
0x012A000A 10 Signal, oxygen sensor before cat., bank 1  
0x012A000C 12 Signal, oxygen sensor after cat. conv., bank 1  
0x012A000D 13 oxygen-sensor heater before catalytic converter, bank 1  
0x012A000E 14 oxygen-sensor heater after catalytic converter, bank 1  
0x012A000F 15 Oxygen-sensor ageing TP before catalytic converter, bank 1  
0x012A0010 16 Oxygen-sensor ageing TV before catalytic converter, bank 1  
0x012A0011 17 Oxygen-sensor ageing after catalytic converter, bank 1  
0x012A0012 18 Oxygen-sensor ageing before catalytic converter, bank 2  
0x012A0014 20 Oxygen sensor after catalytic converter, bank 2  
0x012A0015 21 Oxygen-sensor ageing TP before catalytic converter, bank 2  
0x012A0016 22 Oxygen-sensor ageing TP before catalytic converter, bank 2  
0x012A0017 23 Oxygen-sensor ageing after catalytic converter, bank 2  
0x012A0018 24 Function, diagnosis, A/C compressor  
0x012A001A 26 Multiplicative mixture adaptation  
0x012A001B 27 Additive mixture adaptation (idle), bank 1, control limit reached  
0x012A001C 28 Additive mixture adaptation (idle), bank 1, control limit reached  
0x012A001D 29 Activation, switching valve for air-contained fuel injectors, bank 1  
0x012A0020 32 Function, idle-speed control  
0x012A0022 34 Multiplicative mixture adaptation  
0x012A0023 35 Additive mixture adaptation (idle), bank 2, control limit reached  
0x012A0024 36 Additive mixture adaptation (idle), bank 2, control limit reached  
0x012A0027 39 EWS 3.3 tampering protection  
0x012A0028 40 Catalytic-converter conversion, bank 1  
0x012A002D 45 Catalytic-converter conversion, bank 2  
0x012A0032 50 Misfire detection, cyl. 1  
0x012A0033 51 Misfire detection, cyl. 2  
0x012A0034 52 Misfire detection, cyl. 3  
0x012A0035 53 Misfire detection, cyl. 4  
0x012A0036 54 Misfire detection, cyl. 5  
0x012A0037 55 Misfire detection, cyl. 6  
0x012A0038 56 Misfire detection, cyl. 7  
0x012A0039 57 Misfire detection, cyl. 8  
0x012A003A 58 Misfire detection, cyl. 9  
0x012A003B 59 Misfire detection, cyl. 10  
0x012A003C 60 Misfire detection, cyl. 11  
0x012A003D 61 Misfire detection, cyl. 12  
0x012A003E 62 Misfiring at several cylinders  
0x012A003F 63 Misfiring with cylinder cutout, cyl. 1  
0x012A0040 64 Misfiring with cylinder cutout, cyl. 2  
0x012A0041 65 Misfiring with cylinder cutout, cyl. 3  
0x012A0042 66 Misfiring with cylinder cutout, cyl. 4  
0x012A0043 67 Misfiring with cylinder cutout, cyl. 5  
0x012A0044 68 Misfiring with cylinder cutout, cyl. 6  
0x012A0045 69 Misfiring with cylinder cutout, cyl. 7  
0x012A0046 70 Misfiring with cylinder cutout, cyl. 8  
0x012A0047 71 Misfiring with cylinder cutout, cyl. 9

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0x012A0048 72 Misfiring with cylinder cutout, cyl. 10  
 0x012A0049 73 Misfiring with cylinder cutout, cyl. 11  
 0x012A004A 74 Misfiring with cylinder cutout, cyl. 12  
 0x012A004B 75 Misfiring with cylinder cutout, total  
 0x012A004D 77 Activation, air containment, fuel injectors, bank 1  
 0x012A004E 78 Signal, crankshaft speed sensor  
 0x012A0050 80 Function, secondary-air system  
 0x012A0054 84 Activative, relay, secondary-air pump  
 0x012A0055 85 Activation, relay, secondary-air pump  
 0x012A005B 91 Activation, tank-venting valve, bank 2  
 0x012A005D 93 Function, tank-venting system  
 0x012A0061 97 Tank-venting system, minor leak  
 0x012A0062 98 Activation, tank-venting valve, bank 1  
 0x012A0065 101 Control module faulty (internal RAM)  
 0x012A0066 102 Control module faulty (external RAM)  
 0x012A0067 103 Control module faulty (ROM)  
 0x012A0068 104 Wrong values in fault memory  
 0x012A006B 107 Voltage supply (via DME main relay)  
 0x012A006C 108 Open circuit, continuous  
 0x012A006F 111 Signal, crankshaft position sensor  
 0x012A0070 112 Signal, camshaft position sensor  
 0x012A0073 115 Signal, bot-film air-mass flow sensor  
 0x012A0075 117 Signal, throttle potentiometer  
 0x012A0078 120 Signal, vehicle speed  
 0x012A0079 121 Load measurement  
 0x012A007B 123 Signal, temperature sensor, engine coolant  
 0x012A007C 124 Signal, temperature sensor, intake air  
 0x012A0082 130 Oxygen sensors before catalytic converter connected in incorrect sequence  
 0x012A0086 134 Switch, tank fill level  
 0x012A0087 135 Engine intervention/specified engine torque (gearbox intervention)  
 0x012A008A 138 Compressor intervention  
 0x012A008B 139 Activation, map cooling  
 0x012A008C 140 Engine torque, bank comparison  
 0x012A008D 141 Dynamic Stability Control DSC intervention with fadeout  
 0x012A008F 143 Function, ASC/DSC MSR - engine intervention  
 0x012A0090 144 Automatic Stability Control ASC - intervention  
 0x012A0093 147 Function, map cooling  
 0x012A0094 148 EWS 3.3 interface DME-EWS  
 0x012A0096 150 Activation, fuel injector, cyl. 1  
 0x012A0097 151 Activation, fuel injector, cyl. 2  
 0x012A0098 152 Activation, fuel injector, cyl. 3  
 0x012A0099 153 Activation, fuel injector, cyl. 4  
 0x012A009A 154 Activation, fuel injector, cyl. 5  
 0x012A009B 155 Activation, fuel injector, cyl. 6  
 0x012A009C 156 Activation, fuel injector, cyl. 7  
 0x012A009D 157 Activation, fuel injector, cyl. 8  
 0x012A009E 158 Activation, fuel injector, cyl. 9  
 0x012A009F 159 Activation, fuel injector, cyl. 10  
 0x012A00A0 160 Activation, fuel injector, cyl. 11  
 0x012A00A1 161 Activation, fuel injector, cyl. 12  
 0x012A00A3 163 Activation, electric fuel pump, EKP relay  
 0x012A00A7 167 Activation, electric fuel pump, EKP relay  
 0x012A00A8 168 Activation, idle-speed control valve, opening coil  
 0x012A00A9 169 Activation, idle-speed control valve, closing coil  
 0x012A00AA 170 A/C-compressor control  
 0x012A00AE 179 A/C-compressor control, bank 2  
 0x012A00B7 183 Tank-leak detection  
 0x012A00B8 184 Tank-venting system, blocked line  
 0x012A00BE 190 Ignition-circuit monitoring, cylinder 1  
 0x012A00BF 191 Ignition-circuit monitoring, cylinder 2  
 0x012A00C0 192 Ignition-circuit monitoring, cylinder 3  
 0x012A00C1 193 Ignition-circuit monitoring, cylinder 4



# Bmw Code Sheet.txt

0x012A00C2 194 Ignition-circuit monitoring, cylinder 5  
 0x012A00C3 195 Ignition-circuit monitoring, cylinder 6  
 0x012A00C4 196 Ignition-circuit monitoring, cylinder 7  
 0x012A00C5 197 Ignition-circuit monitoring, cylinder 8  
 0x012A00C6 198 Ignition-circuit monitoring, cylinder 9  
 0x012A00C7 199 Ignition-circuit monitoring, cylinder 10  
 0x012A00C8 200 Ignition-circuit monitoring, cylinder 11  
 0x012A00C9 201 Ignition-circuit monitoring, cylinder 12  
 0x012A00CB 203 Ignition-circuit monitoring, bank 1  
 0x012A00CC 204 EWS 3.3 random-code storage  
 0x012A00D2 210 Signal, knock sensor 1  
 0x012A00D3 211 Signal, knock sensor 2  
 0x012A00D4 212 Knock sensor 3  
 0x012A00D5 213 Knock sensor 4  
 0x012A00D6 214 Control modules with different CAN versions at CAN bus  
 0x012A00D7 215 CAN timeout, Digital Motor Electronics (DME)  
 0x012A00D8 216 CAN timeout ASC/DSC  
 0x012A00D9 217 CAN timeout, electronic engine-power control EML  
 0x012A00DC 220 Knock control  
 0x012A00DE 222 Knock-control test pulse  
 0x012A00E4 228 Automatic, fuel injector, activation, bank 2  
 0x012A00E9 233 Activation, automatic starting device  
 0x012A00EA 234 Start signal, ignition-lock position 3  
 0x012A00EC 236 CAN timeout, electronic transmission management (EGA/AGS)  
 0x012A00ED 237 Function, automatic starting device  
 0x012A00FA 250 Function,air-contained fuel injectors

## //0x012B0000 DME M3.3 M60

0x012B0001 1 Relay for electric fuel pump  
 0x012B0002 2 Idle-actuator closing winding  
 0x012B0003 3 Fuel injector, cylinder 1  
 0x012B0004 4 Fuel injector, cylinder 4  
 0x012B0005 5 Fuel injector, cylinder 6  
 0x012B0006 6 Fuel-injector output stage without cylinder association  
 0x012B0007 7 Fuel injector, cylinder 7  
 0x012B0008 8 Fault lamp (US Only)  
 0x012B000C 12 Oxygen sensor 2  
 0x012B000D 13 Oxygen sensor 1  
 0x012B000F 15 Ignition-circuit monitoring  
 0x012B0010 16 Pulse generator for crankshaft  
 0x012B0011 17 Camshaft sensor  
 0x012B0016 22 Ignition, cylinder 7  
 0x012B0017 23 Ignition, cylinder 6  
 0x012B0018 24 Ignition, cylinder 4  
 0x012B0019 25 Ignition, cylinder 1  
 0x012B001A 26 Control-unit power supply B+  
 0x012B001D 29 Idle-actuator opening winding  
 0x012B001F 31 Fuel injector, cylinder 5  
 0x012B0020 32 Fuel injector, cylinder 8  
 0x012B0021 33 Fuel injector, cylinder 3  
 0x012B0023 35 Fuel injector, cylinder 2  
 0x012B0024 36 Tank ventilation  
 0x012B0025 37 Oxygen-sensor heater  
 0x012B0029 41 Air-mass flow sensor (hot-film)  
 0x012B002A 42 Speed sensor  
 0x012B0030 48 A/C-compressor cutoff  
 0x012B0031 49 Ignition, cylinder 2  
 0x012B0032 50 Ignition, cylinder 3  
 0x012B0033 51 Ignition, cylinder 8  
 0x012B0034 52 Ignition, cylinder 5  
 0x012B0036 54 Control-unit power supply via main relay  
 0x012B003E 62 Electronic engine-power-control signal (EML)  
 0x012B0042 66 Signal, burglar alarm system (DWA/EWS)

# BMW Code Sheet.txt

0x012B0043 67 Knock sensor 4  
 0x012B0044 68 Knock sensor 3  
 0x012B0045 69 Knock sensor 2  
 0x012B0046 70 Knock sensor 1  
 0x012B0049 73 Throttle-valve potentiometer  
 0x012B004D 77 Intake-air temperature sensor  
 0x012B004E 78 Engine-temperature sensor (coolant)  
 0x012B0052 82 Intervention, engine drag-torque control (MSR)  
 0x012B0053 83 Intervention, Automatic Stability Control  
 0x012B0064 100 Output stage, group 1  
 0x012B0065 101 Output stage, group 2  
 0x012B00C8 333 DME Control unit  
 0x012B00C9 201 Oxygen-sensor control 1  
 0x012B00CA 202 Fault memory  
 0x012B00CB 203 Oxygen-sensor control 2  
 0x012B00CC 204 Idle-speed increase during engine-dragtorque control  
 0x012B00CD 205 Gearbox intervention during gearshifts (with EGS only)  
 0x012B00CE 206 Knock-contorl test pulse  
 0x012B00D2 210 CAN interface, gearbox intervention  
 0x012B00DC 220 EWS code  
 //0x012C0000 DME MS41.1 M52  
 0x012C0001 1 Ignition,cylinder 2  
 0x012C0002 2 Ignition,cylinder 4  
 0x012C0003 3 Ignition,cylinder 6  
 0x012C0005 5 Fuel injector,cylinder 2  
 0x012C0006 6 Fuel injector,cylinder 1  
 0x012C0008 8 Air-mass flow sensor  
 0x012C000a 10 Coolant-temperature sensor  
 0x012C000B 11 Tank pressure sensor  
 0x012C000c 12 Throttle valve potentiometer  
 0x012C000E 14 Intake air temperature sensor  
 0x012C0010 16 Line for controlled air conditioning compressor  
 0x012C0012 18 EWS signal defective  
 0x012C0014 20 Fault lamp (MIL)  
 0x012C0015 21 VANOS: electrical fault  
 0x012C0016 22 Fuel injector,cylinder 3  
 0x012C0017 23 Fuel injector,cylinder 6  
 0x012C0018 24 Fuel injector,cylinder 4  
 0x012C0019 25 Output stage, oxygen-sensor hearter, sensor 1,cylinder 1-3 befor cat.  
 con  
 0x012C001B 27 Idle actuator: closing winding  
 0x012C001D 29 Ignition,cylinder 1  
 0x012C001E 30 Ignition,cylinder 3  
 0x012C001F 31 Ignition,cylinder 5  
 0x012C0021 33 Fuel injector,cylinde 5  
 0x012C0023 35 Relay on secondary air pump  
 0x012C002e 46 Signal, "Fuel reserve"  
 0x012C0032 50 Solenoid valve for fuel evaporation system (running losses)  
 0x012C0033 51 Shoutoff valve, activated charcoal filter  
 0x012C0034 52 Solenoid valv, exhaust flap  
 0x012C0035 53 Idle actuator: opening winding  
 0x012C0037 55 Output stage for oxygen sensor heating, sensor 2 (cylinder 4-6; before  
 cat')  
 0x012C0038 56 Open circuit, ignition-current-feedback resistor  
 0x012C0039 57 Knock sensor 1  
 0x012C003B 59 Knock sensor 2  
 0x012C003D 61 Oxygen sensor heating, sensor 4 (cylinder 4-6; after cat')  
 0x012C003E 62 Secondary air valve (electorically operated change-over valve)  
 0x012C0041 65 Camshaft sensor  
 0x012C0044 68 Tank-ventilation valve, electrical fault  
 0x012C0045 69 Electric-fuel-pump relay  
 0x012C004A 74 A/C-Compressor relay  
 0x012C004B 75 Oxygen-sensor voltage 1, cylinders 1-3; beofre cat. conv. Z3 and 323i

# Bmw Code Sheet.txt

US only: this fault affects cylinders 1-6  
0x012C004C 76 Oxygen sensor voltage 2 (cylinder 4-6; before cat')  
0x012C004D 77 Oxygen-sensor voltage 3, cylinders 1-3; after cat, conv, Z3 and 323i  
US only: this fault affects cylinder 1-6  
0x012C004E 78 Oxygen-sensor voltage 4 (cylinder 4-6; after cat')  
0x012C004F 79 Oxygen-sensor heater, sensor 3, cylinders 1-3; after cat. conv. Z3 and 323i US only: this fault affects cylinder 1-6  
0x012C0050 80 ABS/ASC interface, ignition fadeout  
0x012C0051 81 ABS/ASC interface, idle-speed increas  
0x012C0052 82 ABS/ASC interface, ignition-timing adjustment  
0x012C0053 83 Crankshaft sensor  
0x012C0064 100 DME control unit self-test  
0x012C00BE 190 Tank-leakage diagnosis pump: reed contact dose not close  
0x012C00BF 191 Tank-leakage diagnosis pump: reed contact dose not open  
0x012C00C0 192 Tank-leakage diagnosis Zpump: reed contact no longer close  
0x012C00C1 193 Reed Contact, tank-leak diagnosis pump: hose pinched  
0x012C00C2 194 Tank-leakage detection: major leak  
0x012C00C3 195 Tank-leakage detection: minor leak  
0x012C00C4 196 Activation, solenoid valve, tank-leakage diagnosis pump  
0x012C00C5 197 Ambient-pressure sensor  
0x012C00C8 200 Oxygen-sensor voltage 1-3; before cat. conv. Z3 and 323i US only: this fault affects cylinders 1-6  
0x012C00C9 201 Oxygen sensor voltage stroke, sensor 2 (cylinder 4-6; before cat')  
0x012C00CA 202 Oxygen sensor control limit, cylinders 1-3; Z3 and 323i US only: this fault affects cylinder 1-6  
0x012C00CB 203 Oxygen-sensor control limit, cylinder 4-6  
0x012C00CC 204 Idle speed deviates significantly from nominal value  
0x012C00D1 209 Signal, EWS manipulated  
0x012C00D2 210 Ignition-current-feedback fault: at more than 2 cylinders  
0x012C00D3 211 Idle actuator: mechanical jamming  
0x012C00D4 212 VANOS: mechanical jamming  
0x012C00D6 214 Road-speed signal  
0x012C00D7 215 ASC/MSR/EML: signal combination  
0x012C00D8 216 Speed-range signal , EGS  
0x012C00D9 217 CAN-bus: no EGS transmission  
0x012C00DA 218 CAN module: warning level reached  
0x012C00DB 219 CAN module: bus off  
0x012C00DC 220 Function, oxygen-sensor control,bank 1  
0x012C00DD 221 Function, oxygen-sensor control,bank 2  
0x012C00DE 223 Oxygen sensor control not active after specified time  
0x012C00E3 227 Mixture deviation, cylinders 1-3; Z3 and 323i US only: this fault affects cylinders 1-6  
0x012C00E4 228 Mixture deviation, cylinders 4-6;  
0x012C00E5 229 Control frequency, oxygen sensor 1, cylinders 1-3; before cat. conv. Z3 and 323i US only this fault affects cylinders 1-6  
0x012C00E6 230 Control frequency, oxygen sensor 2 (cylinder 4-6; before cat')  
0x012C00E7 231 Operating time, oxygen sensor 1, cylinders 1-3; before cat. conv. Z3 and 323i US only: this fault concerns cylinders 1-6  
0x012C00E8 232 Operating time, oxygen sensor 2, (cylinders 4-6; before cat. conv.)  
0x012C00E9 233 Total CAT. Conv. efficiency, cylinders 1-3; Z3 and 323i US only: this fault affects cylinders 1-6  
0x012C00EA 234 CAT overall efficiency rating, cylinder 4-6  
0x012C00EB 235 Heat output, oxygen sensor 3, cylinders 1-3; after cat. conv. Z3 and 323i US only: this fault affects cylinders 1-6  
0x012C00EC 236 Heating power, oxygen sensor 4 (cylinder 4-6; after cat')  
0x012C00EE 238 Misfire, cylinder 1  
0x012C00EF 239 Misfire, cylinder 2  
0x012C00F0 240 Misfire, cylinder 3  
0x012C00F1 241 Misfire, cylinder 4  
0x012C00F2 242 Misfire, cylinder 5  
0x012C00F3 243 Misfire, cylinder 6  
0x012C00F4 244 Crankshaft segment timing  
0x012C00F5 245 Secondary-air system, cylinders 1-3 Only Z3 and 323i US and E36/5

# Bmw Code Sheet.txt

from 12/98: This fault affects cylinder 1-6

0x012C00F6 246 Secondary air system, cylinders 4-6  
 0x012C00F7 247 Secondary air valve jams in open position  
 0x012C00FA 250 Function fault, tank vent valve  
 0x012C00FB 251 Tank-leak detection: minor leak  
 0x012C00FC 252 Tank-Ventilation system: suction fault  
 0x012C00FD 253 Shut-off valve, activated-charcoal filter, jammed shut  
 0x012C00FE 254 Tank-leak detection: major leak  
 0x012C00FF 255 Tank-Ventilation system: tank-Ventilation valve jams open

//0x012D0000 DME MS41.1 M52 ORVR  
 0x012D0001 1 Ignition,cylinder 2  
 0x012D0002 2 Ignition,cylinder 4  
 0x012D0003 3 Ignition,cylinder 6  
 0x012D0005 5 Fuel injector,cylinder 2  
 0x012D0006 6 Fuel injector,cylinder 1  
 0x012D0008 8 Air-mass flow sensor  
 0x012D000a 10 Coolant-temperature sensor  
 0x012D000B 11 Tank pressure sensor  
 0x012D000c 12 Throttle valve potentiometer  
 0x012D000E 14 Intake air temperature sensor  
 0x012D0010 16 Line for controlled air conditioning compressor  
 0x012D0012 18 EWS signal defective  
 0x012D0014 20 Fault lamp (MIL)  
 0x012D0015 21 VANOS: electrical fault  
 0x012D0016 22 Fuel injector,cylinder 3  
 0x012D0017 23 Fuel injector,cylinder 6  
 0x012D0018 24 Fuel injector,cylinder 4  
 0x012D0019 25 Output stage, oxygen-sensor heater, sensor 1,cylinder 1-3 before cat.  
 con  
 0x012D001B 27 Idle actuator: closing winding  
 0x012D001D 29 Ignition,cylinder 1  
 0x012D001E 30 Ignition,cylinder 3  
 0x012D001F 31 Ignition,cylinder 5  
 0x012D0021 33 Fuel injector,cylinder 5  
 0x012D0023 35 Relay on secondary air pump  
 0x012D002e 46 Signal, "Fuel reserve"  
 0x012D0032 50 Solenoid valve for fuel evaporation system (running losses)  
 0x012D0033 51 Shut-off valve, activated charcoal filter  
 0x012D0034 52 Solenoid valve, exhaust flap  
 0x012D0035 53 Idle actuator: opening winding  
 0x012D0037 55 Output stage for oxygen sensor heating, sensor 2 (cylinder 4-6; before cat')  
 0x012D0038 56 Open circuit, ignition-current-feedback resistor  
 0x012D0039 57 Knock sensor 1  
 0x012D003B 59 Knock sensor 2  
 0x012D003D 61 Oxygen sensor heating, sensor 4 (cylinder 4-6; after cat')  
 0x012D003E 62 Secondary air valve (electrically operated change-over valve)  
 0x012D0041 65 Camshaft sensor  
 0x012D0044 68 Tank-ventilation valve, electrical fault  
 0x012D0045 69 Electric-fuel-pump relay  
 0x012D004A 74 A/C-Compressor relay  
 0x012D004B 75 Oxygen-sensor voltage 1, cylinders 1-3; before cat. conv. Z3 and 323i  
 US only: this fault affects cylinders 1-6  
 0x012D004C 76 Oxygen sensor voltage 2 (cylinder 4-6; before cat')  
 0x012D004D 77 Oxygen-sensor voltage 3, cylinders 1-3; after cat, conv, Z3 and 323i  
 US only: this fault affects cylinder 1-6  
 0x012D004E 78 Oxygen-sensor voltage 4 (cylinder 4-6; after cat')  
 0x012D004F 79 Oxygen-sensor heater, sensor 3, cylinders 1-3; after cat. conv. Z3 and 323i  
 US only: this fault affects cylinder 1-6  
 0x012D0050 80 ABS/ASC interface, ignition fadeout  
 0x012D0051 81 ABS/ASC interface, idle-speed increase  
 0x012D0052 82 ABS/ASC interface, ignition-timing adjustment

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0x012D0053 83 Crankshaft sensor  
 0x012D0064 100 DME control unit self-test  
 0x012D00BE 190 Tank-leakage diagnosis pump: reed contact dose not close  
 0x012D00BF 191 Tank-leakage diagnosis pump: reed contact dose not open  
 0x012D00C0 192 Tank-leakage diagnosis Zpump: reed contact no longer close  
 0x012D00C1 193 Reed Contact, tank-leak diagnosis pump: hose pinched  
 0x012D00C2 194 Tank-leakage detection: major leak  
 0x012D00C3 195 Tank-leakage detection: minor leak  
 0x012D00C4 196 Activation, solenoid valve, tank-leakage diagnosis pump  
 0x012D00C5 197 Ambient-pressure sensor  
 0x012D00C8 200 Oxygen-sensor voltage 1-3; before cat. conv. Z3 and 323i US only: this fault affects cylinders 1-6  
 0x012D00C9 201 Oxygen sensor voltage stroke, sensor 2 (cylinder 4-6; before cat')  
 0x012D00CA 202 Oxygen sensor control limit, cylinders 1-3; Z3 and 323i US only: this fault affects cylinder 1-6  
 0x012D00CB 203 Oxygen-sensor control limit, cylinder 4-6  
 0x012D00CC 204 Idle speed deviates significantly from nominal value  
 0x012D00D1 209 Signal, EWS manipulated  
 0x012D00D2 210 Ignition-current-feedback fault: at more than 2 cylinders  
 0x012D00D3 211 Idle actuator: mechanical jamming  
 0x012D00D4 212 VANOS: mechanical jamming  
 0x012D00D6 214 Road-speed signal  
 0x012D00D7 215 ASC/MSR/EML: signal combination  
 0x012D00D8 216 Speed-range signal, EGS  
 0x012D00D9 217 CAN-bus: no EGS transmission  
 0x012D00DA 218 CAN module: warning level reached  
 0x012D00DB 219 CAN module: bus off  
 0x012D00DC 220 Function, oxygen-sensor control, bank 1  
 0x012D00DD 221 Function, oxygen-sensor control, bank 2  
 0x012D00DE 223 Oxygen sensor control not active after specified time  
 0x012D00E3 227 Mixture deviation, cylinders 1-3; Z3 and 323i US only: this fault affects cylinders 1-6  
 0x012D00E4 228 Mixture deviation, cylinders 4-6;  
 0x012D00E5 229 Control frequency, oxygen sensor 1, cylinders 1-3; before cat. conv. Z3 and 323i US only this fault affects cylinders 1-6  
 0x012D00E6 230 Control frequency, oxygen sensor 2 (cylinder 4-6; before cat')  
 0x012D00E7 231 Operating time, oxygen sensor 1, cylinders 1-3; before cat. conv. Z3 and 323i US only: this fault concerns cylinders 1-6  
 0x012D00E8 232 Operating time, oxygen sensor 2, (cylinders 4-6; before cat. conv.)  
 0x012D00E9 233 Total CAT. Conv. efficiency, cylinders 1-3; Z3 and 323i US only: this fault affects cylinders 1-6  
 0x012D00EA 234 CAT overall efficiency rating, cylinder 4-6  
 0x012D00EB 235 Heat output, oxygen sensor 3, cylinders 1-3; after cat. conv. Z3 and 323i US only: this fault affects cylinders 1-6  
 0x012D00EC 236 Heating power, oxygen sensor 4 (cylinder 4-6; after cat')  
 0x012D00EE 238 Misfire, cylinder 1  
 0x012D00EF 239 Misfire, cylinder 2  
 0x012D00F0 240 Misfire, cylinder 3  
 0x012D00F1 241 Misfire, cylinder 4  
 0x012D00F2 242 Misfire, cylinder 5  
 0x012D00F3 243 Misfire, cylinder 6  
 0x012D00F4 244 Crankshaft segment timing  
 0x012D00F5 245 Secondary-air system, cylinders 1-3 Only Z3 and 323i US and E36/5 from 12/98: This fault affects cylinder 1-6  
 0x012D00F6 246 Secondary air system, cylinders 4-6  
 0x012D00F7 247 Secondary air valve jams in open position  
 0x012D00FA 250 Function fault, tank vent valve  
 0x012D00FB 251 Tank-leak detection: minor leak  
 0x012D00FC 252 Tank-Ventilation system: suction fault  
 0x012D00FD 253 Shut-off valve, activated-charcoal filter, jammed shut  
 0x012D00FE 254 Tank-leak detection: major leak  
 0x012D00FF 255 Tank-Ventilation system: tank-Ventilation valve jams open  
 //0x012E0000 DME MS41 M52

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0x012E0001 1 Ignition,cylinder 2  
 0x012E0002 2 Ignition,cylinder 4  
 0x012E0003 3 Ignition,cylinder 6  
 0x012E0005 5 Fuel injector,cylinder 2  
 0x012E0006 6 Fuel injector,cylinder 1  
 0x012E0008 8 Air-mass flow sensor  
 0x012E000a 10 Coolant-temperature sensor  
 0x012E000B 11 Tank pressure sensor  
 0x012E000c 12 Throttle valve potentiometer  
 0x012E000E 14 Intake air temperature sensor  
 0x012E0010 16 Line for controlled air conditioning compressor  
 0x012E0012 18 EWS signal defective  
 0x012E0014 20 Fault lamp (MIL)  
 0x012E0015 21 VANOS: electrical fault  
 0x012E0016 22 Fuel injector,cylinder 3  
 0x012E0017 23 Fuel injector,cylinder 6  
 0x012E0018 24 Fuel injector,cylinder 4  
 0x012E0019 25 Output stage, oxygen-sensor heater, sensor 1,cylinder 1-3 before cat.  
 conv. Z3 and 323i US only: this fault affects cylinder 1-6  
 0x012E001B 27 Idle actuator: closing winding  
 0x012E001D 29 Ignition,cylinder 1  
 0x012E001E 30 Ignition,cylinder 3  
 0x012E001F 31 Ignition,cylinder 5  
 0x012E0021 33 Fuel injector,cylinder 5  
 0x012E0023 35 Relay on secondary air pump  
 0x012E002e 46 Signal, "Fuel reserve"  
 0x012E0032 50 Solenoid valve for fuel evaporation system (running losses)  
 0x012E0033 51 Shutoff valve, activated charcoal filter  
 0x012E0034 52 Solenoid valve, exhaust flap  
 0x012E0035 53 Idle actuator: opening winding  
 0x012E0037 55 Output stage for oxygen sensor heating, sensor 2 (cylinder 4-6; before  
 cat')  
 0x012E0038 56 Open circuit, ignition-current-feedback resistor  
 0x012E0039 57 Knock sensor 1  
 0x012E003B 59 Knock sensor 2  
 0x012E003D 61 Oxygen sensor heating, sensor 4 (cylinder 4-6; after cat')  
 0x012E003E 62 Secondary air valve (electrically operated change-over valve)  
 0x012E0041 65 Camshaft sensor  
 0x012E0044 68 Tank-ventilation valve, electrical fault  
 0x012E0045 69 Electric-fuel-pump relay  
 0x012E004A 74 A/C-Compressor relay  
 0x012E004B 75 Oxygen-sensor voltage 1, cylinders 1-3; before cat. conv. Z3 and 323i  
 US only: this fault affects cylinders 1-6  
 0x012E004C 76 Oxygen sensor voltage 2 (cylinder 4-6; before cat')  
 0x012E004D 77 Oxygen-sensor voltage 3, cylinders 1-3; after cat, conv, Z3 and 323i  
 US only: this fault affects cylinder 1-6  
 0x012E004E 78 Oxygen-sensor voltage 4 (cylinder 4-6; after cat')  
 0x012E004F 79 Oxygen-sensor heater, sensor 3, cylinders 1-3; after cat. conv. Z3 and  
 323i US only: this fault affects cylinder 1-6  
 0x012E0050 80 ABS/ASC interface, ignition fadeout  
 0x012E0051 81 ABS/ASC interface, idle-speed increase  
 0x012E0052 82 ABS/ASC interface, ignition-timing adjustment  
 0x012E0053 83 Crankshaft sensor  
 0x012E0064 100 DME control unit self-test  
 0x012E00BE 190 Tank-leakage diagnosis pump: reed contact does not close  
 0x012E00BF 191 Tank-leakage diagnosis pump: reed contact does not open  
 0x012E00C0 192 Tank-leakage diagnosis pump: reed contact no longer close  
 0x012E00C1 193 Reed Contact, tank-leak diagnosis pump: hose pinched  
 0x012E00C2 194 Tank-leakage detection: major leak  
 0x012E00C3 195 Tank-leakage detection: minor leak  
 0x012E00C4 196 Activation, solenoid valve, tank-leakage diagnosis pump  
 0x012E00C5 197 Ambient-pressure sensor  
 0x012E00C8 200 Oxygen-sensor voltage 1-3; before cat. conv. Z3 and 323i US only:

# Bmw Code Sheet.txt

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this fault affects cylinders 1-6
0x012E00C9 201 Oxygen sensor voltage stroke, sensor 2 (cylinder 4-6; before cat')
0x012E00CA 202 Oxygen sensor control limit, cylinders 1-3; Z3 and 323i US only: this
fault affects cylinder 1-6
0x012E00CB 203 Oxygen-sensor control limit, cylinder 4-6
0x012E00CC 204 Idle speed deviates significantly from nominal value
0x012E00D1 209 Signal, EWS manipulated
0x012E00D2 210 Ignition-current-feedback fault: at more than 2 cylinders
0x012E00D3 211 Idle actuator: mechanical jamming
0x012E00D4 212 VANOS: mechanical jamming
0x012E00D6 214 Road-speed signal
0x012E00D7 215 ASC/MSR/EML: signal combination
0x012E00D8 216 Speed-range signal , EGS
0x012E00D9 217 CAN-bus: no EGS transmission
0x012E00DA 218 CAN module: warning level reached
0x012E00DB 219 CAN module: bus off
0x012E00DC 220 Function, oxygen-sensor control,bank 1
0x012E00DD 221 Function, oxygen-sensor control,bank 2
0x012E00DE 223 Oxygen sensor control not active after specified time
0x012E00E3 227 Mixture deviation, cylinders 1-3; Z3 and 323i US only: this fault
affects cylinders 1-6
0x012E00E4 228 Mixture deviation, cylinders 4-6;
0x012E00E5 229 Control frequency, oxygen sensor 1, cylinders 1-3; before cat. conv.
Z3 and 323i US only this fault affects cylinders 1-6
0x012E00E6 230 Control frequency, oxygen sensor 2 (cylinder 4-6; before cat')
0x012E00E7 231 Operating time, oxygen sensor 1, cylinders 1-3; before cat. conv. Z3
and 323i US only: this fault concerns cylinders 1-6
0x012E00E8 232 Operating time, oxygen sensor 2, (cylinders 4-6; before cat. conv.)
0x012E00E9 233 Total CAT. Conv. efficiency, cylinders 1-3; Z3 and 323i US only: this
fault affects cylinders 1-6
0x012E00EA 234 CAT overall efficiency rating, cylinder 4-6
0x012E00EB 235 Heat output, oxygen sensor 3, cylinders 1-3; after cat. conv. Z3 and
323i US only: this fault affects cylinders 1-6
0x012E00EC 236 Heating power, oxygen sensor 4 (cylinder 4-6; after cat')
0x012E00EE 238 Misfire, cylinder 1
0x012E00EF 239 Misfire, cylinder 2
0x012E00F0 240 Misfire, cylinder 3
0x012E00F1 241 Misfire, cylinder 4
0x012E00F2 242 Misfire, cylinder 5
0x012E00F3 243 Misfire, cylinder 6
0x012E00F4 244 Crankshaft segment timing
0x012E00F5 245 Secondary-air system, cylinders 1-3 Only Z3 and 323i US and E36/5
from 12/98: This fault affects cylinder 1-6
0x012E00F6 246 Secondary air system, cylinders 4-6
0x012E00F7 247 Secondary air valve jams in open position
0x012E00FA 250 Function fault, tank vent valve
0x012E00FB 251 Tank-leak detection: minor leak
0x012E00FC 252 Tank-Ventilation system: suction fault
0x012E00FD 253 Shut-off valve, activated-charcoal filter, jammed shut
0x012E00FE 254 Tank-leak detection: major leak
0x012E00FF 255 Tank-Ventilation system: tank-Ventilation valve jams open

//0x012F0000 DDE 3.0 M47
0x012F0001 01 Delivery controller
0x012F0003 03 Electric shut-off valve
0x012F0005 05 Needle-motion sensor
0x012F0006 06 Exhaust-gas recirculation
0x012F0008 08 Glow-plug system
0x012F000A 0A Control, start of injection
0x012F0010 10 Power supply
0x012F0011 11 DDE control unit
0x012F0012 12 Terminal 15
0x012F0013 13 DDE main relay

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# Bmw Code Sheet.txt

0x012F001A 1A Brake-light switch/brake-test switch  
 0x012F001B 1B Electric auxiliary heater  
 0x012F001C 1C Clutch switch  
 0x012F001D 1D Roadspeed signal  
 0x012F0020 20 Control element, cruise control  
 0x012F0023 23 Fuel temperature sensor  
 0x012F0024 24 Engine-oil temperature sensor  
 0x012F0025 25 Pedal-travel sensor  
 0x012F0026 26 Air-mass flow sensor  
 0x012F002d 2D Electronic car immobilization system  
 0x012F002E 2E Speed sensor, injection pump  
 0x012F002F 2F Speed sensor, crankshaft  
 0x012F0034 34 intake-air temperature sensor  
 0x012F0035 35 Coolant temperature sensor  
 0x012F0036 36 Charge-air-pressure sensor  
 0x012F0040 40 DDE control module (microcontroller)  
 0x012F0041 41 injection pump, solenoid shutoff valve  
 0x012F0042 42 DDE control module (EEPROM and configuration)  
 0x012F0043 43 Control module, injection pump  
 0x012F0044 44 Solenoid valve, injection rate  
 0x012F0045 45 Control unit DDE (CAN controller)  
 0x012F0046 46 Control unit, injection pump (communication)  
 0x012F0047 47 Synchronicity of speed sensors  
 0x012F0048 48 Control, timing device  
 0x012F0049 49 Speed sensor, injection pump  
 0x012F0050 50 Engine mount control  
 0x012F0052 52 Electric fan  
 0x012F0056 56 Radiator blind  
 0x012F0065 65 Charge-air-pressure control  
 0x012F006B 6B Atmospheric-pressure sensor  
 0x012F0072 72 CAN Bus  
 0x012F0073 73 Fuel pre-supply pump  
 0x012F0074 74 Activation, A/C compressor  
 0x012F0075 75 Alternator load signal  
 0x012F0077 77 Ambient temperature

//0x01300000 DME MS43 M54

0x01300001 1 Activation, ignition cylinder 2  
 0x01300002 2 Activation, ignition cylinder 4  
 0x01300003 3 Activation, ignition cylinder 6  
 0x01300005 5 Activation, fuel injector, cylinder 2  
 0x01300006 6 Activation, fuel injector, cylinder 1  
 0x01300008 8 Signal, air-mass flow sensor  
 0x0130000A 10 Signal, sensor, engine coolant temperature  
 0x0130000B 11 Signal, sensor, radiator-outlet coolant temperature  
 0x0130000C 12 Plausibility, maximum coolant temperature  
 0x0130000D 13 Plausibility, radiator outlet temperature  
 0x0130000E 14 Signal, sensor, intake-air temperature  
 0x0130000F 15 Plausibility, cutout time  
 0x01300010 16 Plausibility, intake-air temperature  
 0x01300011 17 Plausibility, engine coolant temperature  
 0x01300012 18 Signal, camshaft sensor,exhaust  
 0x01300013 19 Activation, VANOS Solenoid valve, exhaust  
 0x01300015 21 Activation, VANOS solenoid valve, inlet  
 0x01300016 22 Activation, fuel injector, cylinder 3  
 0x01300017 23 Activation, fuel injector, cylinder 6  
 0x01300018 24 Activation, fuel injector, cylinder 4  
 0x01300019 25 Activation, oxygen-sensor heater before catalytic converter, bank 1  
 0x0130001B 27 Activation, idle-speed control valve/closing coil  
 0x0130001D 29 Activation, ignition, cylinder 1  
 0x0130001E 30 Activation, ignition, cylinder 3  
 0x0130001F 31 Activation, ignition, cylinder 5  
 0x01300021 33 Activation, fuel injector, cylinder 5



Bmw Code Sheet.txt

0x01300023 35 Activation,relay,secondary-air pump  
 0x01300024 36 Main relay  
 0x01300025 37 Main relay:switching delay  
 0x01300026 38 Clutch switch  
 0x01300027 39 Plausibility,signal,brake-light switch/brake-light test switch  
 0x0130002A 42 Multifunction steering wheel, plausibility, signal  
 0x0130002B 43 Multifunction steering wheel, plausibility, rocker switch  
 0x0130002D 45 Multifunction steering wheel, monitoring, interface  
 0x0130002F 47 Torque limitation,safety concept,level 1  
 0x01300030 48 Control-unit self-test 1,plausibilisation  
 0x01300031 49 Fault,torque monitoring,level 2  
 0x01300032 50 Fault,response monitoring,level 2  
 0x01300033 51 Request,control-unit reset  
 0x01300034 52 Activation, solenoid valve, exhaust flap  
 0x01300035 53 Activation, idle-speed control valve/opening coil  
 0x01300037 55 Activation, oxygen-sensor heater before catalytic converter, bank 2  
 0x01300038 56 Signal, ignition-current measurement, resistance  
 0x01300039 57 Signal, knock sensor 1  
 0x0130003A 58 Control-unit self-test 2,plausibilisation  
 0x0130003B 59 Signal, Knock sensor 2  
 0x0130003D 61 Activation, oxygen-sensor heater behind catalytic, bank 2  
 0x0130003E 62 Activation,solenoid valve,secondary air  
 0x0130003F 63 Signal, ambient temperature, via CAN bus  
 0x01300040 64 Plausibility, ambient temperature  
 0x01300041 65 Signal, inlet-camshaft sensor  
 0x01300042 66 Control-unit self-test,plausibilisation 4  
 0x01300043 67 Control-unit self-test,plausibilisation 5  
 0x01300044 68 Activation, solenoid valve, tank ventilation  
 0x01300045 69 Activation, fuel-pump relay  
 0x01300046 70 Control-unit self-test,6 plausibilisation  
 0x01300047 71 Control-unit self-test,7 plausibilisation  
 0x0130004A 74 Activation, A/C compressor  
 0x0130004F 79 Activation, oxygen-sensor heater behind catalytic, bank 1  
 0x01300053 83 Signal, crankshaft sensor  
 0x0130005A 90 Exhaust temperature before cat.conv.,bank 1  
 0x0130005B 91 Exhaust temperature before cat.conv.,bank 2  
 0x0130005C 92 Exhaust temperature after cat.conv.,bank 1  
 0x0130005D 93 Exhaust temperature after cat.conv.,bank 2  
 0x0130005E 94 Secondary-air hot-film air-mass sensor  
 0x0130005F 95 Secondary-air valve or secondary-air hose blocked  
 0x01300060 96 Secondary-air pump not active  
 0x01300061 97 Secondary-air flow rate too low  
 0x01300062 98 Secondary-air flow rate too high  
 0x01300063 99 Secondary-air valve jammed open  
 0x01300064 100 Control units, self-test  
 0x01300067 103 VANOS inlet camshaft,end position not reached  
 0x01300068 104 VANOS exhaust camshaft,end position not reached  
 0x01300069 105 VANOS inlet camshaft,tight or jammed  
 0x0130006A 106 VANOS exhaust camshaft,tighy or jammed  
 0x0130006D 109 Engine throttle, output-stage fault  
 0x0130006E 110 Signal, pedal-travel sensor,signal 1  
 0x0130006F 111 Signal, pedal-travel sensor,signal 2  
 0x01300070 112 Signal, engine-throttle sensor, potentiometer 1  
 0x01300071 113 Signal, engine-throttle sensor, Potentiometer 2  
 0x01300072 114 Pedal-position sensor,double fault  
 0x01300073 115 Adaptation,engine throttle  
 0x01300075 117 Plausibility, signal 1/2, pedal-position sensor  
 0x01300076 118 Plausibility, signal 1,engine throttle to air-mass flow sensor  
 0x01300077 119 Plausibility, signal 2,engine throttle to air-mass flow sensor  
 0x01300078 120 Plausibility, accelerator and brake pedals  
 0x0130007A 122 Signal, sensor,engine-oil temperature  
 0x0130007B 123 Activation, map cooling  
 0x0130007C 124 Activation, solenoid valve, intake manifold(DISAs)

# Bmw Code Sheet.txt

0x0130007D 125 Activation, electric fan  
 0x0130007E 126 Output-stage fault, diagn. Module, tank-leak diagnosis valve  
 0x01300080 128 EWS transmission/parity  
 0x01300081 129 Signal CAN SMG 1  
 0x01300082 130 Signal,CAN ASC/DSC  
 0x01300083 131 Signal,CAN instrument cluster  
 0x01300084 132 Signal,CAN instrument cluster  
 0x01300085 133 Signal,CAN ASC/DSC  
 0x01300086 134 Request, SMG intervention, implausible  
 0x01300087 135 Engine-throttle sensor starting test,readaptation was triggered  
 0x01300088 136 Engine-throttle sensor starting test,readaptation necessary  
 0x01300089 137 Signal CAN steering-angle sensor  
 0x0130008B 139 Signal, CAN, tank fill level  
 0x0130008C 140 Output-stage fault, DMTL pump  
 0x0130008D 141 Plausibility, tank fill level  
 0x0130008E 142 Module fault DMTL  
 0x0130008F 143 Tank-leak diagnosis with DMTL  
 0x01300092 146 Supply voltage,potentiometer 1  
 0x01300093 147 Supply voltage,potentiometer 2  
 0x01300095 149 Plausibility error, air mass to engine throttle  
 0x01300096 150 Oxygen-sensor voltage before catalytic converter, bank 1  
 0x01300097 151 Oxygen-sensor voltage before catalytic converter, bank 2  
 0x01300098 152 Oxygen-sensor voltage behind catalytic converter, bank 1  
 0x01300099 153 Oxygen-sensor voltage behind catalytic converter, bank 2  
 0x013000A0 160 Engine-throttle position controller,jammed briefly  
 0x013000A1 161 Engine-throttle position controller,jammed permanently  
 0x013000A2 162 Engine-throttle position controller,sluggish  
 0x013000A8 168 Thermostat, map cooling, mechanical, jammed open  
 0x013000BA 186 Voltage excursion before cat. sensor, bank 1  
 0x013000BB 187 Voltage excursion before cat. sensor, bank 2  
 0x013000BC 188 Insufficient heat output,oxygen sensor before catalytic converter, bank 1  
 0x013000BD 189 Insufficient heat output,oxygen sensor before catalytic converter, bank 2  
 0x013000BE 190 Insufficient heat output,oxygen sensor behind catalytic converter, bank 1  
 0x013000BF 191 Insufficient heat output,oxygen sensor behind catalytic converter, bank 2  
 0x013000C4 196 Fault,pressure-sensor variant  
 0x013000C5 197 Ambient-pressure sensor  
 0x013000C6 198 Cat.efficiency during starting sequence, bank 1  
 0x013000C7 199 Cat.efficiency during starting sequence, bank 2  
 0x013000CA 202 Fuel trim bank 1 control limit  
 0x013000CB 203 Fuel trim bank 2 control limit  
 0x013000CC 204 Plausibility, idle speed (leakage air)  
 0x013000D1 209 Anti-tampering protection EWS  
 0x013000D2 210 Error, ign.-current measurement at more than 2 cylinders  
 0x013000D3 211 Idle-speed control valve, mechanical fault  
 0x013000D6 214 Signal, road speed  
 0x013000D7 215 Oxygen sensor behind catalytic converter, bank 1, no signal  
 0x013000D8 216 Oxygen sensor behind catalytic converter, bank 2, no signal  
 0x013000D9 217 Signal CAN EGS  
 0x013000DB 219 Monitoring, CAN  
 0x013000DC 220 Voltage, oxygen sensor, bank 1, behind catalytic converter, sensor too slow  
 0x013000DD 221 Voltage, oxygen sensor, bank 2, behind catalytic converter, sensor too slow  
 0x013000DE 222 Oxygen-sensor control not active after specified time  
 0x013000DF 223 Jump time, oxygen sensor behind catalytic converter, bank 1  
 0x013000E0 224 Jump time, oxygen sensor behind catalytic converter, bank 2  
 0x013000E1 225 Trimming, oxygen sensor behind catalytic converter, bank 1  
 0x013000E2 226 Trimming, oxygen sensor behind catalytic converter, bank 2  
 0x013000E3 227 Fuel trim bank 1, permissible range exceeded

# Bmw Code Sheet.txt

0x013000E4 228 Fuel trim bank 2, permissible range exceeded  
 0x013000E5 229 Control frequency, oxygen sensor, bank 1, incorrect  
 0x013000E6 230 Control frequency, oxygen sensor, bank 2, incorrect  
 0x013000E7 231 Switch time, oxygen sensor before catalytic converter, bank 1  
 0x013000E8 232 Switch time, oxygen sensor before catalytic converter, bank 2  
 0x013000E9 233 Catalytic-converter efficiency, bank 1  
 0x013000EA 234 Catalytic-converter efficiency, bank 2  
 0x013000EB 235 Trimming, oxygen sensor before catalytic converter, bank 1  
 0x013000EC 236 Trimming, oxygen sensor before catalytic converter, bank 2  
 0x013000EE 238 Misfire, cylinder 1  
 0x013000EF 239 Misfire, cylinder 2  
 0x013000F0 240 Misfire, cylinder 3  
 0x013000F1 241 Misfire, cylinder 4  
 0x013000F2 242 Misfire, cylinder 5  
 0x013000F3 243 Misfire, cylinder 6  
 0x013000F4 244 Segment timing, ture running disturbed  
 0x013000F5 245 Flow rate,secondary-air system,too low,bank 1  
 0x013000F6 246 Flow rate,secondary-air system,too low,bank 2  
 0x013000F7 247 Secondary-air valve open,jammed mechanically  
 0x013000F8 248 Sensor signal behind catalytic converter implausible, bank 1  
 0x013000F9 249 Sensor signal behind catalytic converter implausible, bank 2  
 0x013000FA 250 FA Function check, tank ventilation  
 //0x01310000 MSS52 S62  
 0x01310001 001 Driver/fuel-pump relay  
 0x01310002 002 Idle-speed control valve, closing winding  
 0x01310003 003 Fuel injector cylinder 1  
 0x01310004 004 Fuel injector cylinder 3  
 0x01310005 005 Fuel injector cylinder 2  
 0x01310007 007 Signal, camshaft sensor, inlet, bank 1  
 0x01310008 008 Signal, camshaft sensor, inlet, bank 2  
 0x01310009 009 Signal, knock sensor, cylinder 1-2  
 0x0131000A 010 Signal, camshaft sensor, exhaust, bank 1  
 0x0131000B 011 Signal, camshaft sensor, exhaust, bank 2  
 0x0131000C 012 Signal, oxygen sensor before cat. conv., bank 2  
 0x0131000D 013 Signal, oxygen sensor before cat. conv., bank 1  
 0x0131000E 014 Heating, DMTL module  
 0x0131000F 015 Camshaft sensor, bank 1: synchronization to crankshaft  
 0x01310010 016 Signal, crankshaft sensor  
 0x01310013 019 Relay, secondary air pump  
 0x01310014 020 Starter relay  
 0x01310015 021 Exhaust VANOS, bank 1, retard valve  
 0x01310016 022 Exhaust VANOS, bank 1, Advance valve  
 0x01310017 023 Ignition coil, cylinder 2  
 0x01310018 024 Ignition coil, cylinder 3  
 0x01310019 025 Ignition coil, cylinder 1  
 0x0131001A 026 Ignition coil, cylinder 8  
 0x0131001B 027 DMTL changeover valve  
 0x0131001D 029 Idle-speed control valve, NC winding  
 0x0131001E 030 Internal DME fault  
 0x0131001F 031 Fuel injector cylinder 5  
 0x01310020 032 Fuel injector cylinder 6  
 0x01310021 033 Fuel injector cylinder 4  
 0x01310022 034 Fuel injector cylinder 7  
 0x01310023 035 Fuel injector cylinder 8  
 0x01310024 036 Tank-venting valve  
 0x01310025 037 Oxygen-sensor heater before cat. conv., bank 1  
 0x01310026 038 Oxygen-sensor heater before cat. conv., bank 2  
 0x01310027 039 Oxygen-sensor heater behind cat. conv., bank 1  
 0x01310028 040 Oxygen-sensor heater behind cat. conv., bank 2  
 0x01310029 041 Signal, air-mass flow sensor, right  
 0x0131002A 042 Roadspped signal, pin 4-22  
 0x0131002B 043 Signal, temperature sensor, radiator outlet  
 0x0131002C 044 Signal, thermal oil-level, sensor

# Bmw Code Sheet.txt

0x0131002D 045 Electric throttle-servomotor  
 0x0131002F 047 Output, engine-speed signal TD  
 0x01310030 048 Internal, A/C control module  
 0x01310031 049 Internal index 95  
 0x01310032 050 Ignition coil, cylinder 4  
 0x01310033 051 Ignition coil, cylinder 6  
 0x01310034 052 Ignition coil, cylinder 5  
 0x01310035 053 Interface, electric fan  
 0x01310036 054 System voltages, main relay  
 0x01310037 055 Ignition coil, cylinder 7  
 0x01310039 057 Signal, air-mass flow sensor left  
 0x0131003A 058 Voltage supply, sensors  
 0x0131003B 059 Voltage supply, sensors  
 0x0131003C 060 Signal, pedal-position sensor 1  
 0x0131003D 061 Signal, pedal-position sensor 2  
 0x0131003F 063 Secondary-air valve  
 0x01310041 065 Signal, potentiometer, throttle and electric throttle actuator  
 0x01310042 066 EWS 3.3 interface: no DME-EWS communication  
 0x01310043 067 Inlet VANOS, bank 1, advance valve  
 0x01310045 069 Signal, knock sensor, cylinder 3-4  
 0x01310046 070 Signal, knock sensor, cylinder 7-8  
 0x01310047 071 Signal, knock sensor, cylinder 5-6  
 0x01310048 072 Inlet VANOS, bank 1, retard valve  
 0x01310049 073 Signal, air-mass flow sensor, implausible  
 0x0131004A 074 Inlet VANOS, bank 2, advance valve  
 0x0131004B 075 Inlet VANOS, bank 2, retard valve  
 0x0131004C 076 Ambient-pressure sensor (DME internal)  
 0x0131004D 077 Signal, intake-air temperature sensor  
 0x0131004E 078 Signal, coolant temperature sensor  
 0x0131004F 079 Signal, exhaust-gas temperature sensor  
 0x01310050 080 Switch chain, frictional connection  
 0x01310051 081 Interface, multifunction steering wheel(E39)/steering-column lever(E52)  
 0x01310053 083 Exhaust VANOS, bank 2, advance valve  
 0x01310054 084 Exhaust VANOS, bank 2, retard valve  
 0x01310055 085 Signal, throttle potentiometer  
 0x01310056 086 No CAN-bus signal to DME  
 0x01310057 087 Signal, oxygen-sensor after cat. conv., bank 1  
 0x01310058 088 Signal, oxygen-sensor after cat. conv., bank 2  
 0x01310059 089 Internal DME fault  
 0x0131005C 092 Oxygen sensor after cat. conv., bank 1: voltage monitoring  
 0x0131005D 093 Oxygen sensor after cat. conv., bank 2: voltage monitoring  
 0x01310063 099 Internal DME fault  
 0x01310064 100 Signal tire pressure, front left  
 0x01310065 101 Signal tire pressure, front right  
 0x01310066 102 Signal tire pressure, rear right  
 0x01310067 103 Signal tire pressure, rear left  
 0x01310069 105 Signal, engine temperature, implausible  
 0x0131006A 106 Signal, brake-light switch  
 0x0131006B 107 Electric throttle: self-test  
 0x0131006C 108 Activation, oil-circuit changeover valve, left  
 0x0131006D 109 Activation, oil-circuit changeover valve, right  
 0x0131006E 110 Function light, switch, vehicle dynamics  
 0x0131006F 111 Pedal-position sensor, comparison fault  
 0x01310070 112 Pedal-position sensor, comparison fault  
 0x01310071 113 Function, inlet VANOS, bank 2  
 0x01310072 114 Function, exhaust VANOS, bank 2  
 0x01310073 115 Sensor, control module temperature (DME internal) or button, tire pressure control system  
 0x01310074 116 Valve, servotronic  
 0x01310075 117 Servotronic: no roadspeed signal  
 0x01310076 118 Electric throttle: signal, potentiometer, bank 1  
 0x01310077 119 Electric throttle: signal, potentiometer, bank 2

# Bmw Code Sheet.txt

0x01310078 120 Electric throttle: potentiometer, signal comparison  
 0x01310079 121 Electric throttle: both potentiometers faulty  
 0x0131007A 122 DME-internal processor check  
 0x0131007D 125 Thermal oil-level sensor: function lamp  
 0x0131007E 126 Crash deactivation, electric fuel pump  
 0x0131007F 127 DMTL module, tank-leakage diagnosis  
 0x01310080 128 Deviation, idle speed  
 0x01310081 129 Cat. protection function as result of empty tank or lack of fuel  
 0x01310082 130 EWS 3.3 anti-tampering protection  
 0x01310083 131 DSC intervention implausible  
 0x01310084 132 CAN timeout, DSC  
 0x01310085 133 CAN timeout, Steering-angle sensor  
 0x01310086 134 CAN timeout, instrument cluster  
 0x01310087 135 NO roadspeed signal  
 0x01310088 136 Function, idle-speed control  
 0x0131008B 139 Interruption, Tempomat operation  
 0x0131008C 140 Knock control deactivated/knock protection  
 0x0131008D 141 Tank fill level implausible  
 0x0131008F 143 Electronics-box fan  
 0x01310090 144 Function, oxygen-sensor control, bank 1  
 0x01310091 145 Function, oxygen-sensor control, bank 2  
 0x01310095 149 Fault with empty tank  
 0x01310096 150 DME memory fault  
 0x01310097 151 Internal DME fault  
 0x0131009B 155 Saving adaptation values not possible  
 0x0131009C 156 Saving adaptation values not possible  
 0x0131009D 157 DME memory fault  
 0x0131009E 158 Reset DME possibly as result of over speed  
 0x0131009F 159 Internal DME fault: knock control  
 0x013100A0 160 Internal DME fault: knock control  
 0x013100A1 161 Internal DME fault: knock control  
 0x013100A2 162 Camshaft sensor, bank 2: synchronization to crankshaft  
 0x013100A3 163 Reset DME possibly as result of over speed  
 0x013100AA 170 Secondary-air quantity too low  
 0x013100AB 171 Function, secondary-air valve: jammed  
 0x013100AC 172 VANOS admission-pressure pump  
 0x013100AD 173 Continuous signal, tm. 50, starter switch  
 0x013100AE 174 Fuel-system diagnosis, bank 1  
 0x013100AF 175 Fuel-system diagnosis, bank 2  
 0x013100B0 176 Abort tank-leak diagnosis due to moisture  
 0x013100B2 178 Catalytic-converter conversion, bank 1  
 0x013100B3 179 Catalytic-converter conversion, bank 2  
 0x013100B4 180 Tank leakage detected  
 0x013100B5 181 Fuel filler cap open/missing  
 0x013100B6 182 Internal DME fault  
 0x013100B7 183 Internal DME fault  
 0x013100B8 184 Function, inlet VANOS, bank 1: control  
 0x013100B9 185 Function, exhaust VANOS, bank 1: control  
 0x013100C2 194 Electric throttle limp-home program from cruise-control mode  
 0x013100C3 195 Deviation, setpoint torque from actual torque  
 0x013100C4 196 Misfiring, cylinder 1 with cylinder cutout  
 0x013100C5 197 Misfiring, cylinder 2 with cylinder cutout  
 0x013100C6 198 Misfiring, cylinder 3 with cylinder cutout  
 0x013100C7 199 Misfiring, cylinder 4 with cylinder cutout  
 0x013100C8 200 Misfiring, cylinder 5 with cylinder cutout  
 0x013100C9 201 Misfiring, cylinder 6 with cylinder cutout  
 0x013100CA 202 Misfiring, cylinder 7 with cylinder cutout  
 0x013100CB 203 Misfiring, cylinder 8 with cylinder cutout  
 0x013100CC 204 Misfiring, several cylinder with cylinder cutout  
 0x013100CD 195 Misfiring, cylinder 1 without cylinder cutout  
 0x013100CE 196 Misfiring, cylinder 2 without cylinder cutout  
 0x013100CF 197 Misfiring, cylinder 3 without cylinder cutout  
 0x013100D0 198 Misfiring, cylinder 4 without cylinder cutout

# Bmw Code Sheet.txt

0x013100D1 209 Misfiring, cylinder 5 without cylinder cutout  
 0x013100D2 210 Misfiring, cylinder 6 without cylinder cutout  
 0x013100D3 211 Misfiring, cylinder 7 without cylinder cutout  
 0x013100D4 212 Misfiring, cylinder 8 without cylinder cutout  
 0x013100D5 213 Misfiring, several cylinder without cylinder cutout  
 0x013100D6 214 Oxygen sensor before cat. conv., bank 1: period duration  
 0x013100D7 215 Oxygen sensor before cat. conv., bank 2: period duration  
 0x013100D8 216 Oxygen sensor before cat. conv., bank 1: jump time  
 0x013100D9 217 Oxygen sensor before cat. conv., bank 2: jump time  
 0x013100DA 218 Oxygen sensor before cat. conv., bank 1: Signal excursion  
 0x013100DB 219 Oxygen sensor before cat. conv., bank 2: Signal excursion  
 0x013100DC 220 DME-internal processor check  
 0x013100E4 228 Electric throttle: limit violation  
 0x013100E6 230 Electric throttle: setpoint/actual value deviation  
 0x013100E7 231 DME-internal processor check  
 0x013100E8 232 Function check, tank-venting valve  
 0x013100F7 247 VANOS pressure-accumulator valve

//0x01320000 MSS54 M54

0x01320001 001 Driver/fuel-pump relay  
 0x01320002 002 Idle-speed control valve, closing winding  
 0x01320003 003 Fuel injector cylinder 1  
 0x01320004 004 Fuel injector cylinder 3  
 0x01320005 005 Fuel injector cylinder 2  
 0x01320007 007 Signal, camshaft sensor, inlet, bank 1  
 0x01320008 008 Signal, camshaft sensor, inlet, bank 2  
 0x01320009 009 Signal, knock sensor, cylinder 1-2  
 0x0132000A 010 Signal, camshaft sensor, exhaust, bank 1  
 0x0132000B 011 Signal, camshaft sensor, exhaust, bank 2  
 0x0132000C 012 Signal, oxygen sensor before cat. conv., bank 2  
 0x0132000D 013 Signal, oxygen sensor before cat. conv., bank 1  
 0x0132000E 014 Heating, DMTL module  
 0x0132000F 015 Camshaft sensor, bank 1: synchronization to crankshaft  
 0x01320010 016 Signal, crankshaft sensor  
 0x01320013 019 Relay, secondary air pump  
 0x01320014 020 Starter relay  
 0x01320015 021 Exhaust VANOS, bank 1, retard valve  
 0x01320016 022 Exhaust VANOS, bank 1, Advance valve  
 0x01320017 023 Ignition coil, cylinder 2  
 0x01320018 024 Ignition coil, cylinder 3  
 0x01320019 025 Ignition coil, cylinder 1  
 0x0132001A 026 Ignition coil, cylinder 8  
 0x0132001B 027 DMTL changeover valve  
 0x0132001D 029 Idle-speed control valve, NC winding  
 0x0132001E 030 Internal DME fault  
 0x0132001F 031 Fuel injector cylinder 5  
 0x01320020 032 Fuel injector cylinder 6  
 0x01320021 033 Fuel injector cylinder 4  
 0x01320022 034 Fuel injector cylinder 7  
 0x01320023 035 Fuel injector cylinder 8  
 0x01320024 036 Tank-venting valve  
 0x01320025 037 Oxygen-sensor heater before cat. conv., bank 1  
 0x01320026 038 Oxygen-sensor heater before cat. conv., bank 2  
 0x01320027 039 Oxygen-sensor heater behind cat. conv., bank 1  
 0x01320028 040 Oxygen-sensor heater behind cat. conv., bank 2  
 0x01320029 041 Signal, air-mass flow sensor, right  
 0x0132002A 042 Roadspeed signal, pin 4-22  
 0x0132002B 043 Signal, temperature sensor, radiator outlet  
 0x0132002C 044 Signal, thermal oil-level, sensor  
 0x0132002D 045 Electric throttle-servomotor  
 0x0132002F 047 Output, engine-speed signal TD  
 0x01320030 048 Internal, A/C control module  
 0x01320031 049 Internal index 95

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0x01320032 050 Ignition coil, cylinder 4  
 0x01320033 051 Ignition coil, cylinder 6  
 0x01320034 052 Ignition coil, cylinder 5  
 0x01320035 053 Interface, electric fan  
 0x01320036 054 System voltages, main relay  
 0x01320037 055 Ignition coil, cylinder 7  
 0x01320039 057 Signal, air-mass flow sensor left  
 0x0132003A 058 Voltage supply, sensors  
 0x0132003B 059 Voltage supply, sensors  
 0x0132003C 060 Signal, pedal-position sensor 1  
 0x0132003D 061 Signal, pedal-position sensor 2  
 0x0132003F 063 Secondary-air valve  
 0x01320041 065 Signal, potentiometer, throttle and electric throttle actuator  
 0x01320042 066 EWS 3.3 interface: no DME-EWS communication  
 0x01320043 067 Inlet VANOS, bank 1, advance valve  
 0x01320045 069 Signal, knock sensor, cylinder 3-4  
 0x01320046 070 Signal, knock sensor, cylinder 7-8  
 0x01320047 071 Signal, knock sensor, cylinder 5-6  
 0x01320048 072 Inlet VANOS, bank 1, retard valve  
 0x01320049 073 Signal, air-mass flow sensor, implausible  
 0x0132004A 074 Inlet VANOS, bank 2, advance valve  
 0x0132004B 075 Inlet VANOS, bank 2, retard valve  
 0x0132004C 076 Ambient-pressure sensor (DME internal)  
 0x0132004D 077 Signal, intake-air temperature sensor  
 0x0132004E 078 Signal, coolant temperature sensor  
 0x0132004F 079 Signal, exhaust-gas temperature sensor  
 0x01320050 080 Switch chain, frictional connection  
 0x01320051 081 Interface, multifunction steering wheel(E39)/steering-column lever(E52)  
 0x01320053 083 Exhaust VANOS, bank 2, advance valve  
 0x01320054 084 Exhaust VANOS, bank 2, retard valve  
 0x01320055 085 Signal, throttle potentiometer  
 0x01320056 086 No CAN-bus signal to DME  
 0x01320057 087 Signal, oxygen-sensor after cat. conv., bank 1  
 0x01320058 088 Signal, oxygen-sensor after cat. conv., bank 2  
 0x01320059 089 Internal DME fault  
 0x0132005C 092 Oxygen sensor after cat. conv., bank 1: voltage monitoring  
 0x0132005D 093 Oxygen sensor after cat. conv., bank 2: voltage monitoring  
 0x01320063 099 Internal DME fault  
 0x01320064 100 Signal tire pressure, front left  
 0x01320065 101 Signal tire pressure, front right  
 0x01320066 102 Signal tire pressure, rear right  
 0x01320067 103 Signal tire pressure, rear left  
 0x01320069 105 Signal, engine temperature, implausible  
 0x0132006A 106 Signal, brake-light switch  
 0x0132006B 107 Electric throttle: self-test  
 0x0132006C 108 Activation, oil-circuit changeover valve, left  
 0x0132006D 109 Activation, oil-circuit changeover valve, right  
 0x0132006E 110 Function light, switch, vehicle dynamics  
 0x0132006F 111 Pedal-position sensor, comparison fault  
 0x01320070 112 Pedal-position sensor, comparison fault  
 0x01320071 113 Function, inlet VANOS, bank 2  
 0x01320072 114 Function, exhaust VANOS, bank 2  
 0x01320073 115 Sensor, control module temperature (DME internal) or button, tire pressure control system  
 0x01320074 116 Valve, servotronic  
 0x01320075 117 Servotronic: no roadspeed signal  
 0x01320076 118 Electric throttle: signal, potentiometer, bank 1  
 0x01320077 119 Electric throttle: signal, potentiometer, bank 2  
 0x01320078 120 Electric throttle: potentiometer, signal comparison  
 0x01320079 121 Electric throttle: both potentiometers faulty  
 0x0132007A 122 DME-internal processor check  
 0x0132007D 125 Thermal oil-level sensor: function lamp

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0x0132007E 126 Crash deactivation, electric fuel pump  
 0x0132007F 127 DMTL module, tank-leakage diagnosis  
 0x01320080 128 Deviation, idle speed  
 0x01320081 129 Cat. protection function as result of empty tank or lack of fuel  
 0x01320082 130 EWS 3.3 anti-tampering protection  
 0x01320083 131 DSC intervention implausible  
 0x01320084 132 CAN timeout, DSC  
 0x01320085 133 CAN timeout, Steering-angle sensor  
 0x01320086 134 CAN timeout, instrument cluster  
 0x01320087 135 NO roadspeed signal  
 0x01320088 136 Function, idle-speed control  
 0x0132008B 139 Interruption, Tempomat operation  
 0x0132008C 140 Knock control deactivated/knock protection  
 0x0132008D 141 Tank fill level implausible  
 0x0132008F 143 Electronics-box fan  
 0x01320090 144 Function, oxygen-sensor control, bank 1  
 0x01320091 145 Function, oxygen-sensor control, bank 2  
 0x01320095 149 Fault with empty tank  
 0x01320096 150 DME memory fault  
 0x01320097 151 Internal DME fault  
 0x0132009B 155 Saving adaptation values not possible  
 0x0132009C 156 Saving adaptation values not possible  
 0x0132009D 157 DME memory fault  
 0x0132009E 158 Reset DME possibly as result of over speed  
 0x0132009F 159 Internal DME fault: knock control  
 0x013200A0 160 Internal DME fault: knock control  
 0x013200A1 161 Internal DME fault: knock control  
 0x013200A2 162 Camshaft sensor, bank 2: synchronization to crankshaft  
 0x013200A3 163 Reset DME possibly as result of over speed  
 0x013200AA 170 Secondary-air quantity too low  
 0x013200AB 171 Function, secondary-air valve: jammed  
 0x013200AC 172 VANOS admission-pressure pump  
 0x013200AD 173 Continuous signal, tm. 50, starter switch  
 0x013200AE 174 Fuel-system diagnosis, bank 1  
 0x013200AF 175 Fuel-system diagnosis, bank 2  
 0x013200B0 176 Abort tank-leak diagnosis due to moisture  
 0x013200B2 178 Catalytic-converter conversion, bank 1  
 0x013200B3 179 Catalytic-converter conversion, bank 2  
 0x013200B4 180 Tank leakage detected  
 0x013200B5 181 Fuel filler cap open/missing  
 0x013200B6 182 Internal DME fault  
 0x013200B7 183 Internal DME fault  
 0x013200B8 184 Function, inlet VANOS, bank 1: control  
 0x013200B9 185 Function, exhaust VANOS, bank 1: control  
 0x013200C2 194 Electric throttle limp-home program from cruise-control mode  
 0x013200C3 195 Deviation, setpoint torque from actual torque  
 0x013200C4 196 Misfiring, cylinder 1 with cylinder cutout  
 0x013200C5 197 Misfiring, cylinder 2 with cylinder cutout  
 0x013200C6 198 Misfiring, cylinder 3 with cylinder cutout  
 0x013200C7 199 Misfiring, cylinder 4 with cylinder cutout  
 0x013200C8 200 Misfiring, cylinder 5 with cylinder cutout  
 0x013200C9 201 Misfiring, cylinder 6 with cylinder cutout  
 0x013200CA 202 Misfiring, cylinder 7 with cylinder cutout  
 0x013200CB 203 Misfiring, cylinder 8 with cylinder cutout  
 0x013200CC 204 Misfiring, several cylinder with cylinder cutout  
 0x013200CD 195 Misfiring, cylinder 1 without cylinder cutout  
 0x013200CE 196 Misfiring, cylinder 2 without cylinder cutout  
 0x013200CF 197 Misfiring, cylinder 3 without cylinder cutout  
 0x013200D0 198 Misfiring, cylinder 4 without cylinder cutout  
 0x013200D1 209 Misfiring, cylinder 5 without cylinder cutout  
 0x013200D2 210 Misfiring, cylinder 6 without cylinder cutout  
 0x013200D3 211 Misfiring, cylinder 7 without cylinder cutout  
 0x013200D4 212 Misfiring, cylinder 8 without cylinder cutout



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0x013200D5 213 Misfiring, several cylinder without cylinder cutout  
 0x013200D6 214 Oxygen sensor before cat. conv., bank 1: period duration  
 0x013200D7 215 Oxygen sensor before cat. conv., bank 2: period duration  
 0x013200D8 216 Oxygen sensor before cat. conv., bank 1: jump time  
 0x013200D9 217 Oxygen sensor before cat. conv., bank 2: jump time  
 0x013200DA 218 Oxygen sensor before cat. conv., bank 1: Signal excursion  
 0x013200DB 219 Oxygen sensor before cat. conv., bank 2: Signal excursion  
 0x013200DC 220 DME-internal processor check  
 0x013200E4 228 Electric throttle: limit violation  
 0x013200E6 230 Electric throttle: setpoint/actual value deviation  
 0x013200E7 231 DME-internal processor check  
 0x013200E8 232 Function check, tank-venting valve  
 0x013200F7 247 VANOS pressure-accumulator valve  
 //0x01330000 DME 5.2.1 M62  
 0x01330000 0 Undefined code  
 0x01330001 1 Activation, leakage diagnosis pump LDP  
 0x01330002 2 Activation, solenoid valve, fuel system changeover  
 0x01330003 3 Function, tank leakage diagnosis pump  
 0x01330004 4 Oxygen-sensor heater after catalytic converter, bank 2  
 0x01330005 5 Oxygen-sensor heater before catalytic converter, bank 2  
 0x01330006 6 CAN instrument cluster  
 0x01330008 8 Misfiring was caused by tank having been run dry  
 0x0133000A 10 Signal, oxygen sensor before cat., bank 1  
 0x0133000C 12 Signal, oxygen sensor after cat. conv., bank 1  
 0x0133000D 13 Oxygen-sensor heater before catalytic converter, bank 1  
 0x0133000E 14 Oxygen-sensor heater after catalytic converter, bank 1  
 0x0133000F 15 Oxygen-sensor ageing TP before catalytic converter, bank 1  
 0x01330010 16 Oxygen-sensor ageing TV before catalytic converter, bank 1  
 0x01330011 17 Oxygen-sensor ageing after catalytic converter, bank 1  
 0x01330012 18 Oxygen sensor before catalytic converter, bank 2  
 0x01330014 20 Oxygen sensor after catalytic converter, bank 2  
 0x01330015 21 Oxygen-sensor ageing TP before catalytic converter, bank 2  
 0x01330016 22 Oxygen-sensor ageing TV before catalytic converter, bank 2  
 0x01330017 23 Oxygen-sensor ageing after catalytic converter, bank 2  
 0x01330018 24 Function, diagnosis, A/C compressor  
 0x0133001A 26 Multiplicative mixture adaption (part load), bank 1, control limit reached  
 0x0133001B 27 Additive mixture adaptation (idle), bank 1, control limit reached  
 0x0133001C 28 Additive mixture adaptation (idle), bank 1, control limit reached  
 0x0133001D 29 Activation, switching valve for aircontained fuel injectors, bank 1  
 0x01330020 32 Function, idle-speed control  
 0x01330022 34 Multiplicative mixture adaptation, bank 2, control limit reached  
 0x01330023 35 Additive mixture adaptation (idle), bank 2, control limit reached  
 0x01330024 36 Additive mixture adaptation (idle), bank 2, control limit reached  
 0x01330027 39 EWS 3.3 tampering portection  
 0x01330028 40 Catalytic-converter conversion, bank 1  
 0x0133002D 45 Catalytic-converter conversion, bank 2  
 0x01330032 50 Misfire detection, cyl. 1  
 0x01330033 51 Misfire detection, cyl. 2  
 0x01330034 52 Misfire detection, cyl. 3  
 0x01330035 53 Misfire detection, cyl. 4  
 0x01330036 54 Misfire detection, cyl. 5  
 0x01330037 55 Misfire detection, cyl. 6  
 0x01330038 56 Misfire detection, cyl. 7  
 0x01330039 57 Misfire detection, cyl. 8  
 0x0133003A 58 Misfire detection, cyl. 9  
 0x0133003B 59 Misfire detection, cyl. 10  
 0x0133003C 60 Misfire detection, cyl. 11  
 0x0133003D 61 Misfire detection, cyl. 12  
 0x0133003E 62 Misfiring at several cylinders  
 0x0133003F 63 Misfiring with cylinder cutout, cyl. 1  
 0x01330040 64 Misfiring with cylinder cutout, cyl. 2  
 0x01330041 65 Misfiring with cylinder cutout, cyl. 3

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0x01330042 66 Misfiring with cylinder cutout, cyl. 4  
 0x01330043 67 Misfiring with cylinder cutout, cyl. 5  
 0x01330044 68 Misfiring with cylinder cutout, cyl. 6  
 0x01330045 69 Misfiring with cylinder cutout, cyl. 7  
 0x01330046 70 Misfiring with cylinder cutout, cyl. 8  
 0x01330047 71 Misfiring with cylinder cutout, cyl. 9  
 0x01330048 72 Misfiring with cylinder cutout, cyl. 10  
 0x01330049 73 Misfiring with cylinder cutout, cyl. 11  
 0x0133004A 74 Misfiring with cylinder cutout, cyl. 12  
 0x0133004B 75 Misfiring with cylinder cutout, total  
 0x0133004D 77 Activation, air contamination-fuel injectors, bank 1  
 0x0133004E 78 Signal, crankshaft speed sensor  
 0x01330050 80 Function, secondary-air system  
 0x01330054 84 Activation-f-relay, secondary-air pump  
 0x01330055 85 Activation, relay, secondary-air pump  
 0x0133005B 91 Activation, tank-venting valve, bank 2  
 0x0133005D 93 Function, tank-venting system  
 0x01330061 97 Tank-venting system, minor leak  
 0x01330062 98 Activation, tank-venting valve, bank 1  
 0x01330065 101 Control module faulty (internal RAM)  
 0x01330066 102 Control module faulty (external RAM)  
 0x01330067 103 Control module faulty (ROM)  
 0x01330068 104 Wrong values in fault memory  
 0x0133006B 107 Voltage supply (via DME main relay)  
 0x0133006C 108 Open circuit, continuous power supply  
 0x0133006F 111 Signal, crankshaft position sensor  
 0x01330070 112 Signal, camshaft position sensor  
 0x01330073 115 Signal, hot-film air-mass flow sensor  
 0x01330075 117 Signal, throttle potentiometer  
 0x01330078 120 Signal, vehicle speed  
 0x01330079 121 Load measurement  
 0x0133007B 123 Signal, temperature sensor, engine coolant  
 0x0133007C 124 Signal, temperature sensor, intake air  
 0x01330082 130 Oxygen sensors before catalytic converter connected in incorrect sequence  
 0x01330086 134 Switch, tank fill level  
 0x01330087 135 Engine intervention / specified engine torque (gearbox intervention)  
 0x0133008A 138 Compressor intervention  
 0x0133008B 139 Activation, map cooling  
 0x0133008C 140 Engine torques, bank comparison  
 0x0133008D 141 Dynamic Stability Control DSC intervention with fadeout  
 0x0133008F 143 Function, ASC/DSC MSR - engine intervention  
 0x01330090 144 Automatic Stability Control ASC - intervention  
 0x01330093 147 Function, map cooling  
 0x01330094 148 EWS 3.3 interface DME-EWS  
 0x01330096 150 Activation, fuel injector, cyl. 1  
 0x01330097 151 Activation, fuel injector, cyl. 2  
 0x01330098 152 Activation, fuel injector, cyl. 3  
 0x01330099 153 Activation, fuel injector, cyl. 4  
 0x0133009A 154 Activation, fuel injector, cyl. 5  
 0x0133009B 155 Activation, fuel injector, cyl. 6  
 0x0133009C 156 Activation, fuel injector, cyl. 7  
 0x0133009D 157 Activation, fuel injector, cyl. 8  
 0x0133009E 158 Activation, fuel injector, cyl. 9  
 0x0133009F 159 Activation, fuel injector, cyl. 10  
 0x013300A0 160 Activation, fuel injector, cyl. 11  
 0x013300A1 161 Activation, fuel injector, cyl. 12  
 0x013300A3 163 Activation, electric fuel pump, EKP relay  
 0x013300A7 167 Activation, electric fuel pump, EKP relay  
 0x013300A8 168 Activation, idle-speed control valve, opening coil  
 0x013300A9 169 Activation, idle-speed control valve, closing coil  
 0x013300AA 170 A/C-compressor control  
 0x013300AE 179 A/C-compressor control, bank 2

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0x013300B7 183 Tank-leak detection  
 0x013300B8 184 Tank-venting system, blocked line  
 0x013300BE 190 Ignition-circuit monitoring, cylinder 1  
 0x013300BF 191 Ignition-circuit monitoring, cylinder 2  
 0x013300C0 192 Ignition-circuit monitoring, cylinder 3  
 0x013300C1 193 Ignition-circuit monitoring, cylinder 4  
 0x013300C2 194 Ignition-circuit monitoring, cylinder 5  
 0x013300C3 195 Ignition-circuit monitoring, cylinder 6  
 0x013300C4 196 Ignition-circuit monitoring, cylinder 7  
 0x013300C5 197 Ignition-circuit monitoring, cylinder 8  
 0x013300C6 198 Ignition-circuit monitoring, cylinder 9  
 0x013300C7 199 Ignition-circuit monitoring, cylinder 6  
 0x013300C8 200 Ignition-circuit monitoring, cylinder 11  
 0x013300C9 201 Ignition-circuit monitoring, cylinder 12  
 0x013300CB 203 Ignition-circuit monitoring, bank 1  
 0x013300CC 204 EWS 3.3 random-code storage  
 0x013300D2 210 Siganl, knock sensor 1  
 0x013300D3 211 Siganl, knock sensor 2  
 0x013300D4 212 Knock sensor 3  
 0x013300D5 213 Knock sensor 4  
 0x013300D6 214 Control modules with different CAN versions at CAN bus  
 0x013300D7 215 CAN timeout, Digital Motor Electronics (DME)  
 0x013300D8 216 CAN timeout ASC/DSC  
 0x013300D9 217 CAN timeout, electronic engine-power control (EML)  
 0x013300DC 220 Knock control  
 0x013300DE 222 Knock-control test pulse  
 0x013300E4 228 Automatic starting, activation, bank 2  
 0x013300E9 233 Activation, automatic starting device  
 0x013300EA 234 Start signal, ignition-lock position 3  
 0x013300EC 236 CAN timeout, electronic transimission management (EGS/AGS)  
 0x013300ED 237 Function,automatic starting device  
 0x013300FA 250 Function, air-contained fuel injectors  
 //0x01340000 DME 5.2.1 M73TU  
 0x01340001 1 Activation, leakage diagnosis pump LDP  
 0x01340002 2 Activation, Solenoid valve, fuel system changeover  
 0x01340003 3 Function, tank leakage diagnosis pump  
 0x01340006 6 CAN instrument cluster  
 0x01340007 7 Temperature sensor, coolant outlet  
 0x01340008 8 Misfiring was caused by tank having been run dry  
 0x0134000A 10 Signal, oxygen sensor before cat. conv., bank 1  
 0x0134000B 12 Signal, oxygen sensor after cat. conv., bank 1  
 0x0134000D 13 Oxygen-sensor heater before catalytic converter, bank 1  
 0x0134000E 14 Oxygen-sensor heater after catalytic converter, bank 1  
 0x0134000F 15 Oxygen-sensor ageing TP before catalytic converter, bank 1  
 0x01340010 16 Oxygen-sensor ageing TV before catalytic converter, bank 1  
 0x01340011 17 Oxygen-sensor ageing after catalytic converter, bank 1  
 0x01340013 19 CAN timeout ECAT  
 0x01340017 23 Oxygen-sensor ageing after catalytic converter, bank 2  
 0x0134001A 26 Multiplicative mixture adaptation (part load), bank 1, control limit reached  
 0x0134001B 27 Additive mixture adaptation (idle), bank 1, control limit reached  
 0x0134001C 28 Additive mixture adaptation (idle), bank 1, control limit reached  
 0x0134001D 29 Activation, switching valve for air-contained fuel injectors, bank 1  
 0x0134001E 30 Abort heating ECAT  
 0x01340020 32 Function, idle-speed control  
 0x01340021 33 Control unit, electr. heated cat. converter  
 0x01340027 39 EWS 3.3 tampering protection  
 0x01340028 40 Catalytic-converter conversion, bank 1  
 0x0134002A 42 Abort heating ECAT 1  
 0x0134002B 43 Abort heating ECAT 1  
 0x0134002C 44 Control module ECAT, circuit-breaker 1  
 0x0134002E 46 Abort heating ECAT 2  
 0x0134002F 47 Abort heating ECAT 2

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0x01340030 48 Control module ECAT, circuit-breaker 2  
 0x01340032 50 Misfire detection, cyl. 1  
 0x01340033 51 Misfire detection, cyl. 2  
 0x01340034 52 Misfire detection, cyl. 3  
 0x01340035 53 Misfire detection, cyl. 4  
 0x01340036 54 Misfire detection, cyl. 5  
 0x01340037 55 Misfire detection, cyl. 6  
 0x01340038 56 Misfire detection, cyl. 7  
 0x01340039 57 Misfire detection, cyl. 8  
 0x0134003A 58 Misfire detection, cyl. 9  
 0x0134003B 59 Misfire detection, cyl. 10  
 0x0134003C 60 Misfire detection, cyl. 11  
 0x0134003D 61 Misfire detection, cyl. 12  
 0x0134003E 62 Misfiring at several cylinders  
 0x0134003F 63 Misfiring with cylinder cutout, cyl. 1  
 0x01340040 64 Misfiring with cylinder cutout, cyl. 2  
 0x01340041 65 Misfiring with cylinder cutout, cyl. 3  
 0x01340042 66 Misfiring with cylinder cutout, cyl. 4  
 0x01340043 67 Misfiring with cylinder cutout, cyl. 5  
 0x01340044 68 Misfiring with cylinder cutout, cyl. 6  
 0x01340045 69 Misfiring with cylinder cutout, cyl. 7  
 0x01340046 70 Misfiring with cylinder cutout, cyl. 8  
 0x01340047 71 Misfiring with cylinder cutout, cyl. 9  
 0x01340048 72 Misfiring with cylinder cutout, cyl. 10  
 0x01340049 73 Misfiring with cylinder cutout, cyl. 11  
 0x0134004A 74 Misfiring with cylinder cutout, cyl. 12  
 0x0134004B 75 Misfiring with cylinder cutout, total  
 0x0134004D 77 Activation, air containment, fuel injectors, bank 1  
 0x0134004E 78 Signal, crankshaft speed sensor  
 0x01340050 80 Function, secondary-air system  
 0x01340051 81 Temperature sensor 1, battery  
 0x01340052 82 Temperature sensor 2, battery  
 0x01340053 83 Temperature sensor, battery, not plausible  
 0x01340054 84 Activation, relay, secondary-air pump  
 0x01340055 85 Activation, relay, secondary-air pump  
 0x0134005B 91 Activation, tank-venting valve, bank 2  
 0x0134005D 93 Function, tank-venting system  
 0x01340062 98 Activation, tank-venting valve, bank 1  
 0x01340065 101 Control module faulty (internal RAM)  
 0x01340066 102 Control module faulty (external RAM)  
 0x01340067 103 Control module faulty (ROM)  
 0x01340068 104 Wrong values in fault memory  
 0x0134006B 107 Voltage supply (via DME main relay)  
 0x0134006C 108 Open circuit, continuous power supply  
 0x0134006F 111 Signal, crankshaft position sensor  
 0x01340070 112 Signal, camshaft position sensor  
 0x01340073 115 Signal, hot-film air-mass flow sensor  
 0x01340078 120 Signal, vehicle speed  
 0x01340079 121 Load measurement  
 0x0134007B 123 Signal, temperature sensor, engine coolant  
 0x0134007C 124 Signal, temperature sensor, intake air  
 0x01340082 130 Oxygen sensors before catalytic converter connected in incorrect sequence  
 0x01340086 134 Switch, tank fill level  
 0x01340087 135 Engine intervention / specified engine torque (gearbox intervention)  
 0x0134008A 138 Compressor intervention  
 0x0134008B 139 Activation, map cooling  
 0x0134008C 140 Engine torque, bank comparison  
 0x0134008D 141 Dynamix Stability Control DSC intervention with fadeout  
 0x0134008F 143 Function, ASC/DSC MSR - engine intervention  
 0x01340090 144 Automatic Stability Control ASC - intervention  
 0x01340093 147 Function, map cooling  
 0x01340094 148 EWS 3.3 interface DME-EWS

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0x01340095 149 Inlet-camshaft setting bank 2
0x01340096 150 Activation, fuel injector, cyl. 1
0x01340097 151 Activation, fuel injector, cyl. 2
0x01340098 152 Activation, fuel injector, cyl. 3
0x01340099 153 Activation, fuel injector, cyl. 4
0x0134009A 154 Activation, fuel injector, cyl. 5
0x0134009B 155 Activation, fuel injector, cyl. 6
0x0134009C 156 Activation, fuel injector, cyl. 7
0x0134009D 157 Activation, fuel injector, cyl. 8
0x0134009E 158 Activation, fuel injector, cyl. 9
0x0134009F 159 Activation, fuel injector, cyl. 10
0x013400A0 160 Activation, fuel injector, cyl. 11
0x013400A1 161 Activation, fuel injector, cyl. 12
0x013400A3 163 Activation, electric fuel pump, EKP relay
0x013400A7 167 Activation, electric fuel pump, EKP relay
0x013400A8 168 Activation, idle-speed control valve, opening coil
0x013400A9 169 Activation, idle-speed control valve, closing coil
0x013400AA 170 A/C-compressor control
0x013400B3 179 A/C-compressor control, bank 2
0x013400B7 183 Tank-leak detection
0x013400B8 184 Tank-venting system, blocked line
0x013400BE 190 Ignition-circuit monitoring, cylinder 1
0x013400BF 191 Ignition-circuit monitoring, cylinder 2
0x013400C0 192 Ignition-circuit monitoring, cylinder 3
0x013400C1 193 Ignition-circuit monitoring, cylinder 4
0x013400C2 194 Ignition-circuit monitoring, cylinder 5
0x013400C3 195 Ignition-circuit monitoring, cylinder 6
0x013400C4 196 Ignition-circuit monitoring, cylinder 7
0x013400C5 197 Ignition-circuit monitoring, cylinder 8
0x013400C6 198 Ignition-circuit monitoring, cylinder 9
0x013400C7 199 Ignition-circuit monitoring, cylinder 10
0x013400C8 200 Ignition-circuit monitoring, cylinder 11
0x013400C9 201 Ignition-circuit monitoring, cylinder 12
0x013400CB 203 Ignition-circuit monitoring, bank 1
0x013400CC 204 EWS 3.3 random-code storage
0x013400D2 210 Signal, knock sensor 1
0x013400D3 211 Signal, knock sensor 2
0x013400D6 214 Control modules with different CAN versions at CAN bus
0x013400D7 215 CAN timeout, Digital Motor Electronics (DME)
0x013400D8 216 CAN timeout ASC/DSC
0x013400D9 217 CAN timeout, electronic engine-power control EML
0x013400DC 220 Knock control
0x013400DE 222 Knock-control test pulse
0x013400E1 225 Control module ECAT, temperature sensor
0x013400E2 226 Ctr. module ECAT, voltage, circuit-breaker
0x013400E3 227 Activation, battery disconnecting switch
0x013400E4 228 Automatic starting, activation, bank 2
0x013400E9 233 Activation, automatic starting device
0x013400EA 234 Start signal, ignition-lock position 3
0x013400EC 236 CAN timeout, electronic transmission management (EGS/AGS)
0x013400ED 237 Function, automatic starting device
0x013400FA 250 Function, air-contained fuel injectors
0x013400FD 253 Activation, electric fan
//0x01350000 BMS46 III M43
0x01350064 100 Activation, ignition coil, cylinder 1
0x01350065 101 Activation, ignition coil, cylinder 2
0x01350066 102 Activation, ignition coil, cylinder 3
0x01350067 103 Activation, ignition coil, cylinder 4
0x01350068 104 Activation, fuel injector, cylinder 1 (EUIII code: P0201)
0x01350069 105 Activation, fuel injector, cylinder 2 (EUIII code: P0202)
0x0135006A 106 Activation, fuel injector, cylinder 3 (EUIII code: P0203)
0x0135006B 107 Activation, fuel injector, cylinder 4 (EUIII code: P0204)
0x0135006C 108 Activation, electric fan

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# Bmw Code Sheet.txt

0x0135006E 110 Activation, A/C compressor  
 0x0135006F 111 Activation, fuel-pump relay  
 0x01350070 112 Activation, DISA valve  
 0x01350071 113 Activation, tank-venting valve (EUIII code: P0443)  
 0x01350072 114 Activation, suction-jet-pump valve  
 0x01350073 115 Activation, map cooling  
 0x01350075 117 Activation, idle-speed control valve (EUIII code: P0505)  
 0x01350076 118 Activation, ox.-sensor heater before cat. conv. (EUIII code: P0135)  
 0x01350077 119 Signal, throttle potentiometer (EUIII code: P0120)  
 0x01350078 120 Signal, hot-film air-mass flow sensor (EUIII code: P0101)  
 0x01350079 121 Signal, intake-air temperature (EUIII code: P0110)  
 0x0135007A 122 Signal, coolant temperature (EUIII code: P0115)  
 0x0135007B 123 Signal, coolant outlet temperature  
 0x0135007C 124 Battery positive voltage, main relay  
 0x0135007D 125 Signal, oxygen sensor before catalytic converter (EUIII code: P0130)  
 0x0135007E 126 Signal, CAN ASC  
 0x0135007F 127 Request, CAN ASC  
 0x01350080 128 Signal, CAN EGS (EUIII code: P0700)  
 0x01350081 129 Request, CAN EGS  
 0x01350082 130 Signal, CAN IKE  
 0x01350083 131 Signal, road speed (EUIII code: P0500)  
 0x01350084 132 Ref. voltage for hot-film air-mass flow sensor (EUIII code: P0101)  
 0x01350085 133 Reference voltage for throttle potentiometer (EUIII code: P0608)  
 0x01350087 135 Signal, camshaft sensor (EUIII code: P0340)  
 0x01350088 136 Signal, crankshaft sensor (EUIII code: P0335)  
 0x01350089 137 Signal, knock sensor 1 (EUIII code: P0325)  
 0x0135008A 138 Signal, knock sensor 2 (EUIII code: P0330)  
 0x0135008B 139 Signal, oxygen sensor after catalytic converter (EUIII code: P0136)  
 0x0135008C 140 DME-EWS 3.3 interface  
 0x0135008D 141 Oxygen-sensor control, control limit (EUIII code: P0170)  
 0x0135008E 142 Knock control, self-test (EUIII code: P0325)  
 0x0135008F 143 Control modules, self-test (EUIII code: P0601)  
 0x01350090 144 Anti-tampering protection EWS 3.3  
 0x01350091 145 Misfire relevant to exhaust gas, cylinder 1 (EUIII code: P0301)  
 0x01350092 146 Misfire relevant to exhaust gas, cylinder 2 (EUIII code: P0302)  
 0x01350093 147 Misfire relevant to exhaust gas, cylinder 3 (EUIII code: P0303)  
 0x01350094 148 Misfire relevant to exhaust gas, cylinder 4 (EUIII code: P0304)  
 0x01350095 149 Activation, secondary-air valve (EUIII code: P0412)  
 0x01350096 150 Activation, secondary-air pump (EUIII code: P0418)  
 0x01350097 151 Secondary-air system, plausibility (EUIII code: P0410)  
 0x01350098 152 ECU self-test, E2PROM emulation (EUIII code: P0602)  
 0x01350099 153 Activation, ox.-sensor heater after cat. conv. (EUIII code: P0141)  
 0x0135009B 155 Misfire relevant to exhaust gas, total (EUIII code: P0300)  
 0x0135009C 156 Misfire with cylinder cutout at cylinder 1 (EUIII code: P0301)  
 0x0135009D 157 Misfire with cylinder cutout at cylinder 2 (EUIII code: P0302)  
 0x0135009E 158 Misfire with cylinder cutout at cylinder 3 (EUIII code: P0303)  
 0x0135009F 159 Misfire with cylinder cutout at cylinder 4 (EUIII code: P0304)  
 0x013500A0 160 Misfire with cylinder cutout, total (EUIII code: P0300)  
 0x013500A5 165 Catalytic-converter conversion (EUIII code: P0420)  
 0x013500A6 166 Period duration, ox.sensor before cat. conv. (EUIII code: P0133)  
 0x013500A9 169 Heat output, sensor before cat. conv. (EUIII code: P0135)  
 0x013500AA 170 Heat output, sensor after cat. conv. (EUIII code: P0141)  
 0x013500AB 171 Check, fuel supply system (EUIII code: P0170)  
 //0x01360000 DME M5.2.1 M73  
 0x01360001 1 Activation, solenoid valve, leakage diagnosis pump  
 0x01360002 2 Activation, solenoid valve, fuel system changeover  
 0x01360003 3 Function, tank leakage diagnosis pump  
 0x01360004 4 Oxygen-sensor heater after catalytic converter, bank 2  
 0x01360005 5 Oxygen-sensor heater before catalytic converter, bank 2  
 0x01360006 6 CAN instrument cluster  
 0x01360008 8 Misfiring was caused by tank having been run dry  
 0x0136000A 10 Signal, oxygen sensor before cat., bank 1  
 0x0136000C 12 Signal, oxygen sensor after cat. conv., bank 1

# Bmw Code Sheet.txt

0x0136000D 13 oxygen-sensor heater before catalytic converter, bank 1  
 0x0136000E 14 oxygen-sensor heater after catalytic converter, bank 1  
 0x0136000F 15 Oxygen-sensor ageing TP before catalytic converter, bnak 1  
 0x01360010 16 Oxygen-sensor ageing TV before catalytic converter, bnak 1  
 0x01360011 17 Oxygen-sensor ageing after catalytic converter, bnak 1  
 0x01360012 18 Oxygen-sensor ageing before catalytic xonverter, bank 2  
 0x01360014 20 Oxygen sensor after catalytic converter, bank 2  
 0x01360015 21 Oxygen-sensor ageing TP before catalytic converter, bank 2  
 0x01360016 22 Oxygen-sensor ageing TP before catalytic converter, bank 2  
 0x01360017 23 Oxygen-sensor ageing after catalytic converter, bank 2  
 0x01360018 24 Function, diagnosis, A/C compressor  
 0x0136001A 26 Multiplicative mixture adaptation  
 0x0136001B 27 Additive mixture adaptation (idle), bank 1, control limit reached  
 0x0136001C 28 Additive mixture afaptation (idle), bnak 1, control limit reached  
 0x0136001D 29 Activation, switching valve for aircontained fuel injectors, bank 1  
 0x01360020 32 Function, idle-speed control  
 0x01360022 34 Multiplicative mixture adaptation  
 0x01360023 35 Additive mixture adaptation (idle), bank 2, control limit reached  
 0x01360024 36 Additive mixture adaptation (idle), bank 2, control limit reached  
 0x01360027 39 EWS 3.3 tampering protection  
 0x01360028 40 Catalytic-converter conversion, bank 1  
 0x0136002D 45 Catalytic-converter conversion, bank 2  
 0x01360032 50 Misfire detection, cyl. 1  
 0x01360033 51 Misfire detection, cyl. 2  
 0x01360034 52 Misfire detection, cyl. 3  
 0x01360035 53 Misfire detection, cyl. 4  
 0x01360036 54 Misfire detection, cyl. 5  
 0x01360037 55 Misfire detection, cyl. 6  
 0x01360038 56 Misfire detection, cyl. 7  
 0x01360039 57 Misfire detection, cyl. 8  
 0x0136003A 58 Misfire detection, cyl. 9  
 0x0136003B 59 Misfire detection, cyl. 10  
 0x0136003C 60 Misfire detection, cyl. 11  
 0x0136003D 61 Misfire detection, cyl. 12  
 0x0136003E 62 Misfiring at several cylinders  
 0x0136003F 63 Misfiring with cylinder cutout, cyl. 1  
 0x01360040 64 Misfiring with cylinder cutout, cyl. 2  
 0x01360041 65 Misfiring with cylinder cutout, cyl. 3  
 0x01360042 66 Misfiring with cylinder cutout, cyl. 4  
 0x01360043 67 Misfiring with cylinder cutout, cyl. 5  
 0x01360044 68 Misfiring with cylinder cutout, cyl. 6  
 0x01360045 69 Misfiring with cylinder cutout, cyl. 7  
 0x01360046 70 Misfiring with cylinder cutout, cyl. 8  
 0x01360047 71 Misfiring with cylinder cutout, cyl. 9  
 0x01360048 72 Misfiring with cylinder cutout, cyl. 10  
 0x01360049 73 Misfiring with cylinder cutout, cyl. 11  
 0x0136004A 74 Misfiring with cylinder cutout, cyl. 12  
 0x0136004B 75 Misfiring with cylinder cutout, total  
 0x0136004D 77 Activation, air containment, fuel injectors, bank 1  
 0x0136004E 78 Signal, crankshaft speed sensor  
 0x01360050 80 Function, secondary-air system  
 0x01360054 84 Activative, relay, secondary-air pump  
 0x01360055 85 Activation, relay, secondary-air pump  
 0x0136005B 91 Activation, tank-venting valve, bank 2  
 0x0136005D 93 Function, tank-venting system  
 0x01360061 97 Tank-venting system, minor leak  
 0x01360062 98 Activation, tank-venting valve, bank 1  
 0x01360065 101 Control module faulty (internal RAM)  
 0x01360066 102 Control module faulty (external RAM)  
 0x01360067 103 Control module faulty (ROM)  
 0x01360068 104 Wrong values in fault memory  
 0x0136006B 107 Voltage supply (via DME main relay)  
 0x0136006C 108 Open circuit, continuous

# Bmw Code Sheet.txt

0x0136006F 111 Signal, crankshaft position sensor  
 0x01360070 112 Signal, camshaft position sensor  
 0x01360073 115 Signal, bot-film air-mass flow sensor  
 0x01360075 117 Signal, throttle potentiometer  
 0x01360078 120 Signal, vehicle speed  
 0x01360079 121 Load measurement  
 0x0136007B 123 Signal, temperature sensor, engine coolant  
 0x0136007C 124 Signal, tempersture sensor, intake air  
 0x01360082 130 Oxygen sensors before catalytic converter connected in incorrect sequence  
 0x01360086 134 Switch, tank fill level  
 0x01360087 135 Engine intervention/specified engine torque (gearbox intervention)  
 0x0136008A 138 Compressor intervention  
 0x0136008B 139 Activation, map cooling  
 0x0136008C 140 Engine torque, bank comparison  
 0x0136008D 141 Dynamic Stability Control DSC intervention with fadeout  
 0x0136008F 143 Function, ASC/DSC MSR - engine intervention  
 0x01360090 144 Automatic Stability Control ASC - intervention  
 0x01360093 147 Function, map cooling  
 0x01360094 148 EWS 3.3 interface DME-EWS  
 0x01360096 150 Activation, fuel injector, cyl. 1  
 0x01360097 151 Activation, fuel injector, cyl. 2  
 0x01360098 152 Activation, fuel injector, cyl. 3  
 0x01360099 153 Activation, fuel injector, cyl. 4  
 0x0136009A 154 Activation, fuel injector, cyl. 5  
 0x0136009B 155 Activation, fuel injector, cyl. 6  
 0x0136009C 156 Activation, fuel injector, cyl. 7  
 0x0136009D 157 Activation, fuel injector, cyl. 8  
 0x0136009E 158 Activation, fuel injector, cyl. 9  
 0x0136009F 159 Activation, fuel injector, cyl. 10  
 0x013600A0 160 Activation, fuel injector, cyl. 11  
 0x013600A1 161 Activation, fuel injector, cyl. 12  
 0x013600A3 163 Activation, electric fuel pump, EKP relay  
 0x013600A7 167 Activation, electric fuel pump, EKP relay  
 0x013600A8 168 Activation, idle-speed control valve, opening coil  
 0x013600A9 169 Activation, idle-speed control valve, closing coil  
 0x013600AA 170 A/C-compressor control  
 0x013600AE 179 A/C-compressor control, bank 2  
 0x013600B7 183 Tank-leak detection  
 0x013600B8 184 Tank-venting system, blocked line  
 0x013600BE 190 Ignition-circuit monitoring, cylinder 1  
 0x013600BF 191 Ignition-circuit monitoring, cylinder 2  
 0x013600C0 192 Ignition-circuit monitoring, cylinder 3  
 0x013600C1 193 Ignition-circuit monitoring, cylinder 4  
 0x013600C2 194 Ignition-circuit monitoring, cylinder 5  
 0x013600C3 195 Ignition-circuit monitoring, cylinder 6  
 0x013600C4 196 Ignition-circuit monitoring, cylinder 7  
 0x013600C5 197 Ignition-circuit monitoring, cylinder 8  
 0x013600C6 198 Ignition-circuit monitoring, cylinder 9  
 0x013600C7 199 Ignition-circuit monitoring, cylinder 10  
 0x013600C8 200 Ignition-circuit monitoring, cylinder 11  
 0x013600C9 201 Ignition-circuit monitoring, cylinder 12  
 0x013600CB 203 Ignition-circuit monitoring, bank 1  
 0x013600CC 204 EWS 3.3 random-code storage  
 0x013600D2 210 Signal, knock sensor 1  
 0x013600D3 211 Signal, knock sensor 2  
 0x013600D4 212 Knock sensor 3  
 0x013600D5 213 Knock sensor 4  
 0x013600D6 214 Control modules with different CAN versions at CAN bus  
 0x013600D7 215 CAN timeout, Digital Motor Electronics (DME)  
 0x013600D8 216 CAN timeout ASC/DSC  
 0x013600D9 217 CAN timeout, electronic engine-power control EML  
 0x013600DC 220 Knock control



# Bmw Code Sheet.txt

0x013600DE 222 Knock-control test pulse  
 0x013600E4 228 Automatic, fuel injector, activation, bank 2  
 0x013600E9 233 Activation, automatic starting device  
 0x013600EA 234 Start signal, ignition-lock position 3  
 0x013600EC 236 CAN timeout, electronic transmission management (EGA/AGS)  
 0x013600ED 237 Function, automatic starting device  
 0x013600FA 250 Function, air-contained fuel injectors  
 //0x01340000 DME 5.2.1 M73TU  
 0x01370001 1 Activation, leakage diagnosis pump LDP  
 0x01370002 2 Activation, solenoid valve, fuel system changeover  
 0x01370003 3 Function, tank leakage diagnosis pump  
 0x01370006 6 CAN instrument cluster  
 0x01370007 7 Temperature sensor, coolant outlet  
 0x01370008 8 Misfiring was caused by tank having been run dry  
 0x0137000A 10 Signal, oxygen sensor before cat. conv., bank 1  
 0x0137000B 12 Signal, oxygen sensor after cat. conv., bank 1  
 0x0137000D 13 Oxygen-sensor heater before catalytic converter, bank 1  
 0x0137000E 14 Oxygen-sensor heater after catalytic converter, bank 1  
 0x0137000F 15 Oxygen-sensor ageing TP before catalytic converter, bank 1  
 0x01370010 16 Oxygen-sensor ageing TV before catalytic converter, bank 1  
 0x01370011 17 Oxygen-sensor ageing after catalytic converter, bank 1  
 0x01370013 19 CAN timeout ECAT  
 0x01370017 23 Oxygen-sensor ageing after catalytic converter, bank 2  
 0x0137001A 26 Multiplicative mixture adaptation (part load), bank 1, control limit reached  
 0x0137001B 27 Additive mixture adaptation (idle), bank 1, control limit reached  
 0x0137001C 28 Additive mixture adaptation (idle), bank 1, control limit reached  
 0x0137001D 29 Activation, switching valve for air-contained fuel injectors, bank 1  
 0x0137001E 30 Abort heating ECAT  
 0x01370020 32 Function, idle-speed control  
 0x01370021 33 Control unit, electr. heated cat. converter  
 0x01370027 39 EWS 3.3 tampering protection  
 0x01370028 40 Catalytic-converter conversion, bank 1  
 0x0137002A 42 Abort heating ECAT 1  
 0x0137002B 43 Abort heating ECAT 1  
 0x0137002C 44 Control module ECAT, circuit-breaker 1  
 0x0137002E 46 Abort heating ECAT 2  
 0x0137002F 47 Abort heating ECAT 2  
 0x01370030 48 Control module ECAT, circuit-breaker 2  
 0x01370032 50 Misfire detection, cyl. 1  
 0x01370033 51 Misfire detection, cyl. 2  
 0x01370034 52 Misfire detection, cyl. 3  
 0x01370035 53 Misfire detection, cyl. 4  
 0x01370036 54 Misfire detection, cyl. 5  
 0x01370037 55 Misfire detection, cyl. 6  
 0x01370038 56 Misfire detection, cyl. 7  
 0x01370039 57 Misfire detection, cyl. 8  
 0x0137003A 58 Misfire detection, cyl. 9  
 0x0137003B 59 Misfire detection, cyl. 10  
 0x0137003C 60 Misfire detection, cyl. 11  
 0x0137003D 61 Misfire detection, cyl. 12  
 0x0137003E 62 Misfiring at several cylinders  
 0x0137003F 63 Misfiring with cylinder cutout, cyl. 1  
 0x01370040 64 Misfiring with cylinder cutout, cyl. 2  
 0x01370041 65 Misfiring with cylinder cutout, cyl. 3  
 0x01370042 66 Misfiring with cylinder cutout, cyl. 4  
 0x01370043 67 Misfiring with cylinder cutout, cyl. 5  
 0x01370044 68 Misfiring with cylinder cutout, cyl. 6  
 0x01370045 69 Misfiring with cylinder cutout, cyl. 7  
 0x01370046 70 Misfiring with cylinder cutout, cyl. 8  
 0x01370047 71 Misfiring with cylinder cutout, cyl. 9  
 0x01370048 72 Misfiring with cylinder cutout, cyl. 10  
 0x01370049 73 Misfiring with cylinder cutout, cyl. 11

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0x0137004A 74 Misfiring with cylinder cutout, cyl. 12  
 0x0137004B 75 Misfiring with cylinder cutout, total  
 0x0137004D 77 Activation, air containment, fuel injectors, bank 1  
 0x0137004E 78 Signal, crankshaft speed sensor  
 0x01370050 80 Function, secondary-air system  
 0x01370051 81 Temperature sensor 1, battery  
 0x01370052 82 Temperature sensor 2, battery  
 0x01370053 83 Temperature sensor, battery, not plausible  
 0x01370054 84 Activation, relay, secondary-air pump  
 0x01370055 85 Activation, relay, secondary-air pump  
 0x0137005B 91 Activation, tank-venting valve, bank 2  
 0x0137005D 93 Function, tank-venting system  
 0x01370062 98 Activation, tank-venting valve, bank 1  
 0x01370065 101 Control module faulty (internal RAM)  
 0x01370066 102 Control module faulty (external RAM)  
 0x01370067 103 Control module faulty (ROM)  
 0x01370068 104 Wrong values in fault memory  
 0x0137006B 107 Voltage supply (via DME main relay)  
 0x0137006C 108 Open circuit, continuous power supply  
 0x0137006F 111 Signal, crankshaft position sensor  
 0x01370070 112 Signal, camshaft position sensor  
 0x01370073 115 Signal, hot-film air-mass flow sensor  
 0x01370078 120 Signal, vehicle speed  
 0x01370079 121 Load measurement  
 0x0137007B 123 Signal, temperature sensor, engine coolant  
 0x0137007C 124 Signal, temperature sensor, intake air  
 0x01370082 130 Oxygen sensors before catalytic converter connected in incorrect sequence  
 0x01370086 134 Switch, tank fill level  
 0x01370087 135 Engine intervention / specified engine torque (gearbox intervention)  
 0x0137008A 138 Compressor intervention  
 0x0137008B 139 Activation, map cooling  
 0x0137008C 140 Engine torque, bank comparison  
 0x0137008D 141 Dynamix Stability Control DSC intervention with fadeout  
 0x0137008F 143 Function, ASC/DSC MSR - engine intervention  
 0x01370090 144 Automatic Stability Control ASC - intervention  
 0x01370093 147 Function, map cooling  
 0x01370094 148 EWS 3.3 interface DME-EWS  
 0x01370095 149 Inlet-camshaft setting bank 2  
 0x01370096 150 Activation, fuel injector, cyl. 1  
 0x01370097 151 Activation, fuel injector, cyl. 2  
 0x01370098 152 Activation, fuel injector, cyl. 3  
 0x01370099 153 Activation, fuel injector, cyl. 4  
 0x0137009A 154 Activation, fuel injector, cyl. 5  
 0x0137009B 155 Activation, fuel injector, cyl. 6  
 0x0137009C 156 Activation, fuel injector, cyl. 7  
 0x0137009D 157 Activation, fuel injector, cyl. 8  
 0x0137009E 158 Activation, fuel injector, cyl. 9  
 0x0137009F 159 Activation, fuel injector, cyl. 10  
 0x013700A0 160 Activation, fuel injector, cyl. 11  
 0x013700A1 161 Activation, fuel injector, cyl. 12  
 0x013700A3 163 Activation, electric fuel pump, EKP relay  
 0x013700A7 167 Activation, electric fuel pump, EKP relay  
 0x013700A8 168 Activation, idle-speed control valve, opening coil  
 0x013700A9 169 Activation, idle-speed control valve, closing coil  
 0x013700AA 170 A/C-compressor control  
 0x013700B3 179 A/C-compressor control, bank 2  
 0x013700B7 183 Tank-leak detection  
 0x013700B8 184 Tank-venting system, blocked line  
 0x013700BE 190 Ignition-circuit monitoring, cylinder 1  
 0x013700BF 191 Ignition-circuit monitoring, cylinder 2  
 0x013700C0 192 Ignition-circuit monitoring, cylinder 3  
 0x013700C1 193 Ignition-circuit monitoring, cylinder 4

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0x013700C2 194 Ignition-circuit monitoring, cylinder 5  
 0x013700C3 195 Ignition-circuit monitoring, cylinder 6  
 0x013700C4 196 Ignition-circuit monitoring, cylinder 7  
 0x013700C5 197 Ignition-circuit monitoring, cylinder 8  
 0x013700C6 198 Ignition-circuit monitoring, cylinder 9  
 0x013700C7 199 Ignition-circuit monitoring, cylinder 10  
 0x013700C8 200 Ignition-circuit monitoring, cylinder 11  
 0x013700C9 201 Ignition-circuit monitoring, cylinder 12  
 0x013700CB 203 Ignition-circuit monitoring, bank 1  
 0x013700CC 204 EWS 3.3 random-code storage  
 0x013700D2 210 Signal, knock sensor 1  
 0x013700D3 211 Signal, knock sensor 2  
 0x013700D6 214 Control modules with different CAN versions at CAN bus  
 0x013700D7 215 CAN timeout, Digital Motor Electronics (DME)  
 0x013700D8 216 CAN timeout ASC/DSC  
 0x013700D9 217 CAN timeout, electronic engine-power control EML  
 0x013700DC 220 Knock control  
 0x013700DE 222 Knock-control test pulse  
 0x013700E1 225 Control module ECAT, temperature sensor  
 0x013700E2 226 Ctr. module ECAT, voltage, circuit-breaker  
 0x013700E3 227 Activation, battery disconnecting switch  
 0x013700E4 228 Automatic starting, activation, bank 2  
 0x013700E9 233 Activation, automatic starting device  
 0x013700EA 234 Start signal, ignition-lock position 3  
 0x013700EC 236 CAN timeout, electronic transmission management (EGS/AGS)  
 0x013700ED 237 Function, automatic starting device  
 0x013700FA 250 Function, air-contained fuel injectors  
 0x013700FD 253 Activation, electric fan

//0x41: //1jME 7.2 M62TU

0x01410001 001 Activation, leak diagnosis pump  
 0x01410002 002 DMTL output stage, solenoid valve  
 0x01410003 003 Oxygen sensors before catalytic converter mixed up  
 0x01410004 004 Oxygen-sensor heater after cat. conv., bank 2  
 0x01410005 005 Oxygen-sensor heater before cat. conv., bank 2  
 0x0141000A 010 Signal, oxygen sensor before cat. conv., bank 1  
 0x0141000C 012 Signal, oxygen sensor after cat. conv., bank 1  
 0x0141000D 013 Oxygen-sensor heater before cat. conv., bank 1  
 0x0141000E 014 Oxygen-sensor heater after cat. conv., bank 1  
 0x0141000F 015 Oxygen-sensor ageing before cat. conv., bank 1 (TP)  
 0x01410010 016 Oxygen-sensor ageing before cat. conv., bank 1 (TV)  
 0x01410011 017 Oxygen-sensor ageing before cat. conv., bank 1  
 0x01410012 018 Signal, oxygen sensor before cat. conv., bank 2  
 0x01410014 020 Signal, oxygen sensor after cat. conv., bank 2  
 0x01410015 021 Oxygen-sensor ageing before cat. conv., bank 2 (TP)  
 0x01410016 022 Oxygen-sensor ageing before cat. conv., bank 2 (TV)  
 0x01410017 023 Oxygen-sensor ageing after cat. conv., bank 2  
 0x01410018 024 Multiplication. Mixture adaptation, bank 1, control limit reached  
 0x01410019 025 Multiplication. Mixture adaptation, bank 2, control limit reached  
 0x0141001A 026 Multiplication. Mixture adaptation, bank 1, control limit reached  
 0x0141001B 027 Multiplication. Mixture adaptation, bank 2, control limit reached  
 0x0141001C 028 Additive mixture adaptation, bank 1, control limit reached  
 0x0141001D 029 Additive mixture adaptation, bank 2, control limit reached  
 0x0141001E 030 Fast add. Mixture adaptation, bank 1, control limit reached  
 0x0141001F 031 Fast add. Mixture adaptation, bank 2, control limit reached  
 0x01410020 032 Function, idle-speed control  
 0x01410021 033 Function, inlet-camshaft control, bank 1  
 0x01410022 034 Function, inlet-camshaft control, bank 2  
 0x01410027 039 EWS 3.3 Anti-tampering protection  
 0x01410028 040 Catalytic-converter conversion, bank 1  
 0x0141002D 045 Catalytic-converter conversion, bank 2  
 0x01410032 050 Misfire detection, cyl. 1  
 0x01410033 051 Misfire detection, cyl. 5

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0x01410034 052 Misfire detection, cyl. 4  
 0x01410035 053 Misfire detection, cyl. 8  
 0x01410036 054 Misfire detection, cyl. 6  
 0x01410037 055 Misfire detection, cyl. 3  
 0x01410038 056 Misfire detection, cyl. 7  
 0x01410039 057 Misfire detection, cyl. 2  
 0x0141003E 062 Misfiring at several cylinders  
 0x01410050 080 Function, secondary-air system, bank 1  
 0x01410051 081 Function, secondary-air system, bank 2  
 0x01410052 082 Function, secondary-air valve  
 0x01410054 084 Activation, relay, secondary-air pump  
 0x01410055 085 Activation, secondary-air valve  
 0x0141005D 093 Function, tank-venting system  
 0x01410062 098 Activation, tank-venting valve  
 0x01410065 101 Torque monitoring, level 2  
 0x01410066 102 Signal, multifunction steering wheel  
 0x01410067 103 Function, monitoring, control unit  
 0x01410068 104 Signal, switch clutch  
 0x01410069 105 Control unit faulty (RAM)  
 0x0141006A 106 Signal, switch brake  
 0x0141006B 107 Control unit faulty (ROM)  
 0x0141006C 108 Reset DME / voltage supply  
 0x0141006D 109 Battery positive voltage  
 0x0141006E 110 Torque monitoring, level 1  
 0x0141006F 111 Signal, crankshaft speed sensor  
 0x01410070 112 Signal, crankshaft speed sensor  
 0x01410071 113 Signal, camshaft position sensor, bank 1  
 0x01410072 114 Signal, camshaft position sensor, bank 2  
 0x01410073 115 Signal, hot-film air-mass flow sensor  
 0x01410075 117 Signal, throttle potentiometer  
 0x01410076 118 Signal, throttle potentiometer 1  
 0x01410077 119 Signal, throttle potentiometer 2  
 0x01410078 120 Signal, vehicle speed  
 0x01410079 121 CAN signal, wheel speeds  
 0x0141007A 122 Ambient temperature  
 0x0141007B 123 Signal, temperature sensor engine coolant  
 0x0141007C 124 Signal, temperature sensor, intake air  
 0x0141007D 125 Signal, temperature sensor, radiator outlet  
 0x0141007F 127 TxU plausibility  
 0x01410082 130 Function, throttle actuator  
 0x01410083 131 Function, throttle actuator jammed  
 0x01410084 132 Activation, throttle actuator  
 0x01410085 133 Spring check, throttle actuator  
 0x01410086 134 Learning function, lower stop, throttle actuator  
 0x01410087 135 Throttle potentiometer, booster adjustment  
 0x01410088 136 Function check, throttle emergency operation point  
 0x0141008B 139 Thermostat jammed  
 0x0141008C 140 Activation map cooling  
 0x0141008D 141 Activation, electric fan  
 0x0141008E 142 Activation, exhaust flap  
 0x01410094 148 EWS 3.3 interface DME-EWS  
 0x01410096 150 Activation, fuel injector, cyl. 1  
 0x01410097 151 Activation, fuel injector, cyl. 5  
 0x01410098 152 Activation, fuel injector, cyl. 4  
 0x01410099 153 Activation, fuel injector, cyl. 8  
 0x0141009A 154 Activation, fuel injector, cyl. 6  
 0x0141009B 155 Activation, fuel injector, cyl. 3  
 0x0141009C 156 Activation, fuel injector, cyl. 7  
 0x0141009D 157 Activation, fuel injector, cyl. 2  
 0x014100A3 163 Diagnosis, throttle-air-mass flow sensor adjustment  
 0x014100A4 164 Signal, ambient-pressure sensor  
 0x014100A5 165 Activation, inlet VANOS, bank 1  
 0x014100A6 166 Activation, inlet VANOS, bank 2

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0x014100A7 167 Activation, electric fuel pump, EKP relay  
 0x014100A8 168 Activation, fault lamp MIL  
 0x014100AA 170 A/C-compressor control  
 0x014100B6 182 Function, tank-leakage detection: minor leak  
 0x014100B7 183 Function, tank-leakage detection  
 0x014100B8 184 Function, tank-leak detection, blocked line  
 0x014100B9 185 Function, leakage diagnosis pump  
 0x014100BA 186 Activation, pump motor DMTL  
 0x014100BB 187 DMTL minimal leak (0.5mm)  
 0x014100BC 188 DMTL minor leak (1.0mm)  
 0x014100BD 189 DMTL module  
 0x014100C9 201 DMTL heating  
 0x014100CC 204 EWS 3.3 random-code storage  
 0x014100D2 210 Signal, knock sensor 1  
 0x014100D3 211 Signal, knock sensor 2  
 0x014100D4 212 Signal, knock sensor 3  
 0x014100D5 213 Signal, knock sensor 4  
 0x014100D6 214 Function, knock control, zero test  
 0x014100D7 215 Function, knock control, offset  
 0x014100D8 216 Function, knock control, test pulse  
 0x014100DB 219 CAN timeout TCU  
 0x014100DC 220 CAN timeout, electronic transmission management (EGS/AGS)  
 0x014100DD 221 CAN timeout ASC/DSC  
 0x014100DE 222 CAN timeout, instrument cluster  
 0x014100DF 223 CAN timeout ACC  
 0x014100E0 224 Function, plausibility, MSR intervention  
 0x014100E1 225 Function, plausibility, ACC intervention  
 0x014100E2 226 Plausibility, tank fill level  
 0x014100E5 229 Comparison, supplies, pedal-travel sensor  
 0x014100E6 230 Signal, pedal-travel sensor  
 0x014100E7 231 Signal, pedal-travel sensor, potentiometer 1  
 0x014100E8 232 Signal, pedal-travel sensor, potentiometer 2  
 0x014100E9 233 Activation, automatic starting  
 0x014100EA 234 Signal, ignition lock, position 3 (terminal 50)  
 0x014100EC 236 Activation, intake flap  
 0x014100ED 237 Function, automatic starting

//0x42: //2;ME 9 N40/N42(0x42)

0x01422713 2713 Oxygen sensors before catalytic converter mixed up  
 0x01422714 2714 Oxygen-sensor heater after cat., bank 2  
 0x01422715 2715 Oxygen-sensor heater before cat., bank 2  
 0x0142271A 271A Oxygen sensor before cat., bank 1 - signal  
 0x0142271C 271C Oxygen sensor after cat., bank 1 - signal  
 0x0142271D 271D Oxygen-sensor heater before cat., bank 1  
 0x0142271E 271E Oxygen-sensor heater after cat., bank 1  
 0x0142271F 271F Oxygen-sensor ageing,period  
 0x01422720 2720 Oxygen-sensor ageing,switching time  
 0x01422721 2721 Oxygen-sensor ageing after cat., conv., bank 1  
 0x01422722 2722 Oxygen sensor before cat., bank 2 - signal  
 0x01422724 2724 Oxygen sensor after cat., bank 2- signal  
 0x01422727 2727 Oxygen sensor ageing after cat., conv., bank 2  
 0x0142272A 272A Multiplicative mixture adaptation, bank 1 - control limit 1 reached  
 0x0142272B 272B Multiplicative mixture adaptation, bank 2 - control limit 1 reached  
 0x0142272C 272C Additive mixture adaptation, bank 1 - control limit reached  
 0x0142272D 272D Additive mixture adaptation, bank 2 - control limit reached  
 0x01422731 2731 Function, camshaft control, inlet  
 0x01422737 2737 EWS 3.3 anti-tampering protection  
 0x01422738 2738 Catalytic-converter conversion, bank 1  
 0x01422739 2739 Catalytic-converter conversion, bank 1  
 0x0142273A 273A Catalytic-converter conversion, bank 2  
 0x0142273D 273D Catalytic-converter conversion, bank 2  
 0x01422742 2742 Misfire detection, cylinder 1  
 0x01422743 2743 Misfire detection, cylinder 3

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0x01422744 2744 Misfire detection, cylinder 4  
 0x01422745 2745 Misfire detection, cylinder 2  
 0x01422753 2753 Ignition circuit, cylinder 1  
 0x01422754 2754 Ignition circuit, cylinder 3  
 0x01422755 2755 Ignition circuit, cylinder 4  
 0x01422756 2756 Ignition circuit, cylinder 2  
 0x01422760 2760 Secondary-air system, bank 1  
 0x01422761 2761 Secondary-air system, bank 2  
 0x01422764 2764 Secondary-air pump, relay  
 0x01422769 2769 Throttle actuator - spring test  
 0x0142276D 276D Function, tank-venting system  
 0x01422772 2772 Tank-venting valve, output stage  
 0x01422775 2775 Monitoring, engine torque, level 2  
 0x01422776 2776 Interface, multifunction steering wheel  
 0x01422778 2778 Clutch, switch  
 0x01422779 2779 DME self-test-RAM  
 0x0142277A 277A Brake-light switch  
 0x0142277B 277B DME self-test - ROM  
 0x0142277C 277C DME self-test - RESET  
 0x0142277D 277D Battery voltage  
 0x0142277E 277E Limitation, engine torque, level 1  
 0x0142277F 277F Crankshaft sensor - speed  
 0x01422780 2780 Crankshaft sensor - reference mark  
 0x01422781 2781 Camshaft sensor, intake  
 0x01422782 2782 Camshaft sensor, exhaust  
 0x01422783 2783 Hot-film air-mass flow sensor  
 0x01422786 2786 Throttle-valve potentiometer 1  
 0x01422787 2787 Throttle-valve potentiometer 2  
 0x01422788 2788 Vehicle speed  
 0x01422789 2789 Detection, rough road  
 0x0142278A 278A Ambient temperature  
 0x0142278B 278B Temperature sensor, engine coolant  
 0x0142278C 278C Intake-air temperature sensor  
 0x0142278D 278D Temperature sensor, radiator outlet  
 0x0142278E 278E Differential-pressure sensor, intake manifold  
 0x01422791 2791 Detection, replacement, throttle, without adaptation  
 0x01422792 2792 Throttle actuator - position monitoring  
 0x01422793 2793 Throttle actuator - control range  
 0x01422794 2794 Throttle actuator - activation  
 0x01422795 2795 Throttle actuator - spring test  
 0x01422796 2796 Throttle actuator - test, lower stop  
 0x01422797 2797 Throttle actuator - booster adjustment  
 0x01422798 2798 Throttle actuator - emergency operating point  
 0x01422799 2799 Throttle actuator - adaptation abort due to environmental conditions  
 0x0142279A 279A Throttle actuator - relearn abort  
 0x0142279C 279C Output stage, thermostat, map cooling  
 0x0142279D 279D Output stage, electric fan  
 0x014227A4 27A4 EWS 3.3 interface DME-EWS  
 0x014227A6 27A6 Fuel injector, cylinder 1  
 0x014227A7 27A7 Fuel injector, cylinder 3  
 0x014227A8 27A8 Fuel injector, cylinder 4  
 0x014227A9 27A9 Fuel injector, cylinder 2  
 0x014227B3 27B3 Plausibility, throttle to hot-film air-mass flow sensor  
 0x014227B4 27B4 Ambient-pressure sensor  
 0x014227B5 27B5 Camshaft control, inlet - output stage  
 0x014227B7 27B7 Output stage, fuel-pump relay  
 0x014227B8 27B8 Differential-pressure sensor, intake manifold - plausibility  
 0x014227BB 27BB Function, camshaft control, exhaust  
 0x014227BD 27BD Camshaft control, exhaust, output stage  
 0x014227C1 27C1 All camshaft sensors failed  
 0x014227C2 27C2 Output stage, A/C-compressor control  
 0x014227C3 27C3 Thermal oil-level sensor  
 0x014227CE 27CE Load monitoring

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0x014227DA 27DA Alternator fault  
 0x014227DC 27DC EWS 3.3 random-code storage  
 0x014227E1 27E1 Monitoring, pedal-travel sensor  
 0x014227E2 27E2 Knock sensor 1  
 0x014227E3 27E3 Knock sensor 2  
 0x014227E6 27E6 Knock control - zero test  
 0x014227E7 27E7 Knock control - offset  
 0x014227E8 27E8 Knock control - test pulse  
 0x014227EC 27EC No CAN message from EGS  
 0x014227ED 27ED No CAN message from ASC/DSC  
 0x014227EE 27EE No CAN message from instrument cluster  
 0x014227F3 27F3 No CAN message from Valvetronic control unit  
 0x014227F7 27F7 Pedal - travel sensor, potentiometer 1  
 0x014227F8 27F8 Pedal - travel sensor, potentiometer 2  
 0x01422811 2811 LOCAL CAN communication error  
 0x01422813 2813 DME monitoring, group A  
 0x01422814 2814 DME monitoring, group B  
 0x01422815 2815 DME monitoring, group C  
 0x01422816 2816 DME monitoring, speed-sensor or ECU fault  
 0x0142281E 281E DISA intake system-output stage  
 0x01422823 2823 Oxygen-sensor heater before cat., bank 1  
 0x01422824 2824 Oxygen-sensor heater before cat., bank 2  
 0x01422825 2825 Oxygen-sensor ageing, bank 1  
 0x01422826 2826 Oxygen-sensor ageing, bank 2  
 0x0142283D 283D PT-CAN communication error  
 0x0142283E 283E Variable valve gear-output stage, enable line  
 0x01422850 2850 Variable valve gear-guide sensor  
 0x01422852 2852 Variable valve gear-reference sensor  
 0x01422854 2854 Variable valve gear-plausibility sensor  
 0x01422856 2856 Variable valve gear-voltage-supply sensor  
 0x01422858 2858 Variable valve gear-learn function, stop  
 0x0142285A 285A Variable valve gear-monitoring servomotor  
 0x0142285C 285C Variable valve gear-CAN communication  
 0x0142285E 285E Variable valve gear-control unit, internal fault  
 0x01422860 2860 Variable valve gear-output stage, servomotor  
 0x01422862 2862 Variable valve gear-voltage supply, power output stage  
 0x01422865 2865 Variable valve gear-power limitation in limp-home operating mode  
 0x01422866 2866 Variable valve gear-learning stops necessary  
 0x01422867 2867 Variable valve gear-overload  
 0x014228D6 28D6 Process error-no coding  
 0x014228D7 28D7 Alternator communication  
 0x014228D8 28D8 RAM backup  
 0x014228DB 28DB variable valve gear-minimum-lift adaptation exceeded  
 0x01422972 2972 Activation,suction-jet pump for break booster  
 //0x43: //3jCME 9 N40/N42(0x43)  
 0x01432713 2713 Oxygen sensors before catalytic converter mixed up  
 0x01432714 2714 Oxygen-sensor heater after cat., bank 2  
 0x01432715 2715 Oxygen-sensor heater before cat., bank 2  
 0x0143271A 271A Oxygen sensor before cat., bank 1 - signal  
 0x0143271C 271C Oxygen sensor after cat., bank 1 - signal  
 0x0143271D 271D Oxygen-sensor heater before cat., bank 1  
 0x0143271E 271E Oxygen-sensor heater after cat., bank 1  
 0x0143271F 271F Oxygen-sensor ageing,period  
 0x01432720 2720 Oxygen-sensor ageing,switching time  
 0x01432721 2721 Oxygen-sensor ageing after cat., conv., bank 1  
 0x01432722 2722 Oxygen sensor before cat., bank 2 - signal  
 0x01432724 2724 Oxygen sensor after cat., bank 2- signal  
 0x01432727 2727 Oxygen sensor ageing after cat., conv., bank 2  
 0x0143272A 272A Multiplicative mixture adaptation, bank 1 - control limit 1 reached  
 0x0143272B 272B Multiplicative mixture adaptation, bank 2 - control limit 1 reached  
 0x0143272C 272C Additive mixture adaptation, bank 1 - control limit reached  
 0x0143272D 272D Additive mixture adaptation, bank 2 - control limit reached  
 0x01432731 2731 Function, camshaft control, inlet

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0x01432737 2737 EWS 3.3 anti-tampering protection  
 0x01432738 2738 Catalytic-converter conversion, bank 1  
 0x01432739 2739 Catalytic-converter conversion, bank 1  
 0x0143273A 273A Catalytic-converter conversion, bank 2  
 0x0143273D 273D Catalytic-converter conversion, bank 2  
 0x01432742 2742 Misfire detection, cylinder 1  
 0x01432743 2743 Misfire detection, cylinder 3  
 0x01432744 2744 Misfire detection, cylinder 4  
 0x01432745 2745 Misfire detection, cylinder 2  
 0x01432753 2753 Ignition circuit, cylinder 1  
 0x01432754 2754 Ignition circuit, cylinder 3  
 0x01432755 2755 Ignition circuit, cylinder 4  
 0x01432756 2756 Ignition circuit, cylinder 2  
 0x01432760 2760 Secondary-air system, bank 1  
 0x01432761 2761 Secondary-air system, bank 2  
 0x01432764 2764 Secondary-air pump, relay  
 0x01432769 2769 Throttle actuator - spring test  
 0x0143276D 276D Function, tank-venting system  
 0x01432772 2772 Tank-venting valve, output stage  
 0x01432775 2775 Monitoring, engine torque, level 2  
 0x01432776 2776 Interface, multifunction steering wheel  
 0x01432778 2778 Clutch,switch  
 0x01432779 2779 DME self-test-RAM  
 0x0143277A 277A Brake-light switch  
 0x0143277B 277B DME self-test - ROM  
 0x0143277C 277C DME self-test - RESET  
 0x0143277D 277D Battery voltage  
 0x0143277E 277E Limitation, engine torque, level 1  
 0x0143277F 277F Crankshift sensor - speed  
 0x01432780 2780 Crankshift sensor - reference mark  
 0x01432781 2781 Camshaft sensor, intake  
 0x01432782 2782 Camshaft sensor, exhaust  
 0x01432783 2783 Hot-film air-mass flow sensor  
 0x01432786 2786 Throttle-valve potentiometer 1  
 0x01432787 2787 Throttle-valve potentiometer 2  
 0x01432788 2788 Vehicle speed  
 0x01432789 2789 Detection, rough road  
 0x0143278A 278A Ambient temperature  
 0x0143278B 278B Temperature sensor, engine coolant  
 0x0143278C 278C Intake-air temperature sensor  
 0x0143278D 278D Temperature sensor, radiator outlet  
 0x0143278E 278E Differential-pressure sensor, intake manifold  
 0x01432791 2791 Detection, replacement, throttle, without adaptation  
 0x01432792 2792 Throttle actuator - position monitoring  
 0x01432793 2793 Throttle actuator - control range  
 0x01432794 2794 Throttle actuator - activation  
 0x01432795 2795 Throttle actuator - spring test  
 0x01432796 2796 Throttle actuator - test, lower stop  
 0x01432797 2797 Throttle actuator - booster adjustment  
 0x01432798 2798 Throttle actuator - emergency operating point  
 0x01432799 2799 Throttle actuator - adaptation abort due to environmental conditions  
 0x0143279A 279A Throttle actuator - relearn abort  
 0x0143279C 279C Output stage, thermostat, map cooling  
 0x0143279D 279D Output stage, electric fan  
 0x014327A4 27A4 EWS 3.3 interface DME-EWS  
 0x014327A6 27A6 Fuel injector, cylinder 1  
 0x014327A7 27A7 Fuel injector, cylinder 3  
 0x014327A8 27A8 Fuel injector, cylinder 4  
 0x014327A9 27A9 Fuel injector, cylinder 2  
 0x014327B3 27B3 Palusibility, throttle to hot-film air-mass flow sensor  
 0x014327B4 27B4 Ambient-pressure sensor  
 0x014327B5 27B5 Camshaft control, inlet - output stage  
 0x014327B7 27B7 Output stage, fuel-pump relay



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0x014327B8 27B8 Differential-pressure sensor, intake manifold - plausibility  
 0x014327BB 27BB Function, camshaft control, exhaust  
 0x014327BD 27BD Camshaft control, exhaust, output stage  
 0x014327C1 27C1 All camshaft sensors failed  
 0x014327C2 27C2 Output stage, A/C-compressor control  
 0x014327C3 27C3 Thermal oil-level sensor  
 0x014327CE 27CE Load monitoring  
 0x014327DA 27DA Alternator fault  
 0x014327DC 27DC EWS 3.3 random-code storage  
 0x014327E1 27E1 Monitoring, pedal-travel sensor  
 0x014327E2 27E2 Knock sensor 1  
 0x014327E3 27E3 Knock sensor 2  
 0x014327E6 27E6 Knock control - zero test  
 0x014327E7 27E7 Knock control - offset  
 0x014327E8 27E8 Knock control - test pulse  
 0x014327EC 27EC No CAN message from EGS  
 0x014327ED 27ED No CAN message from ASC/DSC  
 0x014327EE 27EE No CAN message from instrument cluster  
 0x014327F3 27F3 No CAN message from Valvetronic control unit  
 0x014327F7 27F7 Pedal - travel sensor, potentiometer 1  
 0x014327F8 27F8 Pedal - travel sensor, potentiometer 2  
 0x01432811 2811 LOCAL CAN communication error  
 0x01432813 2813 DME monitoring, group A  
 0x01432814 2814 DME monitoring, group B  
 0x01432815 2815 DME monitoring, group C  
 0x01432816 2816 DME monitoring, speed-sensor or ECU fault  
 0x0143281E 281E DISA intake system-output stage  
 0x01432823 2823 Oxygen-sensor heater before cat., bank 1  
 0x01432824 2824 Oxygen-sensor heater before cat., bank 2  
 0x01432825 2825 Oxygen-sensor ageing, bank 1  
 0x01432826 2826 Oxygen-sensor ageing, bank 2  
 0x0143283D 283D PT-CAN communication error  
 0x0143283E 283E Variable valve gear-output stage, enable line  
 0x01432850 2850 Variable valve gear-guide sensor  
 0x01432852 2852 Variable valve gear-reference sensor  
 0x01432854 2854 Variable valve gear-plausibility sensor  
 0x01432856 2856 Variable valve gear-voltage-supply sensor  
 0x01432858 2858 Variable valve gear-learn function, stop  
 0x0143285A 285A Variable valve gear-monitoring servomotor  
 0x0143285C 285C Variable valve gear-CAN communication  
 0x0143285E 285E Variable valve gear-control unit, internal fault  
 0x01432860 2860 Variable valve gear-output stage, servomotor  
 0x01432862 2862 Variable valve gear-voltage supply, power output stage  
 0x01432865 2865 Variable valve gear-power limitation in limp-home operating mode  
 0x01432866 2866 Variable valve gear-learning stops necessary  
 0x01432867 2867 Variable valve gear-overload  
 0x014328D6 28D6 Process error-no coding  
 0x014328D7 28D7 Alternator communication  
 0x014328D8 28D8 RAM backup  
 0x014328DB 28DB variable valve gear-minimum-lift adaptation exceeded  
 0x01432972 2972 Activation,suction-jet pump for break booster  
 //0x44: //4;DDE4.0 M57  
 0x01440100 0100 Air-mass flower sensor  
 0x01440105 0105 Atmospheric-pressure sensor (in c. module)  
 0x01440110 0110 Intake-air temperature sensor  
 0x01440115 0115 Coolant temperature sensor  
 0x01440120 0120 Pedal-travel sensor, potentiometer 1 (PWG)  
 0x01440190 0190 Rail-pressure sensor  
 0x01440200 0200 Injector, cylinder 1  
 0x01440201 0201 Injector, cylinder 5  
 0x01440202 0202 Injector, cylinder 3  
 0x01440203 0203 Injector, cylinder 6  
 0x01440204 0204 Injector, cylinder 2

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0x01440205 0205 Injector, cylinder 4  
 0x01440220 0220 Pedal-travel sensor, potentiometer 2 (PGS)  
 0x01440235 0235 Charge-air pressure sensor  
 0x01440335 0335 Speed, crankshaft  
 0x01440400 0400 Exhaust-gas recirculation or exhaust-gas recirculation controller  
 0x01440404 0404 Exhaust-gas recirculation  
 0x01440480 0480 Electric fan  
 0x01440500 0500 Road speed signal  
 0x01440560 0560 Reference voltage, internal  
 0x01440600 0600 DDE control module (CAN controller)  
 0x01440605 0605 DDE control module (micro controller)  
 0x014409F6 09F6 Rail-pressure monitoring on engine start  
 0x01441190 1190 Rail-pressure control  
 0x01441195 1195 Rail-pressure regulating valve  
 0x01441250 1250 Relay, pre-supply pump  
 0x01441255 1255 Pre-supply pressure sensor  
 0x01441260 1260 Pre-supply pressure monitoring  
 0x01441470 1470 Charge-air pressure control  
 0x01441612 1612 DDE warning lamp activated  
 0x01441613 1613 Smooth running controller  
 0x01441640 1640 DDE contr. module (EEPROM and configuration)  
 0x01441A04 1A04 Electric auxiliary heater  
 0x01441A0E 1A0E Alternator load signal  
 0x01441A18 1A18 Ambient temperature  
 0x01441A22 1A22 Swirl flaps  
 0x01441E00 1E00 CAN bus  
 0x01441E05 1E05 Control panel,Cruise Control  
 0x01441E25 1E25 Monitoring,speed sensor  
 0x01441E30 1E30 Boost-pressure control or boost-presure controller  
 0x01441E35 1E35 Fault in run-on d.shutd. via off or 0 rate  
 0x01441E40 1E40 Analog/digital transducer,test voltage  
 0x01441E45 1E45 Capacitor voltage 1 for cylinders 1,2,3  
 0x01441E50 1E50 Capacitor voltage 2 for culinders 4,5,6  
 0x01441E55 1E55 Supply V f.PTS 2,CAP sensor,AMF sensor  
 0x01441E60 1E60 Supply V f.pedal-tr.,fuel,pre-s.-p.sensors  
 0x01443505 3505 Glow-plug system  
 //0x45: //5;DME Motor Electronic EMS2  
 0x01450101 P0201 Fuel injector, cylinder 1 - malfunction  
 0x01450102 P0202 Fuel injector, cylinder 2 - malfunction  
 0x01450103 P0203 Fuel injector, cylinder 3 - malfunction  
 0x01450104 P0204 Fuel injector, cylinder 4 - malfunction  
 0x01450118 P0218 Transmission-oil temperature too high  
 0x01450122 P0222 Throttle/accelerator-pedal potstion, sensor/switch 2 - input low  
 0x01450123 P0123 Throttle/accelerator-pedal potstion, sensor/switch 1 - input high  
 0x01450134 P0234 Charge-air pressure, compressor  
 0x01450161 P0261 Fuel injector, cylinder 1 - input low  
 0x01450162 P0262 Fuel injector, cylinder 1 - input high  
 0x01450164 P0264 Fuel injector, cylinder 2 - input low  
 0x01450165 P0265 Fuel injector, cylinder 2 - input high  
 0x01450167 P0267 Fuel injector, cylinder 3 - input low  
 0x01450168 P0268 Fuel injector, cylinder 3 - input high  
 0x01450170 P0270 Fuel injector, cylinder 4 - input low  
 0x01450171 P0271 Fuel injector, cylinder 4 - input high  
 0x01450201 P0201 Fuel injector, cylinder 1 - malfunction  
 0x01450202 P0202 Fuel injector, cylinder 2 - malfunction  
 0x01450203 P0203 Fuel injector, cylinder 3 - malfunction  
 0x01450204 P0204 Fuel injector, cylinder 4 - malfunction  
 0x01450218 P0218 Transmission-oil temperature too high  
 0x01450222 P0222 Throttle/accelerator-pedal potstion, sensor/switch 2 - input low  
 0x01450223 P0223 Throttle/accelerator-pedal potstion, sensor/switch 2 - input high  
 0x01450234 P0234 Charge-air pressure, compressor  
 0x01450261 P0261 Fuel injector, cylinder 1 - input low  
 0x01450262 P0262 Fuel injector, cylinder 1 - input high

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0x01450264 P0264 Fuel injector, cylinder 2 - input low  
 0x01450265 P0265 Fuel injector, cylinder 2 - input high  
 0x01450267 P0267 Fuel injector, cylinder 3 - input low  
 0x01450268 P0268 Fuel injector, cylinder 3 - input high  
 0x01450270 P0270 Fuel injector, cylinder 4 - input low  
 0x01450271 P0271 Fuel injector, cylinder 4 - input high  
 0x01450301 P0201 Fuel injector, cylinder 1 - malfunction  
 0x01450302 P0202 Fuel injector, cylinder 2 - malfunction  
 0x01450303 P0203 Fuel injector, cylinder 3 - malfunction  
 0x01450304 P0204 Fuel injector, cylinder 4 - malfunction  
 0x01450318 P0218 Transmission-oil temperature too high  
 0x01450322 P0222 Throttle/accelerator-pedal potstion, sensor/switch 2 - input low  
 0x01450323 P0223 Throttle/accelerator-pedal potstion, sensor/switch 2 - input high  
 0x01450334 P0234 Charge-air pressure, compressor  
 0x01450361 P0261 Fuel injector, cylinder 1 - input low  
 0x01450362 P0262 Fuel injector, cylinder 1 - input high  
 0x01450364 P0264 Fuel injector, cylinder 2 - input low  
 0x01450365 P0265 Fuel injector, cylinder 2 - input high  
 0x01450367 P0267 Fuel injector, cylinder 3 - input low  
 0x01450368 P0268 Fuel injector, cylinder 3 - input high  
 0x01450370 P0270 Fuel injector, cylinder 4 - input low  
 0x01450371 P0271 Fuel injector, cylinder 4 - input high  
 0x01450420 P0420 Cat. converter (bank 1) - efficiency below threshold  
 0x01450443 P0443 Tank-venting system - fault in valve switching circuit  
 0x01450444 P0444 Tank-venting system - open circuit in valve switching circuit  
 0x01450445 P0445 Tank-venting system - open circuit in valve switching circuit  
 0x01450500 P0500 Vehicle-speed signal - malfunction  
 0x01450506 P0506 Idle control system - engine speed lower than expected  
 0x01450506 P0507 Idle control system - engine speed higher than expected  
 0x01450532 P0532 A/C system, refrigerant-pressure sensor - input low  
 0x01450533 P0533 A/C system, refrigerant-pressure sensor - input high  
 0x01450562 P0562 Supply voltage, voltage - low  
 0x01450563 P0563 Supply voltage, voltage - high  
 0x01450568 P0568 Cruise control, 'adjust' signal - malfunction  
 0x01450571 P0571 Cruise control, brake switch - malfunction  
 0x01450575 P0575 Cruise control, input malfunction  
 0x01450601 P0601 Control unit - internal fault in memory, checksum error  
 0x01450603 P0603 Control unit - internal fault in 'Keep Alive Memory' (KAM)  
 0x01450604 P0604 Control unit - internal fault in 'Random Access Memory' (RAM)  
 0x01450646 P0646 A/C compressor, clutch relay - input low  
 0x01450647 P0647 A/C compressor, clutch relay - input high  
 0x01450705 P0705 Gearbox position sensor (PRNDL) - malfunction  
 0x01450712 P0712 Gearbox temperature sensor - input low  
 0x01450713 P0713 Gearbox temperature sensor - input high  
 0x01450714 P0714 Gearbox temperature sensor - input sporadic  
 0x01450721 P0721 Drive-speed snesor - measuring-range or power-output problem  
 0x01450790 P0790 Gearbox program switch - malfunction  
 0x01450815 P0815 One-touch up switch - malfunction  
 0x01450816 P0816 One-touch down switch - malfunction  
 0x01451106 P1106 Pressure snesor, intake manifold - input too low with engine stopped  
 0x01451107 P1107 Pressure sensor, intake manifold - input too low at idle  
 0x01451108 P1108 Pressure sensor, intake manifold - input too low at full load and low engine speed  
 0x01451109 P1109 Pressure sensor, intake manifold - input too high with trailing throttle  
 0x01451122 P1122 Pedal-travel sensor 1 - input low  
 0x01451123 P1123 Pedal-travel sensor 1 - input high  
 0x01451125 P1125 Throttle potentiometer 1 and 2 - measuring-range or power-output problem (minor fault)  
 0x01451126 P1126 Throttle potentiometer 1 and 2 - measuring-range or power-output problem (major fault)  
 0x01451143 P1143 Oxygen sensor (bank 1, after catalytic converter) - input high

# Bmw Code Sheet.txt

0x01451144 P1144 Oxygen sensor (bank 1, after catalytic converter) - input low  
 0x01451222 P1222 Pedal-travel sensor 2 - input low  
 0x01451223 P1223 Pedal-travel sensor 2 - input high  
 0x01451224 P1224 Pedal-travel sensors 1 and 2 - measuring-range or power-output problem  
 0x01451226 P1226 Throttle - malfunction (flap malfunction)  
 0x01451229 P1229 Throttle potentiometer - adaptation fault  
 0x01451234 P1234 Fuel-pump relay, primary circuit - input low  
 0x01451235 P1235 Fuel-pump relay, primary circuit - input high  
 0x01451320 P1320 Flywheel adaptation for misfire detection - measuring-range problem  
 0x01451321 P1321 Flywheel adaptation for misfire detection - power-output problem  
 0x01451340 P1340 Misfiring during starting - multiple fault  
 0x01451341 P1341 Cat.-damaging misfiring - multiple fault  
 0x01451342 P1342 Misfiring during starting - cylinder 1  
 0x01451343 P1343 Cat.-damaging misfiring - cylinder 1  
 0x01451344 P1344 Misfiring during starting - cylinder 2  
 0x01451345 P1345 Cat.-damaging misfiring - cylinder 2  
 0x01451346 P1346 Misfiring during starting - cylinder 3  
 0x01451347 P1347 Cat.-damaging misfiring - cylinder 3  
 0x01451348 P1348 Misfiring during starting - cylinder 4  
 0x01451349 P1349 Cat.-damaging misfiring - cylinder 4  
 0x01451366 P1366 Ignition coil 1, primary/secondary circuit - input low  
 0x01451367 P1367 Ignition coil 2, primary/secondary circuit - input low  
 0x01451481 P1481 Electric fan, relay 1 - input low  
 0x01451482 P1482 Electric fan, relay 1 - input high  
 0x01451484 P1484 Electric fan, relay 2 - input low  
 0x01451485 P1485 Electric fan, relay 2 - input high  
 0x01451487 P1487 Electric fan, relay 3 - input low  
 0x01451488 P1488 Electric fan, relay 3 - input high  
 0x01451497 P1497 Unmetered air after throttle  
 0x01451498 P1498 Unmetered air after compressor  
 0x01451499 P1499 Air cleaner, leakage  
 0x01451570 P1570 Control unit, sensor supply A - output low  
 0x01451571 P1571 Control unit, sensor supply A - output high  
 0x01451572 P1572 Control unit, sensor supply A - output static  
 0x01451573 P1573 Control unit, sensor supply B - output low  
 0x01451574 P1574 Control unit, sensor supply B - output high  
 0x01451575 P1575 Control unit, sensor supply B - output static  
 0x01451600 P1600 Control unit - external fault in 'Random Access Memory' (RAM)  
 0x01451607 P1607 CAN status  
 0x01451611 P1611 Serial communication connection, gearbox control unit  
 0x01451612 P1612 Serial communication connection, instrument cluster  
 0x01451613 P1613 Serial communication connection, ASC  
 0x01451615 P1615 Control unit, processor, SPI bus - malfunction  
 0x01451616 P1616 Control unit, coding memory - checksum error  
 0x01451617 P1617 Control unit, H-bridge driver  
 0x01451626 P1626 Alternator, load sensor - input low  
 0x01451627 P1627 Alternator, load sensor - input high  
 0x01451656 P1656 EWS incorrect code  
 0x01451661 P1661 Timeout, EWS telegram  
 0x01451679 P1679 Electronic throttle monitoring, level 2/3  
 0x01451680 P1680 Electronic throttle monitoring, level 2/3, A/D converter, processor error  
 0x01451681 P1681 Electronic throttle monitoring, level 2/3, engine speed - calculation error  
 0x01451682 P1682 Electronic throttle monitoring, level 2/3, idle speed 'A' - calculation error  
 0x01451683 P1683 Electronic throttle monitoring, level 2/3, idle speed 'B' - calculation error  
 0x01451684 P1684 Electronic throttle monitoring, level 2/3, clutch torque - min. error  
 0x01451685 P1685 Electronic throttle monitoring, level 2/3, clutch torque - max. error

# Bmw Code Sheet.txt

0x01451686 P1686 Electronic throttle monitoring, level 2/3, pedal-travel sensor - diagnostic error  
 0x01451687 P1687 Electronic throttle monitoring, level 2/3, throttle potentiometer - diagnostic error  
 0x01451688 P1688 Electronic throttle monitoring, level 2/3, air mass - calculation error  
 0x01451689 P1689 Electronic throttle monitoring, level 2/3, torque calculation - error  
 0x01451691 P1691 Electronic throttle monitoring, level 2/3, engine-speed limitation - error  
 0x01451692 P1692 Electronic throttle monitoring, level 2/3, engine throttle and injection deactivation 'A'  
 0x01451693 P1693 Electronic throttle monitoring, level 2/3, engine throttle and injection deactivation 'B'  
 0x01451696 P1696 Main-relay activation - input low  
 0x01451697 P1697 Main-relay activation - input high  
 0x01451698 P1698 Gearbox control unit - control error  
 0x01451699 P1699 Gearbox control unit - checksum error  
 0x01451705 P1705 Gearbox control unit, LED output - open circuit  
 0x01451706 P1706 Gearbox control unit, LED output - short circuit  
 0x01451712 P1712 Transmission-oil temperature too high  
 0x01451739 P1739 Clutch solenoid - communication error  
 0x01451740 P1740 Clutch solenoid - measuring-range or power-output problem  
 0x01451741 P1741 Clutch solenoid - open circuit  
 0x01451742 P1742 Clutch solenoid - short circuit  
 0x01451749 P1749 Secondary pressure actuator - communication error  
 0x01451750 P1750 Secondary pressure actuator - measuring-range or power-output problem  
 0x01451751 P1751 Secondary pressure actuator - open circuit  
 0x01451752 P1752 Secondary pressure actuator - short circuit  
 0x01451785 P1785 Gearbox-ratio actuator - malfunction  
 0x01451786 P1786 Gearbox-ratio actuator - measuring-range or power-output problem  
 0x01451787 P1787 Gearbox-ratio actuator - open circuit  
 0x01451788 P1788 Gearbox-ratio actuator - short circuit  
 0x01451789 P1789 Gearbox-ratio actuator - communication error  
 0x01451815 P1815 Gearbox step switch on steering wheel '+' - input low  
 0x01451816 P1816 Gearbox step switch on steering wheel '-' - input low  
 0x01451825 P1825 Shiftlock - malfunction  
 0x01451826 P1826 Shiftlock relay (CVT) - input low  
 0x01451827 P1827 Shiftlock relay (CVT) - input high  
 //0x46: //6j Diesel electronics DDE 4.1 M67  
 0x01460110 0110 Intake-air temperature sensor 2  
 0x01460115 0115 Coolant temperature sensor  
 0x01460120 0120 Pedal-travel sensor, potentiometer 1 (PWG)  
 0x01460190 0190 Rail-pressure sensor  
 0x01460200 0200 Injector, cylinder 5  
 0x01460201 0201 Injector, cylinder 8  
 0x01460202 0202 Injector, cylinder 3  
 0x01460203 0203 Injector, cylinder 2  
 0x01460220 0220 Pedal-travel sensor, potentiometer 2 (PGS)  
 0x01460235 0235 Changer-air-pressure sensor  
 0x01460335 0335 Speed, crankshaft  
 0x014603E6 03E6 Starter-motor control  
 0x01460400 0400 Exhaust-gas recirculation (EGR) 2  
 0x01460404 0404 Exhaust-gas recirculation (EGR) 2  
 0x01460480 0480 Electric fan  
 0x01460500 0500 Roadspeed signal  
 0x01460560 0560 Reference voltage, internal  
 0x01460600 0600 CAN-bus, private  
 0x01460605 0605 DDE control module (Microcontroller)  
 0x01461190 1190 Rail pressure control  
 0x01461195 1195 Rail-pressure regulating valve  
 0x01461250 1250 Relay, pre-supply pump

# Bmw Code Sheet.txt

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0x01461255 1255 Pre-supply pressure sensor
0x01461260 1260 Pre-supply pressure monitoring
0x01461470 1470 Charge-air pressure control
0x01461612 1612 DDE warning lamp activated
0x01461613 1613 Smooth running controller
0x01461640 1640 DDE contr. module (EEPROM and configuration)
0x01461A18 1A18 Ambient temperature
0x01461A22 1A22 Swirl flaps

//0x47: //7;DDE 5.0-3.1
0x01473E90 3E90 Speed sensor,crankshaft
0x01473E91 3E91 Speed sensor,crankshaft
0x01473EA0 3EA0 Speed sensor,crankshaft
0x01473EA1 3EA1 Speed sensor,crankshaft
0x01473EB0 3EB0 Speed calculation
0x01473EC0 3EC0 Camshaft sensor
0x01473EC1 3EC1 Camshaft sensor
0x01473ED0 3ED0 Camshaft sensor
0x01473ED1 3ED1 Camshaft sensor
0x01473EE0 3EE0 Coolant temperature sensor
0x01473EE1 3EE1 Coolant temperature sensor
0x01473EE2 3EE2 Coolant temperature sensor
0x01473F00 3F00 Charge-air pressure sensor
0x01473F01 3F01 Charge-air pressure sensor
0x01473F02 3F02 Charge-air pressure sensor
0x01473F03 3F03 Charge-air pressure sensor
0x01473F10 3F10 Pedal-travel sensor 1 (PWG)
0x01473F11 3F11 Pedal-travel sensor 1 (PWG)
0x01473F13 3F13 Pedal-travel sensor 1 (PWG)
0x01473F20 3F20 Pedal-travel sensor 2 (PGS)
0x01473F21 3F21 Pedal-travel sensor 2 (PGS)
0x01473F23 3F23 Pedal-travel sensor 2 (PGS)
0x01473F30 3F30 Rail-pressure sensor
0x01473F31 3F31 Rail-pressure sensor
0x01473F50 3F50 Roadspeed signal
0x01473F51 3F51 Roadspeed signal
0x01473F52 3F52 Roadspeed signal
0x01473F53 3F53 Roadspeed signal
0x01473F62 3F62 Roadspeed signal via CAN
0x01473F70 3F70 Intake-air temperature sensor
0x01473F71 3F71 Intake-air temperature sensor
0x01473FB0 3FB0 Air-mass flow sensor
0x01473FB1 3FB1 Air-mass flow sensor
0x01473FC0 3FC0 Air-mass flow sensor
0x01473FD0 3FD0 Air-mass flow sensor
0x01474060 4060 Atmospheric-pressure sensor(fitted in control unit)
0x01474061 4061 Atmospheric-pressure sensor(fitted in control unit)
0x01474063 4063 Atmospheric-pressure sensor(fitted in control unit)
0x01474072 4072 Clutch switch
0x01474073 4073 Clutch switch
0x01474083 4083 Brake light/brake test switch
0x014740A0 40A0 Alternator load signal
0x014740A1 40A1 Alternator load signal
0x014740E0 40E0 Generator
0x01474100 4100 A/C-capacity output
0x01474101 4101 A/C-capacity output
0x01474102 4102 A/C-capacity output
0x01474103 4103 A/C-capacity output
0x01474120 4120 DDE main relay
0x01474121 4121 DDE main relay
0x01474130 4130 Swirl flaps
0x01474141 4141 Swirl flaps
0x01474152 4152 Swirl flaps

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0x01474153 4153 Swirl flaps  
 0x01474160 4160 Relay,pre-supply pumps  
 0x01474161 4161 Relay,pre-supply pumps  
 0x01474162 4162 Relay,pre-supply pumps  
 0x01474163 4163 Relay,pre-supply pumps  
 0x01474180 4180 Charge-air pressure controller  
 0x01474191 4191 Charge-air pressure controller  
 0x014741A2 41A2 Charge-air pressure controller  
 0x014741A3 41A3 Charge-air pressure controller  
 0x014741B0 41B0 Exhaust-gas recirculation controller  
 0x014741C0 41C0 Radiator blind  
 0x014741C1 41C1 Radiator blind  
 0x014741C2 41C2 Radiator blind  
 0x014741C3 41C3 Radiator blind  
 0x014741D1 41D1 Exhaust-gas recirculation controller  
 0x014741E2 41E2 Exhaust-gas recirculation controller  
 0x014741E3 41E3 Exhaust-gas recirculation controller  
 0x014741F0 41F0 Electric fan  
 0x014741F1 41F1 Electric fan  
 0x014741F2 41F2 Electric fan  
 0x014741F3 41F3 Electric fan  
 0x01474203 4203 Glow control unit  
 0x01474211 4211 Glow plug,cylinder 1  
 0x01474212 4212 Glow plug,cylinder 1  
 0x01474213 4213 Glow plug,cylinder 1  
 0x01474221 4221 Glow plug,cylinder 2  
 0x01474222 4222 Glow plug,cylinder 2  
 0x01474223 4223 Glow plug,cylinder 2  
 0x01474231 4231 Glow plug,cylinder 3  
 0x01474232 4232 Glow plug,cylinder 3  
 0x01474233 4233 Glow plug,cylinder 3  
 0x01474241 4241 Glow plug,cylinder 4  
 0x01474242 4242 Glow plug,cylinder 4  
 0x01474243 4243 Glow plug,cylinder 4  
 0x014742C0 42C0 Oil-pressure warning lamp  
 0x014742C1 42C1 Oil-pressure warning lamp  
 0x014742C2 42C2 Oil-pressure warning lamp  
 0x014742C3 42C3 Oil-pressure warning lamp  
 0x01474302 4302 Delivery control valve  
 0x01474303 4303 Delivery control valve  
 0x01474310 4310 Delivery control valve  
 0x01474321 4321 Delivery control valve  
 0x01474332 4332 Rail-pressure control valve  
 0x01474333 4333 Rail-pressure control valve  
 0x01474340 4340 Rail-pressure control valve  
 0x01474351 4351 Rail-pressure control valve  
 0x01474360 4360 Rail-pressure control valve,current control(-)  
 0x01474361 4361 Rail-pressure control valve,current control(-)  
 0x01474362 4362 Rail-pressure control valve,current control  
 0x01474378 4378 Rail-pressure control valve,test(-)  
 0x01474382 4382 Diagnosis,rail-pressure control valve(-)  
 0x01474390 4390 Charge-air-temperature sensor  
 0x01474391 4391 Charge-air-temperature sensor  
 0x01474397 4397 Diagnosis,delivery control valve(-)  
 0x014743F0 43F0 Electric auxiliary heater  
 0x014743F1 43F1 Electric auxiliary heater  
 0x014743F2 43F2 Electric auxiliary heater  
 0x014743F3 43F3 Electric auxiliary heater  
 0x01474410 4410 Injector,cylinder 1,activation  
 0x01474412 4412 Injector,cylinder 1,activation  
 0x01474413 4413 Injector,cylinder 1,activation  
 0x0147441C 441C Injector,cylinder 1,activation  
 0x01474420 4420 Injector,cylinder 2,activation

# Bmw Code Sheet.txt

0x01474422	4422	Injector,cylinder 2,activation
0x01474423	4423	Injector,cylinder 2,activation
0x0147442C	442C	Injector,cylinder 2,activation
0x01474430	4430	Injector,cylinder 3,activation
0x01474432	4432	Injector,cylinder 3,activation
0x01474433	4433	Injector,cylinder 3,activation
0x0147443C	443C	Injector,cylinder 3,activation
0x01474440	4440	Injector,cylinder 4,activation
0x01474442	4442	Injector,cylinder 4,activation
0x01474443	4443	Injector,cylinder 4,activation
0x0147444C	444C	Injector,cylinder 4,activation
0x014744A0	44A0	Injectors,positive leads
0x014744A1	44A1	Injectors,positive leads
0x014744A2	44A2	Injectors,activation
0x014744A3	44A3	Injectors,positive leads
0x014744AC	44AC	Injectors,positive leads
0x01474501	4501	Exhaust-gas recirculation
0x01474507	4507	Exhaust-gas recirculation
0x01474521	4521	Charge-air pressure control
0x01474530	4530	Charge-air pressure control
0x01474560	4560	Rail-pressure plausibility delivery-controlled
0x01474570	4570	Rail-pressure plausibility delivery-controlled
0x01474580	4580	Rail-pressure plausibility delivery-controlled
0x01474590	4590	Rail-pressure plausibility delivery-controlled
0x014745A0	45A0	Rail-pressure plausibility delivery-controlled
0x014745C0	45C0	Rail-pressure plausibility delivery-controlled(-)
0x01474600	4600	Rail-pressure plausibility delivery-controlled
0x01474610	4610	Rail-pressure plausibility delivery-controlled
0x01474620	4620	Rail-pressure plausibility delivery-controlled
0x01474630	4630	Rail-pressure plausibility delivery-controlled
0x01474640	4640	Rail-pressure plausibility delivery-controlled
0x01474650	4650	Rail-pressure plausibility delivery-controlled(-)
0x01474660	4660	Power supply
0x01474661	4661	Power supply
0x01474670	4670	Supply voltage 1
0x01474671	4671	Supply voltage 1
0x01474680	4680	Supply voltage 2
0x01474681	4681	Supply voltage 2
0x01474690	4690	Supply voltage 3
0x01474691	4691	Supply voltage 3
0x014746A0	46A0	Control unit,internal 1
0x014746A1	46A1	Control unit,internal 1
0x014746A2	46A2	Control unit,internal 1
0x014746A3	46A3	Control unit,internal 1
0x014746B0	46B0	Control unit,internal 2
0x014746B1	46B1	Control unit,internal 2
0x014746B2	46B2	Control unit,internal 2
0x014746B3	46B3	Control unit,internal 2
0x014746C0	46C0	Control unit,internal 3
0x014746D0	46D0	Control unit,internal 4
0x014746D1	46D1	Control unit,internal 4
0x014746D2	46D2	Control unit,internal 4
0x014746D3	46D3	Control unit,internal 4
0x014746E3	46E3	Control unit,internal 5
0x014746F0	46F0	Control unit,internal 6
0x014746F1	46F1	Control unit,internal 6
0x01474703	4703	Control unit,internal 7
0x01474711	4711	Control unit,internal 8
0x01474712	4712	Control unit,internal 8
0x01474713	4713	Control unit,internal 8
0x01474723	4723	Control unit,internal 9
0x01474730	4730	Delivery control valve,current control
0x01474731	4731	Delivery control valve,current control



# Bmw Code Sheet.txt

0x01474732 4732 Delivery control valve,current control  
 0x01474740 4740 Control unit,internal 11  
 0x01474750 4750 Control unit,internal 12  
 0x01474753 4753 Control unit,internal 12  
 0x01474763 4763 Control unit,internal 13(-)  
 0x01474772 4772 Control unit,internal 14(-)  
 0x01474773 4773 Control unit,internal 14(-)  
 0x01474780 4780 Control unit,internal 15  
 0x01474781 4781 Control unit,internal 15  
 0x01474782 4782 Control unit,internal 15  
 0x01474783 4783 Control unit,internal 15  
 0x014748A2 48A2 CAN message monitoring ASC1  
 0x014748A3 48A3 CAN message monitoring ASC1  
 0x014748B2 48B2 CAN message monitoring ASC2  
 0x014748B3 48B3 CAN message monitoring ASC2  
 0x014748C2 48C2 CAN message monitoring EGS1  
 0x014748C3 48C3 CAN message monitoring EGS1  
 0x014748D2 48D2 CAN message monitoring INSTR2  
 0x014748D3 48D3 CAN message monitoring INSTR2  
 0x014748E2 48E2 CAN message monitoring INSTR3  
 0x014748E3 48E3 CAN message monitoring INSTR3  
 0x014748F2 48F2 CAN bus  
 0x014748F3 48F3 CAN bus  
 0x01474910 4910 CAN bus  
 0x01474912 4912 CAN bus  
 0x01474913 4913 CAN bus  
 0x01474A02 4A02 Terminal 15  
 0x01474A03 4A03 Terminal 15  
 0x01474A10 4A10 Bit-serial data interface BSD  
 0x01474A13 4A13 Bit-serial data interface BSD  
 0x01474A30 4A30 Multifunction steering wheel  
 0x01474A31 4A31 Multifunction steering wheel  
 0x01474A32 4A32 Multifunction steering wheel  
 0x01474A33 4A33 Multifunction steering wheel  
 0x01474A41 4A41 EWS interface error  
 0x01474A42 4A42 EWS interface error  
 0x01474A43 4A43 EWS interface error  
 0x01474A50 4A50 EWS EEPROM random-code storage faulty  
 0x01474A51 4A51 EWS EEPROM random-code storage faulty  
 0x01474A60 4A60 EWS tampering  
 0x01474A61 4A61 EWS tampering  
 0x01474A62 4A62 EWS tampering  
 0x01474A63 4A63 EWS tampering  
 0x01474A70 4A70 Internal map incorrect  
 0x01474A92 4A92 CAN message monitoring ASC3  
 0x01474A93 4A93 CAN message monitoring ASC3  
 0x01474AA2 4AA2 CAN message monitoring EGS2  
 0x01474AA3 4AA3 CAN message monitoring EGS2  
 0x01474AB0 4AB0 Electric auxiliary heater  
 0x01474AE0 4AE0 E-box fan  
 0x01474AE1 4AE1 E-box fan  
 0x01474AE2 4AE2 E-box fan  
 0x01474AE3 4AE3 E-box fan  
 0x01474AF0 4AF0 Control-unit temperature sensor  
 0x01474AF1 4AF1 Control-unit temperature sensor  
 0x01474B00 4B00 Control-unit temperature  
 0x01474B10 4B10 Smooth running controller  
 0x01474B11 4B11 Smooth running controller  
 0x01474B20 4B20 E-box fan  
 0x01474B50 4B50 Rate adjustment  
 0x01474B60 4B60 volume drift compensation  
 0x01474B80 4B80 Rail-pressure plausibility delivery-controlled(-)  
 0x01474B90 4B90 Rail-pressure monitoring on engine start

# Bmw Code Sheet.txt

//0x48: //8;DDE 5.0-3.2

0x01483E90 3E90 Speed sensor, crankshaft, signal  
0x01483E91 3E91 Speed sensor, crankshaft, signal  
0x01483EB0 3EB0 Speed calculation  
0x01483EC0 3EC0 Camshaft sensor, signal  
0x01483EC1 3EC1 Camshaft sensor, signal  
0x01483EE0 3EE0 Coolant temperature sensor, signal  
0x01483EE1 3EE1 Coolant temperature sensor, signal  
0x01483EE2 3EE2 Coolant temperature sensor, signal  
0x01483EE3 3EE3 Coolant temperature sensor, signal  
0x01483EF3 3EF3 Coolant temperature sensor, plausibility  
0x01483F00 3F00 Charge-air pressure sensor, signal  
0x01483F01 3F01 Charge-air pressure sensor, signal  
0x01483F02 3F02 Charge-air pressure sensor, signal  
0x01483F03 3F03 Charge-air pressure sensor, signal  
0x01483F05 3F05 MIL switched off  
0x01483F10 3F10 Pedal-travel sensor 1 (PWG), signal  
0x01483F11 3F11 Pedal-travel sensor 1 (PWG), signal  
0x01483F13 3F13 Pedal-travel sensor 1 (PWG), signal  
0x01483F15 3F15 MIL switched on  
0x01483F20 3F20 Pedal-travel sensor 2 (PGS), signal  
0x01483F21 3F21 Pedal-travel sensor 2 (PGS), signal  
0x01483F23 3F23 Pedal-travel sensor 2 (PGS), signal  
0x01483F25 3F25 Charge-air tube monitoring  
0x01483F30 3F30 Rail-pressure sensor, signal  
0x01483F31 3F31 Rail-pressure sensor, signal  
0x01483F35 3F35 Charge-air tube monitoring at idle  
0x01483F40 3F40 Rail pressure sensor, offset test  
0x01483F41 3F41 Rail pressure sensor, offset test  
0x01483F48 3F48 Brake-light switch  
0x01483F50 3F50 Roadspped signal  
0x01483F52 3F52 Roadspped signal  
0x01483F53 3F53 Roadspped signal  
0x01483F57 3F57 Charge-air pressure controller  
0x01483F62 3F62 Vehicle speed via CAN bus  
0x01483F70 3F70 Intake-air temperature sensor, signal  
0x01483F71 3F71 Intake-air temperature sensor, signal  
0x01483F72 3F72 Intake-air temperature sensor, signal  
0x01483F77 3F77 Charge-air pressure actuator, activation  
0x01483F90 3F90 Oil pressure sensor (-), signal  
0x01483F91 3F91 Oil pressure sensor (-), signal  
0x01483F97 3F97 Charge-air pressure actuator, supply voltage  
0x01483FA0 3FA0 Oil temperature sensor  
0x01483FA1 3FA1 Oil temperature sensor  
0x01483FA2 3FA2 Oil temperature sensor  
0x01483FA3 3FA3 Oil temperature sensor  
0x01483FC0 3FC0 Air-mass flow sensor  
0x01483FD0 3FD0 Air-mass flow sensor  
0x01483FE0 3FE0 Air-mass flow sensor (-)  
0x01483FE1 3FE1 Air-mass flow sensor (-)  
0x01483FF0 3FF0 Air-mass flow sensor  
0x01483FF1 3FF1 Air-mass flow sensor  
0x01484000 4000 Fuel temperature sensor, signal  
0x01484001 4001 Fuel temperature sensor, signal  
0x01484060 4060 Ambient-pressure sensor (installed in control unit), signal  
0x01484061 4061 Ambient-pressure sensor (installed in control unit), signal  
0x01484063 4063 Ambient-pressure sensor (installed in control unit), signal  
0x01484072 4072 Clutch switch, signal  
0x01484073 4073 Clutch switch, signal  
0x01484082 4082 Brake-light/brake-test switch, signals  
0x01484083 4083 Brake-light/brake-test switch, signal  
0x014840A0 40A0 Alternator load signal (-)  
0x014840A1 40A1 Alternator load signal

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0x014840E0 40E0 Generator  
 0x01484120 4120 DDE main relay  
 0x01484121 4121 DDE main relay  
 0x01484130 4130 Swirl flaps, activation  
 0x01484141 4141 Swirl flaps, activation  
 0x01484152 4152 Swirl flaps, activation  
 0x01484153 4153 Swirl flaps, activation  
 0x01484160 4160 Relay, pre-supply pumps, activation  
 0x01484161 4161 Relay, pre-supply pumps, activation  
 0x01484162 4162 Relay, pre-supply pumps, activation  
 0x01484163 4163 Relay, pre-supply pumps, activation  
 0x01484180 4180 Charge-air pressure actuator, activation  
 0x01484191 4191 Charge-air pressure actuator, activation  
 0x014841A2 41A2 Charge-air pressure actuator, activation  
 0x014841A3 41A3 Charge-air pressure actuator, activation  
 0x014841B0 41B0 Exhaust-gas recirculation controller, activation  
 0x014841C0 41C0 Radiator blind, activation  
 0x014841C1 41C1 Radiator blind, activation  
 0x014841C2 41C2 Radiator blind, activation  
 0x014841C3 41C3 Radiator blind, activation  
 0x014841D1 41D1 Exhaust-gas recirculation controller, activation  
 0x014841D5 41D5 Oxygen sensor, signal, Nernst voltage  
 0x014841D6 41D6 Oxygen sensor, signal, Nernst voltage  
 0x014841D7 41D7 Oxygen sensor, signal, Nernst voltage  
 0x014841E2 41E2 Exhaust-gas recirculation controller, activation  
 0x014841E3 41E3 Exhaust-gas recirculation controller, activation  
 0x014841E5 41E5 Oxygen sensor, signal, pump current  
 0x014841E6 41E6 Oxygen sensor, signal, pump current  
 0x014841E7 41E7 Oxygen sensor, signal, pump current  
 0x014841F0 41F0 Electric fan, activation  
 0x014841F1 41F1 Electric fan, activation  
 0x014841F2 41F2 Electric fan, activation  
 0x014841F3 41F3 Electric fan, activation  
 0x014841F5 41F5 Oxygen sensor, ground connection  
 0x014841F6 41F6 Oxygen sensor, ground connection  
 0x014841F7 41F7 Oxygen sensor, ground connection  
 0x01484203 4203 Glow control unit  
 0x01484205 4205 Oxygen sensor, heater activation  
 0x01484206 4206 Oxygen sensor, heater activation  
 0x01484207 4207 Oxygen sensor, heater activation  
 0x01484211 4211 Glow plug, cylinder 1, activation  
 0x01484212 4212 Glow plug, cylinder 1, activation  
 0x01484213 4213 Glow plug, cylinder 1, activation  
 0x01484217 4217 Oxygen sensor, heater coupling  
 0x01484221 4221 Glow plug, cylinder 2, activation  
 0x01484222 4222 Glow plug, cylinder 2, activation  
 0x01484223 4223 Glow plug, cylinder 2, activation  
 0x01484225 4225 Oxygen sensor, signal  
 0x01484226 4226 Oxygen sensor, signal  
 0x01484231 4231 Glow plug, cylinder 3, activation  
 0x01484232 4232 Glow plug, cylinder 3, activation  
 0x01484233 4233 Glow plug, cylinder 3, activation  
 0x01484235 4235 Control unit, internal 21  
 0x01484236 4236 Control unit, internal 21  
 0x01484241 4241 Glow plug, cylinder 4, activation  
 0x01484242 4242 Glow plug, cylinder 4, activation  
 0x01484243 4243 Glow plug, cylinder 4, activation  
 0x01484245 4245 Control unit, internal 22  
 0x01484246 4246 Control unit, internal 22  
 0x01484258 4258 Control unit, internal 23  
 0x01484267 4267 Oxygen sensor, shunt detection  
 0x01484275 4275 Oxygen sensor, heater  
 0x01484276 4276 Oxygen sensor, heater

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0x01484288 4288 Oxygen sensor  
 0x01484293 4293 Control unit, internal 16  
 0x01484296 4296 Oxygen sensor  
 0x01484298 4298 Oxygen sensor  
 0x014842B5 42B5 Engine speed monitoring  
 0x014842C0 42C0 Oil-pressure warning lamp, activation  
 0x014842C1 42C1 Oil-pressure warning lamp, activation  
 0x014842C2 42C2 Oil-pressure warning lamp, activation  
 0x014842C3 42C3 Oil-pressure warning lamp, activation  
 0x01484302 4302 Delivery control valve, activation  
 0x01484303 4303 Delivery control valve, activation  
 0x01484310 4310 Delivery control valve, activation  
 0x01484321 4321 Delivery control valve, activation  
 0x01484332 4332 Rail-pressure control valve, activation  
 0x01484333 4333 Rail-pressure control valve, activation  
 0x01484340 4340 Rail-pressure control valve, activation  
 0x01484351 4351 Rail-pressure control valve, activation  
 0x01484360 4360 Rail-pressure control valve, current control(-)  
 0x01484361 4361 Rail-pressure control valve, current control(-)  
 0x01484362 4362 Rail-pressure control valve, current control  
 0x01484378 4378 Rail-pressure control valve, test (-)  
 0x01484382 4382 Rail-pressure control valve, controller test (-)  
 0x01484390 4390 Charge-air temperature sensor, signal  
 0x01484391 4391 Charge-air temperature sensor, signal  
 0x01484392 4392 Charge-air temperature sensor, signal  
 0x01484397 4397 Delivery control valve, controller test (-)  
 0x014843A0 43A0 Starter interlock relay, activation  
 0x014843A1 43A1 Starter interlock relay, activation  
 0x014843A2 43A2 Starter interlock relay, activation  
 0x014843A3 43A3 Starter interlock relay, activation  
 0x014843F0 43F0 Electric auxiliary heater, activation  
 0x014843F1 43F1 Electric auxiliary heater, activation  
 0x014843F2 43F2 Electric auxiliary heater, activation  
 0x014843F3 43F3 Electric auxiliary heater, activation  
 0x01484403 4403 Control unit, internal 17  
 0x01484410 4410 Injector, cylinder 1, activation  
 0x01484411 4411 Injector, cylinder 1, activation  
 0x01484412 4412 Injector, cylinder 1, activation  
 0x01484413 4413 Injector, cylinder 1, activation  
 0x0148441C 441C Injector, cylinder 1, activation  
 0x01484420 4420 Injector, cylinder 2, activation  
 0x01484421 4421 Injector, cylinder 2, activation  
 0x01484422 4422 Injector, cylinder 2, activation  
 0x01484423 4423 Injector, cylinder 2, activation  
 0x0148442C 442C Injector, cylinder 2, activation  
 0x01484430 4430 Injector, cylinder 3, activation  
 0x01484431 4431 Injector, cylinder 3, activation  
 0x01484432 4432 Injector, cylinder 3, activation  
 0x01484433 4433 Injector, cylinder 3, activation  
 0x0148443C 443C Injector, cylinder 3, activation  
 0x01484440 4440 Injector, cylinder 4, activation  
 0x01484441 4441 Injector, cylinder 4, activation  
 0x01484442 4442 Injector, cylinder 4, activation  
 0x01484443 4443 Injector, cylinder 4, activation  
 0x0148444C 444C Injector, cylinder 4, activation  
 0x01484473 4473 Control unit, internal 18  
 0x01484480 4480 Control unit, internal 19  
 0x01484491 4491 Control unit, internal 20  
 0x014844A0 44A0 Injectors, activation, positive leads  
 0x014844A1 44A1 Injectors, activation, positive leads  
 0x014844A2 44A2 Injectors, activation  
 0x014844A3 44A3 Injectors, activation  
 0x014844A5 44A5 Zero-quantity adaptation, injector, cylinder 1

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0x014844A6 44A6 Zero-quantity adaptation, injector, cylinder 1  
 0x014844AC 44AC Injectors, activation, positive leads  
 0x014844B5 44B5 Zero-quantity adaptation, injector, cylinder 2  
 0x014844B6 44B6 Zero-quantity adaptation, injector, cylinder 2  
 0x014844C0 44C0 Number of desired injections limited  
 0x014844C1 44C1 Number of desired injections limited  
 0x014844C2 44C2 Number of desired injections limited  
 0x014844C5 44C5 Zero-quantity adaptation, injector, cylinder 3  
 0x014844C6 44C6 Zero-quantity adaptation, injector, cylinder 3  
 0x014844D5 44D5 Zero-quantity adaptation, injector, cylinder 4  
 0x014844D6 44D6 Zero-quantity adaptation, injector, cylinder 4  
 0x014844F0 44F0 Rail-pressure plausibility pressure-controlled (-)  
 0x01484501 4501 Exhaust-gas recirculation control, control deviation  
 0x01484507 4507 Exhaust-gas recirculation control, control deviation  
 0x01484512 4512 Thermal oil-level sensor, signal  
 0x01484513 4513 Thermal oil-level sensor, signal  
 0x01484521 4521 Charge-air pressure control, control deviation  
 0x01484530 4530 Charge-air pressure control, control deviation  
 0x01484541 4541 Thermal oil-level sensor  
 0x01484560 4560 Rail-pressure plausibility delivery-controlled  
 0x01484570 4570 Rail-pressure plausibility delivery-controlled  
 0x01484580 4580 Rail-pressure plausibility delivery-controlled  
 0x01484590 4590 Rail-pressure plausibility delivery-controlled  
 0x014845A0 45A0 Rail-pressure plausibility delivery-controlled  
 0x014845C0 45C0 Rail-pressure plausibility delivery-controlled (-)  
 0x01484600 4600 Rail-pressure plausibility pressure-controlled  
 0x01484610 4610 Rail-pressure plausibility pressure-controlled  
 0x01484620 4620 Rail-pressure plausibility pressure-controlled  
 0x01484630 4630 Rail-pressure plausibility pressure-controlled  
 0x01484640 4640 Rail-pressure plausibility pressure-controlled  
 0x01484645 4645 Exhaust-gas recirculation controller  
 0x01484650 4650 Rail-pressure plausibility pressure-controlled (-)  
 0x01484656 4656 Control unit, internal 24  
 0x01484660 4660 Power supply  
 0x01484661 4661 Power supply  
 0x01484670 4670 Supply voltage 1  
 0x01484671 4671 Supply voltage 1  
 0x01484680 4680 Supply voltage 2  
 0x01484681 4681 Supply voltage 2  
 0x01484690 4690 Supply voltage 3  
 0x01484691 4691 Supply voltage 3  
 0x014846A0 46A0 Control unit, internal 1  
 0x014846A1 46A1 Control unit, internal 1  
 0x014846A2 46A2 Control unit, internal 1  
 0x014846A3 46A3 Control unit, internal 1  
 0x014846B0 46B0 Control unit, internal 2  
 0x014846B1 46B1 Control unit, internal 2  
 0x014846B2 46B2 Control unit, internal 2  
 0x014846B3 46B3 Control unit, internal 2  
 0x014846C0 46C0 Control unit, internal 3  
 0x014846D0 46D0 Control unit, internal 4  
 0x014846D1 46D1 Control unit, internal 4  
 0x014846D2 46D2 Control unit, internal 4  
 0x014846D3 46D3 Control unit, internal 4  
 0x01484703 4703 Control unit, internal 7  
 0x01484711 4711 Control unit, internal 8  
 0x01484712 4712 Control unit, internal 8  
 0x01484713 4713 Control unit, internal 8  
 0x01484723 4723 Control unit, internal 9  
 0x01484730 4730 Delivery control valve, current control  
 0x01484731 4731 Delivery control valve, current control  
 0x01484732 4732 Delivery control valve, current control  
 0x01484740 4740 Control unit, internal 11

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0x01484750 4750 Control unit, internal 12  
 0x01484753 4753 Control unit, internal 12  
 0x01484763 4763 Control unit, internal 13 (-)  
 0x01484772 4772 Control unit, internal 14  
 0x01484773 4773 Control unit, internal 14 (-)  
 0x01484780 4780 Control unit, internal 15  
 0x01484781 4781 Control unit, internal 15  
 0x01484782 4782 Control unit, internal 15  
 0x01484783 4783 Control unit, internal 15  
 0x01484820 4820 A/C-capacity output, activation  
 0x01484821 4821 A/C-capacity output, activation  
 0x01484822 4822 A/C-capacity output, activation  
 0x01484823 4823 A/C-capacity output, activation  
 0x01484830 4830 Intake-air temperature sensor  
 0x01484831 4831 Intake-air temperature sensor  
 0x01484832 4832 Intake-air temperature sensor  
 0x01484863 4863 Cruise control  
 0x014848A2 48A2 CAN message monitoring ASC/DSC 1  
 0x014848A3 48A3 CAN message monitoring ASC/DSC 1  
 0x014848B2 48B2 CAN message monitoring ASC/DSC 2  
 0x014848B3 48B3 CAN message monitoring ASC/DSC 2  
 0x014848C2 48C2 CAN message monitoring EGS 1  
 0x014848C3 48C3 CAN message monitoring EGS 1  
 0x014848D2 48D2 CAN message monitoring INSTR 2  
 0x014848D3 48D3 CAN message monitoring INSTR 2  
 0x014848E2 48E2 CAN message monitoring INSTR 3  
 0x014848E3 48E3 CAN message monitoring INSTR 3  
 0x014848F2 48F2 CAN bus  
 0x014848F3 48F3 CAN bus  
 0x01484900 4900 Torque intervention DCS (-)  
 0x01484910 4910 CAN bus  
 0x01484912 4912 CAN bus  
 0x01484913 4913 CAN bus  
 0x01484920 4920 Torque intervention, gearbox (-)  
 0x014849D7 49D7 CAN message monitoring ASC/DSC 4  
 0x014849D8 49D8 CAN message monitoring ASC/DSC 4  
 0x01484A02 4A02 Terminal 15  
 0x01484A03 4A03 Terminal 15  
 0x01484A10 4A10 Bit-serial data interface BSD  
 0x01484A13 4A13 Bit-serial data interface BSD  
 0x01484A30 4A30 Multifunction steering wheel, signal  
 0x01484A31 4A31 Multifunction steering wheel, signal  
 0x01484A32 4A32 Multifunction steering wheel, signal  
 0x01484A33 4A33 Multifunction steering wheel, signal  
 0x01484A41 4A41 EWS interface error  
 0x01484A42 4A42 EWS interface error  
 0x01484A43 4A43 EWS interface error  
 0x01484A50 4A50 EWS Immobiliser random-code storage faulty  
 0x01484A51 4A51 EWS random-code storage faulty  
 0x01484A60 4A60 EWS tampering  
 0x01484A61 4A61 EWS tampering  
 0x01484A62 4A62 EWS tampering  
 0x01484A63 4A63 EWS tampering  
 0x01484A70 4A70 Internal map incorrect  
 0x01484A80 4A80 Charge-air tube monitoring  
 0x01484A92 4A92 CAN message monitoring ASC/DSC 3  
 0x01484A93 4A93 CAN message monitoring ASC/DSC 3  
 0x01484AA2 4AA2 CAN message monitoring EGS 2  
 0x01484AA3 4AA3 CAN message monitoring EGS 2  
 0x01484AB2 4AB2 Electric auxiliary heater  
 0x01484AC2 4AC2 Electric auxiliary heater 2 (-)  
 0x01484AD2 4AD2 Electric auxiliary heater 3 (-)  
 0x01484AD5 4AD5 zero-quantity calibration, injector, cylinder 1

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0x01484AD6 4AD6 Zero-quantity calibration, injector, cylinder 1  
 0x01484AE0 4AE0 Electronics-box fan, activation  
 0x01484AE1 4AE1 Electronics-box fan, activation  
 0x01484AE2 4AE2 Electronics-box fan, activation  
 0x01484AE3 4AE3 Electronics-box fan, activation  
 0x01484AE5 4AE5 Zero-quantity calibration, injector, cylinder 2  
 0x01484AE6 4AE6 Zero-quantity calibration, injector, cylinder 2  
 0x01484AF0 4AF0 Control-unit temperature sensor, signal  
 0x01484AF1 4AF1 Control-unit temperature sensor, signal  
 0x01484AF5 4AF5 Zero-quantity calibration, injector, cylinder 3  
 0x01484AF6 4AF6 Zero-quantity calibration, injector, cylinder 3  
 0x01484B00 4B00 Control-unit temperature sensor  
 0x01484B05 4B05 Zero-quantity calibration, injector, cylinder 4  
 0x01484B06 4B06 Zero-quantity calibration, injector, cylinder 4  
 0x01484B10 4B10 Smooth running controller  
 0x01484B11 4B11 Smooth running controller  
 0x01484B22 4B22 Electric fan  
 0x01484B32 4B32 Electric fan 2 (-)  
 0x01484B42 4B42 Electric fan 3 (-)  
 0x01484B50 4B50 Rate adjustment  
 0x01484B60 4B60 Volume drift compensation  
 0x01484B80 4B80 Rail-pressure plausibility delivery-controlled (-)  
 0x01484B90 4B90 Rail-pressure monitoring on engine start  
 0x01484BA0 4BA0 Intake-air temperature sensor, signal  
 0x01484BA1 4BA1 Intake-air temperature sensor, signal  
 0x01484BB0 4BB0 Supply voltage, air-mass flow sensor  
 0x01484BB1 4BB1 Supply voltage, air-mass flow sensor  
 0x01484BB5 4BB5 Air-mass flow sensor  
 0x01484BB6 4BB6 Air-mass flow sensor  
 0x01484BC0 4BC0 Air-mass flow sensor  
 0x01484BC1 4BC1 Air-mass flow sensor  
 0x01484BC2 4BC2 Air-mass flow sensor  
 0x01484BC5 4BC5 Intake-air temperature sensor (reference signal for air-mass sensor)  
 0x01484BC6 4BC6 Intake-air temperature sensor (reference signal for air-mass sensor)  
 0x01484BC7 4BC7 Intake-air temperature sensor (reference signal for air-mass sensor)  
 0x01484BD5 4BD5 Engine mount, activation  
 0x01484BD6 4BD6 Engine mount, activation  
 0x01484BD7 4BD7 Engine mount, activation  
 0x01484BD8 4BD8 Engine mount, activation  
 //0x49: //9;DDE 5.0-3.3  
 0x01493E90 3E90 Speed sensor, crankshaft  
 0x01493E91 3E91 Speed sensor, crankshaft  
 0x01493EA0 3EA0 Speed sensor, crankshaft  
 0x01493EA1 3EA1 Speed sensor, crankshaft  
 0x01493EB0 3EB0 Speed calculation  
 0x01493EC0 3EC0 Camshaft sensor  
 0x01493EC1 3EC1 Camshaft sensor  
 0x01493ED0 3ED0 Camshaft sensor  
 0x01493ED1 3ED1 Camshaft sensor  
 0x01493EE0 3EE0 Coolant temperature sensor  
 0x01493EE1 3EE1 Coolant temperature sensor  
 0x01493EE2 3EE2 Coolant temperature sensor  
 0x01493F00 3F00 Charge-air pressure sensor  
 0x01493F01 3F01 Charge-air pressure sensor  
 0x01493F02 3F02 Charge-air pressure sensor  
 0x01493F03 3F03 Charge-air pressure sensor  
 0x01493F05 3F05 MIL switched off  
 0x01493F10 3F10 Pedal-travel sensor 1 (PWG)  
 0x01493F11 3F11 Pedal-travel sensor 1 (PWG)  
 0x01493F13 3F13 Pedal-travel sensor 1 (PWG)  
 0x01493F15 3F15 MIL switched on  
 0x01493F20 3F20 Pedal-travel sensor 2 (PGS)  
 0x01493F21 3F21 Pedal-travel sensor 2 (PGS)

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0x01493F23 3F23 Pedal-travel sensor 2 (PGS)  
 0x01493F25 3F25 Charge-air tube monitoring  
 0x01493F30 3F30 Rail-pressure sensor  
 0x01493F31 3F31 Rail-pressure sensor  
 0x01493F35 3F35 Charge-air tube monitoring at idle  
 0x01493F48 3F48 Brake-light switch  
 0x01493F50 3F50 Roadspeed signal  
 0x01493F52 3F52 Roadspeed signal  
 0x01493F53 3F53 Roadspeed signal  
 0x01493F62 3F62 Vehicle speed via CAN bus  
 0x01493F70 3F70 Intake-air temperature sensor  
 0x01493F71 3F71 Intake-air temperature sensor  
 0x01493FB0 3FB0 Air-mass flow sensor  
 0x01493FB1 3FB1 Air-mass flow sensor  
 0x01493FC0 3FC0 Air-mass flow sensor  
 0x01493FD0 3FD0 Air-mass flow sensor  
 0x01493FD8 3FD8 Air-mass flow sensor (-)  
 0x01494010 4010 Exhaust-gas backpressure sensor before particle filter (-)  
 0x01494011 4011 Exhaust-gas backpressure sensor before particle filter (-)  
 0x01494020 4020 Exhaust-gas backpressure sensor before particle filter (-)  
 0x01494021 4021 Exhaust-gas backpressure sensor before particle filter (-)  
 0x01494060 4060 Atmospheric-pressure sensor(in control unit)  
 0x01494061 4061 Atmospheric-pressure sensor(in control unit)  
 0x01494072 4072 Clutch switch  
 0x01494073 4073 Clutch switch  
 0x01494083 4083 Brake light/brake test switch  
 0x014940A0 40A0 Alternator load signal (-)  
 0x014940A1 40A1 Alternator load signal  
 0x014940E0 40E0 Generator  
 0x01494100 4100 A/C-capacity output  
 0x01494101 4101 A/C-capacity output  
 0x01494102 4102 A/C-capacity output  
 0x01494103 4103 A/C-capacity output  
 0x01494120 4120 DDE main relay  
 0x01494121 4121 DDE main relay  
 0x01494130 4130 Swirl flaps  
 0x01494141 4141 Swirl flaps  
 0x01494152 4152 Swirl flaps  
 0x01494153 4153 Swirl flaps  
 0x01494160 4160 Relay, pre-supply pumps  
 0x01494161 4161 Relay, pre-supply pumps  
 0x01494162 4162 Relay, pre-supply pumps  
 0x01494163 4163 Relay, pre-supply pumps  
 0x01494180 4180 Charge-air pressure controller  
 0x01494191 4191 Charge-air pressure controller  
 0x014941A2 41A2 Charge-air pressure controller  
 0x014941A3 41A3 Charge-air pressure controller  
 0x014941B0 41B0 Exhaust-gas recirculation controller  
 0x014941C0 41C0 Radiator blind  
 0x014941C1 41C1 Radiator blind  
 0x014941C2 41C2 Radiator blind  
 0x014941C3 41C3 Radiator blind  
 0x014941D1 41D1 Exhaust-gas recirculation controller  
 0x014941E2 41E2 Exhaust-gas recirculation controller  
 0x014941E3 41E3 Exhaust-gas recirculation controller  
 0x014941F0 41F0 Electric fan  
 0x014941F1 41F1 Electric fan  
 0x014941F2 41F2 Electric fan  
 0x014941F3 41F3 Electric fan  
 0x01494203 4203 Glow control unit  
 0x01494211 4211 Glow plug, cylinder 1  
 0x01494212 4212 Glow plug, cylinder 1  
 0x01494213 4213 Glow plug, cylinder 1



# Bmw Code Sheet.txt

0x01494221 4221 Glow plug, cylinder 2  
 0x01494222 4222 Glow plug, cylinder 2  
 0x01494223 4223 Glow plug, cylinder 2  
 0x01494231 4231 Glow plug, cylinder 3  
 0x01494232 4232 Glow plug, cylinder 3  
 0x01494233 4233 Glow plug, cylinder 3  
 0x01494241 4241 Glow plug, cylinder 4  
 0x01494242 4242 Glow plug, cylinder 4  
 0x01494243 4243 Glow plug, cylinder 4  
 0x014942C0 42C0 Oil-pressure warning lamp  
 0x014942C1 42C1 Oil-pressure warning lamp  
 0x014942C2 42C2 Oil-pressure warning lamp  
 0x014942C3 42C3 Oil-pressure warning lamp  
 0x01494302 4302 Delivery control valve  
 0x01494303 4303 Delivery control valve  
 0x01494310 4310 Delivery control valve  
 0x01494321 4321 Delivery control valve  
 0x01494332 4332 Rail-pressure control valve  
 0x01494333 4333 Rail-pressure control valve  
 0x01494340 4340 Rail-pressure control valve  
 0x01494351 4351 Rail-pressure control valve  
 0x01494360 4360 Rail-pressure control valve, current control(-)  
 0x01494361 4361 Rail-pressure control valve, current control(-)  
 0x01494362 4362 Rail-pressure control valve, current control  
 0x01494382 4382 Rail-pressure control valve, controller test (-)  
 0x01494390 4390 Charge-air-temperature sensor  
 0x01494391 4391 Charge-air-temperature sensor  
 0x01494397 4397 Delivery control valve, controller test (-)  
 0x014943F0 43F0 Electric auxiliary heater  
 0x014943F1 43F1 Electric auxiliary heater  
 0x014943F2 43F2 Electric auxiliary heater  
 0x014943F3 43F3 Electric auxiliary heater  
 0x01494410 4410 Injector, cylinder 1, activation  
 0x01494411 4411 Injector, cylinder 1, activation  
 0x01494412 4412 Injector, cylinder 1, activation  
 0x01494413 4413 Injector, cylinder 1, activation  
 0x01494420 4420 Injector, cylinder 2, activation  
 0x01494421 4421 Injector, cylinder 2, activation  
 0x01494422 4422 Injector, cylinder 2, activation  
 0x01494423 4423 Injector, cylinder 2, activation  
 0x01494430 4430 Injector, cylinder 3, activation  
 0x01494431 4431 Injector, cylinder 3, activation  
 0x01494432 4432 Injector, cylinder 3, activation  
 0x01494433 4433 Injector, cylinder 3, activation  
 0x01494440 4440 Injector, cylinder 4, activation  
 0x01494441 4441 Injector, cylinder 4, activation  
 0x01494442 4442 Injector, cylinder 4, activation  
 0x01494443 4443 Injector, cylinder 4, activation  
 0x014944A0 44A0 Injectors, activation, positive leads  
 0x014944A1 44A1 Injectors, activation, positive leads  
 0x014944A2 44A2 Injectors, activation  
 0x014944A3 44A3 Injectors, activation, positive leads  
 0x014944AC 44AC Injectors, activation, positive leads  
 0x01494501 4501 Exhaust-gas recirculation  
 0x01494507 4507 Exhaust-gas recirculation  
 0x01494521 4521 Charge-air pressure control  
 0x01494530 4530 Charge-air pressure control  
 0x01494560 4560 Rail-pressure plausibility delivery-controlled  
 0x01494570 4570 Rail-pressure plausibility delivery-controlled  
 0x01494580 4580 Rail-pressure plausibility delivery-controlled  
 0x01494590 4590 Rail-pressure plausibility delivery-controlled  
 0x014945A0 45A0 Rail-pressure plausibility delivery-controlled  
 0x01494600 4600 Rail-pressure plausibility pressure-controlled

# Bmw Code Sheet.txt

0x01494610	4610	Rail-pressure	plausibility	pressure-controlled
0x01494620	4620	Rail-pressure	plausibility	pressure-controlled
0x01494630	4630	Rail-pressure	plausibility	pressure-controlled
0x01494640	4640	Rail-pressure	plausibility	pressure-controlled
0x01494660	4660	Power supply		
0x01494661	4661	Power supply		
0x01494670	4670	Supply voltage	1	
0x01494671	4671	Supply voltage	1	
0x01494680	4680	Supply voltage	2	
0x01494681	4681	Supply voltage	2	
0x01494690	4690	Supply voltage	3	
0x01494691	4691	Supply voltage	3	
0x014946A0	46A0	Control unit,	internal	1
0x014946A1	46A1	Control unit,	internal	1
0x014946A2	46A2	Control unit,	internal	1
0x014946A3	46A3	Control unit,	internal	1
0x014946B0	46B0	Control unit,	internal	2
0x014946B1	46B1	Control unit,	internal	2
0x014946B2	46B2	Control unit,	internal	2
0x014946B3	46B3	Control unit,	internal	2
0x014946C0	46C0	Control unit,	internal	3
0x014946D0	46D0	Control unit,	internal	4
0x014946D1	46D1	Control unit,	internal	4
0x014946D2	46D2	Control unit,	internal	4
0x014946D3	46D3	Control unit,	internal	4
0x014946E3	46E3	Control unit,	internal	5
0x014946F0	46F0	Control unit,	internal	6
0x014946F1	46F1	Control unit,	internal	6
0x01494703	4703	Control unit,	internal	7
0x01494711	4711	Control unit,	internal	8
0x01494712	4712	Control unit,	internal	8
0x01494713	4713	Control unit,	internal	8
0x01494723	4723	Control unit,	internal	9
0x01494730	4730	Delivery control valve,	current control	
0x01494731	4731	Delivery control valve,	current control	
0x01494732	4732	Delivery control valve,	current control	
0x01494740	4740	Control unit,	internal	11
0x01494750	4750	Control unit,	internal	12
0x01494753	4753	Control unit,	internal	12
0x01494763	4763	Control unit,	internal	13 (-)
0x01494772	4772	Control unit,	internal	14 (-)
0x01494773	4773	Control unit,	internal	14 (-)
0x01494780	4780	Control unit,	internal	15
0x01494781	4781	Control unit,	internal	15
0x01494782	4782	Control unit,	internal	15
0x01494783	4783	Control unit,	internal	15
0x014948A2	48A2	CAN message monitoring	ASC	1
0x014948A3	48A3	CAN message monitoring	ASC	1
0x014948B2	48B2	CAN message monitoring	ASC	2
0x014948B3	48B3	CAN message monitoring	ASC	2
0x014948C2	48C2	CAN message monitoring	EGS	1
0x014948C3	48C3	CAN message monitoring	EGS	1
0x014948D2	48D2	CAN message monitoring	INSTR	2
0x014948D3	48D3	CAN message monitoring	INSTR	2
0x014948E2	48E2	CAN message monitoring	INSTR	3
0x014948E3	48E3	CAN message monitoring	INSTR	3
0x014948F2	48F2	CAN bus		
0x014948F3	48F3	CAN bus		
0x01494910	4910	CAN bus		
0x01494912	4912	CAN bus		
0x01494913	4913	CAN bus		
0x01494A02	4A02	Terminal	15	
0x01494A03	4A03	Terminal	15	

# Bmw Code Sheet.txt

0x01494A10 4A10 Bit-serial data interface BSD  
 0x01494A13 4A13 Bit-serial data interface BSD  
 0x01494A30 4A30 Multifunction steering wheel  
 0x01494A31 4A31 Multifunction steering wheel  
 0x01494A32 4A32 Multifunction steering wheel  
 0x01494A33 4A33 Multifunction steering wheel  
 0x01494A41 4A41 EWS interface error  
 0x01494A42 4A42 EWS interface error  
 0x01494A43 4A43 EWS interface error  
 0x01494A51 4A51 EWS random-code storage faulty  
 0x01494A60 4A60 EWS tampering  
 0x01494A61 4A61 EWS tampering  
 0x01494A62 4A62 EWS tampering  
 0x01494A63 4A63 EWS tampering  
 0x01494A70 4A70 Internal map incorrect  
 0x01494A92 4A92 CAN message monitoring ASC 3  
 0x01494A93 4A93 CAN message monitoring ASC 3  
 0x01494AA2 4AA2 CAN message monitoring EGS 2  
 0x01494AA3 4AA3 CAN message monitoring EGS 2  
 0x01494AB2 4AB2 Electric auxiliary heater  
 0x01494AE0 4AE0 E-box fan  
 0x01494AE1 4AE1 E-box fan  
 0x01494AE2 4AE2 E-box fan  
 0x01494AE3 4AE3 E-box fan  
 0x01494AF0 4AF0 Control-unit temperature sensor  
 0x01494AF1 4AF1 Control-unit temperature sensor  
 0x01494B00 4B00 Control-unit temperature sensor  
 0x01494B10 4B10 Smooth running controller  
 0x01494B11 4B11 Smooth running controller  
 0x01494B22 4B22 Electric fan  
 0x01494B50 4B50 Rate adjustment  
 0x01494B60 4B60 Volume drift compensation  
 0x01494B71 4B71 Engine-speed monitoring  
 0x01494B90 4B90 Rail-pressure monitoring on engine start  
 //0x4A: //10j4DME Motor Electronics  
 0x014A29CC 29CC Misfire, several cylinders  
 0x014A29CD 29CD Misfire, cylinder 1  
 0x014A29CE 29CE Misfire, cylinder 2  
 0x014A29CF 29CF Misfire, cylinder 3  
 0x014A29D0 29D0 Misfire, cylinder 4  
 0x014A29DD 29DD Poor road surface detection  
 0x014A29E5 29E5 Mixture adaptation 1(air density), upper speed range  
 0x014A29E6 29E6 Mixture adaptation 2 (air density), upper speed range  
 0x014A29E7 29E7 Mixture adaptation 1 (leakage air)  
 0x014A29E8 29E8 Mixture adaptation 2 (leakage air)  
 0x014A29ED 29ED Mixture adaptation 1 (air density) ,lower speed range  
 0x014A29EE 29EE Mixture adaptation 2 (air density), lower speed range  
 0x014A29F4 29F4 Catalytic-converter conversion 1  
 0x014A29FE 29FE Secondary-air system  
 0x014A29FF 29FF Secondary-air system  
 0x014A2A03 2A03 Secondary-air pump relay, activation  
 0x014A2A19 2A19 Tank-venting valve  
 0x014A2A59 2A59 Valvetronic, eccentric-shaft sensor 1  
 0x014A2A5B 2A5B Valvetronic, eccentric-shaft sensor 1  
 0x014A2A5D 2A5D Valvetronic, eccentric-shaft sensor 1  
 0x014A2A5F 2A5F Valvetronic, eccentric-shaft sensor 1  
 0x014A2A61 2A61 Valvetronic, adaptation 1  
 0x014A2A63 2A63 Valvetronic, servomotor 1  
 0x014A2A67 2A67 Valvetronic, internal fault  
 0x014A2A69 2A69 Valvetronic, voltage supply,servomotor 1  
 0x014A2A6B 2A6B Valvetronic, power limitation, servomotor  
 0x014A2A6C 2A6C Valvetronic, learning function, stop  
 0x014A2A6D 2A6D Valvetronic, electrical overload protection 1

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0x014A2A6F 2A6F Valvetronic, minimum lift exceeded  
 0x014A2A70 2A70 Valvetronic, servomotor  
 0x014A2A71 2A71 Valvetronic, relief relay  
 0x014A2A80 2A80 Inlet VANOS, activation 1  
 0x014A2A83 2A83 Inlet VANOS 1  
 0x014A2A85 2A85 Exhaust VANOS, activation 1  
 0x014A2A88 2A88 Exhaust VANOS 1  
 0x014A2B5C 2B5C Crankshaft sensor  
 0x014A2B5D 2B5D Crankshaft sensor  
 0x014A2B62 2B62 Camshaft sensor 1, inlet  
 0x014A2B63 2B63 Camshaft sensor 2, exhaust  
 0x014A2B66 2B66 Camshaft sensor  
 0x014A2B70 2B70 Variable intake system  
 0x014A2B7F 2B7F Idle-speed control  
 0x014A2B80 2B80 Idle-speed control  
 0x014A2B8A 2B8A Control module: internal fault, knock control  
 0x014A2B8B 2B8B Control module: internal fault, knock control  
 0x014A2B8C 2B8C Control module: internal fault, knock control  
 0x014A2B98 2B98 Control module: internal fault, RAM  
 0x014A2B99 2B99 Control module: internal fault, RAM  
 0x014A2B9A 2B9A Control module: internal fault, RAM  
 0x014A2B9B 2B9B Control module: internal fault, ROM  
 0x014A2B9C 2B9C Control module: internal fault, reset  
 0x014A2BA7 2BA7 Engine torque too high  
 0x014A2C24 2C24 Oxygen sensors before catalytic converter mixed up  
 0x014A2C45 2C45 Oxygen sensor before catalytic converter 1  
 0x014A2C46 2C46 Oxygen sensor before catalytic converter 2  
 0x014A2C6A 2C6A Oxygen sensors after catalytic converter mixed up  
 0x014A2C6D 2C6D Oxygen sensor after catalytic converter 1, ageing  
 0x014A2C6E 2C6E Oxygen sensor after catalytic converter 2, ageing  
 0x014A2C6F 2C6F Oxygen sensor after catalytic converter 1  
 0x014A2C70 2C70 Oxygen sensor after catalytic converter 2  
 0x014A2C71 2C71 Oxygen sensor after catalytic converter 1  
 0x014A2C72 2C72 Oxygen sensor after catalytic converter 2  
 0x014A2C9C 2C9C Oxygen sensor heater before catalytic converter 1  
 0x014A2C9D 2C9D Oxygen sensor heater before catalytic converter 2  
 0x014A2CA0 2CA0 Oxygen sensor heater before catalytic converter 1  
 0x014A2CA1 2CA1 Oxygen sensor heater before catalytic converter 2  
 0x014A2CA2 2CA2 Oxygen sensor heater before catalytic converter 1  
 0x014A2CA3 2CA3 Oxygen sensor heater before catalytic converter 2  
 0x014A2CA8 2CA8 Oxygen sensor heater after catalytic converter 1  
 0x014A2CA9 2CA9 Oxygen sensor heater after catalytic converter 2  
 0x014A2CEF 2CEF Throttle-value actuator  
 0x014A2CF0 2CF0 Throttle-value actuator  
 0x014A2CF1 2CF1 Throttle-value actuator  
 0x014A2CF8 2CF8 Throttle-valve potentiometer  
 0x014A2CF9 2CF9 Throttle-valve potentiometer 1  
 0x014A2CFA 2CFA Throttle-valve potentiometer 2  
 0x014A2CFF 2CFF Throttle-value actuator  
 0x014A2D00 2D00 Throttle-value actuator  
 0x014A2D01 2D01 Throttle-value actuator  
 0x014A2D02 2D02 Throttle-value actuator  
 0x014A2D03 2D03 Throttle-value actuator  
 0x014A2D04 2D04 Throttle-value actuator  
 0x014A2D05 2D05 Throttle-value actuator  
 0x014A2D08 2D08 Throttle actuator  
 0x014A2D0F 2D0F Hot-film air-mass sensor, signal  
 0x014A2D19 2D19 Accelerator-pedal module  
 0x014A2D1A 2D1A Accelerator-pedal module  
 0x014A2D1B 2D1B Accelerator-pedal module, signal 1  
 0x014A2D1C 2D1C Accelerator-pedal module, signal 2  
 0x014A2D28 2D28 Intake-manifold pressure sensor, signal  
 0x014A2D29 2D29 Intake-manifold pressure sensor, plausibility

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0x014A2D6E 2D6E Control module, internal fault: torque monitoring  
 0x014A2D6F 2D6F Load-sensor monitoring  
 0x014A2D70 2D70 Control module, internal fault  
 0x014A2D71 2D71 Control module, internal fault  
 0x014A2D72 2D72 Control module, internal fault  
 0x014A2D73 2D73 Fuel-pressure sensor  
 0x014A2D74 2D74 Fuel-pressure sensor  
 0x014A2D75 2D75 Crankshaft sensor  
 0x014A2D76 2D76 Accelerator-pedal module  
 0x014A2E24 2E24 Ignition coil, cylinder 1  
 0x014A2E25 2E25 Ignition coil, cylinder 2  
 0x014A2E26 2E26 Ignition coil, cylinder 3  
 0x014A2E27 2E27 Ignition coil, cylinder 4  
 0x014A2E30 2E30 Fuel injector, cylinder 1  
 0x014A2E31 2E31 Fuel injector, cylinder 2  
 0x014A2E32 2E32 Fuel injector, cylinder 3  
 0x014A2E33 2E33 Fuel injector, cylinder 4  
 0x014A2E68 2E68 Knock-sensor signal 1  
 0x014A2E69 2E69 Knock-sensor signal 2  
 0x014A2E95 2E95 Generator  
 0x014A2E97 2E97 Generator  
 0x014A2EE0 2EE0 Engine temperature sensor, signal  
 0x014A2EEA 2EEA Temperature sensor at radiator outlet, signal  
 0x014A2EF4 2EF4 Map thermostat, mechanism  
 0x014A2EF5 2EF5 Map thermostat, activation  
 0x014A2EFE 2EFE Electric fan  
 0x014A2F08 2F08 Intake-air temperature sensor, signal  
 0x014A2F12 2F12 Air-conditioning compressor relay  
 0x014A2F17 2F17 Engine oil temperature, at times too high  
 0x014A2F44 2F44 Electronic car immobilization system  
 0x014A2F45 2F45 EWS data line  
 0x014A2F46 2F46 EWS calibration  
 0x014A2F4E 2F4E No road-speed signal  
 0x014A2F62 2F62 Brake-light switch  
 0x014A2F67 2F67 Clutch switch  
 0x014A2F76 2F76 Control module, internal fault: ambient-pressure sensor  
 0x014A2F85 2F85 Control module, internal fault: internal temperature sensor  
 0x014A2F8A 2F8A Power supply  
 0x014A2F94 2F94 Fuel-pump relay, activation  
 0x014A2F99 2F99 Outside temperature sensor, plausibility  
 0x014A2F9E 2F9E Thermal oil-level sensor  
 0x014A2FA3 2FA3 No coding  
 //0x4B: //11;DME Digital Motor Electronics [ X3\_E83;Z4\_E85 ]  
 0x014B2712 2712 DMTL solenoid valve: activation  
 0x014B2715 2715 Oxygen-sensor heater before cat. conv., bank 2: activation  
 0x014B2716 2716 Oxygen-sensor heater after cat. conv., bank 1: activation  
 0x014B2717 2717 Oxygen-sensor heater after cat. conv., bank 2: activation  
 0x014B2718 2718 Crankshaft sensor: reference mark  
 0x014B2719 2719 Crankshaft sensor: period  
 0x014B271A 271A Oxygen sensor before cat. conv., bank 1: signal  
 0x014B271C 271C Oxygen sensor after cat. conv., bank 1: signal  
 0x014B271D 271D Oxygen-sensor heater before cat. conv., bank 1: activation  
 0x014B271F 271F Oxygen-sensor aging, bank 1: period  
 0x014B2720 2720 Oxygen-sensor aging, bank 1: switching time  
 0x014B2721 2721 Oxygen-sensor aging after cat. conv., bank 1  
 0x014B2722 2722 Oxygen sensor before cat. conv., bank 2: signal  
 0x014B2724 2724 Oxygen sensor after cat. conv., bank 2: signal  
 0x014B2725 2725 Oxygen-sensor aging, bank 2: period  
 0x014B2726 2726 Oxygen-sensor aging, bank 2: switching time  
 0x014B2727 2727 Oxygen-sensor aging after cat. conv., bank 2  
 0x014B2734 2734 Throttle-valve potentiometer 1: signal implausible to hot-film  
 air-mass flow sensor  
 0x014B2735 2735 Throttle-valve potentiometer 2: signal implausible to hot-film

# Bmw Code Sheet.txt

## air-mass flow sensor

0x014B2737 2737 EWS 3.3 Anti-tampering protection  
 0x014B2738 2738 Catalytic converter conversion, bank 1  
 0x014B273D 273D Catalytic converter conversion, bank 2  
 0x014B2740 2740 Pedal-position sensor 1: voltage supply  
 0x014B2741 2741 Pedal-position sensor 2: voltage supply  
 0x014B2742 2742 Misfire, cylinder 1  
 0x014B2743 2743 Misfire, cylinder 5  
 0x014B2744 2744 Misfire, cylinder 3  
 0x014B2745 2745 Misfire, cylinder 6  
 0x014B2746 2746 Misfire, cylinder 2  
 0x014B2747 2747 Misfire, cylinder 4  
 0x014B274E 274E Misfire at several cylinders  
 0x014B2750 2750 Throttle position controller: jammed briefly  
 0x014B2751 2751 Throttle position controller: jammed permanently  
 0x014B2752 2752 Throttle position controller: stiff  
 0x014B2753 2753 Ignition coil, cylinder 1  
 0x014B2754 2754 Ignition coil, cylinder 5  
 0x014B2755 2755 Ignition coil, cylinder 3  
 0x014B2756 2756 Ignition coil, cylinder 6  
 0x014B2757 2757 Ignition coil, cylinder 2  
 0x014B2758 2758 Ignition coil, cylinder 4  
 0x014B2760 2760 Secondary-air system  
 0x014B2761 2761 Secondary-air system  
 0x014B2762 2762 Secondary air valve  
 0x014B2764 2764 Relay, secondary-air pump: activation  
 0x014B2765 2765 Solenoid valve, secondary air: activation  
 0x014B2766 2766 Inlet camshaft sensor: signal duration  
 0x014B2767 2767 Exhaust camshaft sensor: signal duration  
 0x014B2768 2768 Inlet camshaft sensor: phase position  
 0x014B276C 276C Exhaust camshaft sensor: phase position  
 0x014B276D 276D Function check, tank ventilation  
 0x014B2770 2770 Secondary-air hot-film air-mass flow sensor  
 0x014B2772 2772 Tank vent valve: activation  
 0x014B2774 2774 CAN message, engine shutdown time  
 0x014B2777 2777 DME self-test: monitoring AD converter  
 0x014B2778 2778 Clutch switch  
 0x014B2779 2779 DME self-test: RAM  
 0x014B2783 2783 Hot-film air-mass flow sensor  
 0x014B2786 2786 Throttle-valve potentiometer 1  
 0x014B2787 2787 Throttle-valve potentiometer 2  
 0x014B2788 2788 Vehicle speed  
 0x014B278B 278B Temperature sensor, engine coolant  
 0x014B278C 278C Intake-air temperature sensor  
 0x014B278D 278D Temperature sensor, radiator outlet  
 0x014B278F 278F Alternator: under-excitation  
 0x014B2790 2790 Radiator outlet temperature  
 0x014B2794 2794 Throttle actuator  
 0x014B2796 2796 Throttle: adaptation values incorrect  
 0x014B279B 279B Thermostat, map cooling: mechanism  
 0x014B279C 279C Thermostat, map cooling: activation  
 0x014B279D 279D Engine fan: activation  
 0x014B279E 279E Exhaust flap: activation  
 0x014B27A0 27A0 Electronics box fan: activation  
 0x014B27A1 27A1 Throttle: starting test  
 0x014B27A4 27A4 Interface EWS 3.3 - DME  
 0x014B27A5 27A5 Throttle: new adaptation  
 0x014B27A6 27A6 Fuel injector, cylinder 1  
 0x014B27A7 27A7 Fuel injector, cylinder 5  
 0x014B27A8 27A8 Fuel injector, cylinder 3  
 0x014B27A9 27A9 Fuel injector, cylinder 6  
 0x014B27AA 27AA Fuel injector, cylinder 2  
 0x014B27AB 27AB Fuel injector, cylinder 4

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0x014B27B2 27B2 Brake light switch: signal  
 0x014B27B4 27B4 Ambient pressure sensor  
 0x014B27B5 27B5 Inlet camshaft: activation  
 0x014B27B7 27B7 Fuel-pump relay: activation  
 0x014B27B9 27B9 Oxygen sensor before cat. conv., bank 1: voltage excursion  
 0x014B27BA 27BA Oxygen sensor before cat. conv., bank 2: voltage excursion  
 0x014B27BD 27BD Exhaust camshaft: activation  
 0x014B27C2 27C2 A/C compressor control: activation  
 0x014B27C3 27C3 Thermal oil-level sensor  
 0x014B27C4 27C4 Main relay  
 0x014B27C5 27C5 Brake light test switch: signal  
 0x014B27C7 27C7 Main relay: switching delay  
 0x014B27CA 27CA DMTL pump motor: activation  
 0x014B27CC 27CC DMTL: leakage  
 0x014B27CD 27CD DMTL: Module fault  
 0x014B27CF 27CF Firing, cylinder 1  
 0x014B27D0 27D0 Firing, cylinder 5  
 0x014B27D1 27D1 Firing, cylinder 3  
 0x014B27D2 27D2 Firing, cylinder 6  
 0x014B27D3 27D3 Firing, cylinder 2  
 0x014B27D4 27D4 Firing, cylinder 4  
 0x014B27D6 27D6 Idle-speed control valve: activation - position closed  
 0x014B27D7 27D7 Idle-speed control valve: activation - position open  
 0x014B27D9 27D9 DMTL heater: activation  
 0x014B27DA 27DA BSD generator  
 0x014B27DB 27DB Accelerator and brake pedals: signal  
 0x014B27DC 27DC EWS 3.3 random-code storage  
 0x014B27DD 27DD Temperature sensor, engine coolant: gradient  
 0x014B27DE 27DE Temperature sensor, engine coolant: signal  
 0x014B27DF 27DF Temperature sensor, engine coolant: signal constant  
 0x014B27E0 27E0 Crankshaft sensor: segment time measurement  
 0x014B27E2 27E2 Knock sensor 1  
 0x014B27E3 27E3 Knock sensor 2  
 0x014B27EB 27EB No message (EGS 2) from EGS control module  
 0x014B27EC 27EC No message (EGS 1) from EGS control module  
 0x014B27F2 27F2 Tank fill level  
 0x014B27F7 27F7 Pedal position sensor, potentiometer 1  
 0x014B27F8 27F8 Pedal position sensor, potentiometer 2  
 0x014B27F9 27F9 Automatic starting device: activation  
 0x014B27FB 27FB Radiator shutter: activation  
 0x014B2800 2800 No message (inst.cl.2) from instrument cluster  
 0x014B2801 2801 Idle speed implausible (unmetered air)  
 0x014B2804 2804 Cruise control: request  
 0x014B2805 2805 Switch, cruise control: signal  
 0x014B2806 2806 Cruise control: time limit of data transmission reached  
 0x014B2807 2807 Pedal-position sensor potentiometer: signal 1 implausible to signal 2 (double fault)  
 0x014B2808 2808 Pedal-position sensor: ratio fault  
 0x014B2809 2809 No message (inst.cl.3) from instrument cluster  
 0x014B280B 280B No message (DSC 1) from DSC control module  
 0x014B280C 280C No message (DSC 3) from DSC control module  
 0x014B280D 280D No message (LWS) from steering-angle sensor  
 0x014B280E 280E No message (SMG 1) from SMG control module  
 0x014B280F 280F No message (ASC 4) from DSC control module  
 0x014B2812 2812 Oil temperature  
 0x014B281A 281A No message (TxU)  
 0x014B281C 281C Bit-serial data interface (BSD): signal  
 0x014B281D 281D BSD generator: signal  
 0x014B281E 281E Variable intake system: activation  
 0x014B282F 282F CAN communication fault  
 0x014B2830 2830 DME self-test: checksum  
 0x014B2831 2831 DME self-test: processor monitoring  
 0x014B283A 283A Oil condition sensor

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0x014B283F 283F Oil-pressure switch: signal implausible  
 0x014B2869 2869 DME self-test: RAM check faulty  
 0x014B286A 286A DME self-test: knock-sensor module  
 0x014B286B 286B DME self-test: multiple output module  
 0x014B2882 2882 Fuel trim, bank 1  
 0x014B2883 2883 Fuel trim, bank 2  
 0x014B2892 2892 Misfiring  
 0x014B2893 2893 Control modules, internal temperature  
 0x014B2894 2894 Irreversible control-module fault  
 0x014B2895 2895 Crankshaft sensor: signal  
 0x014B2896 2896 Inlet camshaft sensor: signal  
 0x014B2897 2897 Exhaust camshaft sensor: signal  
 0x014B2898 2898 Oxygen sensor after cat. conv., bank 1: signal  
 0x014B2899 2899 Oxygen sensor after cat. conv., bank 2: signal  
 0x014B289A 289A Oxygen-sensor heater before cat. conv., bank 1: function  
 0x014B289B 289B Oxygen-sensor heater before cat. conv., bank 2: function  
 0x014B289C 289C Oxygen-sensor heater after cat. conv., bank 1: function  
 0x014B289D 289D Oxygen-sensor heater after cat. conv., bank 2: function  
 0x014B289E 289E Oxygen sensor before cat. conv., bank 1  
 0x014B289F 289F Oxygen sensor before cat. conv., bank 2  
 0x014B28A1 28A1 Cruise control: monitoring  
 0x014B28A2 28A2 Air path: monitoring  
 0x014B28A4 28A4 Engine speed: monitoring  
 0x014B28A5 28A5 Pedal-position sensor: monitoring  
 0x014B28AA 28AA Idle controller: monitoring  
 0x014B28AB 28AB External torque request: monitoring  
 0x014B28AC 28AC Specified torque: monitoring  
 0x014B28AD 28AD Actual torque: monitoring  
 0x014B28B1 28B1 Speed limitation: monitoring  
 0x014B28B2 28B2 Speed limitation: reset  
 0x014B28B3 28B3 Throttle: continuous adaptation  
 0x014B28B4 28B4 Button, driving dynamics control  
 0x014B28B5 28B5 Sound flap: signal  
 0x014B28B6 28B6 Inlet camshaft: mechanical  
 0x014B28B8 28B8 Exhaust camshaft: mechanical  
 0x014B28BA 28BA Inlet camshaft: stiff  
 0x014B28BC 28BC Exhaust camshaft: stiff  
 0x014B28BD 28BD Inlet camshaft sensor: locking  
 0x014B28BE 28BE Exhaust camshaft sensor: locking  
 0x014B28C1 28C1 Oxygen sensor before cat. conv., bank 1  
 0x014B28C2 28C2 Oxygen sensor before cat. conv., bank 2  
 0x014B28C3 28C3 Oxygen-sensor heater before cat. conv., bank 1: function  
 0x014B28C4 28C4 Oxygen-sensor heater before cat. conv., bank 2: function  
 0x014B28C5 28C5 Oxygen sensor after cat. conv., bank 1: system check  
 0x014B28C6 28C6 Oxygen sensor after cat. conv., bank 2: system check  
 0x014B28CA 28CA Ozone conversion: too low  
 0x014B28CB 28CB Ozone sensor 2  
 0x014B28CC 28CC Ozone sensor 1  
 0x014B28CF 28CF Fuel pump: emergency shutoff  
 0x014B28D0 28D0 Fuel pump: monitoring  
 0x014B28DD 28DD Air-mass system  
 0x014B28E6 28E6 Evaluation module, oxygen sensor, bank 1: on-board diagnosis  
 0x014B28E7 28E7 Evaluation module, oxygen sensor, bank 2: on-board diagnosis  
 0x014B28E8 28E8 Oxygen sensors, bank 1: trim control  
 0x014B28E9 28E9 Oxygen sensors, bank 2: trim control  
 0x014B28EA 28EA Oxygen sensor after cat. conv., bank 1: signal  
 0x014B28EB 28EB Oxygen sensor after cat. conv., bank 2: signal  
 0x014B28EC 28EC Oxygen sensor after cat. conv., bank 1: signal at full load  
 0x014B28ED 28ED Oxygen sensor after cat. conv., bank 2: signal at full load  
 0x014B28F0 28F0 Oxygen sensor after cat. conv., bank 1: system check  
 0x014B28F1 28F1 Oxygen sensor after cat. conv., bank 2: system check  
 0x014B28F2 28F2 Oxygen sensor, bank 1: trim control  
 0x014B28F3 28F3 Oxygen sensor, bank 2: trim control



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0x014B28F4 28F4 Oxygen sensor before cat. conv., bank 1: cold test  
 0x014B28F5 28F5 Oxygen sensor before cat. conv., bank 2: cold test  
 0x014B28F6 28F6 Oxygen sensor after cat. conv., bank 1: cold test  
 0x014B28F7 28F7 Oxygen sensor after cat. conv., bank 2: cold test  
 0x014B28F9 28F9 Rough running: segment time measurement  
 0x014B28FA 28FA CAN torque for switching phase  
 0x014B28FB 28FB Active Cruise Control (ACC)  
 0x014B28FF 28FF DME self-test  
 0x014B2900 2900 DME self-test  
 0x014B2960 2960 Oxygen sensor before cat. conv., bank 1  
 0x014B2961 2961 Oxygen sensor before cat. conv., bank 2  
 0x014B2962 2962 Oxygen sensor before cat. conv., bank 1: dynamics  
 0x014B2963 2963 Oxygen sensor before cat. conv., bank 2: dynamics  
 0x014B2964 2964 Oxygen sensor before cat. conv., bank 1: ceramic temperature  
 0x014B2965 2965 Oxygen sensor before cat. conv., bank 2: ceramic temperature  
 0x014B2966 2966 Oxygen sensor before cat. conv., bank 1: signal  
 0x014B2967 2967 Oxygen sensor before cat. conv., bank 2: signal  
 0x014B296A 296A Oxygen sensors before cat. conv.: mixed up  
 0x014B296B 296B Oxygen sensors after cat. conv.: mixed up  
 0x014B2973 2973 Oxygen sensor before cat. conv., bank 1: lines  
 0x014B2974 2974 Oxygen sensor before cat. conv., bank 2: lines  
 0x014B2986 2986 Oxygen sensor before cat. conv., bank 1: system check  
 0x014B2987 2987 Oxygen sensor before cat. conv., bank 2: system check  
 0x014B2988 2988 Oxygen sensor before cat. conv., bank 1: system check  
 0x014B2989 2989 Oxygen sensor before cat. conv., bank 2: system check  
 0x014B299A 299A CAN fault management EGS  
 0x014B299B 299B Battery sensor  
 0x014B299C 299C Battery sensor  
 0x014B299D 299D Battery sensor  
 0x014B299E 299E Oxygen sensor after cat. conv., bank 1: signal  
 0x014B299F 299F Oxygen sensor after cat. conv., bank 1: signal  
 0x014B29A0 29A0 Oxygen sensor after cat. conv., bank 2: signal  
 0x014B29A1 29A1 Oxygen sensor after cat. conv., bank 2: signal  
 0x014B29A2 29A2 Oxygen sensor before cat. conv., bank 2: signal  
 0x014B29A3 29A3 Oxygen sensor before cat. conv., bank 2: signal  
 0x014B29A4 29A4 Oxygen-sensor heater before cat. conv., bank 1: activation  
 0x014B29A5 29A5 Oxygen-sensor heater before cat. conv., bank 2: activation  
 0x014B29A6 29A6 Oxygen sensor before cat. conv., bank 1: signal  
 0x014B29A7 29A7 Oxygen sensor before cat. conv., bank 1: signal  
 0x014B29A8 29A8 Power management: vehicle electrical system  
 0x014B29A9 29A9 Power management: battery  
 0x014B29AB 29AB Torque request via CAN  
 0x014B29AE 29AE Tank cap  
 0x014B29B5 29B5 Secondary-air system  
 0x014B29B6 29B6 Cylinder cutout  
 //0x4C: //12;DME ME 9 N62  
 0x014C2712 2712 DMTL solenoid value, output stage  
 0x014C2713 2713 Oxygen sensors before catalytic converter mixed up  
 0x014C2714 2714 Oxygen-sensors heater after cat., bank 2  
 0x014C2715 2715 Oxygen-sensors heater before cat., bank 2  
 0x014C2716 2716 Activation, oxygen-sensors heater after cat., bank 1  
 0x014C2717 2717 Activation, oxygen-sensors heater after cat., bank 2  
 0x014C271A 271A Oxygen sensor before cat., bank 1 - signal  
 0x014C271B 271B Output stage, heater, sensors before catalytic converter  
 0x014C271C 271C Oxygen sensor after cat., bank 1 - signal  
 0x014C271D 271D Oxygen-sensors heater before cat., bank 1  
 0x014C271E 271E Oxygen-sensors heater after cat., bank 1  
 0x014C271F 271F Oxygen-sensor ageing, period  
 0x014C2720 2720 Oxygen-sensor ageing, TV  
 0x014C2721 2721 Oxygen-sensor ageing after cat., bank 1  
 0x014C2722 2722 Oxygen sensor before cat., bank 2 - signal  
 0x014C2723 2723 Output stage, heater, sensors before catalytic converter, bank 2  
 0x014C2724 2724 Oxygen sensor after cat., bank 2 - signal

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0x014C2725 2725 Oxygen-sensor ageing, period duration, bank 2  
 0x014C2726 2726 Oxygen-sensor ageing, TV, bank 2  
 0x014C2727 2727 Oxygen-sensor ageing after cat., bank 2  
 0x014C2728 2728 Multiplicative mixture adaptation, bank 1 - control limit 2 reached  
 0x014C2729 2729 Multiplicative mixture adaptation, bank 2 - control limit 2 reached  
 0x014C272A 272A Multiplicative mixture adaptation, bank 1 - control limit 1 reached  
 0x014C272B 272B Multiplicative mixture adaptation, bank 2 - control limit 1 reached  
 0x014C272C 272C Additive mixture adaptation, bank 1 - control limit reached  
 0x014C272D 272D Additive mixture adaptation, bank 2 - control limit reached  
 0x014C272E 272E LR adaptation, additive, per ignition  
 0x014C272F 272F LR adaptation, additive, per ignition(bank2)  
 0x014C2731 2731 Function, camshaft control, inlet, bank 1  
 0x014C2732 2732 Function, camshaft control, inlet, bank 2  
 0x014C2737 2737 EWS 3.3 anti-tampering protection  
 0x014C2738 2738 Catalytic-converter conversion, bank 1  
 0x014C2739 2739 Catalytic-converter conversion, bank 1  
 0x014C273A 273A Catalytic-converter conversion, bank 2  
 0x014C273D 273D Catalytic-converter conversion, bank 2  
 0x014C2742 2742 Misfire detection, cylinder 1  
 0x014C2743 2743 Misfire detection, cylinder 5  
 0x014C2744 2744 Misfire detection, cylinder 4  
 0x014C2745 2745 Misfire detection, cylinder 8  
 0x014C2746 2746 Misfire detection, cylinder 6  
 0x014C2747 2747 Misfire detection, cylinder 3  
 0x014C2748 2748 Misfire detection, cylinder 7  
 0x014C2749 2749 Misfire detection, cylinder 2  
 0x014C274E 274E Misfire detection, sumcheck error  
 0x014C2753 2753 Ignition circuit, cylinder 1  
 0x014C2754 2754 Ignition circuit, cylinder 5  
 0x014C2755 2755 Ignition circuit, cylinder 4  
 0x014C2756 2756 Ignition circuit, cylinder 8  
 0x014C2757 2757 Ignition circuit, cylinder 6  
 0x014C2758 2758 Ignition circuit, cylinder 3  
 0x014C2759 2759 Ignition circuit, cylinder 7  
 0x014C275A 275A Ignition circuit, cylinder 2  
 0x014C2760 2760 Secondary-air system, bank 1  
 0x014C2761 2761 Secondary-air system, bank 2  
 0x014C2762 2762 Secondary-air value  
 0x014C2763 2763 Secondary-air value, bank 2  
 0x014C2764 2764 Secondary-air pump, relay  
 0x014C2765 2765 Activation, secondary-air value  
 0x014C2769 2769 Throttle actuator-spring test  
 0x014C276B 276B Activation, secondary-air value, bank 2  
 0x014C276D 276D Function, tank-venting system  
 0x014C276E 276E Tank venting, function check, bank 2  
 0x014C2772 2772 Tank-venting value, output stage  
 0x014C2773 2773 Activation, tank-venting value, bank 2  
 0x014C2774 2774 Engine switch-off time, plausibility  
 0x014C2775 2775 Monitoring, engine torque, level 2  
 0x014C2777 2777 Monitoring, computer function  
 0x014C2778 2778 Switch, clutch  
 0x014C2779 2779 DME self-test-RAM  
 0x014C277A 277A Brake-light switch  
 0x014C277B 277B DME self-test-ROM  
 0x014C277C 277C DME self-test-reset  
 0x014C277D 277D Battery voltage  
 0x014C277E 277E Limitation, engine torque, level 1  
 0x014C277F 277F Crankshaft sensor -engine-speed signal  
 0x014C2780 2780 Crankshaft sensor -reference mark  
 0x014C2781 2781 Camshaft sensor, inlet, bank 1  
 0x014C2782 2782 Camshaft sensor, exhaust, bank 1  
 0x014C2783 2783 Hot-film air-mass flow sensor  
 0x014C2785 2785 Thr. potentiometer

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0x014C2786 2786 Throttle-value potentiometer 1  
 0x014C2787 2787 Throttle-value potentiometer 2  
 0x014C2788 2788 Vehicle speed  
 0x014C2789 2789 Detection, rough road  
 0x014C278B 278B Temperature sensor, engine coolant  
 0x014C278C 278C Temperature sensor, intake-air temperature  
 0x014C278D 278D Temperature sensor, radiator outlet  
 0x014C278E 278E Differential-pressure sensor, intake manifold  
 0x014C278F 278F LowRange signal implausible  
 0x014C2790 2790 Transmission temperature  
 0x014C2791 2791 Throttle-replacement detection without adaptation  
 0x014C2792 2792 Throttle-position monitoring  
 0x014C2793 2793 Throttle actuator -control range  
 0x014C2794 2794 Throttle actuator -activation  
 0x014C2795 2795 Throttle actuator -spring test  
 0x014C2796 2796 Throttle actuator -test, lower stop  
 0x014C2797 2797 Throttle actuator -booster adjustment  
 0x014C2798 2798 Throttle actuator -limp-home position  
 0x014C2799 2799 Throttle -value adaptation - abort due to environmental conditions  
 0x014C279A 279A Throttle actuator -relearn abort  
 0x014C279B 279B Thermostat stuck  
 0x014C279C 279C Output stage, thermostat, map cooling  
 0x014C279D 279D Output stage, electric fan  
 0x014C279E 279E Output stage, exhaust flap  
 0x014C279F 279F Activation, fan A  
 0x014C27A0 27A0 Fan, electronics box  
 0x014C27A4 27A4 EWS3.3 interface engine management-immobiliser  
 0x014C27A6 27A6 Fuel injector, cylinder 1  
 0x014C27A7 27A7 Fuel injector, cylinder 5  
 0x014C27A8 27A8 Fuel injector, cylinder 4  
 0x014C27A9 27A9 Fuel injector, cylinder 8  
 0x014C27AA 27AA Fuel injector, cylinder 6  
 0x014C27AB 27AB Fuel injector, cylinder 3  
 0x014C27AC 27AC Fuel injector, cylinder 7  
 0x014C27AD 27AD Fuel injector, cylinder 2  
 0x014C27B3 27B3 Plausibility, throttle to hot-film air-mass flow sensor  
 0x014C27B4 27B4 Ambient-pressure sensor  
 0x014C27B5 27B5 Camshaft control, inlet, bank 1 -output stage  
 0x014C27B6 27B6 Camshaft control, inlet, bank 2 -output stage  
 0x014C27B7 27B7 Activation, fuel-pump relay  
 0x014C27B8 27B8 Differential-pressure sensor, intake manifold -plausibility  
 0x014C27BB 27BB Function, camshaft control, exhaust, bank 1  
 0x014C27BC 27BC Function, camshaft control, exhaust, bank 2  
 0x014C27BD 27BD Camshaft control, exhaust, bank 1-output stage  
 0x014C27BE 27BE Camshaft control, exhaust, bank 2-output stage  
 0x014C27BF 27BF Camshaft sensor, inlet, bank 2  
 0x014C27C0 27C0 Camshaft sensor, exhaust, bank 2  
 0x014C27C1 27C1 All camshaft sensors failed  
 0x014C27C2 27C2 Activation, A/C compressor  
 0x014C27C8 27C8 Tank-leak diagnosis DMTL -major leak  
 0x014C27CA 27CA Tank-leak diagnosis DMTL -activation, pump motor  
 0x014C27CB 27CB Tank-leak diagnosis DMTL -minimal leak(0.5mm)  
 0x014C27CC 27CC Tank-leak diagnosis DMTL -tank leak detected  
 0x014C27CD 27CD Tank-leak diagnosis DMTL -module fault  
 0x014C27CE 27CE Loading monitoring  
 0x014C27D5 27D5 Idle-speed control faulty  
 0x014C27D9 27D9 Tank-leak diagnosis DMTL -heater  
 0x014C27DA 27DA Alternator fault  
 0x014C27DC 27DC EWS3.3 random-code storage  
 0x014C27E1 27E1 Monitoring, pedal-travel sensor  
 0x014C27E2 27E2 Knock sensor 1  
 0x014C27E3 27E3 Knock sensor 2  
 0x014C27E4 27E4 Knock sensor 3

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0x014C27E5 27E5 Knock sensor 4  
 0x014C27E6 27E6 Knock control-zero test, bank 1  
 0x014C27E7 27E7 Knock control-offset, bank 1  
 0x014C27E8 27E8 Knock control-test pulse, bank 1  
 0x014C27E9 27E9 Knock control-zero test, bank 2  
 0x014C27EA 27EA Can timeout HDEV  
 0x014C27EB 27EB Can timeout TXU  
 0x014C27F0 27F0 Plausibility, ACC intervention  
 0x014C27F2 27F2 Plausibility, tank fill level  
 0x014C27F7 27F7 Pedal-travel sensor, potentiometer 1  
 0x014C27F8 27F8 Pedal-travel sensor, potentiometer 2  
 0x014C27F9 27F9 Automatic starting -activation  
 0x014C27FA 27FA Automatic starting -input signal  
 0x014C27FB 27FB Radiator blind, activation(GLF)  
 0x014C27FD 27FD Automatic starting -function  
 0x014C27FE 27FE Knock control-offset, bank 2  
 0x014C27FF 27FF Knock control-test pulse, bank 2  
 0x014C280A 280A Allocation, camshaft to crankshaft  
 0x014C2812 2812 Oil temperature  
 0x014C2813 2813 Engine management monitoring, group A  
 0x014C2814 2814 Engine management monitoring, group B  
 0x014C2815 2815 Engine management monitoring, group C  
 0x014C2816 2816 Engine management monitoring:engine speed  
 0x014C2818 2818 Voltage monitoring, sensor to air, bank 1  
 0x014C281D 281D BSD wire fault  
 0x014C281E 281E Variable intake system -output stage, servomotor  
 0x014C281F 281F Voltage monitoring, sensor to air bank 2  
 0x014C2820 2820 Variable intake system -plausibility  
 0x014C2821 2821 Variable intake system -temperature warning threshold  
 0x014C2822 2822 Engine oil temperature, at times too high  
 0x014C2823 2823 Oxygen-sensor heater before cat., bank 1  
 0x014C2824 2824 Oxygen-sensor heater before cat., bank 2  
 0x014C2825 2825 Oxygen-sensor ageing after cat., bank 1  
 0x014C2826 2826 Oxygen-sensor ageing after cat., bank 2  
 0x014C2827 2827 Heater coupling to signal path  
 0x014C282D 282D Heater coupling to signal path, bank 2  
 0x014C282E 282E Movement, pedal-travel sensor  
 0x014C2830 2830 Oxygen-sensor ageing after cat., bank 2  
 0x014C2832 2832 Plausibility diagnosis LSU by LSH after cat.B2  
 0x014C2833 2833 Self-diagnosis CJ125 SPI communication, bank 2  
 0x014C2834 2834 Open circuit, pump current, bank 2  
 0x014C2835 2835 Short circuit, sensor leads, to ground or Ub B2  
 0x014C2836 2836 LSU dynamically too slow, bank 2  
 0x014C283A 283A Oil-quality sensor  
 0x014C283E 283E Variable value gear -output stage, enable line  
 0x014C283F 283F Oil pressure switch  
 0x014C2841 2841 Air-shrouded fuel injectors, activation  
 0x014C2843 2843 Plausibility diagnosis LSU by LSH after cat.  
 0x014C2844 2844 Self-diagnosis CJ125 SPI communication  
 0x014C2849 2849 Open circuit, pump current  
 0x014C284A 284A Short circuit, sensor leads, to ground or Ub  
 0x014C284C 284C LSU dynamically too slow  
 0x014C284F 284F Speedometer in instrument cluster faulty  
 0x014C2850 2850 Variable value gear -guide sensor, bank 1  
 0x014C2851 2851 Variable value gear -guide sensor, bank 2  
 0x014C2852 2852 Variable value gear -reference sensor, bank 1  
 0x014C2853 2853 Variable value gear -reference sensor, bank 2  
 0x014C2854 2854 Variable value gear -plausibility sensor, bank 1  
 0x014C2855 2855 Variable value gear -plausibility sensor, bank 2  
 0x014C2856 2856 Variable value gear -voltage supply, sensor, bank 1  
 0x014C2857 2857 Variable value gear -voltage supply, sensor, bank 2  
 0x014C2858 2858 Variable value gear -learning function, stop, bank 1  
 0x014C2859 2859 Variable value gear -learning function, stop, bank 2

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0x014C285A 285A Variable value gear -monitoring, servomotor, bank 1  
 0x014C285B 285B Variable value gear -monitoring, servomotor, bank 2  
 0x014C285C 285C Variable value gear -CAN communication, bank 1  
 0x014C285D 285D Variable value gear -CAN communication, bank 2  
 0x014C285E 285E Variable value gear -internal fault, control unit, bank 1  
 0x014C285F 285F Variable value gear -internal fault, control unit, bank 2  
 0x014C2860 2860 Variable value gear -output stage, servomotor, bank 1  
 0x014C2861 2861 Variable value gear -output stage, servomotor, bank 2  
 0x014C2862 2862 Variable value gear -voltage supply, power output stage, bank 1  
 0x014C2863 2863 Variable value gear -voltage supply, power output stage, bank 2  
 0x014C2864 2864 DMTL -activation fault, pump motor  
 0x014C2865 2865 Variable value gear -power limitation in limp-home operating mode  
 0x014C2866 2866 Variable value gear -learning stops necessary  
 0x014C2867 2867 Valvetronic, system overload, bank 1  
 0x014C2868 2868 Valvetronic, system overload, bank 2  
 0x014C287C 287C Pressure sensor, intake manifold  
 0x014C2889 2889 Monitoring, plausibility, RAM backup  
 0x014C28C8 28C8 Oxygen-sensor-controller deviation, bank 1  
 0x014C28C9 28C9 Oxygen-sensor-controller deviation, bank 2  
 0x014C28D6 28D6 No coding, engine management  
 0x014C28D7 28D7 Communication with alternator  
 0x014C28D8 28D8 Read error, RAM backup error  
 0x014C28DB 28DB Variable value gear, min.lift adaptation exceeded  
 0x014C28DC 28DC Alternator 2 communication  
 0x014C290A 290A Active Front Steering torque  
 0x014C292B 292B LSU compensating line  
 0x014C292C 292C LSU compensating line, bank 2  
 0x014C292D 292D LSU Nernst cell, open circuit  
 0x014C292E 292E LSU Nernst cell, open circuit, bank 2  
 0x014C2930 2930 LSU virtual ground, open circuit  
 0x014C299B 299B Battery sensor  
 0x014C299C 299C Battery sensor  
 0x014C299D 299D Battery sensor  
 0x014C29A8 29A8 Power management, network fault  
 0x014C29A9 29A9 Power management  
 0x014C29AE 29AE Fuel tank cap open  
 //0x4D: //13;DDE 6.0-3.1  
 0x014D3E90 3E90 Crankshaft sensor  
 0x014D3E91 3E91 Crankshaft sensor  
 0x014D3EB0 3EB0 Speed calculation  
 0x014D3EC0 3EC0 Camshaft sensor  
 0x014D3EC1 3EC1 Camshaft sensor  
 0x014D3EE0 3EE0 Coolant temperature sensor, signal  
 0x014D3EE1 3EE1 Coolant temperature sensor, signal  
 0x014D3EE2 3EE2 Coolant temperature sensor  
 0x014D3EE3 3EE3 Coolant temperature sensor  
 0x014D3EED 3EED Power management closed-circuit current  
 0x014D3EF3 3EF3 Coolant temperature sensor, plausibility  
 0x014D3EFB 3EFB Thermal oil-level sensor  
 0x014D3EFC 3EFC Thermal oil-level sensor  
 0x014D3EFD 3EFD Thermal oil-level sensor  
 0x014D3F00 3F00 Charge-air pressure sensor, signal  
 0x014D3F01 3F01 Charge-air pressure sensor, signal  
 0x014D3F02 3F02 Charge-air pressure sensor, signal  
 0x014D3F03 3F03 Charge-air pressure sensor, signal  
 0x014D3F05 3F05 MIL Off  
 0x014D3F10 3F10 Accelerator-pedal module, potentiometer 1, signal  
 0x014D3F11 3F11 Accelerator-pedal module, potentiometer 1, signal  
 0x014D3F13 3F13 Accelerator-pedal module, potentiometer 1, signal  
 0x014D3F15 3F15 MIL On  
 0x014D3F20 3F20 Accelerator-pedal module, potentiometer 2, signal  
 0x014D3F21 3F21 Accelerator-pedal module, potentiometer 2, signal  
 0x014D3F23 3F23 Accelerator-pedal module, potentiometer 2, signal

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0x014D3F25 3F25 Charge-air tube monitoring  
 0x014D3F30 3F30 Rail-pressure sensor, signal  
 0x014D3F31 3F31 Rail-pressure sensor, signal  
 0x014D3F35 3F35 Charge-air tube monitoring at idle  
 0x014D3F40 3F40 Rail pressure sensor, offset test  
 0x014D3F41 3F41 Rail pressure sensor, offset test  
 0x014D3F47 3F47 Brake light/brake test switch  
 0x014D3F48 3F48 Brake-light/brake-test switch, signals  
 0x014D3F50 3F50 Roadspeed signal  
 0x014D3F52 3F52 Roadspeed signal  
 0x014D3F53 3F53 Roadspeed signal  
 0x014D3F57 3F57 Charge-air pressure controller  
 0x014D3F70 3F70 Intake-air temperature sensor, signal  
 0x014D3F71 3F71 Intake-air temperature sensor, signal  
 0x014D3F72 3F72 Intake-air temperature sensor, signal  
 0x014D3F77 3F77 Charge-air pressure actuator, activation  
 0x014D3F97 3F97 Charge-air pressure actuator, supply voltage  
 0x014D3FC0 3FC0 Air-mass flow sensor  
 0x014D3FD0 3FD0 Air-mass flow sensor  
 0x014D3FE0 3FE0 Air-mass flow sensor  
 0x014D3FE1 3FE1 Air-mass flow sensor  
 0x014D3FF0 3FF0 Air-mass flow sensor  
 0x014D3FF1 3FF1 Air-mass flow sensor  
 0x014D4000 4000 Fuel temperature sensor, signal  
 0x014D4001 4001 Fuel temperature sensor, signal  
 0x014D4010 4010 Exhaust backpressure sensor before particulate filter, signal  
 0x014D4011 4011 Exhaust backpressure sensor before particulate filter, signal  
 0x014D4020 4020 Exhaust backpressure sensor before particulate filter, signal  
 0x014D4021 4021 Exhaust backpressure sensor before particulate filter, signal  
 0x014D4030 4030 Exhaust backpressure sensor before particulate filter, signal  
 0x014D4031 4031 Exhaust backpressure sensor before particulate filter, signal  
 0x014D4060 4060 Ambient-pressure sensor (installed in DDE control unit), signal  
 0x014D4061 4061 Ambient-pressure sensor (installed in DDE control unit), signal  
 0x014D4063 4063 Ambient-pressure sensor (installed in DDE control unit)  
 0x014D4072 4072 Clutch switch, signal  
 0x014D4073 4073 Clutch switch, signal  
 0x014D4082 4082 Brake-light/brake-test switch, signals  
 0x014D4083 4083 Brake-light/brake-test switch, signals  
 0x014D40E0 40E0 Generator  
 0x014D4120 4120 DDE main relay  
 0x014D4121 4121 DDE main relay  
 0x014D4130 4130 Swirl flaps, activation  
 0x014D4141 4141 Swirl flaps, activation  
 0x014D4152 4152 Swirl flaps, activation  
 0x014D4153 4153 Swirl flaps, activation  
 0x014D4166 4166 Particulate-filter system  
 0x014D4175 4175 Exhaust-gas temperature sensor before particulate filter, signal  
 0x014D4180 4180 Charge-air pressure actuator, activation  
 0x014D4185 4185 Exhaust-gas temperature sensor before cat. conv., signal  
 0x014D4191 4191 Charge-air pressure actuator, activation  
 0x014D4195 4195 Torque request, air conditioning  
 0x014D419A 419A Ambient-pressure sensor (installed in DDE control unit)  
 0x014D419B 419B Ambient-pressure sensor (installed in DDE control unit)  
 0x014D41A2 41A2 Charge-air pressure actuator, activation  
 0x014D41A3 41A3 Charge-air pressure actuator, activation  
 0x014D41AA 41AA Charge-air pressure sensor  
 0x014D41AB 41AB Charge-air pressure sensor  
 0x014D41B0 41B0 Exhaust-gas recirculation controller, activation  
 0x014D41BA 41BA Particulate-filter system, exhaust backpressure sensor  
 0x014D41BB 41BB Particulate-filter system, exhaust backpressure sensor  
 0x014D41CD 41CD Plausibility, pressure sensors  
 0x014D41D1 41D1 Exhaust-gas recirculation controller, activation  
 0x014D41D5 41D5 Oxygen sensor, signal, Nernst voltage

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0x014D41D6 41D6 Oxygen sensor, signal, Nernst voltage  
 0x014D41D7 41D7 Oxygen sensor, signal, Nernst voltage  
 0x014D41E2 41E2 Exhaust-gas recirculation controller, activation  
 0x014D41E3 41E3 Exhaust-gas recirculation controller, activation  
 0x014D41E5 41E5 Oxygen sensor, signal, pump current  
 0x014D41E6 41E6 Oxygen sensor, signal, pump current  
 0x014D41E7 41E7 Oxygen sensor, signal, pump current  
 0x014D41F0 41F0 Electric fan, activation  
 0x014D41F1 41F1 Electric fan, activation  
 0x014D41F2 41F2 Electric fan, activation  
 0x014D41F3 41F3 Electric fan, activation  
 0x014D41F5 41F5 Oxygen sensor, signal, virtual ground  
 0x014D41F6 41F6 Oxygen sensor, signal, virtual ground  
 0x014D41F7 41F7 Oxygen sensor, signal, virtual ground  
 0x014D4203 4203 Glow control unit  
 0x014D4205 4205 Oxygen sensor, heater activation  
 0x014D4206 4206 Oxygen sensor, heater activation  
 0x014D4207 4207 Oxygen sensor, heater activation  
 0x014D4211 4211 Glow plug, cylinder 1  
 0x014D4212 4212 Glow plug, cylinder 1  
 0x014D4213 4213 Glow plug, cylinder 1  
 0x014D4217 4217 Oxygen sensor  
 0x014D4221 4221 Glow plug, cylinder 2  
 0x014D4222 4222 Glow plug, cylinder 2  
 0x014D4223 4223 Glow plug, cylinder 2  
 0x014D4225 4225 Oxygen sensor  
 0x014D4226 4226 Oxygen sensor  
 0x014D4231 4231 Glow plug, cylinder 3  
 0x014D4232 4232 Glow plug, cylinder 3  
 0x014D4233 4233 Glow plug, cylinder 3  
 0x014D4235 4235 Control unit, internal 21  
 0x014D4236 4236 Control unit, internal 21  
 0x014D4241 4241 Glow plug, cylinder 4  
 0x014D4242 4242 Glow plug, cylinder 4  
 0x014D4243 4243 Glow plug, cylinder 4  
 0x014D4245 4245 Control unit, internal 22  
 0x014D4246 4246 Control unit, internal 22  
 0x014D4251 4251 Glow plug, cylinder 5  
 0x014D4252 4252 Glow plug, cylinder 5  
 0x014D4253 4253 Glow plug, cylinder 5  
 0x014D4258 4258 Control unit, internal 23  
 0x014D4261 4261 Glow plug, cylinder 6  
 0x014D4262 4262 Glow plug, cylinder 6  
 0x014D4263 4263 Glow plug, cylinder 6  
 0x014D4267 4267 Oxygen sensor, shunt detection  
 0x014D4275 4275 Oxygen sensor, heater  
 0x014D4276 4276 Oxygen sensor, heater  
 0x014D4288 4288 Oxygen sensor  
 0x014D4293 4293 Control unit, internal 16  
 0x014D4296 4296 Oxygen sensor  
 0x014D4298 4298 Oxygen sensor  
 0x014D42B5 42B5 Engine speed monitoring  
 0x014D42C7 42C7 Monitoring, flywheel oscillation  
 0x014D42E2 42E2 Changeover, rail-pressure control  
 0x014D42F2 42F2 Changeover, rail-pressure control  
 0x014D4302 4302 Delivery control valve, activation  
 0x014D4303 4303 Delivery control valve, activation  
 0x014D4310 4310 Delivery control valve, activation  
 0x014D4321 4321 Delivery control valve, activation  
 0x014D4332 4332 Rail-pressure control valve, activation  
 0x014D4333 4333 Rail-pressure control valve, activation  
 0x014D4335 4335 Radiator blind (controlled kidney grille), activation  
 0x014D4336 4336 Radiator blind (controlled kidney grille), activation

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0x014D4337 4337 Radiator blind (controlled kidney grille), activation  
 0x014D4338 4338 Radiator blind (controlled kidney grille), activation  
 0x014D4340 4340 Rail-pressure control valve, activation  
 0x014D4351 4351 Rail-pressure control valve, activation  
 0x014D4362 4362 Current control for rail-pressure control valve  
 0x014D4378 4378 Rail-pressure control valve, test (-)  
 0x014D437D 437D Torque monitoring DCC  
 0x014D4382 4382 Controller test, rail-pressure control valve  
 0x014D438C 438C Message (ANF\_WHEEL\_TORQUE\_PT, 0xBF)  
 0x014D4390 4390 Charge-air temperature sensor, signal  
 0x014D4391 4391 Charge-air temperature sensor, signal  
 0x014D4392 4392 Charge-air temperature sensor, signal  
 0x014D4397 4397 Actuator test, delivery control valve, actuator test  
 0x014D43A0 43A0 Starter interlock relay, activation  
 0x014D43A1 43A1 Starter interlock relay, activation  
 0x014D43A2 43A2 Starter interlock relay, activation  
 0x014D43A3 43A3 Starter interlock relay, activation  
 0x014D43C0 43C0 Throttle valve, activation  
 0x014D43D1 43D1 Throttle valve, activation  
 0x014D43E2 43E2 Throttle valve, activation  
 0x014D43E3 43E3 Throttle valve, activation  
 0x014D43F0 43F0 Electric auxiliary heater, activation  
 0x014D43F1 43F1 Electric auxiliary heater, activation  
 0x014D43F2 43F2 Electric auxiliary heater, activation  
 0x014D43F3 43F3 Electric auxiliary heater, activation  
 0x014D4403 4403 Control unit, internal 17  
 0x014D4410 4410 Injector, cylinder 1, activation  
 0x014D4411 4411 Injector, cylinder 1, activation  
 0x014D4412 4412 Injector, cylinder 1, activation  
 0x014D4413 4413 Injector, cylinder 1, activation  
 0x014D441C 441C Injector, cylinder 1, activation  
 0x014D4420 4420 Injector, cylinder 2, activation  
 0x014D4421 4421 Injector, cylinder 2, activation  
 0x014D4422 4422 Injector, cylinder 2, activation  
 0x014D4423 4423 Injector, cylinder 2, activation  
 0x014D442C 442C Injector, cylinder 2, activation  
 0x014D4430 4430 Injector, cylinder 3, activation  
 0x014D4431 4431 Injector, cylinder 3, activation  
 0x014D4432 4432 Injector, cylinder 3, activation  
 0x014D4433 4433 Injector, cylinder 3, activation  
 0x014D443C 443C Injector, cylinder 3, activation  
 0x014D4440 4440 Injector, cylinder 4, activation  
 0x014D4441 4441 Injector, cylinder 4, activation  
 0x014D4442 4442 Injector, cylinder 4, activation  
 0x014D4443 4443 Injector, cylinder 4, activation  
 0x014D444C 444C Injector, cylinder 4, activation  
 0x014D4450 4450 Injector, cylinder 5, activation  
 0x014D4451 4451 Injector, cylinder 5, activation  
 0x014D4452 4452 Injector, cylinder 5, activation  
 0x014D4453 4453 Injector, cylinder 5, activation  
 0x014D445C 445C Injector, cylinder 5, activation  
 0x014D4460 4460 Injector, cylinder 6, activation  
 0x014D4461 4461 Injector, cylinder 6, activation  
 0x014D4462 4462 Injector, cylinder 6, activation  
 0x014D4463 4463 Injector, cylinder 6, activation  
 0x014D446C 446C Injector, cylinder 6, activation  
 0x014D4473 4473 Control unit, internal 18  
 0x014D4475 4475 Intelligent battery sensor  
 0x014D4477 4477 Intelligent battery sensor  
 0x014D4478 4478 Intelligent battery sensor  
 0x014D4480 4480 Control unit, internal 19  
 0x014D4485 4485 Intelligent battery sensor  
 0x014D4487 4487 Intelligent battery sensor



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0x014D4488 4488 Intelligent battery sensor  
 0x014D4491 4491 Control unit, internal 20  
 0x014D4495 4495 Intelligent battery sensor  
 0x014D4497 4497 Intelligent battery sensor  
 0x014D449A 449A Charge-air pressure actuator  
 0x014D449B 449B Charge-air pressure actuator  
 0x014D449D 449D Charge-air pressure actuator  
 0x014D44A0 44A0 Injectors, activation, cyl. 1, 2, 3  
 0x014D44A1 44A1 Injectors, activation, cyl. 1, 2, 3  
 0x014D44A2 44A2 Injectors, activation, cyl. 1, 2, 3  
 0x014D44A3 44A3 Injectors, activation, cyl. 1, 2, 3  
 0x014D44AC 44AC Injectors, activation, cyl. 1, 2, 3  
 0x014D44B0 44B0 Injectors, activation, cyl. 4, 5, 6  
 0x014D44B1 44B1 Injectors, activation, cyl. 4, 5, 6  
 0x014D44B2 44B2 Injectors, activation, cyl. 4, 5, 6  
 0x014D44B3 44B3 Injectors, activation, cyl. 4, 5, 6  
 0x014D44BC 44BC Injectors, activation, cyl. 4, 5, 6  
 0x014D44C0 44C0 Number of desired injections limited  
 0x014D44C1 44C1 Number of desired injections limited  
 0x014D44C2 44C2 Number of desired injections limited  
 0x014D44CC 44CC Charge-air pressure actuator  
 0x014D44D0 44D0 Generator  
 0x014D44D2 44D2 Generator  
 0x014D44D3 44D3 Generator  
 0x014D44DC 44DC Charge-air pressure actuator  
 0x014D44E2 44E2 Generator  
 0x014D44E3 44E3 Generator  
 0x014D44EC 44EC Charge-air pressure actuator, activation  
 0x014D44F0 44F0 Rail-pressure plausibility pressure-controlled (-)  
 0x014D44FC 44FC Charge-air pressure actuator  
 0x014D4501 4501 Exhaust-gas recirculation  
 0x014D4507 4507 Exhaust-gas recirculation  
 0x014D4512 4512 Thermal oil-level sensor, signal  
 0x014D4513 4513 Thermal oil-level sensor, signal  
 0x014D4521 4521 Charge-air pressure control, control deviation  
 0x014D4530 4530 Charge-air pressure control, control deviation  
 0x014D4536 4536 Power management, battery  
 0x014D4538 4538 Power management, battery  
 0x014D4541 4541 Thermal oil-level sensor  
 0x014D4545 4545 Power management, vehicle electrical system  
 0x014D4546 4546 Power management, vehicle electrical system  
 0x014D4547 4547 Power management, vehicle electrical system  
 0x014D4548 4548 Power management, vehicle electrical system  
 0x014D4560 4560 Rail-pressure plausibility delivery-controlled  
 0x014D4570 4570 Rail-pressure plausibility delivery-controlled  
 0x014D4580 4580 Rail-pressure plausibility delivery-controlled  
 0x014D4587 4587 Heated fuel filter  
 0x014D4590 4590 Rail-pressure plausibility delivery-controlled  
 0x014D45A0 45A0 Rail-pressure plausibility delivery-controlled  
 0x014D45C0 45C0 Rail-pressure plausibility delivery-controlled (-)  
 0x014D45F6 45F6 Message (torque ACC, 0xB7)  
 0x014D4600 4600 Rail-pressure plausibility pressure-controlled  
 0x014D4610 4610 Rail-pressure plausibility pressure-controlled  
 0x014D4620 4620 Rail-pressure plausibility pressure-controlled  
 0x014D4630 4630 Rail-pressure plausibility pressure-controlled  
 0x014D4640 4640 Rail-pressure plausibility pressure-controlled  
 0x014D4650 4650 Rail-pressure plausibility pressure-controlled(-)  
 0x014D4656 4656 Control unit, internal 24  
 0x014D4660 4660 Power supply  
 0x014D4661 4661 Power supply  
 0x014D4666 4666 Particulate-filter system (nv)  
 0x014D4667 4667 Particulate-filter system  
 0x014D4670 4670 Supply voltage 1

0x014D4671	4671	Supply voltage	1
0x014D4677	4677	Throttle valve	
0x014D4680	4680	Supply voltage	2
0x014D4681	4681	Supply voltage	2
0x014D4687	4687	Throttle valve	
0x014D4690	4690	Supply voltage	3
0x014D4691	4691	Supply voltage	3
0x014D4697	4697	Throttle valve	
0x014D46A0	46A0	Control unit, internal	1
0x014D46A1	46A1	Control unit, internal	1
0x014D46A2	46A2	Control unit, internal	1
0x014D46A3	46A3	Control unit, internal	1
0x014D46B0	46B0	Control unit, internal	2
0x014D46B1	46B1	Control unit, internal	2
0x014D46B2	46B2	Control unit, internal	2
0x014D46B3	46B3	Control unit, internal	2
0x014D46C0	46C0	Control unit, internal	3
0x014D46C1	46C1	Control unit, internal	3
0x014D46D0	46D0	Control unit, internal	4
0x014D46D1	46D1	Control unit, internal	4
0x014D46D2	46D2	Control unit, internal	4
0x014D46D3	46D3	Control unit, internal	4
0x014D4703	4703	Control unit, internal	7
0x014D4711	4711	Control unit, internal	8
0x014D4712	4712	Control unit, internal	8
0x014D4713	4713	Control unit, internal	8
0x014D4723	4723	Control unit, internal	9
0x014D4730	4730	Delivery control valve, current control	
0x014D4731	4731	Delivery control valve, current control	
0x014D4732	4732	Delivery control valve, current control	
0x014D4740	4740	Control unit, internal	11
0x014D4750	4750	Control unit, internal	12
0x014D4753	4753	Control unit, internal	12
0x014D4763	4763	Control unit, internal	13(-)
0x014D4773	4773	Control unit, internal	14
0x014D4780	4780	Control unit, internal	15
0x014D4781	4781	Control unit, internal	15
0x014D4782	4782	Control unit, internal	15
0x014D4783	4783	Control unit, internal	15
0x014D480A	480A	Particulate-filter system	
0x014D481A	481A	Particulate-filter system	
0x014D4830	4830	Intake-air temperature sensor	
0x014D4831	4831	Intake-air temperature sensor	
0x014D483D	483D	Throttle actuator	
0x014D4863	4863	Cruise control	
0x014D48A2	48A2	Message (ASC1)	
0x014D48B2	48B2	Message (ASC2)	
0x014D48C2	48C2	Message (EGS1)	
0x014D48D2	48D2	Message (INSTR2)	
0x014D48E2	48E2	Message (INSTR3)	
0x014D48F2	48F2	PT-CAN bus	
0x014D48F3	48F3	PT-CAN bus	
0x014D4900	4900	Torque intervention DSC (-)	
0x014D4912	4912	PT-CAN bus B	
0x014D4943	4943	PT-CAN bus B	
0x014D4920	4920	Torque intervention, gearbox (-)	
0x014D49D7	49D7	Message (ASC4)	
0x014D49E7	49E7	Throttle actuator	
0x014D4A02	4A02	Terminal	15
0x014D4A03	4A03	Terminal	15
0x014D4A07	4A07	Alternator	
0x014D4A08	4A08	Alternator	
0x014D4A10	4A10	Bit-serial data interface BSD	

0x014D4A13 4A13 Bit-serial data interface BSD  
 0x014D4A15 4A15 Alternator  
 0x014D4A17 4A17 Alternator  
 0x014D4A18 4A18 Alternator  
 0x014D4A25 4A25 Intelligent battery sensor  
 0x014D4A27 4A27 Intelligent battery sensor  
 0x014D4A28 4A28 Intelligent battery sensor  
 0x014D4A35 4A35 Intelligent battery sensor  
 0x014D4A37 4A37 Intelligent battery sensor  
 0x014D4A38 4A38 Intelligent battery sensor  
 0x014D4A41 4A41 EWS interface error  
 0x014D4A42 4A42 EWS interface error  
 0x014D4A43 4A43 EWS interface error  
 0x014D4A45 4A45 Intelligent battery sensor  
 0x014D4A47 4A47 Intelligent battery sensor  
 0x014D4A48 4A48 Intelligent battery sensor  
 0x014D4A51 4A51 EWS random-code storage  
 0x014D4A56 4A56 Power management, battery  
 0x014D4A58 4A58 Power management, battery  
 0x014D4A60 4A60 EWS tampering  
 0x014D4A61 4A61 EWS tampering  
 0x014D4A62 4A62 EWS tampering  
 0x014D4A63 4A63 EWS tampering  
 0x014D4A65 4A65 Power management, vehicle electrical system  
 0x014D4A66 4A66 Power management, vehicle electrical system  
 0x014D4A67 4A67 Power management, vehicle electrical system  
 0x014D4A70 4A70 Map values incorrect  
 0x014D4A80 4A80 Charge-air tube monitoring  
 0x014D4A92 4A92 Message (ASC3)  
 0x014D4A97 4A97 Message (CBS\_RESET\_2, 0x580)  
 0x014D4AA2 4AA2 Message (EGS2)  
 0x014D4AB2 4AB2 Electric auxiliary heater  
 0x014D4AD5 4AD5 Zero-quantity adaptation, injector, cylinder 1  
 0x014D4AD6 4AD6 Zero-quantity adaptation, injector, cylinder 1  
 0x014D4AE0 4AE0 Electronics-box fan, activation  
 0x014D4AE1 4AE1 Electronics-box fan, activation  
 0x014D4AE2 4AE2 Electronics-box fan, activation  
 0x014D4AE3 4AE3 Electronics-box fan, activation  
 0x014D4AE5 4AE5 Zero-quantity adaptation, injector, cylinder 2  
 0x014D4AE6 4AE6 Zero-quantity adaptation, injector, cylinder 2  
 0x014D4AF0 4AF0 Control-unit temperature sensor, signal  
 0x014D4AF1 4AF1 Control-unit temperature sensor, signal  
 0x014D4AF5 4AF5 Zero-quantity adaptation, injector, cylinder 3  
 0x014D4AF6 4AF6 Zero-quantity adaptation, injector, cylinder 3  
 0x014D4B00 4B00 Control-unit temperature  
 0x014D4B05 4B05 Zero-quantity adaptation, injector, cylinder 4  
 0x014D4B06 4B06 Zero-quantity adaptation, injector, cylinder 4  
 0x014D4B10 4B10 Smooth running controller  
 0x014D4B11 4B11 Smooth running controller  
 0x014D4B15 4B15 Zero-quantity adaptation, injector, cylinder 5  
 0x014D4B16 4B16 Zero-quantity adaptation, injector, cylinder 5  
 0x014D4B22 4B22 Electric fan  
 0x014D4B25 4B25 Zero-quantity adaptation, injector, cylinder 6  
 0x014D4B26 4B26 Zero-quantity adaptation, injector, cylinder 6  
 0x014D4B50 4B50 Rate adjustment  
 0x014D4B60 4B60 Volume drift compensation  
 0x014D4B80 4B80 Rail-pressure plausibility delivery-controlled (-)  
 0x014D4B90 4B90 Rail-pressure monitoring on engine start  
 0x014D4BA0 4BA0 Intake-air temperature sensor, signal  
 0x014D4BA1 4BA1 Intake-air temperature sensor, signal  
 0x014D4BB0 4BB0 Supply voltage, air-mass flow sensor  
 0x014D4BB1 4BB1 Supply voltage, air-mass flow sensor  
 0x014D4BB5 4BB5 Air-mass flow sensor

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0x014D4BB6 4BB6 Air-mass flow sensor  
 0x014D4BC0 4BC0 Air-mass flow sensor  
 0x014D4BC1 4BC1 Air-mass flow sensor  
 0x014D4BC2 4BC2 Air-mass flow sensor  
 0x014D4BC5 4BC5 Intake-air temperature sensor(reference signal for air-mass sensor)  
 0x014D4BC6 4BC6 Intake-air temperature sensor(reference signal for air-mass sensor)  
 0x014D4BC7 4BC7 Intake-air temperature sensor(reference signal for air-mass sensor)  
 0x014D4BD2 4BD2 Torque request ARS  
 0x014D4BD5 4BD5 Engine mount, activation  
 0x014D4BD6 4BD6 Engine mount, activation  
 0x014D4BD7 4BD7 Engine mount, activation  
 0x014D4BD8 4BD8 Engine mount, activation  
 0x014D4CF3 4CF3 Exhaust backpressure sensor, signal  
 0x014D4D00 4D00 Particulate-filter system  
 0x014D4D01 4D01 Particulate-filter system (only active in pre-production cars)  
 0x014D4D03 4D03 Particulate-filter system  
 0x014D4DF0 4DF0 Message (torque transmission, 0xB5)  
 0x014D4DF1 4DF1 Message (torque transmission, 0xB5)  
 0x014D4DF3 4DF3 Message (torque transmission, 0xB5)  
 0x01613E90 3E90 Crankshaft sensor  
 0x01613E91 3E91 Crankshaft sensor  
 0x01613EB0 3EB0 Speed calculation  
 0x01613EC0 3EC0 Camshaft sensor  
 0x01613EC1 3EC1 Camshaft sensor  
 0x01613EE0 3EE0 Coolant temperature sensor,signal  
 0x01613EE1 3EE1 Coolant temperature sensor,signal  
 0x01613EE2 3EE2 Coolant temperature sensor  
 0x01613EE3 3EE3 Coolant temperature sensor  
 0x01613EED 3EED Power management closed-circuit current  
 0x01613EF3 3EF3 Coolant temperature sensor,plausibility  
 0x01613EFB 3EFB Thermal oil-level sensor  
 0x01613EFC 3EFC Thermal oil-level sensor  
 0x01613EFD 3EFD Thermal oil-level sensor  
 0x01613F00 3F00 Charge-air pressure sensor,signal  
 0x01613F01 3F01 Charge-air pressure sensor,signal  
 0x01613F02 3F02 Charge-air pressure sensor,signal  
 0x01613F03 3F03 Charge-air pressure sensor,signal  
 0x01613F05 3F05 MIL off  
 0x01613F10 3F10 Accelerator-pedal module,potentiometer 1,signal  
 0x01613F11 3F11 Accelerator-pedal module,potentiometer 1,signal  
 0x01613F13 3F13 Accelerator-pedal module,potentiometer 1,signal  
 0x01613F15 3F15 MIL on  
 0x01613F20 3F20 Accelerator-pedal module,potentiometer 2,signal  
 0x01613F21 3F21 Accelerator-pedal module,potentiometer 2,signal  
 0x01613F23 3F23 Accelerator-pedal module,potentiometer 2,signal  
 0x01613F25 3F25 Charge-air tube monitoring  
 0x01613F30 3F30 Rail-pressure sensor,signal  
 0x01613F31 3F31 Rail-pressure sensor,signal  
 0x01613F35 3F35 Charge-air tube monitoring at idle  
 0x01613F40 3F40 Rail pressure sensor,offset test  
 0x01613F41 3F41 Rail pressure sensor,offset test  
 0x01613F47 3F47 Brake light/brake test switch  
 0x01613F48 3F48 Brake light/brake-test switch,signals  
 0x01613F50 3F50 Roadspeed signal  
 0x01613F52 3F52 Roadspeed signal  
 0x01613F53 3F53 Roadspeed signal  
 0x01613F57 3F57 Charge-air pressure controller  
 0x01613F70 3F70 Intake-air temperature sensor,signal  
 0x01613F71 3F71 Intake-air temperature sensor,signal  
 0x01613F72 3F72 Intake-air temperature sensor,signal  
 0x01613F77 3F77 Charge-air pressure actuator,activation  
 0x01613F97 3F97 Charge-air pressure actuator,supply voltage  
 0x01613FC0 3FC0 Air-mass flow sensor

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0x01613FD0 3FD0 Air-mass flow sensor  
 0x01613FE0 3FE0 Air-mass flow sensor  
 0x01613FE1 3FE1 Air-mass flow sensor  
 0x01613FF0 3FF0 Air-mass flow sensor  
 0x01613FF1 3FF1 Air-mass flow sensor  
 0x01614000 4000 Fuel temperature sensor,signal  
 0x01614001 4001 Fuel temperature sensor,signal  
 0x01614010 4010 Exhaust backpressure sensor before particulate filter,signal  
 0x01614011 4011 Exhaust backpressure sensor before particulate filter,signal  
 0x01614020 4020 Exhaust backpressure sensor before particulate filter,signal  
 0x01614021 4021 Exhaust backpressure sensor before particulate filter,signal  
 0x01614030 4030 Exhaust backpressure sensor before particulate filter,signal  
 0x01614031 4031 Exhaust backpressure sensor before particulate filter,signal  
 0x01614060 4060 Ambient-pressure sensor(installed in DDE control unit),signal  
 0x01614061 4061 Ambient-pressure sensor(installed in DDE control unit),signal  
 0x01614063 4063 Ambient-pressure sensor(installed in DDE control unit)  
 0x01614072 4072 Clutch switch,aignal  
 0x01614073 4073 Clutch switch,signal  
 0x01614082 4082 Brake-light/brake-test switch,signals  
 0x01614083 4083 Brake-light/brake-test switch,signals  
 0x016140E0 40E0 Generator  
 0x01614120 4120 DDE main relay  
 0x01614121 4121 DDE main relay  
 0x01614130 4130 Swirl flaps,activation  
 0x01614141 4141 Swirl flaps,activation  
 0x01614152 4152 Swirl falps,activation  
 0x01614153 4153 Swirl falps,activation  
 0x01614166 4166 Particulate-filter system  
 0x01614175 4175 Exhaust-gas temperature sensor before particulate filter,signal  
 0x01614180 4180 Charge-air pressure actuator,activation  
 0x01614185 4185 Exhaust-gas temperature sensor before cat. conv.,signal  
 0x01614191 4191 Charge-air pressure actuator,activation  
 0x01614195 4195 Torque request,air conditioning  
 0x0161419A 419A Ambient-pressure sensor(installed in DDE control unit)  
 0x0161419B 419B Ambient-pressure sensor(installed in DDE control unit)  
 0x016141A2 41A2 Charge-air pressure actuator,activation  
 0x016141A3 41A3 Charge-air pressure actuator,activation  
 0x016141AA 41AA Charge-air pressure sensor  
 0x016141AB 41AB Charge-air pressure sensor  
 0x016141B0 41B0 Exhaust-gas recirculation controller,activation  
 0x016141BA 41BA Particulate-filter system,exhaust backpressure sensor  
 0x016141BB 41BB Particulate-filter system,exhaust backpressure sensor  
 0x016141CD 41CD Plausibility,pressure sensors  
 0x016141D1 41D1 Exhaust-gas recirculation controller,activation  
 0x016141D5 41D5 Oxygen sensor,signal,Nernst voltage  
 0x016141D6 41D6 Oxygen sensor,signal,Nernst voltage  
 0x016141D7 41D7 Oxygen sensor,signal,Nernst voltage  
 0x016141E2 41E2 Exhaust-gas recirculation controller,activation  
 0x016141E3 41E3 Exhaust-gas recirculation controller,activation  
 0x016141E5 41E5 Oxygen sensor,signal,pump current  
 0x016141E6 41E6 Oxygen sensor,signal,pump current  
 0x016141E7 41E7 Oxygen sensor,signal,pump current  
 0x016141F0 41F0 Electric fan,activation  
 0x016141F1 41F1 Electric fan,activation  
 0x016141F2 41F2 Electric fan,activation  
 0x016141F3 41F3 Electric fan,activation  
 0x016141F5 41F5 Oxygen sensor,signal,virtual ground  
 0x016141F6 41F6 Oxygen sensor,signal,virtual ground  
 0x016141F7 41F7 Oxygen sensor,signal,virtual ground  
 0x01614203 4203 Glow control unit  
 0x01614205 4205 Oxygen sensor,heater activation  
 0x01614206 4206 Oxygen sensor,heater activation  
 0x01614207 4207 Oxygen sensor,heater activation

# Bmw Code Sheet.txt

0x01614211	4211	Glow plug,cylinder 1
0x01614212	4212	Glow plug,cylinder 1
0x01614213	4213	Glow plug,cylinder 1
0x01614217	4217	Oxygen sensor
0x01614221	4221	Glow plug,cylinder 2
0x01614222	4222	Glow plug,cylinder 2
0x01614223	4223	Glow plug,cylinder 2
0x01614225	4225	Oxygen sensor
0x01614226	4226	Oxygen sensor
0x01614231	4231	Glow plug,cylinder 3
0x01614232	4232	Glow plug,cylinder 3
0x01614233	4233	Glow plug,cylinder 3
0x01614235	4235	Control unit,internal 21
0x01614236	4236	Control unit,internal 21
0x01614241	4241	Glow plug,cylinder 4
0x01614242	4242	Glow plug,cylinder 4
0x01614243	4243	Glow plug,cylinder 4
0x01614245	4245	Control unit,internal 22
0x01614246	4246	Control unit,internal 22
0x01614251	4251	Glow plug,cylinder 5
0x01614252	4252	Glow plug,cylinder 5
0x01614253	4253	Glow plug,cylinder 5
0x01614258	4258	Control unit,internal 23
0x01614261	4261	Glow plug,cylinder 6
0x01614262	4262	Glow plug,cylinder 6
0x01614263	4263	Glow plug,cylinder 6
0x01614267	4267	Oxygen sensor,shunt detection
0x01614275	4275	Oxygen sensor,heater
0x01614276	4276	Oxygen sensor,heater
0x01614288	4288	Oxygen sensor
0x01614293	4293	Control unit,internal 16
0x01614296	4296	Oxygen sensor
0x01614298	4298	Oxygen sensor
0x016142B5	42B5	Engine speed monitoring
0x016142C7	42C7	Monitoring,flywheel oscillation
0x01614302	4302	Delivery control valve,activation
0x01614303	4303	Delivery control valve,activation
0x01614310	4310	Delivery control valve,activation
0x01614321	4321	Delivery control valve,activation
0x01614332	4332	Rail-pressure control valve,activation
0x01614333	4333	Rail-pressure control valve,activation
0x01614335	4335	Radiator blind(controlled kidney grille),activation
0x01614336	4336	Radiator blind(controlled kidney grille),activation
0x01614337	4337	Radiator blind(controlled kidney grille),activation
0x01614338	4338	Radiator blind(controlled kidney grille),activation
0x01614340	4340	Rail-pressure control valve,activation
0x01614351	4351	Rail-pressure control valve,activation
0x01614362	4362	Current control for rail-pressure control valve
0x01614378	4378	Rail-pressure control valve,test(-)
0x0161437D	437D	Torque monitoring DCC
0x01614382	4382	Controller test,rail-pressure control valve
0x01614390	4390	Charge-air temperature sensor,signal
0x01614391	4391	Charge-air temperature sensor,signal
0x01614392	4392	Charge-air temperature sensor,signal
0x01614397	4397	Actuator test,delivery control valve,actuator test
0x016143A0	43A0	Starter interlock relay,activation
0x016143A1	43A1	Starter interlock relay,activation
0x016143A2	43A2	Starter interlock relay,activation
0x016143A3	43A3	Starter interlock relay,activation
0x016143C0	43C0	Throttle valve,activation
0x016143D1	43D1	Throttle valve,activation
0x016143E2	43E2	Throttle valve,activation
0x016143E3	43E3	Throttle valve,activation

# Bmw Code Sheet.txt

0x016143F0 43F0 Electric auxiliary heater,activation  
 0x016143F1 43F1 Electric auxiliary heater,activation  
 0x016143F2 43F2 Electric auxiliary heater,activation  
 0x016143F3 43F3 Electric auxiliary heater,activation  
 0x01614403 4403 Control unit,internal 17  
 0x01614410 4410 injector,cylinder 1,activation  
 0x01614411 4411 Injector,cylinder 1,activation  
 0x01614412 4412 Injector,cylinder 1,activation  
 0x01614413 4413 Injector,cylinder 1,activation  
 0x0161441C 441C Injector,cylinder 1,activation  
 0x01614420 4420 injector,cylinder 2,activation  
 0x01614421 4421 Injector,cylinder 2,activation  
 0x01614422 4422 Injector,cylinder 2,activation  
 0x01614423 4423 Injector,cylinder 2,activation  
 0x0161442C 442C Injector,cylinder 2,activation  
 0x01614430 4430 injector,cylinder 3,activation  
 0x01614431 4431 Injector,cylinder 3,activation  
 0x01614432 4432 Injector,cylinder 3,activation  
 0x01614433 4433 Injector,cylinder 3,activation  
 0x0161443C 443C Injector,cylinder 3,activation  
 0x01614440 4440 injector,cylinder 4,activation  
 0x01614441 4441 Injector,cylinder 4,activation  
 0x01614442 4442 Injector,cylinder 4,activation  
 0x01614443 4443 Injector,cylinder 4,activation  
 0x0161444C 444C Injector,cylinder 4,activation  
 0x01614450 4450 injector,cylinder 5,activation  
 0x01614451 4451 Injector,cylinder 5,activation  
 0x01614452 4452 Injector,cylinder 5,activation  
 0x01614453 4453 Injector,cylinder 5,activation  
 0x0161445C 445C Injector,cylinder 5,activation  
 0x01614460 4460 injector,cylinder 6,activation  
 0x01614461 4461 Injector,cylinder 6,activation  
 0x01614462 4462 Injector,cylinder 6,activation  
 0x01614463 4463 Injector,cylinder 6,activation  
 0x0161446C 446C Injector,cylinder 6,activation  
 0x01614473 4473 Control unit,internal 18  
 0x01614475 4475 Intelligent battery sensor  
 0x01614477 4477 Intelligent battery sensor  
 0x01614478 4478 Intelligent battery sensor  
 0x01614480 4480 Control unit,internal 19  
 0x01614485 4485 Intelligent battery sensor  
 0x01614487 4487 Intelligent battery sensor  
 0x01614488 4488 Intelligent battery sensor  
 0x01614491 4491 Control unit,internal 20  
 0x01614495 4495 Intelligent battery sensor  
 0x01614497 4497 Intelligent battery sensor  
 0x0161449A 449A Charge-air pressure actuator  
 0x0161449B 449B Charge-air pressure actuator  
 0x0161449D 449D Charge-air pressure actuator  
 0x016144A0 44A0 Injectors,activation,cyl. 1,2,3  
 0x016144A1 44A1 Injectors,activation,cyl. 1,2,3  
 0x016144A2 44A2 Injectors,activation,cyl. 1,2,3  
 0x016144A3 44A3 Injectors,activation,cyl. 1,2,3  
 0x016144AC 44AC Injectors,activation,cyl. 1,2,3  
 0x016144B0 44B0 Injectors,activation,cyl. 4,5,6  
 0x016144B1 44B1 Injectors,activation,cyl. 4,5,6  
 0x016144B2 44B2 Injectors,activation,cyl. 4,5,6  
 0x016144B3 44B3 Injectors,activation,cyl. 4,5,6  
 0x016144BC 44BC Injectors,activation,cyl. 4,5,6  
 0x016144C0 44C0 Number of desired injections limited  
 0x016144C1 44C1 Number of desired injections limited  
 0x016144C2 44C2 Number of desired injections limited  
 0x016144CC 44CC Charge-air pressure actuator

# Bmw Code Sheet.txt

0x016144D0 44D0 Generator  
 0x016144D2 44D2 Generator  
 0x016144D3 44D3 Generator  
 0x016144DC 44DC Charge-air pressure actuator  
 0x016144E2 44E2 Generator  
 0x016144E3 44E3 Generator  
 0x016144EC 44EC Charge-air pressure actuator,activation  
 0x016144F0 44F0 Rail-pressure plausibility pressure-controlled(-)  
 0x016144FC 44FC Charge-air pressure actuator  
 0x01614501 4501 Exhaust-gas recirculation  
 0x01614507 4507 Exhaust-gas recirculation  
 0x01614512 4512 Thermal oil-level sensor,signal  
 0x01614513 4513 Thermal oil-level sensor,signal  
 0x01614521 4521 Charge-air pressure control,control deviation  
 0x01614530 4530 Charge-air pressure control,control deviation  
 0x01614536 4536 Power management,battery  
 0x01614538 4538 Power management,battery  
 0x01614541 4541 Thermal oil-level sensor  
 0x01614545 4545 Power management,vehicle electrical system  
 0x01614546 4546 Power management,vehicle electrical system  
 0x01614547 4547 Power management,vehicle electrical system  
 0x01614548 4548 Power management,vehicle electrical system  
 0x01614560 4560 Rail-pressure plausibility delivery-controlled  
 0x01614570 4570 Rail-pressure plausibility delivery-controlled  
 0x01614580 4580 Rail-pressure plausibility delivery-controlled  
 0x01614587 4587 Heated fuel filter  
 0x01614590 4590 Rail-pressure plausibility delivery-controlled  
 0x016145A0 45A0 Rail-pressure plausibility delivery-controlled  
 0x016145C0 45C0 Rail-pressure plausibility delivery-controlled(-)  
 0x016145F6 45F6 Message(torque ACCB7)  
 0x01614600 4600 Rail-pressure plausibility pressure-controlled  
 0x01614610 4610 Rail-pressure plausibility pressure-controlled  
 0x01614620 4620 Rail-pressure plausibility pressure-controlled  
 0x01614630 4630 Rail-pressure plausibility pressure-controlled  
 0x01614640 4640 Rail-pressure plausibility pressure-controlled  
 0x01614650 4650 Rail-pressure plausibility pressure-controlled(-)  
 0x01614656 4656 Control unit,internal 24  
 0x01614660 4660 Power supply  
 0x01614661 4661 Power supply  
 0x01614666 4666 Particulate-filter system(nv)  
 0x01614667 4667 Particulate-filter system  
 0x01614670 4670 Supply voltage 1  
 0x01614671 4671 Supply voltage 1  
 0x01614677 4677 Throttle valve  
 0x01614680 4680 Supply voltage 2  
 0x01614681 4681 Supply voltage 2  
 0x01614687 4687 Throttle valve  
 0x01614690 4690 Supply voltage 3  
 0x01614691 4691 Supply voltage 3  
 0x01614697 4697 Throttle valve  
 0x016146A0 46A0 Control unit,internal 1  
 0x016146A1 46A1 Control unit,internal 1  
 0x016146A2 46A2 Control unit,internal 1  
 0x016146A3 46A3 Control unit,internal 1  
 0x016146B0 46B0 Control unit,internal 2  
 0x016146B1 46B1 Control unit,internal 2  
 0x016146B2 46B2 Control unit,internal 2  
 0x016146B3 46B3 Control unit,internal 2  
 0x016146C0 46C0 Control unit,internal 3  
 0x016146C1 46C1 Control unit,internal 3  
 0x016146D0 46D0 Control unit,internal 4  
 0x016146D1 46D1 Control unit,internal 4  
 0x016146D2 46D2 Control unit,internal 4



# Bmw Code Sheet.txt

0x016146D3	46D3	Control unit,internal 4
0x01614703	4703	Control unit,internal 7
0x01614711	4711	Control unit,internal 8
0x01614712	4712	Control unit,internal 8
0x01614713	4713	Control unit,internal 8
0x01614723	4723	Control unit,internal 9
0x01614730	4730	Delivery control valve,current control
0x01614731	4731	Delivery control valve,current control
0x01614732	4732	Delivery control valve,current control
0x01614740	4740	Control unit,internal 11
0x01614750	4750	Control unit,internal 12
0x01614753	4753	Control unit,internal 12
0x01614763	4763	Control unit,internal 13(-)
0x01614773	4773	Control unit,internal 14
0x01614780	4780	Control unit,internal 15
0x01614781	4781	Control unit,internal 15
0x01614782	4782	Control unit,internal 15
0x01614783	4783	Control unit,internal 15
0x0161480A	480A	Particulate-filter system
0x0161481A	481A	Particulate-filter system
0x01614830	4830	Intake-air temperature sensor
0x01614831	4831	Intake-air temperature sensor
0x0161483D	483D	Throttle actuator
0x01614863	4863	Cruise control
0x016148F2	48F2	PT-CAN bus
0x016148F3	48F3	PT-CAN bus
0x01614900	4900	Torque intervention DSC(-)
0x01614912	4912	PT-CAN bus B
0x01614913	4913	PT-CAN bus B
0x01614920	4920	Torque intervention,gearbox(-)
0x016149E7	49E7	Throttle actuator
0x01614A02	4A02	Terminal 15
0x01614A03	4A03	Terminal 15
0x01614A07	4A07	Alternator
0x01614A08	4A08	Alternator
0x01614A10	4A10	Bit-serial data interface BSD
0x01614A13	4A13	Bit-serial data interface BSD
0x01614A15	4A15	Alternator
0x01614A17	4A17	Alternator
0x01614A18	4A18	Alternator
0x01614A25	4A25	Intelligent battery sensor
0x01614A27	4A27	Intelligent battery sensor
0x01614A28	4A28	Intelligent battery sensor
0x01614A35	4A35	Intelligent battery sensor
0x01614A37	4A37	Intelligent battery sensor
0x01614A38	4A38	Intelligent battery sensor
0x01614A41	4A41	EWS interface error
0x01614A42	4A42	EWS interface error
0x01614A43	4A43	EWS interface error
0x01614A45	4A45	Intelligent battery sensor
0x01614A47	4A47	Intelligent battery sensor
0x01614A48	4A48	Intelligent battery sensor
0x01614A51	4A51	EWS random-code storage
0x01614A56	4A56	Power management,battery
0x01614A58	4A58	Power management,battery
0x01614A60	4A60	EWS tampering
0x01614A61	4A61	EWS tampering
0x01614A62	4A62	EWS tampering
0x01614A63	4A63	EWS tampering
0x01614A65	4A65	Power management,vehicle electrical system
0x01614A66	4A66	Power management,vehicle electrical system
0x01614A67	4A67	Power management,vehicle electrical system
0x01614A70	4A70	Map values incorrect

# Bmw Code Sheet.txt

0x01614A80 4A80 Charge-air tube monitoring  
 0x01614AB2 4AB2 Electric auxiliary heater  
 0x01614AD5 4AD5 Zero-quantity adaptation,injector,cylinder 1  
 0x01614AD6 4AD6 Zero-quantity adaptation,injector,cylinder 1  
 0x01614AE0 4AE0 Electronics-box fan,activation  
 0x01614AE1 4AE1 Electronics-box fan,activation  
 0x01614AE2 4AE2 Electronics-box fan,activation  
 0x01614AE3 4AE3 Electronics-box fan,activation  
 0x01614AE5 4AE5 Zero-quantity adaptation,injector,cylinder 2  
 0x01614AE6 4AE6 Zero-quantity adaptation,injector,cylinder 2  
 0x01614AF0 4AF0 Control-unit temperature sensor,signal  
 0x01614AF1 4AF1 Control-unit temperature sensor,signal  
 0x01614AF5 4AF5 Zero-quantity adaptation,injector,cylinder 3  
 0x01614AF6 4AF6 Zero-quantity adaptation,injector,cylinder 3  
 0x01614B00 4B00 Control-unit temperature  
 0x01614B05 4B05 Zero-quantity adaptation,injector,cylinder 4  
 0x01614B06 4B06 Zero-quantity adaptation,injector,cylinder 4  
 0x01614B10 4B10 Smooth running controller  
 0x01614B11 4B11 Smooth running controller  
 0x01614B15 4B15 Zero-quantity adaptation,injector,cylinder 5  
 0x01614B16 4B16 Zero-quantity adaptation,injector,cylinder 5  
 0x01614B22 4B22 Electric fan  
 0x01614B25 4B25 Zero-quantity adaptation,injector,cylinder 6  
 0x01614B26 4B26 Zero-quantity adaptation,injector,cylinder 6  
 0x01614B50 4B50 Rate adjustment  
 0x01614B60 4B60 Volume drift compensation  
 0x01614B80 4B80 Rail-pressure plausibility delivery-controlled(-)  
 0x01614B90 4B90 Rail-pressure monitoring on engine start  
 0x01614BA0 4BA0 Intake-air temperature sensor,signal  
 0x01614BA1 4BA1 Intake-air temperature sensor,signal  
 0x01614BB0 4BB0 Supply voltage,air-mass flow sensor  
 0x01614BB1 4BB1 Supply voltage,air-mass flow sensor  
 0x01614BB5 4BB5 Air-mass flow sensor  
 0x01614BB6 4BB6 Air-mass flow sensor  
 0x01614BC0 4BC0 Air-mass flow sensor  
 0x01614BC1 4BC1 Air-mass flow sensor  
 0x01614BC2 4BC2 Air-mass flow sensor  
 0x01614BC5 4BC5 Intake-air temperature sensor(reference aignal for air-mass sensor)  
 0x01614BC6 4BC6 Intake-air temperature sensor(reference aignal for air-mass sensor)  
 0x01614BC7 4BC7 Intake-air temperature sensor(reference aignal for air-mass sensor)  
 0x01614BD2 4BD2 Torque request ARS  
 0x01614BD5 4BD5 Engine mount,activation  
 0x01614BD6 4BD6 Engine mount,activation  
 0x01614BD7 4BD7 Engine mount,activation  
 0x01614BD8 4BD8 Engine mount,activation  
 0x01614CF3 4CF3 Exhaust backpressure sensor,signal  
 0x01614D00 4D00 Particulate-filter system  
 0x01614D01 4D01 Particulate-filter system(only active in pre-production cars)  
 0x01614D03 4D03 Particulate-filter system  
 0x01614DF0 4DF0 Message(torque transmissionB5)  
 0x01614DF1 4DF1 Message(torque transmissionB5)  
 0x01614DF2 4DF2 Message(torque transmissionB5)  
 0x01614DF3 4DF3 Message(torque transmissionB5)  
 0x01623E90 3E90 Crankshaft sensor  
 0x01623E91 3E91 Crankshaft sensor  
 0x01623EB0 3EB0 Speed calculation  
 0x01623EC0 3EC0 Camshaft sensor  
 0x01623EC1 3EC1 Camshaft sensor  
 0x01623EE0 3EE0 Coolant temperature sensor  
 0x01623EE1 3EE1 Coolant temperature sensor  
 0x01623EE2 3EE2 Coolant temperature sensor  
 0x01623EE3 3EE3 Coolant temperature sensor  
 0x01623EF3 3EF3 Coolant temperature sensor, plausibility

# Bmw Code Sheet.txt

0x01623F00 3F00 Charge-air pressure sensor  
 0x01623F01 3F01 Charge-air pressure sensor  
 0x01623F02 3F02 Charge-air pressure sensor  
 0x01623F03 3F03 Charge-air pressure sensor  
 0x01623F05 3F05 MIL off  
 0x01623F10 3F10 Accelerator-pedal module, potentiometer 1  
 0x01623F11 3F11 Accelerator-pedal module, potentiometer 1  
 0x01623F13 3F13 Accelerator-pedal module, potentiometer 1  
 0x01623F15 3F15 MIL on  
 0x01623F20 3F20 Accelerator-pedal module, potentiometer 2  
 0x01623F21 3F21 Accelerator-pedal module, potentiometer 2  
 0x01623F23 3F23 Accelerator-pedal module, potentiometer 2  
 0x01623F25 3F25 Charge-air tube monitoring  
 0x01623F30 3F30 Rail-pressure sensor  
 0x01623F31 3F31 Rail-pressure sensor  
 0x01623F35 3F35 Charge-air tube monitoring at idle  
 0x01623F40 3F40 Rail pressure sensor, offset test  
 0x01623F41 3F41 Rail pressure sensor, offset test  
 0x01623F47 3F47 Brake light/brake test switch  
 0x01623F48 3F48 Brake light/brake test switch  
 0x01623F50 3F50 Roadspeed signal  
 0x01623F52 3F52 Roadspeed signal  
 0x01623F53 3F53 Roadspeed signal  
 0x01623F62 3F62 Roadspeed signal via CAN  
 0x01623F70 3F70 Intake-air temperature sensor  
 0x01623F71 3F71 Intake-air temperature sensor  
 0x01623F72 3F72 Intake-air temperature sensor  
 0x01623FC0 3FC0 Air-mass flow sensor  
 0x01623FD0 3FD0 Air-mass flow sensor  
 0x01623FE0 3FE0 Air-mass flow sensor  
 0x01623FE1 3FE1 Air-mass flow sensor  
 0x01623FF0 3FF0 Air-mass flow sensor  
 0x01623FF1 3FF1 Air-mass flow sensor  
 0x01624000 4000 Fuel temperature sensor  
 0x01624001 4001 Fuel temperature sensor  
 0x01624060 4060 Ambient-pressure sensor (installed in DDE control unit)  
 0x01624061 4061 Ambient-pressure sensor (installed in DDE control unit)  
 0x01624063 4063 Ambient-pressure sensor (installed in DDE control unit)  
 0x01624082 4082 Brake-light/brake-test switch  
 0x01624083 4083 Brake-light/brake-test switch  
 0x016240E0 40E0 Generator  
 0x01624120 4120 DDE main relay  
 0x01624121 4121 DDE main relay  
 0x01624130 4130 Swirl flap  
 0x01624141 4141 Swirl flap  
 0x01624152 4152 Swirl flap  
 0x01624153 4153 Swirl flap  
 0x01624180 4180 Charge-air pressure controller  
 0x01624191 4191 Charge-air pressure controller  
 0x016241A2 41A2 Charge-air pressure controller  
 0x016241A3 41A3 Charge-air pressure controller  
 0x016241A6 41A6 Message (CBS reset, 0x580)  
 0x016241A7 41A7 Message (CBS reset, 0x580)  
 0x016241A8 41A8 Message (CBS reset, 0x580)  
 0x016241B0 41B0 Exhaust-gas recirculation controller  
 0x016241B5 41B5 Transmission temperature  
 0x016241D1 41D1 Exhaust-gas recirculation controller  
 0x016241E2 41E2 Exhaust-gas recirculation controller  
 0x016241E3 41E3 Exhaust-gas recirculation controller  
 0x016241F0 41F0 Electric fan  
 0x016241F1 41F1 Electric fan  
 0x016241F2 41F2 Electric fan  
 0x016241F3 41F3 Electric fan

# Bmw Code Sheet.txt

0x01624202	4203	Glow control unit
0x01624211	4211	Glow plug, cylinder 1
0x01624212	4212	Glow plug, cylinder 1
0x01624213	4213	Glow plug, cylinder 1
0x01624221	4221	Glow plug, cylinder 2
0x01624222	4222	Glow plug, cylinder 2
0x01624223	4223	Glow plug, cylinder 2
0x01624231	4231	Glow plug, cylinder 3
0x01624232	4232	Glow plug, cylinder 3
0x01624233	4233	Glow plug, cylinder 3
0x01624241	4241	Glow plug, cylinder 4
0x01624242	4242	Glow plug, cylinder 4
0x01624243	4243	Glow plug, cylinder 4
0x01624251	4251	Glow plug, cylinder 5
0x01624252	4252	Glow plug, cylinder 5
0x01624253	4253	Glow plug, cylinder 5
0x01624261	4261	Glow plug, cylinder 6
0x01624262	4262	Glow plug, cylinder 6
0x01624263	4263	Glow plug, cylinder 6
0x01624293	4293	Control unit, internal 16
0x016242B5	42B5	Engine speed monitoring
0x016242E2	42E2	Changeover, rail-pressure control
0x016242F2	42F2	Changeover, rail-pressure control
0x01624302	4302	Delivery control valve
0x01624303	4303	Delivery control valve
0x01624310	4310	Delivery control valve
0x01624321	4321	Delivery control valve
0x01624332	4332	Rail-pressure control valve
0x01624333	4333	Rail-pressure control valve
0x01624340	4340	Rail-pressure control valve
0x01624351	4351	Rail-pressure control valve
0x01624362	4362	Current control for rail-pressure control valve
0x01624378	4378	Rail-pressure control valve, test(-)
0x01624382	4382	Controller test, rail-pressure control valve
0x01624390	4390	Charge-air temperature sensor
0x01624391	4391	Charge-air temperature sensor
0x01624392	4392	Charge-air temperature sensor
0x01624397	4397	Controller test, delivery control valve
0x016243A0	43A0	Start-locking relay
0x016243A1	43A1	Start-locking relay
0x016243A2	43A2	Start-locking relay
0x016243A3	43A3	Start-locking relay
0x01624403	4403	Control unit, internal 17
0x01624410	4410	Injector, cylinder 1, activation
0x01624411	4411	Injector, cylinder 1, activation
0x01624412	4412	Injector, cylinder 1, activation
0x01624413	4413	Injector, cylinder 1, activation
0x0162441C	441C	Injector, cylinder 1, activation
0x01624420	4420	Injector, cylinder 2, activation
0x01624421	4421	Injector, cylinder 2, activation
0x01624422	4422	Injector, cylinder 2, activation
0x01624423	4423	Injector, cylinder 2, activation
0x0162442C	442C	Injector, cylinder 2, activation
0x01624430	4430	Injector, cylinder 3, activation
0x01624431	4431	Injector, cylinder 3, activation
0x01624432	4432	Injector, cylinder 3, activation
0x01624433	4433	Injector, cylinder 3, activation
0x0162443C	443C	Injector, cylinder 3, activation
0x01624440	4440	Injector, cylinder 4, activation
0x01624441	4441	Injector, cylinder 4, activation
0x01624442	4442	Injector, cylinder 4, activation
0x01624443	4443	Injector, cylinder 4, activation
0x0162444C	444C	Injector, cylinder 4, activation

# Bmw Code Sheet.txt

0x01624450 4450 injector, cylinder 5, activation  
 0x01624451 4451 Injector, cylinder 5, activation  
 0x01624452 4452 Injector, cylinder 5, activation  
 0x01624453 4453 Injector, cylinder 5, activation  
 0x0162445C 445C Injector, cylinder 5, activation  
 0x01624460 4460 injector, cylinder 6, activation  
 0x01624461 4461 Injector, cylinder 6, activation  
 0x01624462 4462 Injector, cylinder 6, activation  
 0x01624463 4463 Injector, cylinder 6, activation  
 0x0162446C 446C Injector, cylinder 6, activation  
 0x01624473 4473 Control unit, internal 18  
 0x01624480 4480 Control unit, internal 19  
 0x01624491 4491 Control unit, internal 20  
 0x016244A0 44A0 Injectors, activation, cyl. 1,2,3  
 0x016244A1 44A1 Injectors, activation, cyl. 1,2,3  
 0x016244A2 44A2 Injectors, activation, cyl. 1,2,3  
 0x016244A3 44A3 Injectors, activation, cyl. 1,2,3  
 0x016244AC 44AC Injectors, activation, cyl. 1,2,3  
 0x016244B0 44B0 Injectors, activation, cyl. 1,2,3  
 0x016244B1 44B1 Injectors, activation, cyl. 4,5,6  
 0x016244B2 44B2 Injectors, activation, cyl. 4,5,6  
 0x016244B3 44B3 Injectors, activation, cyl. 4,5,6  
 0x016244BC 44BC Injectors, activation, cyl. 4,5,6  
 0x016244C0 44C0 Number of desired injections limited  
 0x016244C1 44C1 Number of desired injections limited  
 0x016244C2 44C2 Number of desired injections limited  
 0x016244D0 44D0 Generator  
 0x016244D2 44D2 Generator  
 0x016244D3 44D3 Generator  
 0x016244E2 44E2 Generator  
 0x016244E3 44E3 Generator  
 0x016244F0 44F0 Rail-pressure plausibility pressure-controlled(-)  
 0x01624501 4501 Exhaust-gas recirculation  
 0x01624507 4507 Exhaust-gas recirculation  
 0x01624512 4512 Thermal oil-level sensor  
 0x01624513 4513 Thermal oil-level sensor  
 0x01624521 4521 Charge-air pressure control  
 0x01624530 4530 Charge-air pressure control  
 0x01624541 4541 Thermal oil-level sensor  
 0x01624560 4560 Rail-pressure plausibility delivery-controlled  
 0x01624570 4570 Rail-pressure plausibility delivery-controlled  
 0x01624580 4580 Rail-pressure plausibility delivery-controlled  
 0x01624590 4590 Rail-pressure plausibility delivery-controlled  
 0x016245A0 45A0 Rail-pressure plausibility delivery-controlled  
 0x016245C0 45C0 Rail-pressure plausibility delivery-controlled(-)  
 0x01624600 4600 Rail-pressure plausibility pressure-controlled  
 0x01624610 4610 Rail-pressure plausibility pressure-controlled  
 0x01624620 4620 Rail-pressure plausibility pressure-controlled  
 0x01624630 4630 Rail-pressure plausibility pressure-controlled  
 0x01624640 4640 Rail-pressure plausibility pressure-controlled  
 0x01624650 4650 Rail-pressure plausibility pressure-controlled(-)  
 0x01624660 4660 Power supply  
 0x01624661 4661 Power supply  
 0x01624670 4670 Supply voltage 1  
 0x01624671 4671 Supply voltage 1  
 0x01624680 4680 Supply voltage 2  
 0x01624681 4681 Supply voltage 2  
 0x01624690 4690 Supply voltage 3  
 0x01624691 4691 Supply voltage 3  
 0x016246A0 46A0 Control unit, internal 1  
 0x016246A1 46A1 Control unit, internal 1  
 0x016246A2 46A2 Control unit, internal 1  
 0x016246A3 46A3 Control unit, internal 1

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0x016246B0	46B0	Control unit, internal	2
0x016246B1	46B1	Control unit, internal	2
0x016246B2	46B2	Control unit, internal	2
0x016246B3	46B3	Control unit, internal	2
0x016246C0	46C0	Control unit, internal	3
0x016246C1	46C1	Control unit, internal	3
0x016246D0	46D0	Control unit, internal	4
0x016246D1	46D1	Control unit, internal	4
0x016246D2	46D2	Control unit, internal	4
0x016246D3	46D3	Control unit, internal	4
0x01624703	4703	Control unit, internal	7
0x01624711	4711	Control unit, internal	8
0x01624712	4712	Control unit, internal	8
0x01624713	4713	Control unit, internal	8
0x01624723	4723	Control unit, internal	9
0x01624730	4730	Delivery control valve, current control	
0x01624731	4731	Delivery control valve, current control	
0x01624732	4732	Delivery control valve, current control	
0x01624740	4740	Control unit, internal	11
0x01624750	4750	Control unit, internal	12
0x01624753	4753	Control unit, internal	12
0x01624763	4763	Control unit, internal	13(-)
0x01624773	4773	Control unit, internal	14
0x01624780	4780	Control unit, internal	15
0x01624781	4781	Control unit, internal	15
0x01624782	4782	Control unit, internal	15
0x01624783	4783	Control unit, internal	15
0x01624830	4830	Intake-air temperature sensor	
0x01624831	4831	Intake-air temperature sensor	
0x01624863	4863	Cruise control	
0x016248F2	48F2	PT-CAN bus	
0x016248F3	48F3	PT-CAN bus	
0x01624900	4900	Torque intervention DSC(-)	
0x01624912	4912	PT-CAN bus	
0x01624913	4913	PT-CAN bus	
0x01624920	4920	Torque intervention, gearbox(-)	
0x016249A2	49A2	Message (outside temperature, 0x310)	
0x016249A3	49A3	Message (outside temperature, 0x310)	
0x016249B0	49B0	Message (torque request ACC, 0xB7)	
0x016249C0	49C0	Message (torque request ACC, 0xB7)	
0x016249D2	49D2	Message (torque request ACC, 0xB7)	
0x016249E0	49E0	Message (torque request ACC, 0xB7)	
0x016249E3	49E3	Message (torque request ACC, 0xB7)	
0x01624A02	4A02	Terminal 15	
0x01624A03	4A03	Terminal 15	
0x01624A10	4A10	Bit-serial data interface BSD	
0x01624A13	4A13	Bit-serial data interface BSD	
0x01624A41	4A41	EWS interface error	
0x01624A42	4A42	EWS interface error	
0x01624A43	4A43	EWS interface error	
0x01624A51	4A51	EWS random-code storage	
0x01624A60	4A60	EWS tampering	
0x01624A61	4A61	EWS tampering	
0x01624A62	4A62	EWS tampering	
0x01624A63	4A63	EWS tampering	
0x01624A70	4A70	Map values incorrect	
0x01624A80	4A80	Charge-air tube monitoring	
0x01624AE0	4AE0	Electronics-box fan	
0x01624AE1	4AE1	Electronics-box fan	
0x01624AE2	4AE2	Electronics-box fan	
0x01624AE3	4AE3	Electronics-box fan	
0x01624AF0	4AF0	Control-unit temperature sensor	
0x01624AF1	4AF1	Control-unit temperature sensor	

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0x01624B00 4B00 Control-unit temperature  
 0x01624B10 4B10 Smooth running controller  
 0x01624B11 4B11 Smooth running controller  
 0x01624B22 4B22 Electric fan  
 0x01624B50 4B50 Rate adjustment  
 0x01624B60 4B60 Volume drift compensation  
 0x01624B80 4B80 Rail-pressure plausibility delivery-controlled(-)  
 0x01624B90 4B90 Rail-pressure monitoring on engine start  
 0x01624BA0 4BA0 Intake-air temperature sensor  
 0x01624BA1 4BA1 Intake-air temperature sensor  
 0x01624BB0 4BB0 Supply voltage, air-mass flow sensor  
 0x01624BB1 4BB1 Supply voltage, air-mass flow sensor  
 0x01624BB5 4BB5 Air-mass flow sensor  
 0x01624BB6 4BB6 Air-mass flow sensor  
 0x01624BC0 4BC0 Air-mass flow sensor  
 0x01624BC1 4BC1 Air-mass flow sensor  
 0x01624BC2 4BC2 Air-mass flow sensor  
 0x01624BC5 4BC5 Intake-air temperature sensor  
 0x01624BC6 4BC6 Intake-air temperature sensor  
 0x01624BC7 4BC7 Intake-air temperature sensor  
 0x01624BD2 4BD2 Torque request ARS  
 0x01624BD5 4BD5 Engine mount  
 0x01624BD6 4BD6 Engine mount  
 0x01624BD7 4BD7 Engine mount  
 0x01624BD8 4BD8 Engine mount  
 0x01624BF2 4BF2 Message (heating/air conditioning, 0x1B5)  
 0x01624CA2 4CA2 Message (power management, 0x3B4)  
 0x01624CA3 4CA3 Message (power management, battery voltage, 0x3B4)  
 0x01624CB2 4CB2 Message (power management, 0x334)  
 0x01624CB3 4CB3 Message (power management, 0x334)  
 0x01632A83 2A83 VANOS intake  
 0x01632D0F 2D0F Hot-film air-mass sensor, signal  
 0x0163274E 274E Fault code Not Exit  
 0x01632712 2712 DMTL solenoid valve,output stage  
 0x01632713 2713 Oxygen sensors before catalytic converter mixed up  
 0x01632714 2714 Oxygen-sensor heater after cat., bank 2  
 0x01632715 2715 Oxygen-sensor heater before cat., bank 2  
 0x01632716 2716 Activation, oxygen-sensor heater after cat., bank 1  
 0x01632717 2717 Activation, oxygen-sensor heater after cat., bank 2  
 0x0163271A 271A Oxygen sensor before cat., bank 1 -signal  
 0x0163271C 271C Oxygen sensor after cat., bank 1- signal  
 0x0163271D 271D Oxygen-sensor heater before cat., bank 1  
 0x0163271E 271E Oxygen-sensor heater after cat., bank 1  
 0x01632721 2721 Oxygen-sensor ageing after cat., bank 1  
 0x01632722 2722 Oxygen-sensor before cat., bank 2 - signal  
 0x01632724 2724 Oxygen-sensor after cat., bank 2 - signal  
 0x01632727 2727 Oxygen-sensor ageing after cat., bank 2  
 0x01632728 2728 Multiplicative mixture adaptation, bank 1 - control limit 2 reached  
 0x01632729 2729 Multiplicative mixture adaptation, bank 2 - control limit 2 reached  
 0x0163272A 272A Multiplicative mixture adaptation, bank 1 - control limit 1 reached  
 0x0163272B 272B Multiplicative mixture adaptation, bank 2 - control limit 1 reached  
 0x0163272C 272C Additive mixture adaptation, bank 1 - control limit reached  
 0x0163272D 272D Additive mixture adaptation, bank 2 - control limit reached  
 0x01632731 2731 Function, camshaft control, inlet, bank 1  
 0x01632732 2732 Function, camshaft control, inlet, bank 2  
 0x01632737 2737 EWS 3.3 anti-tampering protection  
 0x01632738 2738 Catalytic - converter conversion, bank 1  
 0x01632739 2739 Catalytic - converter conversion, bank 1  
 0x0163273A 273A Catalytic - converter conversion, bank 2  
 0x0163273D 273D Catalytic - converter conversion, bank 2  
 0x01632742 2742 Misfire detection, cylinder 1  
 0x01632743 2743 Misfire detection, cylinder 5  
 0x01632744 2744 Misfire detection, cylinder 4

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0x01632745 2745 Misfire detection, cylinder 8  
 0x01632746 2746 Misfire detection, cylinder 6  
 0x01632747 2747 Misfire detection, cylinder 3  
 0x01632748 2748 Misfire detection, cylinder 7  
 0x01632749 2749 Misfire detection, cylinder 2  
 0x01632753 2753 Ignition circuit, cylinder 1  
 0x01632754 2754 Ignition circuit, cylinder 5  
 0x01632755 2755 Ignition circuit, cylinder 4  
 0x01632756 2756 Ignition circuit, cylinder 8  
 0x01632757 2757 Ignition circuit, cylinder 6  
 0x01632758 2758 Ignition circuit, cylinder 3  
 0x01632759 2759 Ignition circuit, cylinder 7  
 0x0163275A 275A Ignition circuit, cylinder 2  
 0x01632760 2760 Secondary-air system, bank 1  
 0x01632761 2761 Secondary-air system, bank 2  
 0x01632764 2764 Secondary-air pump, relay  
 0x01632769 2769 Throttle actuator - spring test  
 0x0163276D 276D Function, tank-venting system  
 0x01632772 2772 Tank-venting valve, output stage  
 0x01632775 2775 Monitoring, engine torque, level 2  
 0x01632776 2776 Interface, multifunction steering wheel  
 0x01632779 2779 DME self-test-RAM  
 0x0163277A 277A Brake-light switch  
 0x0163277B 277B DME self-test-ROM  
 0x0163277C 277C DME self-test-reset  
 0x0163277D 277D Battery voltage  
 0x0163277E 277E Limitation, engine torque, level 1  
 0x0163277F 277F Crankshaft sensor - engine-speed signal  
 0x01632780 2780 Crankshaft sensor - reference mark  
 0x01632781 2781 Camshaft sensor, inlet, bank 1  
 0x01632782 2782 Camshaft sensor, exhaust, bank 1  
 0x01632783 2783 Hot-film air - mass flow sensor  
 0x01632786 2786 Throttle - valve potentiometer 1  
 0x01632787 2787 Throttle - valve potentiometer 2  
 0x01632788 2788 Vehicle speed  
 0x01632789 2789 Detection, rough road  
 0x0163278A 278A Ambient temperature  
 0x0163278B 278B Temperature sensor, engine coolant  
 0x0163278C 278C Temperature sensor, intake-air temperature  
 0x0163278D 278D Temperature sensor, radiator outlet  
 0x0163278E 278E Differential-pressure sensor, intake manifold  
 0x01632791 2791 Throttle - replacement detection without adaptation  
 0x01632792 2792 Throttle - position monitoring  
 0x01632793 2793 Throttle actuator - control range  
 0x01632794 2794 Throttle actuator - activation  
 0x01632795 2795 Throttle actuator - spring test  
 0x01632796 2796 Throttle actuator - test, lower stop  
 0x01632797 2797 Throttle actuator - booster adjustment  
 0x01632798 2798 Throttle actuator - limp-home position  
 0x01632799 2799 Throttle actuator - adaptation abort due to environmental conditions  
 0x0163279A 279A Throttle actuator - relearn abort  
 0x0163279B 279B Thermostat stuck  
 0x0163279C 279C Output stage, thermostat, map cooling  
 0x0163279D 279D Output stage, electric fan  
 0x0163279E 279E Output stage, exhaust flap  
 0x016327A0 27A0 Fan, electronics box  
 0x016327A4 27A4 EWS 3.3 interface DME-EWS  
 0x016327A6 27A6 Fuel injector, cylinder 1  
 0x016327A7 27A7 Fuel injector, cylinder 5  
 0x016327A8 27A8 Fuel injector, cylinder 4  
 0x016327A9 27A9 Fuel injector, cylinder 8  
 0x016327AA 27AA Fuel injector, cylinder 6  
 0x016327AB 27AB Fuel injector, cylinder 3



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0x016327AC 27AC Fuel injector, cylinder 7  
 0x016327AD 27AD Fuel injector, cylinder 2  
 0x016327B3 27B3 Plausibility, throttle to hot-film air-mass flow sensor  
 0x016327B4 27B4 Ambient-pressure sensor  
 0x016327B5 27B5 Camshaft control, inlet bank 1 - output stage  
 0x016327B6 27B6 Camshaft control, inlet bank 2 - output stage  
 0x016327B8 27B8 Differential-pressure sensor, intake manifold - plausibility  
 0x016327BB 27BB Function camshaft control, exhaust, bank 1  
 0x016327BC 27BC Function camshaft control, exhaust, bank 2  
 0x016327BD 27BD Camshaft control, exhaust, bank 1 - output stage  
 0x016327BE 27BE Camshaft control, exhaust, bank 2 - output stage  
 0x016327BF 27BF Camshaft sensor, inlet, bank 2  
 0x016327C0 27C0 Camshaft sensor, exhaust, bank 2  
 0x016327C1 27C1 All camshaft sensor failed  
 0x016327C2 27C2 Activation, A/C compressor  
 0x016327CA 27CA Tank-leak diagnosis DMTL - activation,pump motor  
 0x016327CB 27CB Tank-leak diagnosis DMTL - mininal leak(0.5mm)  
 0x016327CC 27CC Tank-leak diagnosis DMTL - tank leak detected  
 0x016327CD 27CD Tank-leak diagnosis DMTL - module fault  
 0x016327CE 27CE Load monitoring  
 0x016327D9 27D9 Tank-leak diagnosis DMTL - heater  
 0x016327DA 27DA Altimeter fault  
 0x016327DC 27DC EWS3.3 random - code storage  
 0x016327E1 27E1 Monitoring pedal-travel sensor  
 0x016327E2 27E2 Knock sensor 1  
 0x016327E3 27E3 Knock sensor 2  
 0x016327E4 27E4 Knock sensor 3  
 0x016327E5 27E5 Knock sensor 4  
 0x016327E6 27E6 Knock control - zero test, bank 1  
 0x016327E7 27E7 Knock control - offset bank 1  
 0x016327E8 27E8 Knock control - test pulse, bank 1  
 0x016327E9 27E9 Knock control - zero test, bank 2  
 0x016327EC 27EC No CAN message from EGS  
 0x016327ED 27ED No CAN message from DSC  
 0x016327EE 27EE No CAN message from KOM  
 0x016327EF 27EF No CAN message from ACC  
 0x016327F2 27F2 Plausibility, tank fill level  
 0x016327F3 27F3 No LOCAL CAN message from valvetronic  
 0x016327F7 27F7 Pedal-travel sensor, potentiometer 1  
 0x016327F8 27F8 Pedal-travel sensor, potentiometer 2  
 0x016327F9 27F9 Automatic starting - activation  
 0x016327FA 27FA Automatic starting - input signal  
 0x016327FB 27FB variable intake system - output stage  
 0x016327FD 27FD Automatic starting - Function  
 0x016327FE 27FE Knock control - offset, bank 2  
 0x016327FF 27FF Knock control - test pulse, bank 2  
 0x01632812 2812 Oil temperature  
 0x01632813 2813 DME monitoring group A  
 0x01632814 2814 DME monitoring group B  
 0x01632815 2815 DME monitoring group C  
 0x01632816 2816 DME monitoring: engine speed  
 0x0163281E 281E variable intake system - output stage, servomotor  
 0x01632820 2820 Variable intake system - plausibility  
 0x01632821 2821 variable intake system - temperature warming threshold  
 0x01632823 2823 Oxygen-sensor heater before cat., bank 1  
 0x01632824 2824 Oxygen-sensor heater before cat., bank 2  
 0x01632825 2825 Oxygen-sensor ageing after cat., bank 1  
 0x01632826 2826 Oxygen-sensor ageing after cat., bank 2  
 0x01632828 2828 No CAN message from Active Roll Stabilization ARS  
 0x01632829 2829 No CAN message from Car Access System CAS  
 0x0163282A 282A No CAN message from Integrated Automatic Heater - A/C IHKA  
 0x0163282B 282B No CAN message from power module  
 0x0163282C 282C No CAN message from steering-column switch SZL

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0x0163282E 282E Movement, pedal-travel sensor  
0x0163283A 283A Oil-quality sensor  
0x0163283E 283E Variable valve gear - output stage, enable line  
0x0163283F 283F Oil pressure switch  
0x01632850 2850 Variable valve gear - guide sensor, bank 1  
0x01632851 2851 Variable valve gear - guide sensor, bank 2  
0x01632852 2852 Variable valve gear - reference sensor, bank 1  
0x01632853 2853 Variable valve gear - reference sensor, bank 2  
0x01632854 2854 Variable valve gear - plausibility, sensor, bank 1  
0x01632855 2855 Variable valve gear - plausibility, sensor, bank 2  
0x01632856 2856 Variable valve gear - voltage supply, sensor, bank 1  
0x01632857 2857 Variable valve gear - voltage supply, sensor, bank 2  
0x01632858 2858 Variable valve gear - learning function, stop, bank 1  
0x01632859 2859 Variable valve gear - learning function, stop, bank 2  
0x0163285A 285A Variable valve gear - monitoring, servomotor, bank 1  
0x0163285B 285B Variable valve gear - monitoring, servomotor, bank 2  
0x0163285C 285C Variable valve gear - monitoring, CAN communication, bank 1  
0x0163285D 285D Variable valve gear - monitoring, CAN communication, bank 2  
0x0163285E 285E Variable valve gear - monitoring, CAN internal fault, control unit, bank 1  
0x0163285F 285F Variable valve gear - monitoring, CAN internal fault, control unit, bank 2  
0x01632860 2860 Variable valve gear - output stage, servomotor, bank 1  
0x01632861 2861 Variable valve gear - output stage, servomotor, bank 2  
0x01632862 2862 Variable valve gear - voltage supply, power output stage, bank 1  
0x01632863 2863 Variable valve gear - voltage supply, power output stage, bank 2  
0x01632864 2864 DMTL - activation fault, pump motor  
0x01632865 2865 Variable valve gear - power limitation in limp - home operating code  
0x01632866 2866 Variable valve gear - learning stops necessary  
0x01632867 2867 Valvetronic, system overload, bank 1  
0x01632868 2868 Valvetronic, system overload, bank 2  
0x0163287C 287C Pressure sensor, intake manifold  
0x01632889 2889 Monitoring, plausibility, RAM backup  
0x016328C8 28C8 Oxygen-sensor-controller deviation, bank 1  
0x016328C9 28C9 Oxygen-sensor-controller deviation, bank 2  
0x016328D6 28D6 No DME coding  
0x016328D7 28D7 Communication with alternator  
0x016328D8 28D8 RAM backup  
0x016328DB 28DB Variable valve gear, min. lift adaptation exceeded  
0x01642712 2712 DMTL solenoid value, output stage  
0x01642713 2713 Mixed-up oxygen sensors or mixed-up HDEV connectors, bank 1  
0x01642716 2716 Activation, oxygen-sensor heater after cat., bank 1  
0x0164271B 271B Output stage, heater, sensor before cat., bank 1  
0x0164271C 271C Oxygen sensor after cat., bank 1 - signal  
0x0164271D 271D Oxygen-sensor heater before cat., bank 1  
0x0164271E 271E Oxygen-sensor heater after cat., bank 1  
0x01642721 2721 Oxygen-sensor ageing after cat., bank 1  
0x01642728 2728 Multiplicative mixture adaptation, bank 1 - control limit 2 reached  
0x0164272A 272A Multiplicative mixture adaptation, bank 1 - control limit 1 reached  
0x0164272C 272C Additive mixture adaptation, bank 1 - control limit reached  
0x01642730 2730 Fuel mixture adaptation, sumcheck error  
0x01642731 2731 Function, camshaft control, inlet, bank 1  
0x01642737 2737 EWS 3.3 anti-tampering protection, bank 1  
0x01642738 2738 Catalytic-converter conversion, bank 1  
0x01642742 2742 Misfire detection, cylinder 1  
0x01642744 2744 Misfire detection, cylinder 5  
0x01642746 2746 Misfire detection, cylinder 3  
0x01642748 2748 Misfire detection, cylinder 6  
0x01642749 274E Misfire Detection, sumcheck error, bank 1  
0x0164274A 274A Misfire detection, cylinder 2  
0x0164274C 274C Misfire detection, cylinder 4  
0x01642753 2753 Ignition circuit, cylinder 1  
0x01642754 2754 Ignition circuit, cylinder 5

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0x01642755 2755 Lgnition circuit,cylinder 3  
 0x01642756 2756 Lgnition circuit,cylinder 6  
 0x01642757 2757 Lgnition circuit,cylinder 2  
 0x01642758 2758 Lgnition circuit,cylinder 4  
 0x01642760 2760 Secondary-air system,bank 1  
 0x01642764 2764 Secondary-air pump,relay  
 0x01642769 2769 Throttle actuator -spring test,bank 1  
 0x0164276A 276A Control-unit selection  
 0x0164276D 276D Function,tank-venting system  
 0x01642772 2772 Tank-venting value,output stage  
 0x01642774 2774 System time,power module  
 0x01642775 2775 Monitoring,engine torque,level 2  
 0x01642779 2779 DME-self-test-RAM  
 0x0164277A 277A Brake-light switch  
 0x0164277B 277B DME self-test-ROM  
 0x0164277C 277C DME self-test-reset  
 0x0164277D 277D Battery voltage  
 0x0164277E 277E Limitation,engine torque,level 1  
 0x0164277F 277F Crankshaft sensor -engine-speed signal  
 0x01642780 2780 Crankshaft sensor -reference mark  
 0x01642781 2781 Camshaft sensor,inlet,bank 1  
 0x01642782 2782 Camshaft sensor,exhaust,bank 1  
 0x01642783 2783 Hot-film air-mass flow sensor,bank 1  
 0x01642785 2785 Throttle potentiometer,bank 1  
 0x01642786 2786 Throttle potentiometer 1,bank 1  
 0x01642787 2787 Throttle potentiometer 2,bank 1  
 0x01642788 2788 Vehicle speed  
 0x01642789 2789 Detection,rough load,bank 1  
 0x0164278A 278A Ambient temperature  
 0x0164278B 278B Engine temperature  
 0x0164278C 278C Intake-air temperature sensor,bank 1  
 0x0164278D 278D Temperature sensor,radiator outlet  
 0x0164278E 278E Differential pressure sensor,intake manifold,bank 1  
 0x01642792 2792 Throttle position monitoring,bank 1  
 0x01642793 2793 Throttle actuator -control range,bank 1  
 0x01642794 2794 Throttle actuator -activation,bank 1  
 0x01642795 2795 Throttle actuator -spring test,bank 1  
 0x01642796 2796 Throttle actuator -test lower stop,bank 1  
 0x01642797 2797 Throttle actuator -amplifier adjustment,bank 1  
 0x01642798 2798 Throttle actuator -emergency operation setting,bank 1  
 0x01642799 2799 Cancellation throttle adaptation due to ambient conditions,bank 1  
 0x0164279A 279A Throttle actuator - cancel relearning,bank 1  
 0x0164279B 279B Thermostat stuck  
 0x0164279C 279C Output stage,thermostat,map cooling  
 0x0164279D 279D Output stage,electric fan  
 0x0164279E 279E Output stage,exhaust flap  
 0x016427A0 27A0 Fan,electronics box  
 0x016427A4 27A4 EWS3.3 interface DME-EWS bank 1  
 0x016427B0 27B0 Ambient temperature sensor,signal  
 0x016427B1 27B1 Ambient temperature sensor,plausibility  
 0x016427B3 27B3 Plausibility,throttle to hot-film air-mass flow sensor,bank 1  
 0x016427B4 27B4 Ambient pressure sensor,bank 1  
 0x016427B5 27B5 Camshaft control,inlet,bank 1-output stage  
 0x016427B8 27B8 Differential pressure sensor,intake manifold -plausibility,bank 1  
 0x016427B9 27B9 Ambient-pressure sensor,signal  
 0x016427BA 27BA Ambient-pressure sensor,plausibility  
 0x016427BB 27BB Function,camshaft control,exhaust,bank 1  
 0x016427BD 27BD Camshaft control,exhaust,bank 1 -output stage  
 0x016427C1 27C1 All camshaft sensors failed,bank 1  
 0x016427C8 27C8 Tank-leak diagnosis DMTL -major leak  
 0x016427CA 27CA Tank-leak diagnosis DMTL -activation,pump motor  
 0x016427CB 27CB Tank-leak diagnosis DMTL -minimal leak(0.5mm)  
 0x016427CC 27CC Tank-leak diagnosis DMTL -tank leak detected

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0x016427CD 27CD Tank-leak diagnosis DMTL -module fault  
 0x016427CE 27CE Function monitoring:fuel pressure sensor,supply lead or ECU fault  
 0x016427D5 27D5 Idle-speed control faulty,bank 1  
 0x016427D9 27D9 Tank-leak diagnosis DMTL -heater  
 0x016427DA 27DA Alternator fault  
 0x016427DC 27DC EWS 3.3 random-code storage,bank 1  
 0x016427E1 27E1 Monitoring,pedal-travel sensor  
 0x016427E2 27E2 Knock sensor 1,bank 1  
 0x016427E3 27E3 Knock sensor 2,bank 1  
 0x016427E4 27E4 Knock sensor 3,bank 1  
 0x016427E6 27E6 Knock control - zero test,bank 1  
 0x016427E7 27E7 Knock control - offset,bank 1  
 0x016427E8 27E8 Knock control - test pulse,bank 1  
 0x016427EA 27EA CAN timeout HPFI bank 1  
 0x016427F2 27F2 Plausibility,tank fill level  
 0x016427F5 27F5 Tank fill level,plausibility  
 0x016427F7 27F7 Pedal-travel sensor,potentiometer 1  
 0x016427F8 27F8 Pedal-travel sensor,potentiometer 2  
 0x016427FA 27FA Automatic starting -input signal  
 0x016427FD 27FD Automatic starting -function  
 0x01642813 2813 DME monitoring,Group A  
 0x01642814 2814 DME monitoring,Group B  
 0x01642815 2815 DME monitoring,Group C  
 0x01642816 2816 DME monitoring:engine speed  
 0x01642818 2818 Sensor connected but not mouted,bank 1  
 0x01642819 2819 No CAN message from DME2  
 0x01642822 2822 Forced shifting EGS  
 0x01642825 2825 Oxygen-sensor ageing after cat.,bank 1  
 0x01642827 2827 Heater coupling LSU bank 1  
 0x0164283A 283A Oil-quality sensor  
 0x0164283E 283E Variable value gear -output stage,enable line  
 0x0164283F 283F Oil pressure switch  
 0x01642842 2842 2.Alternator  
 0x01642843 2843 Plausibility diagnosis LSU by LSH after cat.,bank 1  
 0x01642844 2844 Self-diagnosis,output stage,communication,bank 1  
 0x01642846 2846 Activation,auxiliary air flap  
 0x01642849 2849 Open circuit,pump current lead LSU bank 1  
 0x0164284A 284A Short circuit,sensor leads,to ground or Ub,bank 1  
 0x0164284B 284B Non-return shut-off value,output stage  
 0x0164284C 284C LSU dynamically too slow,bank 1  
 0x0164284F 284F Speedometer in instrument cluster faulty  
 0x01642850 2850 Variable value gear -guide sensor  
 0x01642852 2852 Variable value gear -reference sensor  
 0x01642854 2854 Variable value gear -plausibility sensor  
 0x01642856 2856 Variable value gear -voltage-supply sensor  
 0x01642858 2858 Variable value gear -learn function,stop  
 0x0164285A 285A Variable value gear -monitoring servomotor  
 0x0164285C 285C Variable value gear -CAN communication  
 0x0164285E 285E Variable value gear -internal fault,control unit  
 0x01642860 2860 Variable value gear -output stage,servomotor  
 0x01642862 2862 Variable value gear -voltage supply,power output stage  
 0x01642865 2865 Variable value gear -power limitation in limp-home operating mode  
 0x01642866 2866 Variable value gear -Learning stops necessary  
 0x01642867 2867 Valvetronic,system overload,bank 1  
 0x01642880 2880 Pressure damper ventilation value  
 0x01642889 2889 Monitoring,plausibility,RAM backup  
 0x016428C8 28C8 Lambda-controller deviation,bank 1  
 0x016428D6 28D6 No DME coding  
 0x016428D7 28D7 Communication with alternator  
 0x016428D8 28D8 RAM backup  
 0x016428DB 28DB Variable value gear- minimum-lift adaptation exceeded  
 0x016428DC 28DC 2.Alternator communication  
 0x016428DE 28DE High-voltage generation in HDEV control unit

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0x016428DF 28DF High-voltage generation in HDEV control unit  
 0x016428E0 28E0 High-voltage generation in HDEV control unit  
 0x016428E1 28E1 High-voltage generation in HDEV control unit  
 0x016428E2 28E2 High-voltage generation in HDEV control unit  
 0x016428E3 28E3 High-voltage generation in HDEV control unit  
 0x0164290F 290F High-pressure sensor test(signal,rail pressure sensor)bank 1  
 0x01642913 2913 Output stage HPFI1,line 1  
 0x01642914 2914 Output stage HPFI5,line 5  
 0x01642915 2915 Output stage HPFI3,line 3  
 0x01642916 2916 Output stage HPFI6,line 6  
 0x01642917 2917 Output stage HPFI2,line 2  
 0x01642918 2918 Output stage HPFI4,line 4  
 0x0164291B 291B High-pressure fuel injector,Highside 1  
 0x0164291C 291C High-pressure fuel injector,Highside 5  
 0x0164291D 291D High-pressure fuel injector,Highside 3  
 0x0164291E 291E High-pressure fuel injector,Highside 6  
 0x0164291F 291F High-pressure fuel injector,communication,bank 1  
 0x01642920 2920 High-pressure fuel injector,Lowside 1  
 0x01642921 2921 High-pressure fuel injector,Lowside 5  
 0x01642922 2922 High-pressure fuel injector,Lowside 3  
 0x01642923 2923 High-pressure fuel injector,Lowside 6  
 0x01642924 2924 Rail pressure control,bank 1  
 0x0164292B 292B Open circuit,adjustment line LSU bank 1  
 0x0164292D 292D Open circuit,Nernst line to meas.cell LSU bank 1  
 0x01642930 2930 Open circuit,virtual ground LSU bank 1  
 0x01642932 2932 Output stage,quantity control value  
 0x01642936 2936 Function monitoring:fuel pressure sensor,supply lead or ECU fault  
 0x01642937 2937 Function monitoring,lambda plausibilization  
 0x01642940 2940 High-pressure fuel injector,Highside 2  
 0x01642941 2941 High-pressure fuel injector,Highside 4  
 0x01642942 2942 High-pressure fuel injector,Lowside 2  
 0x01642943 2943 High-pressure fuel injector,Lowside 4  
 0x01642944 2944 DME coupling messages  
 0x0164296D 296D Engine torque,bank comparision  
 0x01642971 2971 Proram status DME1 and DME2 different  
 0x0164297C 297C Power limitation  
 0x0164298E 298E High-pressure fuel injector 1  
 0x0164298F 298F High-pressure fuel injector 5  
 0x01642990 2990 High-pressure fuel injector 3  
 0x01642991 2991 High-pressure fuel injector 6  
 0x01642992 2992 High-pressure fuel injector 2  
 0x01642993 2993 High-pressure fuel injector 4  
 0x016429AE 29AE Fuel tank cap open  
 0x01652712 2712 DMTL solenoid valve: activation  
 0x01652715 2715 Oxygen-sensor heater before cat. conv., bank 2:activation  
 0x01652716 2716 Oxygen-sensor heater after cat. conv., bank 1:activation  
 0x01652717 2717 Oxygen-sensor heater after cat. conv., bank 2:activation  
 0x01652718 2718 Crankshaft sensor:reference mark  
 0x01652719 2719 Crankshaft sensor:period  
 0x0165271A 271A Oxygen sensor before cat. conv., bank 1:signal  
 0x0165271C 271C Oxygen sensor after cat. conv., bank 1:signal  
 0x0165271D 271D Oxygen-sensor before cat. conv., bank 1:activation  
 0x0165271F 271F Oxygen-sensor aging, bank 1:period  
 0x01652720 2720 Oxygen-sensor aging, bank 1:switching time  
 0x01652721 2721 Oxygen-sensor aging after cat. conv., bank 1  
 0x01652722 2722 Oxygen sensor before cat. conv., bank 2:signal  
 0x01652724 2724 Oxygen sensor after cat. conv., bank 2:signal  
 0x01652725 2725 Oxygen-sensor aging, bank 2:period  
 0x01652726 2726 Oxygen-sensor aging, bank 2:switching time  
 0x01652727 2727 Oxygen-sensor aging after cat, conv., bank 2  
 0x01652734 2734 Throttle-valve potentiometer 1:signal implausible to hot-film  
 air-mass flow sensor  
 0x01652735 2735 Throttle-valve potentiometer 2:signal implausible to hot-film

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## air-mass flow sensor

0x01652737 2737 EWS 3.3 Anti-tampering protection  
 0x01652738 2738 Catalytic converter conversion, bank 1  
 0x0165273D 273D Catalytic converter conversion, bank 2  
 0x01652740 2740 Pedal-position sensor 1:voltage supply  
 0x01652741 2741 Pedal-position sensor 2:voltage supply  
 0x01652742 2742 Misfire, cylinder 1  
 0x01652743 2743 Misfire, cylinder 5  
 0x01652744 2744 Misfire, cylinder 3  
 0x01652745 2745 Misfire, cylinder 6  
 0x01652746 2746 Misfire, cylinder 2  
 0x01652747 2747 Misfire, cylinder 4  
 0x0165274E 274E Misfire, several cylinders  
 0x01652750 2750 Throttle position controller:jammed briefly  
 0x01652751 2751 Throttle position controller:jammed permanently  
 0x01652752 2752 Throttle position controller:stiff  
 0x01652753 2753 Ignition coil, cylinder 1  
 0x01652754 2754 Ignition coil, cylinder 5  
 0x01652755 2755 Ignition coil, cylinder 3  
 0x01652756 2756 Ignition coil, cylinder 6  
 0x01652757 2757 Ignition coil, cylinder 2  
 0x01652758 2758 Ignition coil, cylinder 4  
 0x01652760 2760 Secondary-air system  
 0x01652761 2761 Secondary-air system  
 0x01652762 2762 Secondary air valve  
 0x01652764 2764 Relay,secondary-air pump:activation  
 0x01652765 2765 Solenoid valve, secondary air:activation  
 0x01652766 2766 Inlet camshaft sensor:signal duration  
 0x01652767 2767 Exhaust camshaft sensor:signal duration  
 0x01652768 2768 Inlet camshaft sensor:phase position  
 0x0165276C 276C Exhaust camshaft sensor:phase position  
 0x0165276D 276D Function check, tank ventilation  
 0x01652770 2770 Secondary-air hot-film air-mass flow sensor  
 0x01652772 2772 Tank vent valve:activation  
 0x01652774 2774 CAN message, engine shutdown time  
 0x01652777 2777 DME self-test:monitoring AD converter  
 0x01652778 2778 Clutch switch  
 0x01652779 2779 DME self-test:RAM  
 0x01652783 2783 Hot-film air-mass flow sensor  
 0x01652786 2786 Throttle-valve potentiometer 1  
 0x01652787 2787 Throttle-valve potentiometer 2  
 0x01652788 2788 Vehicle speed  
 0x0165278B 278B Temperature sensor, engine coolant  
 0x0165278C 278C Intake-air temperature sensor  
 0x0165278D 278D Temperature sensor, radiator outlet  
 0x0165278F 278F Alternator:under-excitation  
 0x01652790 2790 Radiator outlet temperature  
 0x01652794 2794 Throttle actuator  
 0x01652796 2796 Throttle:adaptation values incorrect  
 0x0165279B 279B Thermostat, map cooling:mechanism  
 0x0165279C 279C Thermostat, map cooling:activation  
 0x0165279D 279D Engine fan:activation  
 0x0165279E 279E Exhaust flap:activation  
 0x016527A0 27A0 Electronics box fan:activation  
 0x016527A1 27A1 Throttle:starting test  
 0x016527A4 27A4 Interface EWS 3.3-DME  
 0x016527A5 27A5 Throttle:new adaptation  
 0x016527A6 27A6 Fuel injector, cylinder 1  
 0x016527A7 27A7 Fuel injector, cylinder 5  
 0x016527A8 27A8 Fuel injector, cylinder 3  
 0x016527A9 27A9 Fuel injector, cylinder 6  
 0x016527AA 27AA Fuel injector, cylinder 2  
 0x016527AB 27AB Fuel injector, cylinder 4

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0x016527B2 27B2 Brake light switch:signal  
 0x016527B4 27B4 Ambient pressure sensor  
 0x016527B5 27B5 Inlet camshaft:activation  
 0x016527B7 27B7 Fuel-pump relay:activation  
 0x016527B9 27B9 Oxygen sensor before cat. conv., bank 1:voltage excursion  
 0x016527BA 27BA Oxygen sensor before cat. conv., bank 2:voltage excursion  
 0x016527BD 27BD Exhaust camshaft:activation  
 0x016527C2 27C2 A/C compressor control:activation  
 0x016527C3 27C3 Thermal oil-level sensor  
 0x016527C4 27C4 Main relay  
 0x016527C5 27C5 Brake light test switch:signal  
 0x016527C7 27C7 Main relay:switching delay  
 0x016527CA 27CA DMTL pump motor:activation  
 0x016527CC 27CC DMTL: leakage  
 0x016527CD 27CD DMTL: Module fault  
 0x016527CF 27CF Firing, cylinder 1  
 0x016527D0 27D0 Firing, cylinder 5  
 0x016527D1 27D1 Firing, cylinder 3  
 0x016527D2 27D2 Firing, cylinder 6  
 0x016527D3 27D3 Firing, cylinder 2  
 0x016527D4 27D4 Firing, cylinder 4  
 0x016527D6 27D6 Idle-speed control valve:activation - position closed  
 0x016527D7 27D7 Idle-speed control valve:activation - position open  
 0x016527D9 27D9 DMTL heater:activation  
 0x016527DA 27DA BSD generator  
 0x016527DB 27DB Accelerator and brake pedals:signal  
 0x016527DC 27DC EWS 3.3 random-code storage  
 0x016527DD 27DD Temperature sensor, engine coolant:gradient  
 0x016527DE 27DE Temperature sensor, engine coolant:signal  
 0x016527DF 27DF Temperature sensor, engine coolant:signal constant  
 0x016527E0 27E0 Crankshaft sensor:segment time measurement  
 0x016527E2 27E2 Knock sensor 1  
 0x016527E3 27E3 Knock sensor 2  
 0x016527EB 27EB No message (EGS 2) from EGS control module  
 0x016527EC 27EC No message (EGS 1) from EGS control module  
 0x016527F2 27F2 Tank fill level  
 0x016527F7 27F7 Pedal position sensor, potentiometer 1  
 0x016527F8 27F8 Pedal position sensor, potentiometer 2  
 0x016527F9 27F9 Automatic starting device:activation  
 0x016527FB 27FB Radiator shutter:activation  
 0x01652800 2800 No message (inst.cl.2) from instrument cluster  
 0x01652801 2801 Idle speed implausible (unmetered air)  
 0x01652804 2804 Cruise control:request  
 0x01652805 2805 Switch, cruise control:signal  
 0x01652806 2806 Cruise control:time limit of data transmission reached  
 0x01652807 2807 Pedal-position sensor potentiometer:signal 1 implausible to signal 2 (double fault)  
 0x01652808 2808 Pedal-position sensor:ratio fault  
 0x01652809 2809 No message (inst.cl.3) from instrument cluster  
 0x0165280B 280B No message (DSC 1) from DSC control module  
 0x0165280C 280C No message (DSC 3) from DSC control module  
 0x0165280D 280D No message (LWS) from steering-angle sensor  
 0x0165280E 280E No message (SMG 1) from SMG control module  
 0x0165280F 280F No message (ASC 4) from DSC control module  
 0x01652812 2812 Oil temperature  
 0x0165281A 281A No message (TxU)  
 0x0165281C 281C Bit-serial data interface (BSD):signal  
 0x0165281D 281D BSD generator:signal  
 0x0165281E 281E Variable intake system:activation  
 0x0165282F 282F CAN communication fault  
 0x01652830 2830 DME self-test:checksum  
 0x01652831 2831 DME self-test:processor monitoring  
 0x0165283A 283A Oil condition sensor

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0x0165283F 283F Oil-pressure switch:signal implausible  
 0x01652869 2869 DME self-test:RAM check faulty  
 0x0165286A 286A DME self-test:knock-sensor module  
 0x0165286B 286B DME self-test:multiple output stage module  
 0x01652882 2882 Fuel trim, bank 1  
 0x01652883 2883 Fuel trim, bank 2  
 0x01652892 2892 Misfiring  
 0x01652893 2893 Control modules, internal temperature  
 0x01652894 2894 Irreversible control-module fault  
 0x01652895 2895 Crankshaft sensor:signal  
 0x01652896 2896 Inlet camshaft sensor:signal  
 0x01652897 2897 Exhaust camshaft sensor: signal  
 0x01652898 2898 Oxygen sensor after cat. conv., bank 1:signal  
 0x01652899 2899 Oxygen sensor after cat. conv., bank 2:signal  
 0x0165289A 289A Oxygen-sensor heater before cat. conv., bank 1:function  
 0x0165289B 289B Oxygen-sensor heater before cat. conv., bank 2:function  
 0x0165289C 289C Oxygen-sensor heater after cat. conv., bank 1:function  
 0x0165289D 289D Oxygen-sensor heater after cat. conv., bank 2:function  
 0x0165289E 289E Oxygen sensor before cat. conv., bank 1  
 0x0165289F 289F Oxygen sensor before cat. conv., bank 2  
 0x016528A1 28A1 Cruise control:monitoring  
 0x016528A2 28A2 Air path:monitoring  
 0x016528A4 28A4 Engine speed:monitoring  
 0x016528A5 28A5 Pedal-position sensor:monitoring  
 0x016528AA 28AA Idle controller:monitoring  
 0x016528AB 28AB External torque request:monitoring  
 0x016528AC 28AC Specified torque:monitoring  
 0x016528AD 28AD Actual torque:monitoring  
 0x016528B1 28B1 Speed limitation:monitoring  
 0x016528B2 28B2 Speed limitation:reset  
 0x016528B3 28B3 Throttle:continuous adaptation  
 0x016528B4 28B4 Button, driving dynamics control  
 0x016528B5 28B5 Sound flap:signal  
 0x016528B6 28B6 Inlet camshaft:mechanical  
 0x016528B8 28B8 Exhaust camshaft: mechanical  
 0x016528BA 28BA Inlet camshaft:stiff  
 0x016528BC 28BC Exhaust camshaft:stiff  
 0x016528BD 28BD Inlet camshaft sensor:locking  
 0x016528BE 28BE Exhaust camshaft sensor:locking  
 0x016528C1 28C1 Oxygen sensor before cat. conv., bank 1  
 0x016528C2 28C2 Oxygen sensor before cat. conv., bank 2  
 0x016528C3 28C3 Oxygen-sensor heater before cat. conv., bank 1:function  
 0x016528C4 28C4 Oxygen-sensor heater before cat. conv., bank 2:function  
 0x016528C5 28C5 Oxygen sensor after cat. conv., bank 1: system check  
 0x016528C6 28C6 Oxygen sensor after cat. conv., bank 2:system check  
 0x016528CA 28CA Ozone conversion:too low  
 0x016528CB 28CB Ozone sensor 2  
 0x016528CC 28CC Ozone sensor 1  
 0x016528CF 28CF Fuel pump:emergency shutoff  
 0x016528D0 28D0 Fuel pump:monitoring  
 0x016528DD 28DD Air-mass system  
 0x016528E6 28E6 Evaluation module, oxygen sensor, bank 1:on-board diagnosis  
 0x016528E7 28E7 Evaluation module, oxygen sensor, bank 2:on-board diagnosis  
 0x016528E8 28E8 Oxygen sensors, bank 1:trim control  
 0x016528E9 28E9 Oxygen sensors, bank 2:trim control  
 0x016528EA 28EA Oxygen sensor after cat. conv., bank 1:signal  
 0x016528EB 28EB Oxygen sensor after cat. conv., bank 2:signal  
 0x016528EC 28EC Oxygen sensor after cat. conv., bank 1:signal at full load  
 0x016528ED 28ED Oxygen sensor after cat. conv., bank 2:signal at full load  
 0x016528F0 28F0 Oxygen sensor after cat. conv., bank 1:system check  
 0x016528F1 28F1 Oxygen sensor after cat. conv., bank 2:system check  
 0x016528F2 28F2 Oxygen sensors, bank 1:trim control  
 0x016528F3 28F3 Oxygen sensors, bank 2:trim control



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0x016528F4 28F4 Oxygen sensor before cat. conv., bank 1:cold test  
 0x016528F5 28F5 Oxygen sensor before cat. conv., bank 2:cold test  
 0x016528F6 28F6 Oxygen sensor after cat. conv., bank 1:cold test  
 0x016528F7 28F7 Oxygen sensor after cat. conv., bank 2:cold test  
 0x016528F9 28F9 Rough running:segment time measurement  
 0x016528FA 28FA CAN torque for switching phase  
 0x016528FB 28FB Active Cruise Control(ACC)  
 0x016528FF 28FF DME self-test  
 0x01652900 2900 DME self-test  
 0x01652960 2960 Oxygen sensor before cat. conv., bank 1  
 0x01652961 2961 Oxygen sensor before cat. conv., bank 2  
 0x01652962 2962 Oxygen sensor before cat. conv., bank 1: dynamics  
 0x01652963 2963 Oxygen sensor before cat. conv., bank 2: dynamics  
 0x01652964 2964 Oxygen sensor before cat. conv., bank 1: ceramic temperature  
 0x01652965 2965 Oxygen sensor before cat. conv., bank 2: ceramic temperature  
 0x01652966 2966 Oxygen sensor before cat. conv., bank 1: signal  
 0x01652967 2967 Oxygen sensor before cat. conv., bank 2: signal  
 0x0165296A 296A Oxygen sensor before cat. conv.: mixed up  
 0x0165296B 296B Oxygen sensor after cat. conv.: mixed up  
 0x01652973 2973 Oxygen sensor before cat. conv., bank 1: lines  
 0x01652974 2974 Oxygen sensor before cat. conv., bank 2: lines  
 0x01652986 2986 Oxygen sensor before cat. conv., bank 1: system check  
 0x01652987 2987 Oxygen sensor before cat. conv., bank 2: system check  
 0x01652988 2988 Oxygen sensor before cat. conv., bank 1: system check  
 0x01652989 2989 Oxygen sensor before cat. conv., bank 2: system check  
 0x0165299A 299A CAN fault management EGS  
 0x0165299B 299B Battery sensor  
 0x0165299C 299C Battery sensor  
 0x0165299D 299D Battery sensor  
 0x0165299E 299E Oxygen sensor after cat. conv., bank 1: signal  
 0x0165299F 299F Oxygen sensor after cat. conv., bank 1: signal  
 0x016529A0 29A0 Oxygen sensor after cat. conv., bank 2: signal  
 0x016529A1 29A1 Oxygen sensor after cat. conv., bank 2: signal  
 0x016529A2 29A2 Oxygen sensor before cat. conv., bank 2: signal  
 0x016529A3 29A3 Oxygen sensor before cat. conv., bank 2: signal  
 0x016529A4 29A4 Oxygen-sensor heater before cat. conv., bank 1: activation  
 0x016529A5 29A5 Oxygen-sensor heater before cat. conv., bank 2: activation  
 0x016529A6 29A6 Oxygen sensor before cat. conv., bank 1: signal  
 0x016529A7 29A7 Oxygen sensor before cat. conv., bank 1: signal  
 0x016529A8 29A8 Power management: vehicle electrical system  
 0x016529A9 29A9 Power management: battery  
 0x016529AB 29AB Torque request via CAN  
 0x016529AE 29AE Tank cap  
 0x016529B5 29B5 Secondary-air system  
 0x016529B6 29B6 Cylinder cutout  
 0x01653C1D 3C1D Crankshaft sensor:signal  
 0x01653C1E 3C1E Inlet camshaft sensor:signal  
 0x01653C1F 3C1F Exhaust camshaft sensor:signal  
  
 0x016629CC 29CC Misfire, several cylinders  
 0x016629CD 29CD Misfire, cylinder 1  
 0x016629CE 29CE Misfire, cylinder 2  
 0x016629CF 29CF Misfire, cylinder 3  
 0x016629D0 29D0 Misfire, cylinder 4  
 0x016629DD 29DD Poor road surface detection  
 0x016629E5 29E5 Fuel mixture adaptation (air density), upper engine speed range  
 0x016629E6 29E6 Mixture adaptation 2 (air density), upper speed range  
 0x016629E7 29E7 Fuel mixture adaptation (air leak)  
 0x016629E8 29E8 Mixture adaptation 2 (leakage air)  
 0x016629ED 29ED Fuel mixture adaptation (air density) lower engine speed range  
 0x016629EE 29EE Mixture adaptation 2 (air density), lower speed range  
 0x016629F4 29F4 Catalytic-converter conversion  
 0x016629F5 29F5 Catalytic-converter conversion 2

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0x016629FE 29FE Secondary-air system  
 0x016629FF 29FF Secondary-air system  
 0x01662A03 2A03 Secondary-air pump relay, activation  
 0x01662A19 2A19 Tank-venting valve  
 0x01662A59 2A59 Valvetronic, eccentric shaft sensor  
 0x01662A5B 2A5B Valvetronic, eccentric shaft sensor  
 0x01662A5D 2A5D Valvetronic, eccentric shaft sensor  
 0x01662A5F 2A5F Valvetronic, eccentric shaft sensor  
 0x01662A61 2A61 Valvetronic, adaptation  
 0x01662A63 2A63 Valvetronic, servomotor  
 0x01662A67 2A67 Valvetronic, internal fault  
 0x01662A69 2A69 Valvetronic, power supply actuator motor  
 0x01662A6B 2A6B Valvetronic, power limitation, servomotor  
 0x01662A6C 2A6C Valvetronic, learning function, stop  
 0x01662A6D 2A6D Valvetronic, electrical overload protection  
 0x01662A6F 2A6F Valvetronic, minimum lift exceeded  
 0x01662A70 2A70 Valvetronic, servomotor  
 0x01662A71 2A71 Valvetronic, relief relay  
 0x01662A72 2A72 Actuator monitoring, VVT lift adjustment  
 0x01662A80 2A80 Intake VANOS, activation  
 0x01662A83 2A83 VANOS intake  
 0x01662A85 2A85 Exhaust VANOS, activation  
 0x01662A88 2A88 VANOS exhaust  
 0x01662B5C 2B5C Crankshaft sensor  
 0x01662B5D 2B5D Crankshaft sensor  
 0x01662B62 2B62 Camshaft sensor, intake  
 0x01662B63 2B63 Camshaft sensor, exhaust  
 0x01662B66 2B66 Camshaft sensor  
 0x01662B70 2B70 Variable intake system  
 0x01662B80 2B80 Idle-speed control  
 0x01662B8A 2B8A Control module: internal fault, knock control  
 0x01662B8B 2B8B Control module: internal fault, knock control  
 0x01662B8C 2B8C Control module: internal fault, knock control  
 0x01662B98 2B98 Control module: internal fault, RAM  
 0x01662B99 2B99 Control module: internal fault, RAM  
 0x01662B9A 2B9A Control module: internal fault, RAM  
 0x01662B9B 2B9B Control module: internal fault, ROM  
 0x01662B9C 2B9C Control module: internal fault, reset  
 0x01662B9D 2B9D Control module: internal fault, overvoltage  
 0x01662BA7 2BA7 Engine torque too high  
 0x01662C24 2C24 Oxygen sensors before catalytic converter mixed up  
 0x01662C45 2C45 Oxygen sensor before catalytic converter  
 0x01662C46 2C46 Oxygen sensor 2 before catalytic converter  
 0x01662C6A 2C6A Oxygen sensors behind catalytic converter mixed up  
 0x01662C6D 2C6D Oxygen sensor behind catalytic converter, ageing  
 0x01662C6E 2C6E Oxygen sensor 2 behind catalytic converter, ageing  
 0x01662C6F 2C6F Oxygen sensor behind catalytic converter  
 0x01662C70 2C70 Oxygen sensor 2 behind catalytic converter  
 0x01662C71 2C71 Oxygen sensor behind catalytic converter  
 0x01662C72 2C72 Oxygen sensor 2 behind catalytic converter  
 0x01662C9C 2C9C Oxygen sensor heating before catalytic converter  
 0x01662C9D 2C9D Oxygen sensor heating 2 before catalytic converter  
 0x01662CA0 2CA0 Oxygen sensor heating before catalytic converter  
 0x01662CA1 2CA1 Oxygen sensor heating 2 before catalytic converter  
 0x01662CA2 2CA2 Oxygen sensor heating before catalytic converter  
 0x01662CA3 2CA3 Oxygen sensor heating 2 before catalytic converter  
 0x01662CA8 2CA8 Oxygen sensor heating behind catalytic converter  
 0x01662CA9 2CA9 Oxygen sensor heating 2 behind catalytic converter  
 0x01662CEF 2CEF Throttle actuator  
 0x01662CF0 2CF0 Throttle actuator  
 0x01662CF1 2CF1 Throttle actuator  
 0x01662CF8 2CF8 Throttle-valve potentiometer  
 0x01662CF9 2CF9 Throttle-valve potentiometer

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0x01662CFA 2CFA Throttle-valve potentiometer 2  
 0x01662CFF 2CFF Throttle actuator  
 0x01662D00 2D00 Throttle actuator  
 0x01662D01 2D01 Throttle actuator  
 0x01662D02 2D02 Throttle actuator  
 0x01662D03 2D03 Throttle actuator  
 0x01662D04 2D04 Throttle actuator  
 0x01662D05 2D05 Throttle actuator  
 0x01662D08 2D08 Throttle actuator  
 0x01662D0F 2D0F Hot-film air-mass sensor, signal  
 0x01662D10 2D10 Hot-film air-mass sensor, plausibility  
 0x01662D11 2D11 Plausibilization, exhaust gas, oxygen sensor  
 0x01662D12 2D12 Plausibilization, mass flow, oxygen sensor 2  
 0x01662D19 2D19 Accelerator-pedal module  
 0x01662D1A 2D1A Accelerator-pedal module  
 0x01662D1B 2D1B Accelerator-pedal module, signal 1  
 0x01662D1C 2D1C Accelerator-pedal module, signal 2  
 0x01662D28 2D28 Intake-manifold pressure sensor, signal  
 0x01662D29 2D29 Intake-manifold pressure sensor, plausibility  
 0x01662D32 2D32 Plausibility, pressure sensor, intake manifold  
 0x01662D6E 2D6E Control module, internal fault: torque monitoring  
 0x01662D6F 2D6F Load-sensor monitoring  
 0x01662D70 2D70 Control module, internal fault  
 0x01662D71 2D71 Control module, internal fault  
 0x01662D72 2D72 Control module, internal fault  
 0x01662D73 2D73 Fuel-pressure sensor  
 0x01662D74 2D74 Fuel-pressure sensor  
 0x01662D75 2D75 Crankshaft sensor  
 0x01662D76 2D76 Accelerator-pedal module  
 0x01662DED 2DED Power management  
 0x01662E24 2E24 Ignition coil, cylinder 1  
 0x01662E25 2E25 Ignition coil, cylinder 2  
 0x01662E26 2E26 Ignition coil, cylinder 3  
 0x01662E27 2E27 Ignition coil, cylinder 4  
 0x01662E30 2E30 Fuel injector, cylinder 1  
 0x01662E31 2E31 Fuel injector, cylinder 2  
 0x01662E32 2E32 Fuel injector, cylinder 3  
 0x01662E33 2E33 Fuel injector, cylinder 4  
 0x01662E68 2E68 Knock-sensor signal 1  
 0x01662E69 2E69 Knock-sensor signal 2  
 0x01662E7C 2E7C Bit-serial data interface, signal  
 0x01662E8B 2E8B Intelligent battery sensor, signal  
 0x01662E8C 2E8C Intelligent battery sensor, function  
 0x01662E8D 2E8D Intelligent battery sensor, signal transmission  
 0x01662E95 2E95 Generator  
 0x01662E97 2E97 Generator  
 0x01662EE0 2EE0 Engine temperature sensor, signal  
 0x01662EEA 2EEA Temperature sensor at radiator outlet, signal  
 0x01662EF4 2EF4 Map thermostat, mechanism  
 0x01662EF5 2EF5 Map thermostat, activation  
 0x01662EFE 2EFE Electric fan  
 0x01662F08 2F08 Intake-air temperature sensor, signal  
 0x01662F12 2F12 Air-conditioning compressor relay  
 0x01662F17 2F17 Engine oil temperature, at times too high  
 0x01662F44 2F44 Electronic car immobilization system  
 0x01662F45 2F45 EWS data line  
 0x01662F46 2F46 EWS calibration  
 0x01662F4E 2F4E No road-speed signal  
 0x01662F62 2F62 Brake-light switch  
 0x01662F67 2F67 Clutch switch  
 0x01662F76 2F76 Control module, internal fault: ambient-pressure sensor  
 0x01662F7B 2F7B Oil-pressure switch  
 0x01662F85 2F85 Control module, internal fault: internal temperature sensor

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0x01662F8A 2F8A Power supply  
 0x01662F94 2F94 Fuel-pump relay, activation  
 0x01662F99 2F99 Outside temperature sensor, plausibility  
 0x01662F9E 2F9E Thermal oil-level sensor  
 0x01662FA3 2FA3 No coding  
 0x01672712 2712 DMTL solenoid valve: activation  
 0x01672715 2715 Oxygen-sensor heater before cat. conv., bank 2f°activation  
 0x01672716 2716 Oxygen-sensor heater after cat. conv., bank 1f°activation  
 0x01672717 2717 Oxygen-sensor heater after cat. conv., bank 2f°activation  
 0x01672718 2718 Crankshaft sensorf°reference mark  
 0x01672719 2719 Crankshaft sensorf°period  
 0x0167271A 271A Oxygen sensor before cat. conv., bank 1f°signal  
 0x0167271C 271C Oxygen sensor after cat. conv., bank 1f°signal  
 0x0167271D 271D Oxygen-sensor before cat. conv., bank 1f°activation  
 0x0167271F 271F Oxygen-sensor aging, bank 1f°period  
 0x01672720 2720 Oxygen-sensor aging, bank 1f°switching time  
 0x01672721 2721 Oxygen-sensor aging after cat. conv., bank 1  
 0x01672722 2722 Oxygen sensor before cat. conv., bank 2f°signal  
 0x01672724 2724 Oxygen sensor after cat. conv., bank 2f°signal  
 0x01672725 2725 Oxygen-sensor aging, bank 2f°period  
 0x01672726 2726 Oxygen-sensor aging, bank 2f°switching time  
 0x01672727 2727 Oxygen-sensor aging after cat, conv., bank 2  
 0x01672734 2734 Throttle-valve potentiometer 1f°signal implausible to hot-film  
 air-mass flow sensor  
 0x01672735 2735 Throttle-valve potentiometer 2f°signal implausible to hot-film  
 air-mass flow sensor  
 0x01672737 2737 EWS 3.3 Anti-tampering protection  
 0x01672738 2738 Catalytic converter conversion, bank 1  
 0x0167273D 273D Catalytic converter conversion, bank 2  
 0x01672740 2740 Pedal-position sensor 1f°voltage supply  
 0x01672741 2741 Pedal-position sensor 2f°voltage supply  
 0x01672742 2742 Misfire, cylinder 1  
 0x01672743 2743 Misfire, cylinder 5  
 0x01672744 2744 Misfire, cylinder 3  
 0x01672745 2745 Misfire, cylinder 6  
 0x01672746 2746 Misfire, cylinder 2  
 0x01672747 2747 Misfire, cylinder 4  
 0x0167274E 274E Misfire, several cy  
 0x01672750 2750 Throttle position controllerf°jammed briefly  
 0x01672751 2751 Throttle position controllerf°jammed permanently  
 0x01672752 2752 Throttle position controllerf°stiff  
 0x01672753 2753 Ignition coil, cylinder 1  
 0x01672754 2754 Ignition coil, cylinder 5  
 0x01672755 2755 Ignition coil, cylinder 3  
 0x01672756 2756 Ignition coil, cylinder 6  
 0x01672757 2757 Ignition coil, cylinder 2  
 0x01672758 2758 Ignition coil, cylinder 4  
 0x01672760 2760 Secondary-air system  
 0x01672761 2761 Secondary-air system  
 0x01672762 2762 Secondary air valve  
 0x01672764 2764 Relay,secondary-air pumpf°activation  
 0x01672765 2765 Solenoid valve, secondary airf°activation  
 0x01672766 2766 Inlet camshaft sensorf°signal duration  
 0x01672767 2767 Exhaust camshaft sensorf°signal duration  
 0x01672768 2768 Inlet camshaft sensorf°phase position  
 0x0167276C 276C Exhaust camshaft sensorf°phase position  
 0x0167276D 276D Function check, tank ventilation  
 0x01672770 2770 Secondary-air hot-film air-mass flow sensor  
 0x01672772 2772 Tank vent valvef°activation  
 0x01672774 2774 CAN message, engine shutdown time  
 0x01672777 2777 DME self-testf°monitoring AD converter  
 0x01672778 2778 Clutch switch  
 0x01672779 2779 DME self-testf°RAM

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0x01672783 2783 Hot-film air-mass flow sensor  
 0x01672786 2786 Throttle-valve potentiometer 1  
 0x01672787 2787 Throttle-valve potentiometer 2  
 0x01672788 2788 Vehicle speed  
 0x0167278B 278B Temperature sensor, engine coolant  
 0x0167278C 278C Intake-air temperature sensor  
 0x0167278D 278D Temperature sensor, radiator outlet  
 0x0167278F 278F Alternator<sup>°</sup>under-excitation  
 0x01672790 2790 Radiator outlet temperature  
 0x01672794 2794 Throttle actuator  
 0x01672796 2796 Throttle<sup>°</sup>adaptation values incorrect  
 0x0167279B 279B Thermostat, map cooling<sup>°</sup>mechanism  
 0x0167279C 279C Thermostat, map cooling<sup>°</sup>activation  
 0x0167279D 279D Engine fan<sup>°</sup>activation  
 0x0167279E 279E Exhaust flap<sup>°</sup>activation  
 0x016727A0 27A0 Electronics box fan<sup>°</sup>activation  
 0x016727A1 27A1 Throttle<sup>°</sup>starting test  
 0x016727A4 27A4 Interface EWS 3.3-DME  
 0x016727A5 27A5 Throttle<sup>°</sup>new adaptation  
 0x016727A6 27A6 Fuel injector, cylinder 1  
 0x016727A7 27A7 Fuel injector, cylinder 5  
 0x016727A8 27A8 Fuel injector, cylinder 3  
 0x016727A9 27A9 Fuel injector, cylinder 6  
 0x016727AA 27AA Fuel injector, cylinder 2  
 0x016727AB 27AB Fuel injector, cylinder 4  
 0x016727B2 27B2 Brake light switch<sup>°</sup>signal  
 0x016727B4 27B4 Ambient pressure sensor  
 0x016727B5 27B5 Inlet camshaft<sup>°</sup>activation  
 0x016727B7 27B7 Fuel-pump relay<sup>°</sup>activation  
 0x016727B9 27B9 Oxygen sensor before cat. conv., bank 1<sup>°</sup>voltage excursion  
 0x016727BA 27BA Oxygen sensor before cat. conv., bank 2<sup>°</sup>voltage excursion  
 0x016727BD 27BD Exhaust camshaft<sup>°</sup>activation  
 0x016727C2 27C2 A/C compressor control<sup>°</sup>activation  
 0x016727C3 27C3 Thermal oil-level sensor  
 0x016727C4 27C4 Main relay  
 0x016727C5 27C5 Brake light test switch<sup>°</sup>signal  
 0x016727C7 27C7 Main relay<sup>°</sup>switching delay  
 0x016727CA 27CA DMTL pump motor<sup>°</sup>activation  
 0x016727CC 27CC DMTL: leakage  
 0x016727CD 27CD DMTL: Module fault  
 0x016727CF 27CF Firing, cylinder 1  
 0x016727D0 27D0 Firing, cylinder 5  
 0x016727D1 27D1 Firing, cylinder 3  
 0x016727D2 27D2 Firing, cylinder 6  
 0x016727D3 27D3 Firing, cylinder 2  
 0x016727D4 27D4 Firing, cylinder 4  
 0x016727D6 27D6 Idle-speed control valve<sup>°</sup>activation - position closed  
 0x016727D7 27D7 Idle-speed control valve<sup>°</sup>activation - position open  
 0x016727D9 27D9 DMTL heater<sup>°</sup>activation  
 0x016727DA 27DA BSD generator  
 0x016727DB 27DB Accelerator and brake pedals<sup>°</sup>signal  
 0x016727DC 27DC EWS 3.3 random-code storage  
 0x016727DD 27DD Temperature sensor, engine coolant<sup>°</sup>gradient  
 0x016727DE 27DE Temperature sensor, engine coolant<sup>°</sup>signal  
 0x016727DF 27DF Temperature sensor, engine coolant<sup>°</sup>signal constant  
 0x016727E0 27E0 Crankshaft sensor<sup>°</sup>segment time measurement  
 0x016727E2 27E2 Knock sensor 1  
 0x016727E3 27E3 Knock sensor 2  
 0x016727EB 27EB No message (EGS 2) from EGS control module  
 0x016727EC 27EC No message (EGS 1) from EGS control module  
 0x016727F2 27F2 Tank fill level  
 0x016727F7 27F7 Pedal position sensor, potentiometer 1  
 0x016727F8 27F8 Pedal position sensor, potentiometer 2

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0x016727F9 27F9 Automatic starting devicef°activation  
 0x016727FB 27FB Radiator shutterf°activation  
 0x01672800 2800 No message (inst.cl.2) from instrument cluster  
 0x01672801 2801 Idle speed implausible (unmetered air)  
 0x01672804 2804 Cruise controlf°request  
 0x01672805 2805 Switch, cruise controlf°signal  
 0x01672806 2806 Cruise controlf°time limit of data transmission reached  
 0x01672807 2807 Pedal-position sensor potentiometerf°signal 1 implausible to signal  
 2 (double fault)  
 0x01672808 2808 Pedal-position sensorf°ratio fault  
 0x01672809 2809 No message (inst.cl.3) from instrument cluster  
 0x0167280B 280B No message (DSC 1) from DSC control module  
 0x0167280C 280C No message (DSC 3) from DSC control module  
 0x0167280D 280D No message (LWS) from steering-angle sensor  
 0x0167280E 280E No message (SMG 1) from SMG control module  
 0x0167280F 280F No message (ASC 4) from DSC control module  
 0x01672812 2812 Oil temperature  
 0x0167281A 281A No message (TxU)  
 0x0167281C 281C Bit-serial data interface (BSD)f°signal  
 0x0167281D 281D BSD generatorf°signal  
 0x0167281E 281E Variable intake systemf°activation  
 0x0167282F 282F CAN communication fault  
 0x01672830 2830 DME self-testf°checksum  
 0x01672831 2831 DME self-testf°processor monitoring  
 0x0167283A 283A Oil condition sensor  
 0x0167283F 283F Oil-pressure switchf°signal implausible  
 0x01672869 2869 DME self-testf°RAM check faulty  
 0x0167286A 286A DME self-testf°knock-sensor module  
 0x0167286B 286B DME self-testf°multiple output stage module  
 0x01672882 2882 Fuel trim, bank 1  
 0x01672883 2883 Fuel trim, bank 2  
 0x01672892 2892 Misfiring  
 0x01672893 2893 Control modules, internal temperature  
 0x01672894 2894 Irreversible control-module fault  
 0x01672895 2895 Crankshaft sensorf°signal  
 0x01672896 2896 Inlet camshaft sensorf°signal  
 0x01672897 2897 Exhaust camshaft sensor: signal  
 0x01672898 2898 Oxygen sensor after cat. conv., bank 1f°signal  
 0x01672899 2899 Oxygen sensor after cat. conv., bank 2f°signal  
 0x0167289A 289A Oxygen-sensor heater before cat. conv., bank 1f°function  
 0x0167289B 289B Oxygen-sensor heater before cat. conv., bank 2f°function  
 0x0167289C 289C Oxygen-sensor heater after cat. conv., bank 1f°function  
 0x0167289D 289D Oxygen-sensor heater after cat. conv., bank 2f°function  
 0x0167289E 289E Oxygen sensor before cat. conv., bank 1  
 0x0167289F 289F Oxygen sensor before cat. conv., bank 2  
 0x016728A1 28A1 Cruise controlf°monitoring  
 0x016728A2 28A2 Air pathf°monitoring  
 0x016728A4 28A4 Engine speedf°monitoring  
 0x016728A5 28A5 Pedal-position sensorf°monitoring  
 0x016728AA 28AA Idle controllerf°monitoring  
 0x016728AB 28AB External torque requestf°monitoring  
 0x016728AC 28AC Specified torquef°monitoring  
 0x016728AD 28AD Actual torquef°monitoring  
 0x016728B1 28B1 Speed limitationf°monitoring  
 0x016728B2 28B2 Speed limitationf°reset  
 0x016728B3 28B3 Throttlef°continuous adaptation  
 0x016728B4 28B4 Button, driving dynamics control  
 0x016728B5 28B5 Sound flapf°signal  
 0x016728B6 28B6 Inlet camshaftf°mechanical  
 0x016728B8 28B8 Exhaust camshaft: mechanical  
 0x016728BA 28BA Inlet camshaftf°stiff  
 0x016728BC 28BC Exhaust camshaftf°stiff  
 0x016728BD 28BD Inlet camshaft sensorf°locking

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0x016728BE 28BE Exhaust camshaft sensor f°locking  
 0x016728C1 28C1 Oxygen sensor before cat. conv., bank 1  
 0x016728C2 28C2 Oxygen sensor before cat. conv., bank 2  
 0x016728C3 28C3 Oxygen-sensor heater before cat. conv., bank 1 f°function  
 0x016728C4 28C4 Oxygen-sensor heater before cat. conv., bank 2 f°function  
 0x016728C5 28C5 Oxygen sensor after cat. conv., bank 1: system check  
 0x016728C6 28C6 Oxygen sensor after cat. conv., bank 2 f°system check  
 0x016728CA 28CA Ozone conversion f°too low  
 0x016728CB 28CB Ozone sensor 2  
 0x016728CC 28CC Ozone sensor 1  
 0x016728CF 28CF Fuel pump f°emergency shutoff  
 0x016728D0 28D0 Fuel pump f°monitoring  
 0x016728DD 28DD Air-mass system  
 0x016728E6 28E6 Evaluation module, oxygen sensor, bank 1 f°on-board diagnosis  
 0x016728E7 28E7 Evaluation module, oxygen sensor, bank 2 f°on-board diagnosis  
 0x016728E8 28E8 Oxygen sensors, bank 1 f°trim control  
 0x016728E9 28E9 Oxygen sensors, bank 2 f°trim control  
 0x016728EA 28EA Oxygen sensor after cat. conv., bank 1 f°signal  
 0x016728EB 28EB Oxygen sensor after cat. conv., bank 2 f°signal  
 0x016728EC 28EC Oxygen sensor after cat. conv., bank 1 f°signal at full load  
 0x016728ED 28ED Oxygen sensor after cat. conv., bank 2 f°signal at full load  
 0x016728F0 28F0 Oxygen sensor after cat. conv., bank 1 f°system check  
 0x016728F1 28F1 Oxygen sensor after cat. conv., bank 2 f°system check  
 0x016728F2 28F2 Oxygen sensors, bank 1 f°trim control  
 0x016728F3 28F3 Oxygen sensors, bank 2 f°trim control  
 0x016728F4 28F4 Oxygen sensor before cat. conv., bank 1 f°cold test  
 0x016728F5 28F5 Oxygen sensor before cat. conv., bank 2 f°cold test  
 0x016728F6 28F6 Oxygen sensor after cat. conv., bank 1 f°cold test  
 0x016728F7 28F7 Oxygen sensor after cat. conv., bank 2 f°cold test  
 0x016728F9 28F9 Rough running f°segment time measurement  
 0x016728FA 28FA CAN torque for switching phase  
 0x016728FB 28FB Active Cruise Control (ACC)  
 0x016728FF 28FF DME self-test  
 0x01672900 2900 DME self-test  
 0x01672960 2960 Oxygen sensor before cat. conv., bank 1  
 0x01672961 2961 Oxygen sensor before cat. conv., bank 2  
 0x01672962 2962 Oxygen sensor before cat. conv., bank 1: dynamics  
 0x01672963 2963 Oxygen sensor before cat. conv., bank 2: dynamics  
 0x01672964 2964 Oxygen sensor before cat. conv., bank 1: ceramic temperature  
 0x01672965 2965 Oxygen sensor before cat. conv., bank 2: ceramic temperature  
 0x01672966 2966 Oxygen sensor before cat. conv., bank 1: signal  
 0x01672967 2967 Oxygen sensor before cat. conv., bank 2: signal  
 0x0167296A 296A Oxygen sensor before cat. conv.: mixed up  
 0x0167296B 296B Oxygen sensor after cat. conv.: mixed up  
 0x01672973 2973 Oxygen sensor before cat. conv., bank 1: lines  
 0x01672974 2974 Oxygen sensor before cat. conv., bank 2: lines  
 0x01672986 2986 Oxygen sensor before cat. conv., bank 1: system check  
 0x01672987 2987 Oxygen sensor before cat. conv., bank 2: system check  
 0x01672988 2988 Oxygen sensor before cat. conv., bank 1: system check  
 0x01672989 2989 Oxygen sensor before cat. conv., bank 2: system check  
 0x0167299A 299A CAN fault management EGS  
 0x0167299B 299B Battery sensor  
 0x0167299C 299C Battery sensor  
 0x0167299D 299D Battery sensor  
 0x0167299E 299E Oxygen sensor after cat. conv., bank 1: signal  
 0x0167299F 299F Oxygen sensor after cat. conv., bank 1: signal  
 0x016729A0 29A0 Oxygen sensor after cat. conv., bank 2: signal  
 0x016729A1 29A1 Oxygen sensor after cat. conv., bank 2: signal  
 0x016729A2 29A2 Oxygen sensor before cat. conv., bank 2: signal  
 0x016729A3 29A3 Oxygen sensor before cat. conv., bank 2: signal  
 0x016729A4 29A4 Oxygen-sensor heater before cat. conv., bank 1: activation  
 0x016729A5 29A5 Oxygen-sensor heater before cat. conv., bank 2: activation  
 0x016729A6 29A6 Oxygen sensor before cat. conv., bank 1: signal

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0x016729A7 29A7 Oxygen sensor before cat. conv., bank 1: signal  
 0x016729A8 29A8 Power management: vehicle electrical system  
 0x016729A9 29A9 Power management: battery  
 0x016729AB 29AB Torque request via CAN  
 0x016729AE 29AE Tank cap  
 0x016729B5 29B5 Secondary-air system  
 0x016729B6 29B6 Cylinder cutout  
 0x01673C1D 3C1D Crankshaft sensor:signal  
 0x01673C1E 3C1E Inlet camshaft sensor:signal  
 0x01673C1F 3C1F Exhaust camshaft sensor:signal  
 0x01682712 2712 DMTL solenoid value,output stage  
 0x01682713 2713 Oxygen sensors before catalytic converter mixed up  
 0x01682714 2714 Oxygen-sensors heater after cat.,bank 2  
 0x01682715 2715 Oxygen-sensors heater before cat.,bank 2  
 0x01682716 2716 Activation,oxygen-sensors heater after cat.,bank 1  
 0x01682717 2717 Activation,oxygen-sensors heater after cat.,bank 2  
 0x0168271A 271A Oxygen sensor before cat.,bank 1 - signal  
 0x0168271B 271B Output stage,heater,sensors before catalytic converter  
 0x0168271C 271C Oxygen sensor after cat.,bank 1 - signal  
 0x0168271D 271D Oxygen-sensors heater before cat.,bank 1  
 0x0168271E 271E Oxygen-sensors heater after cat.,bank 1  
 0x0168271F 271F Oxygen-sensor ageing,period  
 0x01682720 2720 Oxygen-sensor ageing,TV  
 0x01682721 2721 Oxygen-sensor ageing after cat.,bank 1  
 0x01682722 2722 Oxygen sensor before cat.,bank 2 - signal  
 0x01682723 2723 Output stage,heater,sensorsbefore catalytic converter,bank 2  
 0x01682724 2724 Oxygen sensor after cat.,bank 2 - signal  
 0x01682725 2725 Oxygen-sensor ageing,period duration,bank 2  
 0x01682726 2726 Oxygen-sensor ageing,TV,bank 2  
 0x01682727 2727 Oxygen-sensor ageing after cat.,bank 2  
 0x01682728 2728 Multiplicative mixture adaptation,bank 1 - control limit 2 reached  
 0x01682729 2729 Multiplicative mixture adaptation,bank 2 - control limit 2 reached  
 0x0168272A 272A Multiplicative mixture adaptation,bank 1 - control limit 1 reached  
 0x0168272B 272B Multiplicative mixture adaptation,bank 2 - control limit 1 reached  
 0x0168272C 272C Additive mixture adaptation,bank 1 - control limit reached  
 0x0168272D 272D Additive mixture adaptation,bank 2 - control limit reached  
 0x0168272E 272E LR adaptation,additive,per ignition  
 0x0168272F 272F LR adaptation,additive,per ignition(bank2)  
 0x01682731 2731 Function,camshaft control,inlet,bank 1  
 0x01682732 2732 Function,camshaft control,inlet,bank 2  
 0x01682737 2737 EWS 3.3 anti-tampering protection  
 0x01682738 2738 Catalytic-converter conversion,bank 1  
 0x01682739 2739 Catalytic-converter conversion,bank 1  
 0x0168273A 273A Catalytic-converter conversion,bank 2  
 0x0168273D 273D Catalytic-converter conversion,bank 2  
 0x01682742 2742 Misfire detection,cylinder 1  
 0x01682743 2743 Misfire detection,cylinder 5  
 0x01682744 2744 Misfire detection,cylinder 4  
 0x01682745 2745 Misfire detection,cylinder 8  
 0x01682746 2746 Misfire detection,cylinder 6  
 0x01682747 2747 Misfire detection,cylinder 3  
 0x01682748 2748 Misfire detection,cylinder 7  
 0x01682749 2749 Misfire detection,cylinder 2  
 0x0168274E 274E Misfire detection,sumcheck error  
 0x01682753 2753 Ignition circuit,cylinder 1  
 0x01682754 2754 Ignition circuit,cylinder 5  
 0x01682755 2755 Ignition circuit,cylinder 4  
 0x01682756 2756 Ignition circuit,cylinder 8  
 0x01682757 2757 Ignition circuit,cylinder 6  
 0x01682758 2758 Ignition circuit,cylinder 3  
 0x01682759 2759 Ignition circuit,cylinder 7  
 0x0168275A 275A Ignition circuit,cylinder 2  
 0x01682760 2760 Secondary-air system,bank 1



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0x01682761 2761 Secondary-air system,bank 2  
 0x01682762 2762 Secondary-air value  
 0x01682763 2763 Secondary-air value,bank 2  
 0x01682764 2764 Secondary-air pump,relay  
 0x01682765 2765 Activation,secondary-air value  
 0x01682769 2769 Throttle actuator-spring test  
 0x0168276B 276B Activation,secondary-air value,bank 2  
 0x0168276D 276D Function,tank-venting system  
 0x0168276E 276E Tank venting,function check,bank 2  
 0x01682772 2772 Tank-venting value,output stage  
 0x01682773 2773 Activation,tank-venting value,bank 2  
 0x01682774 2774 Engine switch-off time,plausibility  
 0x01682775 2775 Monitoring,engine torque,level 2  
 0x01682777 2777 Monitoring,computer function  
 0x01682778 2778 Switch,clutch  
 0x01682779 2779 DME self-test-RAM  
 0x0168277A 277A Brake-light switch  
 0x0168277B 277B DME self-test-ROM  
 0x0168277C 277C DME self-test-reset  
 0x0168277D 277D Battery voltage  
 0x0168277E 277E Limitation,engine torque,level 1  
 0x0168277F 277F Crankshaft sensor -engine-speed signal  
 0x01682780 2780 Crankshaft sensor -reference mark  
 0x01682781 2781 Camshaft sensor,inlet,bank 1  
 0x01682782 2782 Camshaft sensor,exhaust,bank 1  
 0x01682783 2783 Hot-film air-mass flow sensor  
 0x01682785 2785 Thr. potentiometer  
 0x01682786 2786 Throttle-value potentiometer 1  
 0x01682787 2787 Throttle-value potentiometer 2  
 0x01682788 2788 Vehicle speed  
 0x01682789 2789 Detection,rough road  
 0x0168278B 278B Temperature sensor,engine coolant  
 0x0168278C 278C Temperature sensor,intake-air temperature  
 0x0168278D 278D Temperature sensor,radiator outlet  
 0x0168278E 278E Differential-pressure sensor,intake manifold  
 0x0168278F 278F LowRange signal implausible  
 0x01682790 2790 Transmission temperature  
 0x01682791 2791 Throttle-replacement detection without adaptation  
 0x01682792 2792 Throttle-position monitoring  
 0x01682793 2793 Throttle actuator -control range  
 0x01682794 2794 Throttle actuator -activation  
 0x01682795 2795 Throttle actuator -spring test  
 0x01682796 2796 Throttle actuator -test,lower stop  
 0x01682797 2797 Throttle actuator -booster adjustment  
 0x01682798 2798 Throttle actuator -limp-home position  
 0x01682799 2799 Throttle -value adaptation - abort due to environmental conditions  
 0x0168279A 279A Throttle actuator -relearn abort  
 0x0168279B 279B Thermostat stuck  
 0x0168279C 279C Output stage,thermostat,map cooling  
 0x0168279D 279D Output stage,electric fan  
 0x0168279E 279E Output stage,exhaust flap  
 0x0168279F 279F Activation,fan A  
 0x016827A0 27A0 Fan,electronics box  
 0x016827A4 27A4 EWS3.3 interface engine management-immobiliser  
 0x016827A6 27A6 Fuel injector,cylinder 1  
 0x016827A7 27A7 Fuel injector,cylinder 5  
 0x016827A8 27A8 Fuel injector,cylinder 4  
 0x016827A9 27A9 Fuel injector,cylinder 8  
 0x016827AA 27AA Fuel injector,cylinder 6  
 0x016827AB 27AB Fuel injector,cylinder 3  
 0x016827AC 27AC Fuel injector,cylinder 7  
 0x016827AD 27AD Fuel injector,cylinder 2  
 0x016827B3 27B3 Plausibility,throttle to hot-film air-mass flow sensor

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0x016827B4 27B4 Ambient-pressure sensor  
 0x016827B5 27B5 Camshaft control,inlet,bank 1 -output stage  
 0x016827B6 27B6 Camshaft control,inlet,bank 2 -output stage  
 0x016827B7 27B7 Activation,fuel-pump relay  
 0x016827B8 27B8 Differential-pressure sensor,intake manifold -plausibility  
 0x016827BB 27BB Function,camshaft control,exhaust,bank 1  
 0x016827BC 27BC Function,camshaft control,exhaust,bank 2  
 0x016827BD 27BD Camshaft control,exhaust,bank 1-output stage  
 0x016827BE 27BE Camshaft control,exhaust,bank 2-output stage  
 0x016827BF 27BF Camshaft sensor,inlet,bank 2  
 0x016827C0 27C0 Camshaft sensor,exhaust,bank 2  
 0x016827C1 27C1 All camshaft sensors failed  
 0x016827C2 27C2 Activaiton,A/C compressor  
 0x016827C8 27C8 Tank-leak diagnosis DMTL -major leak  
 0x016827CA 27CA Tank-leak diagnosis DMTL -activation,pump motor  
 0x016827CB 27CB Tank-leak diagnosis DMTL -minimal leak(0.5mm)  
 0x016827CC 27CC Tank-leak diagnosis DMTL -tank leak detected  
 0x016827CD 27CD Tank-leak diagnosis DMTL -module fault  
 0x016827CE 27CE Loading monitoring  
 0x016827D5 27D5 Idle-speed control faulty  
 0x016827D9 27D9 Tank-leak diagnosis DMTL -heater  
 0x016827DA 27DA Alternator fault  
 0x016827DC 27DC EWS3.3 random-code storage  
 0x016827E1 27E1 Monitoring,pedal-travel sensor  
 0x016827E2 27E2 Knock sensor 1  
 0x016827E3 27E3 Knock sensor 2  
 0x016827E4 27E4 Knock sensor 3  
 0x016827E5 27E5 Knock sensor 4  
 0x016827E6 27E6 Knock control-zero test,bank 1  
 0x016827E7 27E7 Knock control-offset,bank 1  
 0x016827E8 27E8 Knock control-test pulse,bank 1  
 0x016827E9 27E9 Knock control-zero test,bank 2  
 0x016827EA 27EA Can timeout HDEV  
 0x016827EB 27EB Can timeout TXU  
 0x016827F0 27F0 Plausibility,ACC intervention  
 0x016827F2 27F2 Plausibility,tank fill level  
 0x016827F7 27F7 Pedal-travel sensor,potentiometer 1  
 0x016827F8 27F8 Pedal-travel sensor,potentiometer 2  
 0x016827F9 27F9 Automatic starting -activation  
 0x016827FA 27FA Automatic starting -input signal  
 0x016827FB 27FB Radiator blind,activation(GLF)  
 0x016827FD 27FD Automatic starting -function  
 0x016827FE 27FE Knock control-offset,bank 2  
 0x016827FF 27FF Knock control-test pulse,bank 2  
 0x0168280A 280A Allocation,camshaft to crankshaft  
 0x01682812 2812 Oil temperature  
 0x01682813 2813 Engine management monitoring,group A  
 0x01682814 2814 Engine management monitoring,group B  
 0x01682815 2815 Engine management monitoring,group C  
 0x01682816 2816 Engine management monitoring:engine speed  
 0x01682818 2818 Voltage monitoring,sensor to air,bank 1  
 0x0168281D 281D BSD wire fault  
 0x0168281E 281E Variable intake system -output stage,servomotor  
 0x0168281F 281F Voltage monitoring,sensor to air bank 2  
 0x01682820 2820 Variable intake system -plausibility  
 0x01682821 2821 Variable intake system -temperature warning threshold  
 0x01682822 2822 Engine oil temperature,at times too high  
 0x01682823 2823 Oxygen-sensor heater before cat.,bank 1  
 0x01682824 2824 Oxygen-sensor heater before cat.,bank 2  
 0x01682825 2825 Oxygen-sensor ageing after cat.,bank 1  
 0x01682826 2826 Oxygen-sensor ageing after cat.,bank 2  
 0x01682827 2827 Heater coupling to signal path  
 0x0168282D 282D Heater coupling to signal path,bank 2

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0x0168282E 282E Movement,pedal-travel sensor  
 0x01682830 2830 Oxygen-sensor ageing after cat.,bank 2  
 0x01682832 2832 Plausibility diagnosis LSU by LSH after cat.B2  
 0x01682833 2833 Self-diagnosis CJ125 SPI communication,bank 2  
 0x01682834 2834 Open circuit,pump current,bank 2  
 0x01682835 2835 Short circuit,sensor leads,to ground or Ub B2  
 0x01682836 2836 LSU dynamically too slow,bank 2  
 0x0168283A 283A Oil-quality sensor  
 0x0168283E 283E Variable value gear -output stage,enable line  
 0x0168283F 283F Oil pressure switch  
 0x01682841 2841 Air-shrouded fuel injectors,activation  
 0x01682843 2843 Plausibility diagnosis LSU by LSH after cat.  
 0x01682844 2844 Self-diagnosis CJ125 SPI communication  
 0x01682849 2849 Open circuit,pump current  
 0x0168284A 284A Short circuit,sensor leads,to ground or Ub  
 0x0168284C 284C LSU dynamically too slow  
 0x0168284F 284F Speedometer in instrument cluster faulty  
 0x01682850 2850 Variable value gear -guide sensor,bank 1  
 0x01682851 2851 Variable value gear -guide sensor,bank 2  
 0x01682852 2852 Variable value gear -reference sensor,bank 1  
 0x01682853 2853 Variable value gear -reference sensor,bank 2  
 0x01682854 2854 Variable value gear -plausibility sensor,bank 1  
 0x01682855 2855 Variable value gear -plausibility sensor,bank 2  
 0x01682856 2856 Variable value gear -voltage supply,sensor,bank 1  
 0x01682857 2857 Variable value gear -voltage supply,sensor,bank 2  
 0x01682858 2858 Variable value gear -learning function,stop,bank 1  
 0x01682859 2859 Variable value gear -learning function,stop,bank 2  
 0x0168285A 285A Variable value gear -monitoring,servomotor,bank 1  
 0x0168285B 285B Variable value gear -monitoring,servomotor,bank 2  
 0x0168285C 285C Variable value gear -CAN communication,bank 1  
 0x0168285D 285D Variable value gear -CAN communication,bank 2  
 0x0168285E 285E Variable value gear -internal fault,control unit,bank 1  
 0x0168285F 285F Variable value gear -internal fault,control unit,bank 2  
 0x01682860 2860 Variable value gear -output stage,servomotor,bank 1  
 0x01682861 2861 Variable value gear -output stage,servomotor,bank 2  
 0x01682862 2862 Variable value gear -voltage supply,power output stage,bank 1  
 0x01682863 2863 Variable value gear -voltage supply,power output stage,bank 2  
 0x01682864 2864 DMTL -activation fault,pump motor  
 0x01682865 2865 Variable value gear -power limitation in limp-home operating mode  
 0x01682866 2866 Variable value gear -learning stops necessary  
 0x01682867 2867 Valvetronic,system overload,bank 1  
 0x01682868 2868 Valvetronic,system overload,bank 2  
 0x0168287C 287C Pressure sensor,intake manifold  
 0x01682889 2889 Monitoring,plausibility,RAM backup  
 0x016828C8 28C8 Oxygen-sensor-controller deviation,bank 1  
 0x016828C9 28C9 Oxygen-sensor-controller deviation,bank 2  
 0x016828D6 28D6 No coding,engine management  
 0x016828D7 28D7 Communication with alternator  
 0x016828D8 28D8 Read error,RAM backup error  
 0x016828DB 28DB Variable value gear,min.lift adaptation exceeded  
 0x016828DC 28DC Alternator 2 communication  
 0x0168290A 290A Active Front Steering torque  
 0x0168292B 292B LSU compensating line  
 0x0168292C 292C LSU compensating line,bank 2  
 0x0168292D 292D LSU Nernst cell,open circuit  
 0x0168292E 292E LSU Nernst cell,open circuit,bank 2  
 0x01682930 2930 LSU virtual ground,open circuit  
 0x0168299B 299B Battery sensor  
 0x0168299C 299C Battery sensor  
 0x0168299D 299D Battery sensor  
 0x016829A8 29A8 Power management,network fault  
 0x016829A9 29A9 Power management  
 0x016829AE 29AE Fuel tank cap open

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0x016929CC	29CC	Combustion misfires, several cylinders
0x016929CD	29CD	Combustion misfires, cylinder 1
0x016929CE	29CE	Combustion misfires, cylinder 2
0x016929CF	29CF	Combustion misfires, cylinder 3
0x016929D0	29D0	Combustion misfires, cylinder 4
0x016929D1	29D1	Combustion misfires, cylinder 5
0x016929D2	29D2	Combustion misfires, cylinder 6
0x016929D3	29D3	Combustion misfires, cylinder 7
0x016929D4	29D4	Combustion misfires, cylinder 8
0x016929D9	29D9	Misfire at low tank fill level
0x016929DD	29DD	Poor road surface detection
0x016929E5	29E5	Fuel mixture adaptation, upper engine speed range
0x016929E6	29E6	Fuel mixture adaptation 2, upper engine speed range
0x016929E7	29E7	Fuel mixture adaptation, idling, per time unit
0x016929E8	29E8	Fuel mixture adaptation 2, idling, per time unit
0x016929ED	29ED	Fuel mixture adaptation, lower engine speed range
0x016929EE	29EE	Fuel mixture adaptation 2, lower engine speed range
0x016929EF	29EF	Fuel mixture adaptation, sumcheck error
0x016929F0	29F0	Fuel mixture adaptation 2, sumcheck error
0x016929F4	29F4	Catalytic-converter conversion
0x016929F5	29F5	Catalytic-converter conversion 2
0x016929FE	29FE	Secondary-air system
0x01692A03	2A03	Secondary-air pump relay, activation
0x01692A08	2A08	Secondary air system 2
0x01692A12	2A12	DMTL solenoid valve, activation
0x01692A13	2A13	DMTL leak diagnosis pump, activation
0x01692A14	2A14	DMTL, superfine leak
0x01692A15	2A15	DMTL, minor leak
0x01692A16	2A16	DMTL, superfine leak
0x01692A17	2A17	DMTL, system fault
0x01692A18	2A18	DMTL, heater: activation
0x01692A19	2A19	Tank-venting valve, activation
0x01692A1A	2A1A	Tank-venting system, function
0x01692A1B	2A1B	Tank cap
0x01692A1D	2A1D	Tank fill level, plausibility
0x01692A1E	2A1E	Tank fill level, signal
0x01692A58	2A58	Valvetronic, power supply
0x01692A59	2A59	Valvetronic, eccentric shaft sensor: guide
0x01692A5A	2A5A	Valvetronic, eccentric shaft sensor 2: guide
0x01692A5B	2A5B	Valvetronic, eccentric shaft sensor: reference
0x01692A5C	2A5C	Valvetronic, eccentric shaft sensor 2: reference
0x01692A5D	2A5D	Valvetronic, eccentric shaft sensor: plausibility
0x01692A5E	2A5E	Valvetronic, eccentric shaft sensor 2: plausibility
0x01692A5F	2A5F	Valvetronic, eccentric shaft sensor: power supply
0x01692A60	2A60	Valvetronic, eccentric shaft sensor 2: power supply
0x01692A61	2A61	Valvetronic, adjustment range
0x01692A62	2A62	Valvetronic, adjustment range 2
0x01692A63	2A63	Valvetronic, actuator motor: monitoring sluggish movement, direction of rotation
0x01692A64	2A64	Valvetronic, actuator motor 2: monitoring sluggish movement, direction of rotation
0x01692A65	2A65	Valvetronic, internal fault
0x01692A66	2A66	Valvetronic, internal fault 2
0x01692A67	2A67	Valvetronic, actuator motor: activation
0x01692A68	2A68	Valvetronic, actuator motor 2: activation
0x01692A69	2A69	Valvetronic, actuator motor: power supply
0x01692A6A	2A6A	Valvetronic, actuator motor 2: power supply
0x01692A6B	2A6B	Valvetronic, power limitation
0x01692A6C	2A6C	Valvetronic, position at new start: plausibility
0x01692A6D	2A6D	Valvetronic, electrical overload protection
0x01692A6E	2A6E	Valvetronic, electrical overload protection 2
0x01692A6F	2A6F	Valvetronic, minimum lift
0x01692A80	2A80	Intake VANOS, activation

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0x01692A81 2A81 Inlet VANOS, activation 2  
 0x01692A83 2A83 VANOS intake  
 0x01692A84 2A84 Inlet VANOS 2  
 0x01692A85 2A85 Exhaust VANOS, activation  
 0x01692A86 2A86 Exhaust VANOS, activation 2  
 0x01692A88 2A88 VANOS exhaust  
 0x01692A89 2A89 Exhaust VANOS 2  
 0x01692A8A 2A8A Inlet VANOS, adaptation stop  
 0x01692A8B 2A8B Inlet VANOS, adaptation stop 2  
 0x01692A8C 2A8C Exhaust VANOS, adaptation stop  
 0x01692A8D 2A8D Exhaust VANOS, adaptation stop 2  
 0x01692A8E 2A8E Inlet camshaft, tooth offset to crankshaft  
 0x01692A8F 2A8F Inlet camshaft 2, tooth offset to crankshaft  
 0x01692A90 2A90 Exhaust camshaft, tooth offset to crankshaft  
 0x01692A91 2A91 Exhaust camshaft 2, tooth offset to crankshaft  
 0x01692B5C 2B5C Crankshaft sensor, signal  
 0x01692B5D 2B5D Crankshaft sensor, plausibility  
 0x01692B62 2B62 Camshaft sensor, intake  
 0x01692B63 2B63 Camshaft sensor, exhaust  
 0x01692B64 2B64 Camshaft sensor 2, intake  
 0x01692B65 2B65 Camshaft sensor 2, exhaust  
 0x01692B66 2B66 Camshaft sensor, master  
 0x01692B70 2B70 Variable intake system, activation  
 0x01692B71 2B71 Variable intake system  
 0x01692B72 2B72 Variable intake system, temperature warning threshold  
 0x01692B73 2B73 Variable intake system, plausibility  
 0x01692B80 2B80 Idle-speed control  
 0x01692B98 2B98 Control unit, internal fault: RAM backup, plausibility  
 0x01692B99 2B99 Control unit, internal fault: RAM backup  
 0x01692B9A 2B9A Control unit, internal fault: RAM  
 0x01692B9B 2B9B Control unit, internal fault: ROM  
 0x01692B9C 2B9C Control unit, internal fault: reset  
 0x01692B9D 2B9D Control unit, internal fault: overvoltage  
 0x01692BC0 2BC0 Ambient temperature sensor, plausibility  
 0x01692BC1 2BC1 Ambient temperature sensor, signal  
 0x01692C24 2C24 Oxygen sensors before catalytic converter mixed up  
 0x01692C31 2C31 Oxygen sensor before catalytic converter, trim control  
 0x01692C32 2C32 Oxygen sensor before catalytic converter 2, trim control  
 0x01692C37 2C37 Oxygen sensor before catalytic converter, heater coupling  
 0x01692C38 2C38 Oxygen sensor before catalytic converter 2, heater coupling  
 0x01692C39 2C39 Oxygen sensor before catalytic converter, dynamics  
 0x01692C3A 2C3A Oxygen sensor before catalytic converter 2, dynamics  
 0x01692C3B 2C3B Oxygen sensor before catalytic converter, not connected  
 0x01692C3C 2C3C Oxygen sensor before catalytic converter 2, not connected  
 0x01692C47 2C47 Oxygen sensor before catalytic converter, sensor wires  
 0x01692C48 2C48 Oxygen sensor before catalytic converter 2, sensor wires  
 0x01692C49 2C49 Oxygen sensor before catalytic converter, plausibility  
 0x01692C4A 2C4A Oxygen sensor before catalytic converter 2, plausibility  
 0x01692C4B 2C4B Control unit, internal fault: oxygen sensor module  
 0x01692C4C 2C4C Control unit, internal fault: oxygen sensor module 2  
 0x01692C4D 2C4D Oxygen sensor before catalytic converter, pump current cable  
 0x01692C4E 2C4E Oxygen sensor before catalytic converter 2, pump current cable  
 0x01692C4F 2C4F Oxygen sensor before catalytic converter, calibration cable  
 0x01692C50 2C50 Oxygen sensor before catalytic converter 2, calibration cable  
 0x01692C51 2C51 Oxygen sensor before catalytic converter, Nernst cable  
 0x01692C52 2C52 Oxygen sensor before catalytic converter 2, Nernst cable  
 0x01692C53 2C53 Oxygen sensor before catalytic converter, virtual earth  
 0x01692C54 2C54 Oxygen sensor before catalytic converter 2, virtual earth  
 0x01692C61 2C61 Oxygen sensor before catalytic converter, electrical fault  
 0x01692C62 2C62 Oxygen sensor before catalytic converter 2, electrical fault  
 0x01692C6D 2C6D Oxygen sensor after catalytic converter, ageing  
 0x01692C6E 2C6E Oxygen sensor after catalytic converter 2, ageing  
 0x01692C71 2C71 Oxygen sensor after catalytic converter

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0x01692C72 2C72 Oxygen sensor before catalytic converter 2  
 0x01692C9C 2C9C Oxygen sensor heating before catalytic converter, activation  
 0x01692C9D 2C9D Oxygen sensor heating before catalytic converter 2, activation  
 0x01692C9E 2C9E Oxygen sensor heating after catalytic converter, activation  
 0x01692C9F 2C9F Oxygen sensor heating after catalytic converter 2, activation  
 0x01692CA0 2CA0 Oxygen sensor heating before catalytic converter  
 0x01692CA1 2CA1 Oxygen sensor heating before catalytic converter 2  
 0x01692CA8 2CA8 Oxygen sensor heating after catalytic converter, function  
 0x01692CA9 2CA9 Oxygen sensor heating after catalytic converter 2, function  
 0x01692CEF 2CEF Throttle-valve actuator, activation  
 0x01692CF0 2CF0 Throttle-valve actuator, control range  
 0x01692CF1 2CF1 Throttle-valve actuator, position monitoring  
 0x01692CF8 2CF8 Throttle-valve potentiometer  
 0x01692CF9 2CF9 Throttle-valve potentiometer  
 0x01692CFA 2CFA Throttle-valve potentiometer 2  
 0x01692CFF 2CFF Throttle-valve actuator, amplifier calibration  
 0x01692D00 2D00 Throttle-valve actuator, spring test of closing spring  
 0x01692D01 2D01 Throttle-valve actuator, spring test of opening spring  
 0x01692D02 2D02 Throttle-valve actuator, emergency air point  
 0x01692D03 2D03 Throttle-valve actuator, cancel adaptation due to environmental conditions  
 0x01692D04 2D04 Throttle-valve actuator, test of lower limit position  
 0x01692D05 2D05 Throttle-valve actuator, cancel with UMA relearning  
 0x01692D0F 2D0F Air-mass sensor, signal  
 0x01692D13 2D13 Air mass sensor, rationality  
 0x01692D14 2D14 Air mass sensor, correction signal  
 0x01692D1A 2D1A Accelerator pedal module, pedal-travel sensor  
 0x01692D1B 2D1B Accelerator pedal module, pedal-travel sensor, signal 1  
 0x01692D1C 2D1C Accelerator pedal module, pedal-travel sensor, signal 2  
 0x01692D28 2D28 Differential-pressure sensor, intake manifold: signal  
 0x01692D29 2D29 Differential-pressure sensor, intake manifold: plausibility  
 0x01692D32 2D32 Differential-pressure sensor, intake manifold: plausibility  
 0x01692D6E 2D6E Control unit, internal fault: monitoring of actual torque  
 0x01692D70 2D70 Control unit, internal fault: monitoring of engine functions  
 0x01692D71 2D71 Control unit, internal fault: monitoring of input variables  
 0x01692D72 2D72 Control unit, internal fault: monitoring of hardware  
 0x01692D75 2D75 Control unit, internal fault: monitoring of engine speed  
 0x01692D76 2D76 Control unit, internal fault: monitoring of accelerator pedal module  
 0x01692D78 2D78 Air mass flow adjustment  
 0x01692DDD 2DDD No message from Valvetronic  
 0x01692DDE 2DDE Local CAN communication fault  
 0x01692DDF 2DDF Local CAN communication fault  
 0x01692DEB 2DEB Power management, vehicle electrical system monitoring  
 0x01692DEC 2DEC Power management, battery monitoring  
 0x01692DED 2DED Power management, closed-circuit current monitoring  
 0x01692E24 2E24 Ignition coil, cylinder 1  
 0x01692E25 2E25 Ignition coil, cylinder 2  
 0x01692E26 2E26 Ignition coil, cylinder 3  
 0x01692E27 2E27 Ignition coil, cylinder 4  
 0x01692E28 2E28 Ignition coil, cylinder 5  
 0x01692E29 2E29 Ignition coil, cylinder 6  
 0x01692E2A 2E2A Ignition coil, cylinder 7  
 0x01692E2B 2E2B Ignition coil, cylinder 8  
 0x01692E30 2E30 Fuel injector, cylinder 1, activation  
 0x01692E31 2E31 Fuel injector, cylinder 2, activation  
 0x01692E32 2E32 Fuel injector, cylinder 3, activation  
 0x01692E33 2E33 Fuel injector, cylinder 4, activation  
 0x01692E34 2E34 Fuel injector, cylinder 5, activation  
 0x01692E35 2E35 Fuel injector, cylinder 6, activation  
 0x01692E36 2E36 Fuel injector, cylinder 7, activation  
 0x01692E37 2E37 Fuel injector, cylinder 8, activation  
 0x01692E68 2E68 Knock-sensor signal 1  
 0x01692E69 2E69 Knock-sensor signal 2

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0x01692E6A 2E6A Knock-sensor signal 3  
 0x01692E6B 2E6B Knock-sensor signal 4  
 0x01692E72 2E72 Control unit, internal fault: knock sensor module  
 0x01692E73 2E73 Control unit, internal fault: knock sensor module  
 0x01692E7C 2E7C Bit-serial data interface, signal  
 0x01692E8B 2E8B Intelligent battery sensor, signal  
 0x01692E8C 2E8C Intelligent battery sensor, function  
 0x01692E8D 2E8D Intelligent battery sensor, signal transmission  
 0x01692E97 2E97 Alternator  
 0x01692EA0 2EA0 Oil condition sensor  
 0x01692EB8 2EB8 No BSD message from intelligent battery sensor  
 0x01692EBC 2EBC No BSD message from oil condition sensor  
 0x01692EBD 2EBD No BSD message from alternator  
 0x01692EE0 2EE0 Coolant temperature sensor, signal  
 0x01692EE1 2EE1 Coolant temperature sensor, plausibility  
 0x01692EE4 2EE4 Coolant temperature sensor, plausibility, parallel connection  
 0x01692EEA 2EEA Temperature sensor cooler outlet, signal  
 0x01692EEC 2EEC Temperature sensor cooler outlet, plausibility  
 0x01692EF4 2EF4 Map thermostat, mechanism  
 0x01692EF5 2EF5 Map thermostat, activation  
 0x01692EF6 2EF6 Map thermostat  
 0x01692EFE 2EFE Electric fan, activation  
 0x01692F08 2F08 Intake-air temperature sensor, signal  
 0x01692F09 2F09 Intake air temperature sensor, plausibility  
 0x01692F0D 2F0D Radiator blind, activation, (GLF)  
 0x01692F0F 2F0F Radiator blind, self-diagnosis  
 0x01692F12 2F12 Air-conditioning compressor, activation  
 0x01692F17 2F17 Engine oil temperature, at times too high  
 0x01692F26 2F26 Coordinator, heat management  
 0x01692F44 2F44 EWS preventing manipulation  
 0x01692F45 2F45 Interface EWS-DME  
 0x01692F46 2F46 EWS random code saving  
 0x01692F4E 2F4E Vehicle speed, signal  
 0x01692F4F 2F4F vehicle speed, plausibility  
 0x01692F59 2F59 Automatic start, start signal  
 0x01692F5A 2F5A Automatic starting device  
 0x01692F62 2F62 Brake-light switch  
 0x01692F67 2F67 Clutch switch, signal  
 0x01692F6C 2F6C Exhaust-gas flap, activation  
 0x01692F71 2F71 Electronics-box fan, activation  
 0x01692F77 2F77 Ambient-pressure sensor, plausibility  
 0x01692F78 2F78 Control unit, internal fault: ambient-pressure sensor  
 0x01692F7B 2F7B Oil-pressure switch, plausibility  
 0x01692F80 2F80 System time, plausibility  
 0x01692F8A 2F8A Battery voltage  
 0x01692F94 2F94 Fuel-pump relay, activation  
 0x01692F9E 2F9E Thermal oil-level sensor  
 0x01692FA3 2FA3 No coding  
 0x016A29CC 29CC Combustion misfires, several cylinders  
 0x016A29CD 29CD Combustion misfires, cylinder 1  
 0x016A29CE 29CE Combustion misfires, cylinder 2  
 0x016A29CF 29CF Combustion misfires, cylinder 3  
 0x016A29D0 29D0 Combustion misfires, cylinder 4  
 0x016A29D1 29D1 Combustion misfires, cylinder 5  
 0x016A29D2 29D2 Combustion misfires, cylinder 6  
 0x016A29D9 29D9 Misfire at low tank fill level  
 0x016A29DA 29DA Crankshaft sensor, segment adaptation  
 0x016A29DB 29DB Irregular running, segment timing  
 0x016A29DC 29DC Cylinder injection cutout  
 0x016A29E0 29E0 Mixture control  
 0x016A29E1 29E1 Mixture control 2  
 0x016A29F4 29F4 Catalytic-converter conversion  
 0x016A29F5 29F5 Catalytic-converter conversion 2

# Bmw Code Sheet.txt

0x016A29FF	29FF	Secondary-air system
0x016A2A00	2A00	Secondary-air system
0x016A2A01	2A01	Secondary-air valve, mechanism
0x016A2A02	2A02	Secondary-air valve, activation
0x016A2A03	2A03	Secondary-air pump relay, activation
0x016A2A04	2A04	Secondary-air mass sensor, plausibility
0x016A2A07	2A07	Secondary-air valve, mechanism
0x016A2A12	2A12	DMTL solenoid valve, activation
0x016A2A13	2A13	DMTL leak diagnosis pump, activation
0x016A2A15	2A15	DMTL, minor leak
0x016A2A16	2A16	DMTL, superfine leak
0x016A2A17	2A17	DMTL, system fault
0x016A2A18	2A18	DMTL, heater: activation
0x016A2A19	2A19	Tank-venting valve, activation
0x016A2A1A	2A1A	Tank-venting system, function
0x016A2A1B	2A1B	Tank cap
0x016A2A1C	2A1C	Tank fill level, plausibility
0x016A2A2E	2A2E	Mixture control
0x016A2A2F	2A2F	Mixture control 2
0x016A2A30	2A30	Valvetronic, eccentric shaft sensor: power supply
0x016A2A31	2A31	Valvetronic, eccentric shaft sensor: guide
0x016A2A32	2A32	Valvetronic, eccentric shaft sensor: reference
0x016A2A33	2A33	Valvetronic, eccentric shaft sensor: guide
0x016A2A34	2A34	Valvetronic, eccentric shaft sensor: reference
0x016A2A35	2A35	Valvetronic, eccentric shaft sensor: guide
0x016A2A36	2A36	Valvetronic, eccentric shaft sensor: reference
0x016A2A37	2A37	Valvetronic, eccentric shaft sensor: plausibility
0x016A2A38	2A38	Valvetronic, monitoring, sluggish movement
0x016A2A39	2A39	Valvetronic, adjustment range
0x016A2A3A	2A3A	Valvetronic, internal fault
0x016A2A3B	2A3B	Valvetronic, servomotor: direction of rotation
0x016A2A3C	2A3C	Valvetronic relay, activation
0x016A2A3D	2A3D	Valvetronic, actuator motor: activation
0x016A2A3E	2A3E	Valvetronic, actuator motor: overload
0x016A2A3F	2A3F	Valvetronic, actuator motor: power supply
0x016A2A40	2A40	Valvetronic, thermal overload protection
0x016A2A41	2A41	Valvetronic, electrical overload protection
0x016A2A42	2A42	Valvetronic, position at new start: plausibility
0x016A2A43	2A43	Valvetronic, thermal overload protection: warning threshold
0x016A2A44	2A44	Valvetronic, power limitation
0x016A2A45	2A45	Valvetronic, actuator motor: plausibility
0x016A2A46	2A46	Valvetronic, adaptation
0x016A2A47	2A47	Valvetronic, eccentric shaft sensor: plausibility
0x016A2A80	2A80	Intake VANOS, activation
0x016A2A82	2A82	VANOS intake
0x016A2A85	2A85	Exhaust VANOS, activation
0x016A2A87	2A87	Exhaust VANOS, mechanism
0x016A2A94	2A94	Crankshaft sensor, signal
0x016A2A95	2A95	Crankshaft sensor, synchronization
0x016A2A96	2A96	Crankshaft sensor, tooth fault
0x016A2A97	2A97	Crankshaft sensor, gap fault
0x016A2A98	2A98	Crankshaft-inlet camshaft, correlation
0x016A2A99	2A99	Crankshaft-exhaust camshaft, correlation
0x016A2A9A	2A9A	Camshaft sensor, inlet, signal
0x016A2A9B	2A9B	Camshaft sensor, exhaust, signal
0x016A2A9E	2A9E	Camshaft sensor, inlet, synchronization
0x016A2A9F	2A9F	Camshaft sensor, exhaust, synchronization
0x016A2AA0	2AA0	Camshaft sensor, inlet, signal
0x016A2AA1	2AA1	Camshaft sensor, exhaust, signal
0x016A2AA2	2AA2	Camshaft sensor, inlet, gap loss
0x016A2AA3	2AA3	Camshaft sensor, exhaust, gap loss
0x016A2AA8	2AA8	Variable intake system, servomotor: activation
0x016A2AA9	2AA9	Variable intake system, servomotor 2: activation



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0x016A2AAA 2AAA Variable intake system, plausibility  
 0x016A2AAB 2AAB Variable intake system, self-diagnosis  
 0x016A2AAC 2AAC Variable intake system 2, self-diagnosis  
 0x016A2AAD 2AAD Fuel pump, emergency shutoff  
 0x016A2AAE 2AAE Fuel pump  
 0x016A2AB2 2AB2 Control unit, internal fault: RAM  
 0x016A2AB3 2AB3 Control unit, internal fault: checksum  
 0x016A2AB4 2AB4 Control unit, internal fault: RAM checksum  
 0x016A2AB5 2AB5 Control unit, internal fault: knock sensor module  
 0x016A2AB6 2AB6 Control unit, internal fault: multiple output stage module  
 0x016A2AC1 2AC1 Sound flap, activation  
 0x016A2AC6 2AC6 Button, Dynamic Driving Control(SPORT button), signal  
 0x016A2ACB 2ACB DME master relay, activation  
 0x016A2ACC 2ACC DME master relay, shift delay  
 0x016A2ADF 2ADF Idle speed control, engine speed  
 0x016A2AE0 2AE0 Idle speed control during cold start, plausibility  
 0x016A2AE1 2AE1 Power requirement at idle too high  
 0x016A2AE4 2AE4 Engine breather heating relay, activation  
 0x016A2C24 2C24 Oxygen sensors before catalytic converter mixed up  
 0x016A2C27 2C27 Oxygen sensor before catalytic converter, system check  
 0x016A2C28 2C28 Oxygen sensor before catalytic converter 2, system check  
 0x016A2C2B 2C2B Oxygen sensor before catalytic converter, system check  
 0x016A2C2C 2C2C Oxygen sensor before catalytic converter 2, system check  
 0x016A2C2D 2C2D Oxygen sensor before catalytic converter, overrun check  
 0x016A2C2E 2C2E Oxygen sensor before catalytic converter 2, overrun check  
 0x016A2C31 2C31 Oxygen sensor before catalytic converter, trim control  
 0x016A2C32 2C32 Oxygen sensor before catalytic converter 2, trim control  
 0x016A2C37 2C37 Oxygen sensor before catalytic converter, heater coupling  
 0x016A2C38 2C38 Oxygen sensor before catalytic converter 2, heater coupling  
 0x016A2C39 2C39 Oxygen sensor before catalytic converter, dynamics  
 0x016A2C3A 2C3A Oxygen sensor before catalytic converter 2, dynamics  
 0x016A2C3B 2C3B Oxygen sensor before catalytic converter, not connected  
 0x016A2C3C 2C3C Oxygen sensor before catalytic converter 2, not connected  
 0x016A2C3D 2C3D Oxygen sensor before catalytic converter, line fault  
 0x016A2C3E 2C3E Oxygen sensor before catalytic converter 2, line fault  
 0x016A2C3F 2C3F Control unit, internal fault: oxygen sensor, evaluation module  
 0x016A2C40 2C40 Control unit, internal fault: oxygen sensor 2, evaluation module  
 0x016A2C41 2C41 Control unit, internal fault: oxygen sensor  
 0x016A2C42 2C42 Control unit, internal fault: oxygen sensor 2  
 0x016A2C6A 2C6A Oxygen sensors after catalytic converter, mixed up  
 0x016A2C6B 2C6B Oxygen sensor after catalytic converter, system check  
 0x016A2C6C 2C6C Oxygen sensor after catalytic converter 2, system check  
 0x016A2C6D 2C6D Oxygen sensor after catalytic converter, ageing  
 0x016A2C6E 2C6E Oxygen sensor after catalytic converter 2, ageing  
 0x016A2C6F 2C6F Oxygen sensor after catalytic converter, signal at full load  
 0x016A2C70 2C70 Oxygen sensor after catalytic converter 2, signal at full load  
 0x016A2C73 2C73 Oxygen sensor after catalytic converter, signal  
 0x016A2C74 2C74 Oxygen sensor after catalytic converter 2, signal  
 0x016A2C75 2C75 Oxygen sensor after catalytic converter, signal  
 0x016A2C76 2C76 Oxygen sensor after catalytic converter 2, signal  
 0x016A2C77 2C77 Oxygen sensor after catalytic converter, signal  
 0x016A2C78 2C78 Oxygen sensor after catalytic converter 2, signal  
 0x016A2C79 2C79 Oxygen sensor after catalytic converter, signal  
 0x016A2C7A 2C7A Oxygen sensor after catalytic converter 2, signal  
 0x016A2C7B 2C7B Oxygen sensor after catalytic converter, signal  
 0x016A2C7C 2C7C Oxygen sensor after catalytic converter 2, signal  
 0x016A2C7E 2C7E Oxygen sensor after catalytic converter, trim control  
 0x016A2C7F 2C7F Oxygen sensor after catalytic converter 2, trim control  
 0x016A2C9C 2C9C Oxygen sensor heating before catalytic converter, activation  
 0x016A2C9D 2C9D Oxygen sensor heating before catalytic converter 2, activation  
 0x016A2C9E 2C9E Oxygen sensor heating after catalytic converter, activation  
 0x016A2C9F 2C9F Oxygen sensor heating after catalytic converter 2, activation  
 0x016A2CA6 2CA6 Oxygen sensor heating before catalytic converter, function

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0x016A2CA7 2CA7 Oxygen sensor heating before catalytic converter 2, function  
0x016A2CA8 2CA8 Oxygen sensor heating after catalytic converter, function  
0x016A2CA9 2CA9 Oxygen sensor heating after catalytic converter 2, function  
0x016A2CEC 2CEC Throttle-valve actuator, jamming briefly  
0x016A2CED 2CED Throttle-valve actuator, jamming continuously  
0x016A2CEE 2CEE Throttle-valve actuator, sluggish movement  
0x016A2CEF 2CEF Throttle-valve actuator, activation  
0x016A2CF6 2CF6 Throttle-valve potentiometer 1, plausibility to are mass  
0x016A2CF7 2CF7 Throttle-valve potentiometer 2, plausibility to are mass  
0x016A2CF9 2CF9 Throttle-valve potentiometer 1  
0x016A2CFA 2CFA Throttle-valve potentiometer 2  
0x016A2CFB 2CFB Throttle-valve adaptation value  
0x016A2CFC 2CFC Throttle valve, start check  
0x016A2CFD 2CFD No throttle-valve adaptation value  
0x016A2CFE 2CFE Throttle valve, continuous adaptation  
0x016A2D06 2D06 Air-mass system  
0x016A2D07 2D07 Throttle valve  
0x016A2D09 2D09 Throttle valve  
0x016A2D0F 2D0F Air-mass sensor, signal  
0x016A2D1B 2D1B Accelerator pedal module, pedal-travel sensor, signal 1  
0x016A2D1C 2D1C Accelerator pedal module, pedal-travel sensor, signal 2  
0x016A2D1D 2D1D Accelerator pedal module, pedal-travel sensor 1, voltage supply  
0x016A2D1E 2D1E Accelerator pedal module, pedal-travel sensor 2, voltage supply  
0x016A2D1F 2D1F Accelerator pedal module, pedal-travel sensor potentiometer, signal  
0x016A2D20 2D20 Accelerator pedal module, pedal-travel sensor, plausibility between  
signal 1 and signal 2  
0x016A2D28 2D28 Differential-pressure sensor, intake manifold: signal  
0x016A2D29 2D29 Differential-pressure sensor, intake manifold: plausibility  
0x016A2D2A 2D2A Differential-pressure sensor, intake manifold: adaptation  
0x016A2D50 2D50 DME, internal fault: monitoring, cruise control  
0x016A2D51 2D51 Monitoring, air path  
0x016A2D52 2D52 DME, internal fault: monitoring, engine speed  
0x016A2D53 2D53 DME, internal fault: monitoring, engine speed limitation  
0x016A2D54 2D54 DME, internal fault: monitoring, engine speed limitation reset  
0x016A2D55 2D55 DME, internal fault: monitoring, accelerator-pedal module  
0x016A2D56 2D56 DME, internal fault: monitoring, idle speed control  
0x016A2D57 2D57 DME, internal fault: monitoring, external torque request  
0x016A2D58 2D58 DME, internal fault: monitoring, nominal torque  
0x016A2D59 2D59 DME, internal fault: monitoring, actual torque  
0x016A2D5A 2D5A Monitoring engine torque limiting  
0x016A2D5C 2D5C DME, internal fault: monitoring, hardware  
0x016A2DB5 2DB5 Cruise control, signal  
0x016A2DB6 2DB6 Cruise control, switch, multifunction steering wheel  
0x016A2DB7 2DB7 Cruise control, time limit of data transmission reached  
0x016A2DBE 2DBE Active cruise control, blocked for driving cycle  
0x016A2DC5 2DC5 Torque request via CAN, plausibility  
0x016A2DE0 2DE0 No message from electric fuel pump  
0x016A2DEB 2DEB Power management, vehicle electrical system monitoring  
0x016A2DEC 2DEC Power management, battery monitoring  
0x016A2DED 2DED Power management, closed-circuit current monitoring  
0x016A2E18 2E18 Firing, cylinder 1  
0x016A2E19 2E19 Firing, cylinder 2  
0x016A2E1A 2E1A Firing, cylinder 3  
0x016A2E1B 2E1B Firing, cylinder 4  
0x016A2E1C 2E1C Firing, cylinder 5  
0x016A2E1D 2E1D Firing, cylinder 6  
0x016A2E24 2E24 Ignition coil, cylinder 1  
0x016A2E25 2E25 Ignition coil, cylinder 2  
0x016A2E26 2E26 Ignition coil, cylinder 3  
0x016A2E27 2E27 Ignition coil, cylinder 4  
0x016A2E28 2E28 Ignition coil, cylinder 5  
0x016A2E29 2E29 Ignition coil, cylinder 6  
0x016A2E30 2E30 Fuel injector, cylinder 1, activation

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0x016A2E31 2E31 Fuel injector, cylinder 2, activation  
 0x016A2E32 2E32 Fuel injector, cylinder 3, activation  
 0x016A2E33 2E33 Fuel injector, cylinder 4, activation  
 0x016A2E34 2E34 Fuel injector, cylinder 5, activation  
 0x016A2E35 2E35 Fuel injector, cylinder 6, activation  
 0x016A2E68 2E68 Knock-sensor signal 1  
 0x016A2E69 2E69 Knock-sensor signal 2  
 0x016A2E77 2E77 Firing, voltage supply  
 0x016A2E7C 2E7C Bit-serial data interface, signal  
 0x016A2E81 2E81 Electrical coolant pump, speed deviation  
 0x016A2E82 2E82 Electric coolant pump, cutoff  
 0x016A2E83 2E83 Electric coolant pump, power-reduced operation  
 0x016A2E84 2E84 Electric coolant pump, communication  
 0x016A2E85 2E85 Electric coolant pump, communication  
 0x016A2E8B 2E8B Intelligent battery sensor, communication  
 0x016A2E8C 2E8C Intelligent battery sensor, function  
 0x016A2E8D 2E8D Intelligent battery sensor, signal transmission  
 0x016A2E8E 2E8E Intelligent battery sensor  
 0x016A2E96 2E96 Alternator, underexcitation  
 0x016A2E97 2E97 Alternator  
 0x016A2E98 2E98 Alternator, communication  
 0x016A2E9F 2E9F Oil condition sensor  
 0x016A2EA1 2EA1 Oil condition sensor, communication  
 0x016A2EE0 2EE0 Coolant temperature sensor, signal  
 0x016A2EE1 2EE1 Coolant temperature sensor, plausibility  
 0x016A2EE2 2EE2 Coolant temperature sensor, plausibility: signal constant  
 0x016A2EE3 2EE3 Coolant temperature sensor, plausibility: gradient  
 0x016A2EEA 2EEA Temperature sensor cooler outlet, signal  
 0x016A2EEB 2EEB Temperature sensor, radiator outlet, plausibility, gradient  
 0x016A2EEC 2EEC Temperature sensor cooler outlet, plausibility  
 0x016A2EF4 2EF4 Map thermostat, mechanism  
 0x016A2EF5 2EF5 Map thermostat, activation  
 0x016A2EFE 2EFE Electric fan, activation  
 0x016A2EFF 2EFF Electric fan, self-diagnosis  
 0x016A2F08 2F08 Intake-air temperature sensor, signal  
 0x016A2F09 2F09 Intake-air temperature sensor, plausibility  
 0x016A2F0D 2F0D Radiator blind, activation, (GLF)  
 0x016A2F0F 2F0F Radiator shutter, self-diagnosis (ALKS)  
 0x016A2F12 2F12 A/C-compressor relay, activation  
 0x016A2F44 2F44 EWS preventing manipulation  
 0x016A2F45 2F45 Interface, immobilizer-DME  
 0x016A2F46 2F46 EWS adjustment  
 0x016A2F47 2F47 Immobilizer Irreversible control unit fault  
 0x016A2F4F 2F4F Vehicle speed, plausibility  
 0x016A2F58 2F58 Automatic starting, activation  
 0x016A2F63 2F63 Brake-light switch, plausibility  
 0x016A2F64 2F64 Brake-light test switch, plausibility  
 0x016A2F67 2F67 Clutch switch, signal  
 0x016A2F6C 2F6C Exhaust-gas flap, activation  
 0x016A2F71 2F71 Electronics-box fan, activation  
 0x016A2F76 2F76 Ambient-pressure sensor, signal  
 0x016A2F77 2F77 Ambient-pressure sensor, plausibility  
 0x016A2F7B 2F7B Oil-pressure switch, plausibility  
 0x016A2F85 2F85 DME, internal fault: interior-temperature sensor, signal  
 0x016A2F8F 2F8F Accelerator pedal module and brake pedal, plausibility  
 0x016A2F94 2F94 Fuel-pump relay, activation  
 0x016A2F99 2F99 Ambient temperature sensor, plausibility  
 0x016A2F9A 2F9A Ambient temperature sensor, communication  
 0x016A2F9E 2F9E Thermal oil-level sensor  
 0x016A2FA3 2FA3 No coding  
 0x016A2FA4 2FA4 Incorrect data record  
 0x016A2FC6 2FC6 Energy-saving mode active  
 0x016B2713 2713 Mixed-up oxygen sensors or mixed-up HDEV connectors, bank 2

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0x016B2716 2716 Activation,oxygen-sensor heater after cat.,bank 2  
 0x016B271A 271A Oxygen sensor before cat.,bank 2 -signal  
 0x016B271B 271B Output stage,heater,sensor before cat.,bank 2  
 0x016B271C 271C Oxygen sensor after cat., bank 2 -signal  
 0x016B271D 271D Oxygen-sensor heater before cat.conv.,bank 2  
 0x016B271E 271E Oxygen-sensor heater after cat.conv.,bank  
 0x016B2721 2721 Oxygen-sensor ageing after cat., bank 2  
 0x016B2728 2728 Multiplicative mixture adaptation,bank 2 - control limit 2 reached  
 0x016B272A 272A Multiplicative mixture adaptation,bank 2 - control limit 1 reached  
 0x016B272C 272C Additive mixture adaptation,bank 2 - control limit reached  
 0x016B2730 2730 Fuel mixture adaptation,sumcheck error  
 0x016B2731 2731 Function,camshaft control,inlet,bank 2  
 0x016B2733 2733 Fuel mixture adaptation,sumcheck error,cylinder bank 7-12  
 0x016B2737 2737 EWS 3.3 anti-tampering protection,bank 2  
 0x016B2738 2738 Catalytic-converter conversion,bank 2  
 0x016B2743 2743 Misfire detection,cylinder 7  
 0x016B2745 2745 Misfire detection,cylinder 11  
 0x016B2747 2747 Misfire detection,cylinder 9  
 0x016B2749 2749 Misfire detection,cylinder 12  
 0x016B274B 274B Misfire detection,cylinder 8  
 0x016B274D 274D Misfire detection,cylinder 10  
 0x016B274E 274E Misfire detection,sumcheck error,bank 2  
 0x016B2759 2759 Lgnition circuit,cylinder 7  
 0x016B275A 275A Lgnition circuit,cylinder 11  
 0x016B275B 275B Lgnition circuit,cylinder 9  
 0x016B275C 275C Lgnition circuit,cylinder 12  
 0x016B275D 275D Lgnition circuit,cylinder 8  
 0x016B275E 275E Lgnition circuit,cylinder 10  
 0x016B2760 2760 Secondary-air system,bank 2  
 0x016B2769 2769 Throttle actuator -spring test,bank 2  
 0x016B276A 276A Control-unit selection  
 0x016B276D 276D Function,tank-venting system  
 0x016B2772 2772 Tank-venting value,output stage  
 0x016B2774 2774 System time,power module  
 0x016B2775 2775 Monitoring,engine torque,level 2  
 0x016B2779 2779 DME-self-test-RAM  
 0x016B277A 277A Brake-light switch  
 0x016B277B 277B DME self-test-ROM  
 0x016B277C 277C DME self-test-reset  
 0x016B277D 277D Battery voltage  
 0x016B277E 277E Limitation,engine torque,level 1  
 0x016B277F 277F Crankshaft sensor -engine-speed signal  
 0x016B2780 2780 Crankshaft sensor -reference mark  
 0x016B2781 2781 Camshaft sensor,inlet,bank 2  
 0x016B2782 2782 Camshaft sensor,exhaust,bank 2  
 0x016B2783 2783 Hot-film air-mass flow sensor,bank 2  
 0x016B2785 2785 Throttle potentiometer,bank 2  
 0x016B2786 2786 Throttle potentiometer 1,bank 2  
 0x016B2787 2787 Throttle potentiometer 2,bank 2  
 0x016B2789 2789 Detection,rough load,bank 2  
 0x016B278A 278A Ambient temperature  
 0x016B278C 278C Intake-air temperature sensor,bank 2  
 0x016B278E 278E Differential pressure sensor,intake manifold,bank 2  
 0x016B2792 2792 Throttle position monitoring,bank 2  
 0x016B2793 2793 Throttle actuator -control range,bank 2  
 0x016B2794 2794 Throttle actuator -activation,bank 2  
 0x016B2795 2795 Throttle actuator -spring test,bank 2  
 0x016B2796 2796 Throttle actuator -test lower stop,bank 2  
 0x016B2797 2797 Throttle actuator -amplifier adjustment,bank 2  
 0x016B2798 2798 Throttle actuator -emergency operation setting,bank 2  
 0x016B2799 2799 Cancellation throttle adaptation due to ambient conditions,bank 2  
 0x016B279A 279A Throttle actuator - cancel relearning,bank 2  
 0x016B279D 279D Activation,2nd electric fan

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0x016B279E 279E Output stage,exhaust flap  
 0x016B27A2 27A2 Output stage,2nd electric fan  
 0x016B27A4 27A4 EWS3.3 interface DME-EWS bank 2  
 0x016B27B3 27B3 Plausibility,throttle to hot-film air-mass flow sensor,bank 2  
 0x016B27B4 27B4 Ambient pressure sensor,bank 2  
 0x016B27B5 27B5 Camshaft control,inlet,bank 2-output stage  
 0x016B27B8 27B8 Differential pressure sensor,intake manifold -plausibility,bank 2  
 0x016B27B9 27B9 Ambient-pressure sensor,signal  
 0x016B27BA 27BA Ambient-pressure sensor,plausibility  
 0x016B27BB 27BB Function,camshaft control,exhaust,bank 2  
 0x016B27BD 27BD Camshaft control,exhaust,bank 2 -output stage  
 0x016B27C1 27C1 All camshaft sensors failed,bank 2  
 0x016B27CC 27CC Tank-leak diagnosis DMTL -tank leak detected  
 0x016B27CE 27CE Function monitoring:fuel pressure sensor,supply lead or ECU fault  
 0x016B27D5 27D5 Idle-speed control faulty,bank 2  
 0x016B27D9 27D9 Tank-leak diagnosis DMTL -heater  
 0x016B27DA 27DA Alternator fault  
 0x016B27DC 27DC EWS 3.3 random-code storage,bank 2  
 0x016B27E1 27E1 Monitoring,pedal-travel sensor  
 0x016B27E2 27E2 Knock sensor 1,bank 2  
 0x016B27E3 27E3 Knock sensor 2,bank 2  
 0x016B27E4 27E4 Knock sensor 3,bank 2  
 0x016B27E6 27E6 Knock control - zero test,bank 2  
 0x016B27E7 27E7 Knock control - offset,bank 2  
 0x016B27E8 27E8 Knock control - test pulse,bank 2  
 0x016B27EA 27EA CAN timeout HPFI bank 2  
 0x016B27F2 27F2 Plausibility,tank fill level  
 0x016B27F3 27F3 No local CAN message from Valvetronic  
 0x016B27FA 27FA Automatic starting -input signal  
 0x016B27FD 27FD Automatic starting -function  
 0x016B2813 2813 DME monitoring,Group A  
 0x016B2814 2814 DME monitoring,Group B  
 0x016B2815 2815 DME monitoring,Group C  
 0x016B2816 2816 DME monitoring:engine speed  
 0x016B2818 2818 Sensor connected but not mouted,bank 2  
 0x016B2819 2819 No CAN message from DME1  
 0x016B2825 2825 Oxygen-sensor ageing after act.,bank 2  
 0x016B2827 2827 Heater coupling LSU bank 2  
 0x016B2842 2842 2.Alternator  
 0x016B2843 2843 Plausibility diagnosis LSU by LSH after cat.,bank 2  
 0x016B2844 2844 Self-diagnosis,output stage,communication,bank 2  
 0x016B2846 2846 Activation,intake flap,bank 2  
 0x016B2849 2849 Open circuit,pump current lead LSU bank 2  
 0x016B284A 284A Short circuit,sensor leads,to ground or Ub,bank 2  
 0x016B284C 284C LSU dynamically too slow,bank 2  
 0x016B284F 284F Speedometer in instrument cluster faulty  
 0x016B2850 2850 Variable value gear -guide sensor  
 0x016B2852 2852 Variable value gear -reference sensor  
 0x016B2854 2854 Variable value gear -plausibility sensor  
 0x016B2856 2856 Variable value gear -voltage-supply sensor  
 0x016B2858 2858 Variable value gear -learn function,stop  
 0x016B285A 285A Variable value gear -monitoring servomotor  
 0x016B285C 285C Variable value gear -CAN communication  
 0x016B285E 285E Variable value gear -internal fault,control unit  
 0x016B2860 2860 Variable value gear -output stage,servomotor  
 0x016B2862 2862 Variable value gear -voltage supply,power output stage  
 0x016B2865 2865 Variable value gear -power limitation in limp-home operating mode  
 0x016B2866 2866 Variable value gear -Learning stops necessary  
 0x016B2867 2867 Valvetronic,system overload,bank 2  
 0x016B286D 286D Output stage HPFI9,line 9  
 0x016B286E 286E Output stage HPFI12,line 12  
 0x016B286F 286F Output stage HPFI8,line 8  
 0x016B2870 2870 Output stage HPFI10,line 10

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0x016B2871 2871 High-pressure fuel injector,Highside 7  
 0x016B2872 2872 High-pressure fuel injector,Highside 11  
 0x016B2873 2873 High-pressure fuel injector,Highside 9  
 0x016B2874 2874 High-pressure fuel injector,Highside 12  
 0x016B2875 2875 High-pressure fuel injector,Highside 8  
 0x016B2876 2876 High-pressure fuel injector,Highside 10  
 0x016B2877 2877 High-pressure fuel injector,Lowside 7  
 0x016B2878 2878 High-pressure fuel injector,Lowside 11  
 0x016B287A 287A High-pressure fuel injector,Lowside 9  
 0x016B287D 287D High-pressure fuel injector,Lowside 12  
 0x016B287E 287E High-pressure fuel injector,Lowside 8  
 0x016B287F 287F High-pressure fuel injector,Lowside 10  
 0x016B2889 2889 Monitoring,plausibility,RAM backup  
 0x016B28D6 28D6 No DME coding  
 0x016B28D8 28D8 RAM backup  
 0x016B28DB 28DB Variable value gear- minimum-lift adaptation exceeded  
 0x016B28E4 28E4 High-voltage generation in HDEV2 control unit  
 0x016B28E5 28E5 High-voltage generation in HDEV2 control unit  
 0x016B2901 2901 High-voltage generation in HDEV2 control unit  
 0x016B2902 2902 High-voltage generation in HDEV2 control unit  
 0x016B2903 2903 High-voltage generation in HDEV2 control unit  
 0x016B2904 2904 High-voltage generation in HDEV2 control unit  
 0x016B290F 290F High-pressure sensor test(signal,rail pressure sensor)bank 2  
 0x016B2919 2919 Output stage HPFI7,line 7  
 0x016B291A 291A Output stage HPFI11,line 11  
 0x016B291F 291F High-pressure fuel injector,communication,bank 2  
 0x016B2920 2920 High-pressure fuel injector,Lowside 1  
 0x016B2921 2921 High-pressure fuel injector,Lowside 5  
 0x016B2922 2922 High-pressure fuel injector,Lowside 3  
 0x016B2923 2923 High-pressure fuel injector,Lowside 6  
 0x016B2924 2924 Rail pressure control,bank 2  
 0x016B292B 292B Open circuit,adjustment line LSU bank 2  
 0x016B292D 292D Open circuit,Nernst line to meas.cell LSU bank 2  
 0x016B2930 2930 Open circuit,virtual ground LSU bank 2  
 0x016B2932 2932 Output stage,quantity control value,bank 2  
 0x016B2936 2936 Function monitoring:fuel pressure sensor,supply lead or ECU fault  
 0x016B2937 2937 Function monitoring,lambda plausibilization  
 0x016B2944 2944 DME coupling messages  
 0x016B296D 296D Engine torque,bank comparision  
 0x016B2971 2971 Proram status DME1 and DME2 different  
 0x016B297C 297C Power limitation  
 0x016B2994 2994 High-pressure fuel injector 7  
 0x016B2995 2995 High-pressure fuel injector 11  
 0x016B2996 2996 High-pressure fuel injector 9  
 0x016B2997 2997 High-pressure fuel injector 12  
 0x016B2998 2998 High-pressure fuel injector 8  
 0x016B2999 2999 High-pressure fuel injector 10  
 0x016BCDC7 CDC7 PT CAN bus off  
 0x016BCDCB CDCB Local CAN bus off  
 0x016C3E90 3E90 Crankshaft sensor  
 0x016C3E91 3E91 Crankshaft sensor  
 0x016C3EB0 3EB0 Speed calculation  
 0x016C3EC0 3EC0 Camshaft sensor  
 0x016C3EC1 3EC1 Camshaft sensor  
 0x016C3EE0 3EE0 Coolant temperature sensor,signal  
 0x016C3EE1 3EE1 Coolant temperature sensor,signal  
 0x016C3EE2 3EE2 Coolant temperature sensor  
 0x016C3EE3 3EE3 Coolant temperature sensor  
 0x016C3EF3 3EF3 Coolant temperature sensor,plausibility  
 0x016C3F00 3F00 Charge-air pressure sensor,signal  
 0x016C3F01 3F01 Charge-air pressure sensor,signal  
 0x016C3F02 3F02 Charge-air pressure sensor,signal  
 0x016C3F03 3F03 Charge-air pressure sensor,signal

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0x016C3F05 3F05 MIL off  
 0x016C3F10 3F10 Accelerator-pedal module,potentiometer 1,signal  
 0x016C3F11 3F11 Accelerator-pedal module,potentiometer 1,signal  
 0x016C3F13 3F13 Accelerator-pedal module,potentiometer 1,signal  
 0x016C3F15 3F15 MIL on  
 0x016C3F20 3F20 Accelerator-pedal module,potentiometer 2,signal  
 0x016C3F21 3F21 Accelerator-pedal module,potentiometer 2,signal  
 0x016C3F23 3F23 Accelerator-pedal module,potentiometer 2,signal  
 0x016C3F25 3F25 Charge-air tube monitoring  
 0x016C3F30 3F30 Rail-pressure sensor,signal  
 0x016C3F31 3F31 Rail-pressure sensor,signal  
 0x016C3F35 3F35 Charge-air tube monitoring at idle  
 0x016C3F40 3F40 Rail pressure sensor,offset test  
 0x016C3F41 3F41 Rail pressure sensor,offset test  
 0x016C3F47 3F47 Brake light/brake test switch  
 0x016C3F48 3F48 Brake light/brake-test switch,signals  
 0x016C3F50 3F50 Roadspeed signal  
 0x016C3F52 3F52 Roadspeed signal  
 0x016C3F53 3F53 Roadspeed signal  
 0x016C3F57 3F57 Charge-air pressure controller  
 0x016C3F70 3F70 Intake-air temperature sensor,signal  
 0x016C3F71 3F71 Intake-air temperature sensor,signal  
 0x016C3F72 3F72 Intake-air temperature sensor,signal  
 0x016C3F77 3F77 Charge-air pressure actuator,activation  
 0x016C3F97 3F97 Charge-air pressure actuator,supply voltage  
 0x016C3FC0 3FC0 Air-mass flow sensor  
 0x016C3FD0 3FD0 Air-mass flow sensor  
 0x016C3FE0 3FE0 Air-mass flow sensor  
 0x016C3FE1 3FE1 Air-mass flow sensor  
 0x016C3FF0 3FF0 Air-mass flow sensor  
 0x016C3FF1 3FF1 Air-mass flow sensor  
 0x016C4000 4000 Fuel temperature sensor,signal  
 0x016C4001 4001 Fuel temperature sensor,signal  
 0x016C4010 4010 Exhaust backpressure sensor before particulate filter,signal  
 0x016C4011 4011 Exhaust backpressure sensor before particulate filter,signal  
 0x016C4020 4020 Exhaust backpressure sensor before particulate filter,signal  
 0x016C4021 4021 Exhaust backpressure sensor before particulate filter,signal  
 0x016C4030 4030 Exhaust backpressure sensor before particulate filter,signal  
 0x016C4031 4031 Exhaust backpressure sensor before particulate filter,signal  
 0x016C4060 4060 Ambient-pressure sensor(installed in DDE control unit),signal  
 0x016C4061 4061 Ambient-pressure sensor(installed in DDE control unit),signal  
 0x016C4063 4063 Ambient-pressure sensor(installed in DDE control unit)  
 0x016C4072 4072 Clutch switch,aignal  
 0x016C4073 4073 Clutch switch,signal  
 0x016C4082 4082 Brake-light/brake-test switch,signals  
 0x016C4083 4083 Brake-light/brake-test switch,signals  
 0x016C40E0 40E0 Generator  
 0x016C4120 4120 DDE main relay  
 0x016C4121 4121 DDE main relay  
 0x016C4130 4130 Swirl flaps,activation  
 0x016C4141 4141 Swirl flaps,activation  
 0x016C4152 4152 Swirl falps,activation  
 0x016C4153 4153 Swirl falps,activation  
 0x016C4166 4166 Particulate-filter system  
 0x016C4175 4175 Exhaust-gas temperature sensor before particulate filter,signal  
 0x016C4180 4180 Charge-air pressure actuator,activation  
 0x016C4185 4185 Exhaust-gas temperature sensor before cat. conv.,signal  
 0x016C4191 4191 Charge-air pressure actuator,activation  
 0x016C4195 4195 Torque request,air conditioning  
 0x016C419A 419A Ambient-pressure sensor(installed in DDE control unit)  
 0x016C419B 419B Ambient-pressure sensor(installed in DDE control unit)  
 0x016C41A2 41A2 Charge-air pressure actuator,activation  
 0x016C41A3 41A3 Charge-air pressure actuator,activation

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0x016C41AA 41AA Charge-air pressure sensor  
 0x016C41AB 41AB Charge-air pressure sensor  
 0x016C41B0 41B0 Exhaust-gas recirculation controller,activation  
 0x016C41BA 41BA Particulate-filter system,exhaust backpressure sensor  
 0x016C41BB 41BB Particulate-filter system,exhaust backpressure sensor  
 0x016C41CD 41CD Plausibility,pressure sensors  
 0x016C41D1 41D1 Exhaust-gas recirculation controller,activation  
 0x016C41D5 41D5 Oxygen sensor,signal,Nernst voltage  
 0x016C41D6 41D6 Oxygen sensor,signal,Nernst voltage  
 0x016C41D7 41D7 Oxygen sensor,signal,Nernst voltage  
 0x016C41E2 41E2 Exhaust-gas recirculation controller,activation  
 0x016C41E3 41E3 Exhaust-gas recirculation controller,activation  
 0x016C41E5 41E5 Oxygen sensor,signal,pump current  
 0x016C41E6 41E6 Oxygen sensor,signal,pump current  
 0x016C41E7 41E7 Oxygen sensor,signal,pump current  
 0x016C41F0 41F0 Electric fan,activation  
 0x016C41F1 41F1 Electric fan,activation  
 0x016C41F2 41F2 Electric fan,activation  
 0x016C41F3 41F3 Electric fan,activation  
 0x016C41F5 41F5 Oxygen sensor,signal,virtual ground  
 0x016C41F6 41F6 Oxygen sensor,signal,virtual ground  
 0x016C41F7 41F7 Oxygen sensor,signal,virtual ground  
 0x016C4203 4203 Glow control unit  
 0x016C4205 4205 Oxygen sensor,heater activation  
 0x016C4206 4206 Oxygen sensor,heater activation  
 0x016C4207 4207 Oxygen sensor,heater activation  
 0x016C4211 4211 Glow plug,cylinder 1  
 0x016C4212 4212 Glow plug,cylinder 1  
 0x016C4213 4213 Glow plug,cylinder 1  
 0x016C4217 4217 Oxygen sensor  
 0x016C4221 4221 Glow plug,cylinder 2  
 0x016C4222 4222 Glow plug,cylinder 2  
 0x016C4223 4223 Glow plug,cylinder 2  
 0x016C4225 4225 Oxygen sensor  
 0x016C4226 4226 Oxygen sensor  
 0x016C4231 4231 Glow plug,cylinder 3  
 0x016C4232 4232 Glow plug,cylinder 3  
 0x016C4233 4233 Glow plug,cylinder 3  
 0x016C4235 4235 Control unit,internal 21  
 0x016C4236 4236 Control unit,internal 21  
 0x016C4241 4241 Glow plug,cylinder 4  
 0x016C4242 4242 Glow plug,cylinder 4  
 0x016C4243 4243 Glow plug,cylinder 4  
 0x016C4245 4245 Control unit,internal 22  
 0x016C4246 4246 Control unit,internal 22  
 0x016C4251 4251 Glow plug,cylinder 5  
 0x016C4252 4252 Glow plug,cylinder 5  
 0x016C4253 4253 Glow plug,cylinder 5  
 0x016C4258 4258 Control unit,internal 23  
 0x016C4261 4261 Glow plug,cylinder 6  
 0x016C4262 4262 Glow plug,cylinder 6  
 0x016C4263 4263 Glow plug,cylinder 6  
 0x016C4267 4267 Oxygen sensor,shunt detection  
 0x016C4275 4275 Oxygen sensor,heater  
 0x016C4276 4276 Oxygen sensor,heater  
 0x016C4288 4288 Oxygen sensor  
 0x016C4293 4293 Control unit,internal 16  
 0x016C4296 4296 Oxygen sensor  
 0x016C4298 4298 Oxygen sensor  
 0x016C42B5 42B5 Engine speed monitoring  
 0x016C42C7 42C7 Monitoring,flywheel oscillation  
 0x016C4302 4302 Delivery control valve,activation  
 0x016C4303 4303 Delivery control valve,activation



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0x016C4310 4310 Delivery control valve,activation  
 0x016C4321 4321 Delivery control valve,activation  
 0x016C4332 4332 Rail-pressure control valve,activation  
 0x016C4333 4333 Rail-pressure control valve,activation  
 0x016C4335 4335 Radiator blind(controlled kidney grille),activation  
 0x016C4336 4336 Radiator blind(controlled kidney grille),activation  
 0x016C4337 4337 Radiator blind(controlled kidney grille),activation  
 0x016C4338 4338 Radiator blind(controlled kidney grille),activation  
 0x016C4340 4340 Rail-pressure control valve,activation  
 0x016C4351 4351 Rail-pressure control valve,activation  
 0x016C4362 4362 Current control for rail-pressure control valve  
 0x016C4378 4378 Rail-pressure control valve,test(-)  
 0x016C4382 4382 Controller test,rail-pressure control valve  
 0x016C4390 4390 Charge-air temperature sensor,signal  
 0x016C4391 4391 Charge-air temperature sensor,signal  
 0x016C4392 4392 Charge-air temperature sensor,signal  
 0x016C4397 4397 Actuator test,delivery control valve,actuator test  
 0x016C43A0 43A0 Starter interlock relay,activation  
 0x016C43A1 43A1 Starter interlock relay,activation  
 0x016C43A2 43A2 Starter interlock relay,activation  
 0x016C43A3 43A3 Starter interlock relay,activation  
 0x016C43C0 43C0 Throttle valve,activation  
 0x016C43D1 43D1 Throttle valve,activation  
 0x016C43E2 43E2 Throttle valve,activation  
 0x016C43E3 43E3 Throttle valve,activation  
 0x016C43F0 43F0 Electric auxiliary heater,activation  
 0x016C43F1 43F1 Electric auxiliary heater,activation  
 0x016C43F2 43F2 Electric auxiliary heater,activation  
 0x016C43F3 43F3 Electric auxiliary heater,activation  
 0x016C4403 4403 Control unit,internal 17  
 0x016C4410 4410 injector,cylinder 1,activation  
 0x016C4411 4411 Injector,cylinder 1,activation  
 0x016C4412 4412 Injector,cylinder 1,activation  
 0x016C4413 4413 Injector,cylinder 1,activation  
 0x016C441C 441C Injector,cylinder 1,activation  
 0x016C4420 4420 injector,cylinder 2,activation  
 0x016C4421 4421 Injector,cylinder 2,activation  
 0x016C4422 4422 Injector,cylinder 2,activation  
 0x016C4423 4423 Injector,cylinder 2,activation  
 0x016C442C 442C Injector,cylinder 2,activation  
 0x016C4430 4430 injector,cylinder 3,activation  
 0x016C4431 4431 Injector,cylinder 3,activation  
 0x016C4432 4432 Injector,cylinder 3,activation  
 0x016C4433 4433 Injector,cylinder 3,activation  
 0x016C443C 443C Injector,cylinder 3,activation  
 0x016C4440 4440 injector,cylinder 4,activation  
 0x016C4441 4441 Injector,cylinder 4,activation  
 0x016C4442 4442 Injector,cylinder 4,activation  
 0x016C4443 4443 Injector,cylinder 4,activation  
 0x016C444C 444C Injector,cylinder 4,activation  
 0x016C4450 4450 injector,cylinder 5,activation  
 0x016C4451 4451 Injector,cylinder 5,activation  
 0x016C4452 4452 Injector,cylinder 5,activation  
 0x016C4453 4453 Injector,cylinder 5,activation  
 0x016C445C 445C Injector,cylinder 5,activation  
 0x016C4460 4460 injector,cylinder 6,activation  
 0x016C4461 4461 Injector,cylinder 6,activation  
 0x016C4462 4462 Injector,cylinder 6,activation  
 0x016C4463 4463 Injector,cylinder 6,activation  
 0x016C446C 446C Injector,cylinder 6,activation  
 0x016C4473 4473 Control unit,internal 18  
 0x016C4475 4475 Intelligent battery sensor  
 0x016C4477 4477 Intelligent battery sensor

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0x016C4478 4478 Intelligent battery sensor  
 0x016C4480 4480 Control unit,internal 19  
 0x016C4485 4485 Intelligent battery sensor  
 0x016C4487 4487 Intelligent battery sensor  
 0x016C4488 4488 Intelligent battery sensor  
 0x016C4491 4491 Control unit,internal 20  
 0x016C4495 4495 Intelligent battery sensor  
 0x016C4497 4497 Intelligent battery sensor  
 0x016C44A0 44A0 Injectors,activation,cyl. 1,2,3  
 0x016C44A1 44A1 Injectors,activation,cyl. 1,2,3  
 0x016C44A2 44A2 Injectors,activation,cyl. 1,2,3  
 0x016C44A3 44A3 Injectors,activation,cyl. 1,2,3  
 0x016C44AC 44AC Injectors,activation,cyl. 1,2,3  
 0x016C44B0 44B0 Injectors,activation,cyl. 4,5,6  
 0x016C44B1 44B1 Injectors,activation,cyl. 4,5,6  
 0x016C44B2 44B2 Injectors,activation,cyl. 4,5,6  
 0x016C44B3 44B3 Injectors,activation,cyl. 4,5,6  
 0x016C44BC 44BC Injectors,activation,cyl. 4,5,6  
 0x016C44C0 44C0 Number of desired injections limited  
 0x016C44C1 44C1 Number of desired injections limited  
 0x016C44C2 44C2 Number of desired injections limited  
 0x016C44D0 44D0 Generator  
 0x016C44D2 44D2 Generator  
 0x016C44D3 44D3 Generator  
 0x016C44E2 44E2 Generator  
 0x016C44E3 44E3 Generator  
 0x016C44F0 44F0 Rail-pressure plausibility pressure-controlled(-)  
 0x016C4501 4501 Exhaust-gas recirculation  
 0x016C4507 4507 Exhaust-gas recirculation  
 0x016C4512 4512 Thermal oil-level sensor,signal  
 0x016C4513 4513 Thermal oil-level sensor,signal  
 0x016C4521 4521 Charge-air pressure control,control deviation  
 0x016C4530 4530 Charge-air pressure control,control deviation  
 0x016C4536 4536 Power management,battery  
 0x016C4538 4538 Power management,battery  
 0x016C4541 4541 Thermal oil-level sensor  
 0x016C4545 4545 Power management,vehicle electrical system  
 0x016C4546 4546 Power management,vehicle electrical system  
 0x016C4547 4547 Power management,vehicle electrical system  
 0x016C4548 4548 Power management,vehicle electrical system  
 0x016C4560 4560 Rail-pressure plausibility delivery-controlled  
 0x016C4567 4567 Message(Coding395)  
 0x016C4570 4570 Rail-pressure plausibility delivery-controlled  
 0x016C4580 4580 Rail-pressure plausibility delivery-controlled  
 0x016C4587 4587 Heated fuel filter  
 0x016C4590 4590 Rail-pressure plausibility delivery-controlled  
 0x016C45A0 45A0 Rail-pressure plausibility delivery-controlled  
 0x016C45C0 45C0 Rail-pressure plausibility delivery-controlled(-)  
 0x016C45F6 45F6 Message(torque ACCB7)  
 0x016C4600 4600 Rail-pressure plausibility pressure-controlled  
 0x016C4605 4605 Particulate-filter system  
 0x016C4610 4610 Rail-pressure plausibility pressure-controlled  
 0x016C4620 4620 Rail-pressure plausibility pressure-controlled  
 0x016C4630 4630 Rail-pressure plausibility pressure-controlled  
 0x016C4640 4640 Rail-pressure plausibility pressure-controlled  
 0x016C4650 4650 Rail-pressure plausibility pressure-controlled(-)  
 0x016C4656 4656 Control unit,internal 24  
 0x016C4660 4660 Power supply  
 0x016C4661 4661 Power supply  
 0x016C4666 4666 Particulate-filter system(nv)  
 0x016C4667 4667 Particulate-filter system  
 0x016C4670 4670 Supply voltage 1  
 0x016C4671 4671 Supply voltage 1

0x016C4677	4677	Throttle valve
0x016C4680	4680	Supply voltage 2
0x016C4681	4681	Supply voltage 2
0x016C4687	4687	Throttle valve
0x016C4690	4690	Supply voltage 3
0x016C4691	4691	Supply voltage 3
0x016C4697	4697	Throttle valve
0x016C46A0	46A0	Control unit,internal 1
0x016C46A1	46A1	Control unit,internal 1
0x016C46A2	46A2	Control unit,internal 1
0x016C46A3	46A3	Control unit,internal 1
0x016C46B0	46B0	Control unit,internal 2
0x016C46B1	46B1	Control unit,internal 2
0x016C46B2	46B2	Control unit,internal 2
0x016C46B3	46B3	Control unit,internal 2
0x016C46C0	46C0	Control unit,internal 3
0x016C46C1	46C1	Control unit,internal 3
0x016C46D0	46D0	Control unit,internal 4
0x016C46D1	46D1	Control unit,internal 4
0x016C46D2	46D2	Control unit,internal 4
0x016C46D3	46D3	Control unit,internal 4
0x016C4703	4703	Control unit,internal 7
0x016C4711	4711	Control unit,internal 8
0x016C4712	4712	Control unit,internal 8
0x016C4713	4713	Control unit,internal 8
0x016C4723	4723	Control unit,internal 9
0x016C4730	4730	Delivery control valve,current control
0x016C4731	4731	Delivery control valve,current control
0x016C4732	4732	Delivery control valve,current control
0x016C4740	4740	Control unit,internal 11
0x016C4750	4750	Control unit,internal 12
0x016C4753	4753	Control unit,internal 12
0x016C4763	4763	Control unit,internal 13(-)
0x016C4773	4773	Control unit,internal 14
0x016C4780	4780	Control unit,internal 15
0x016C4781	4781	Control unit,internal 15
0x016C4782	4782	Control unit,internal 15
0x016C4783	4783	Control unit,internal 15
0x016C480A	480A	Particulate-filter system
0x016C481A	481A	Particulate-filter system
0x016C4830	4830	Intake-air temperature sensor
0x016C4831	4831	Intake-air temperature sensor
0x016C483D	483D	Throttle actuator
0x016C4863	4863	Cruise control
0x016C48F2	48F2	PT-CAN bus
0x016C48F3	48F3	PT-CAN bus
0x016C4900	4900	Torque intervention DSC(-)
0x016C4912	4912	PT-CAN bus B
0x016C4913	4913	PT-CAN bus B
0x016C4920	4920	Torque intervention,gearbox(-)
0x016C49E7	49E7	Throttle actuator
0x016C4A02	4A02	Terminal 15
0x016C4A03	4A03	Terminal 15
0x016C4A10	4A10	Bit-serial data interface BSD
0x016C4A13	4A13	Bit-serial data interface BSD
0x016C4A41	4A41	EWS interface error
0x016C4A42	4A42	EWS interface error
0x016C4A43	4A43	EWS interface error
0x016C4A51	4A51	EWS random-code storage
0x016C4A60	4A60	EWS tampering
0x016C4A61	4A61	EWS tampering
0x016C4A62	4A62	EWS tampering
0x016C4A63	4A63	EWS tampering

# Bmw Code Sheet.txt

0x016C4A70 4A70 Map values incorrect  
 0x016C4A80 4A80 Charge-air tube monitoring  
 0x016C4AB2 4AB2 Electric auxiliary heater  
 0x016C4AD5 4AD5 Zero-quantity adaptation,injector,cylinder 1  
 0x016C4AD6 4AD6 Zero-quantity adaptation,injector,cylinder 1  
 0x016C4AE0 4AE0 Electronics-box fan,activation  
 0x016C4AE1 4AE1 Electronics-box fan,activation  
 0x016C4AE2 4AE2 Electronics-box fan,activation  
 0x016C4AE3 4AE3 Electronics-box fan,activation  
 0x016C4AE5 4AE5 Zero-quantity adaptation,injector,cylinder 2  
 0x016C4AE6 4AE6 Zero-quantity adaptation,injector,cylinder 2  
 0x016C4AF0 4AF0 Control-unit temperature sensor,signal  
 0x016C4AF1 4AF1 Control-unit temperature sensor,signal  
 0x016C4AF5 4AF5 Zero-quantity adaptation,injector,cylinder 3  
 0x016C4AF6 4AF6 Zero-quantity adaptation,injector,cylinder 3  
 0x016C4B00 4B00 Control-unit temperature  
 0x016C4B05 4B05 Zero-quantity adaptation,injector,cylinder 4  
 0x016C4B06 4B06 Zero-quantity adaptation,injector,cylinder 4  
 0x016C4B10 4B10 Smooth running controller  
 0x016C4B11 4B11 Smooth running controller  
 0x016C4B15 4B15 Zero-quantity adaptation,injector,cylinder 5  
 0x016C4B16 4B16 Zero-quantity adaptation,injector,cylinder 5  
 0x016C4B22 4B22 Electric fan  
 0x016C4B25 4B25 Zero-quantity adaptation,injector,cylinder 6  
 0x016C4B26 4B26 Zero-quantity adaptation,injector,cylinder 6  
 0x016C4B50 4B50 Rate adjustment  
 0x016C4B60 4B60 Volume drift compensation  
 0x016C4B80 4B80 Rail-pressure plausibility delivery-controlled(-)  
 0x016C4B90 4B90 Rail-pressure monitoring on engine start  
 0x016C4BA0 4BA0 Intake-air temperature sensor,signal  
 0x016C4BA1 4BA1 Intake-air temperature sensor,signal  
 0x016C4BB0 4BB0 Supply voltage,air-mass flow sensor  
 0x016C4BB1 4BB1 Supply voltage,air-mass flow sensor  
 0x016C4BB5 4BB5 Air-mass flow sensor  
 0x016C4BB6 4BB6 Air-mass flow sensor  
 0x016C4BC0 4BC0 Air-mass flow sensor  
 0x016C4BC1 4BC1 Air-mass flow sensor  
 0x016C4BC2 4BC2 Air-mass flow sensor  
 0x016C4BC5 4BC5 Intake-air temperature sensor(reference aignal for air-mass sensor)  
 0x016C4BC6 4BC6 Intake-air temperature sensor(reference aignal for air-mass sensor)  
 0x016C4BC7 4BC7 Intake-air temperature sensor(reference aignal for air-mass sensor)  
 0x016C4BD2 4BD2 Torque request ARS  
 0x016C4BD5 4BD5 Engine mount,activation  
 0x016C4BD6 4BD6 Engine mount,activation  
 0x016C4BD7 4BD7 Engine mount,activation  
 0x016C4BD8 4BD8 Engine mount,activation  
 0x016C4CF3 4CF3 Exhaust backpressure sensor,signal  
 0x016C4D00 4D00 Particulate-filter system  
 0x016C4D01 4D01 Particulate-filter system(only active in pre-production cars)  
 0x016C4D03 4D03 Particulate-filter system  
 0x016C4DF0 4DF0 Message(torque transmissionB5)  
 0x016C4DF1 4DF1 Message(torque transmissionB5)  
 0x016C4DF3 4DF3 Message(torque transmissionB5)  
 0x016D3E90 3E90 Crankshaft sensor  
 0x016D3E91 3E91 Crankshaft sensor  
 0x016D3EB0 3EB0 Speed calculation  
 0x016D3EC0 3EC0 Camshaft sensor  
 0x016D3EC1 3EC1 Camshaft sensor  
 0x016D3EE0 3EE0 Coolant temperature sensor, signal  
 0x016D3EE1 3EE1 Coolant temperature sensor, signal  
 0x016D3EE2 3EE2 Coolant temperature sensor  
 0x016D3EE3 3EE3 Coolant temperature sensor  
 0x016D3EF3 3EF3 Coolant temperature sensor, plausibility

# Bmw Code Sheet.txt

0x016D3F00 3F00 Charge-air pressure sensor, signal  
 0x016D3F01 3F01 Charge-air pressure sensor, signal  
 0x016D3F02 3F02 Charge-air pressure sensor, signal  
 0x016D3F03 3F03 Charge-air pressure sensor, signal  
 0x016D3F05 3F05 MIL off  
 0x016D3F10 3F10 Accelerator-pedal module, potentiometer 1, signal  
 0x016D3F11 3F11 Accelerator-pedal module, potentiometer 1, signal  
 0x016D3F13 3F13 Accelerator-pedal module, potentiometer 1, signal  
 0x016D3F15 3F15 MIL on  
 0x016D3F20 3F20 Accelerator-pedal module, potentiometer 2, signal  
 0x016D3F21 3F21 Accelerator-pedal module, potentiometer 2, signal  
 0x016D3F23 3F23 Accelerator-pedal module, potentiometer 2, signal  
 0x016D3F25 3F25 Charge-air tube monitoring  
 0x016D3F30 3F30 Rail-pressure sensor, signal  
 0x016D3F31 3F31 Rail-pressure sensor, signal  
 0x016D3F35 3F35 Charge-air tube monitoring at idle  
 0x016D3F40 3F40 Rail pressure sensor, offset test  
 0x016D3F41 3F41 Rail pressure sensor, offset test  
 0x016D3F47 3F47 Brake light/brake test switch  
 0x016D3F48 3F48 Brake light/brake test switch  
 0x016D3F50 3F50 Roadspeed signal  
 0x016D3F52 3F52 Roadspeed signal  
 0x016D3F53 3F53 Roadspeed signal  
 0x016D3F62 3F62 Roadspeed signal via CAN  
 0x016D3F70 3F70 Intake-air temperature sensor, signal  
 0x016D3F71 3F71 Intake-air temperature sensor, signal  
 0x016D3F72 3F72 Intake-air temperature sensor, signal  
 0x016D3FC0 3FC0 Air-mass flow sensor  
 0x016D3FD0 3FD0 Air-mass flow sensor  
 0x016D3FE0 3FE0 Air-mass flow sensor  
 0x016D3FE1 3FE1 Air-mass flow sensor  
 0x016D3FF0 3FF0 Air-mass flow sensor  
 0x016D3FF1 3FF1 Air-mass flow sensor  
 0x016D4000 4000 Fuel temperature sensor, signal  
 0x016D4001 4001 Fuel temperature sensor, signal  
 0x016D4060 4060 Ambient-pressure sensor (installed in DDE control unit), signal  
 0x016D4061 4061 Ambient-pressure sensor (installed in DDE control unit), signal  
 0x016D4063 4063 Ambient-pressure sensor (installed in DDE control unit), signal  
 0x016D4072 4072 Clutch switch, signal  
 0x016D4073 4073 Clutch switch, signal  
 0x016D4082 4082 Brake-light/brake-test switch, signals  
 0x016D4083 4083 Brake-light/brake-test switch, signals  
 0x016D40E0 40E0 Generator  
 0x016D4120 4120 DDE main relay  
 0x016D4121 4121 DDE main relay  
 0x016D4130 4130 Swirl flaps, activation  
 0x016D4141 4141 Swirl flaps, activation  
 0x016D4152 4152 Swirl flaps, activation  
 0x016D4153 4153 Swirl flaps, activation  
 0x016D4180 4180 Charge-air pressure actuator, activation  
 0x016D4191 4191 Charge-air pressure actuator, activation  
 0x016D4195 4195 Torque request, air conditioning  
 0x016D41A2 41A2 Charge-air pressure actuator, activation  
 0x016D41A3 41A3 Charge-air pressure actuator, activation  
 0x016D41B0 41B0 Exhaust-gas recirculation controller, activation  
 0x016D41D1 41D1 Exhaust-gas recirculation controller, activation  
 0x016D41E2 41E2 Exhaust-gas recirculation controller, activation  
 0x016D41E3 41E3 Exhaust-gas recirculation controller, activation  
 0x016D41F0 41F0 Electric fan, activation  
 0x016D41F1 41F1 Electric fan, activation  
 0x016D41F2 41F2 Electric fan, activation  
 0x016D41F3 41F3 Electric fan, activation  
 0x016D4202 4203 Glow control unit

# Bmw Code Sheet.txt

0x016D4211 4211 Glow plug, cylinder 1, activation  
 0x016D4212 4212 Glow plug, cylinder 1, activation  
 0x016D4213 4213 Glow plug, cylinder 1, activation  
 0x016D4221 4221 Glow plug, cylinder 2, activation  
 0x016D4222 4222 Glow plug, cylinder 2, activation  
 0x016D4223 4223 Glow plug, cylinder 2, activation  
 0x016D4231 4231 Glow plug, cylinder 3, activation  
 0x016D4232 4232 Glow plug, cylinder 3, activation  
 0x016D4233 4233 Glow plug, cylinder 3, activation  
 0x016D4241 4241 Glow plug, cylinder 4, activation  
 0x016D4242 4242 Glow plug, cylinder 4, activation  
 0x016D4243 4243 Glow plug, cylinder 4, activation  
 0x016D4251 4251 Glow plug, cylinder 5, activation  
 0x016D4252 4252 Glow plug, cylinder 5, activation  
 0x016D4253 4253 Glow plug, cylinder 5, activation  
 0x016D4261 4261 Glow plug, cylinder 6, activation  
 0x016D4262 4262 Glow plug, cylinder 6, activation  
 0x016D4263 4263 Glow plug, cylinder 6, activation  
 0x016D4293 4293 Control unit, internal 16  
 0x016D42B5 42B5 Engine speed monitoring  
 0x016D42C7 42C7 Monitoring, flywheel oscillation  
 0x016D42E2 42E2 Changeover, rail-pressure control  
 0x016D42F2 42F2 Changeover, rail-pressure control  
 0x016D4302 4302 Delivery control valve, activation  
 0x016D4303 4303 Delivery control valve, activation  
 0x016D4310 4310 Delivery control valve, activation  
 0x016D4321 4321 Delivery control valve, activation  
 0x016D4332 4332 Rail-pressure control valve, activation  
 0x016D4333 4333 Rail-pressure control valve, activation  
 0x016D4335 4335 Radiator blind, activation  
 0x016D4336 4336 Radiator blind, activation  
 0x016D4337 4337 Radiator blind, activation  
 0x016D4338 4338 Radiator blind(controlled kidney grille), activation  
 0x016D4340 4340 Rail-pressure control valve, activation  
 0x016D4351 4351 Rail-pressure control valve, activation  
 0x016D4362 4362 Current control for rail-pressure control valve  
 0x016D4378 4378 Rail-pressure control valve, test(-)  
 0x016D4382 4382 Controller test, rail-pressure control valve  
 0x016D4390 4390 Charge-air temperature sensor, signal  
 0x016D4391 4391 Charge-air temperature sensor, signal  
 0x016D4392 4392 Charge-air temperature sensor, signal  
 0x016D4397 4397 Controller test, delivery control valve  
 0x016D43F0 43F0 Electric auxiliary heater, activation  
 0x016D43F1 43F1 Electric auxiliary heater, activation  
 0x016D43F2 43F2 Electric auxiliary heater, activation  
 0x016D43F3 43F3 Electric auxiliary heater, activation  
 0x016D4403 4403 Control unit, internal 17  
 0x016D4410 4410 Injector, cylinder 1, activation  
 0x016D4411 4411 Injector, cylinder 1, activation  
 0x016D4412 4412 Injector, cylinder 1, activation  
 0x016D4413 4413 Injector, cylinder 1, activation  
 0x016D441C 441C Injector, cylinder 1, activation  
 0x016D4420 4420 Injector, cylinder 2, activation  
 0x016D4421 4421 Injector, cylinder 2, activation  
 0x016D4422 4422 Injector, cylinder 2, activation  
 0x016D4423 4423 Injector, cylinder 2, activation  
 0x016D442C 442C Injector, cylinder 2, activation  
 0x016D4430 4430 Injector, cylinder 3, activation  
 0x016D4431 4431 Injector, cylinder 3, activation  
 0x016D4432 4432 Injector, cylinder 3, activation  
 0x016D4433 4433 Injector, cylinder 3, activation  
 0x016D443C 443C Injector, cylinder 3, activation  
 0x016D4440 4440 Injector, cylinder 4, activation

# Bmw Code Sheet.txt

0x016D4441 4441 Injector, cylinder 4, activation  
 0x016D4442 4442 Injector, cylinder 4, activation  
 0x016D4443 4443 Injector, cylinder 4, activation  
 0x016D444C 444C Injector, cylinder 4, activation  
 0x016D4450 4450 Injector, cylinder 5, activation  
 0x016D4451 4451 Injector, cylinder 5, activation  
 0x016D4452 4452 Injector, cylinder 5, activation  
 0x016D4453 4453 Injector, cylinder 5, activation  
 0x016D445C 445C Injector, cylinder 5, activation  
 0x016D4460 4460 Injector, cylinder 6, activation  
 0x016D4461 4461 Injector, cylinder 6, activation  
 0x016D4462 4462 Injector, cylinder 6, activation  
 0x016D4463 4463 Injector, cylinder 6, activation  
 0x016D446C 446C Injector, cylinder 6, activation  
 0x016D4473 4473 Control unit, internal 18  
 0x016D4475 4475 Intelligent battery sensor  
 0x016D4477 4477 Intelligent battery sensor  
 0x016D4478 4478 Intelligent battery sensor  
 0x016D4480 4480 Control unit, internal 19  
 0x016D4485 4485 Intelligent battery sensor  
 0x016D4487 4487 Intelligent battery sensor  
 0x016D4488 4488 Intelligent battery sensor  
 0x016D4491 4491 Control unit, internal 20  
 0x016D4495 4495 Intelligent battery sensor  
 0x016D4497 4497 Intelligent battery sensor  
 0x016D44A0 44A0 Injectors, activation, cyl. 1,2,3  
 0x016D44A1 44A1 Injectors, activation, cyl. 1,2,3  
 0x016D44A2 44A2 Injectors, activation, cyl. 1,2,3  
 0x016D44A3 44A3 Injectors, activation, cyl. 1,2,3  
 0x016D44AC 44AC Injectors, activation, cyl. 1,2,3  
 0x016D44B0 44B0 Injectors, activation, cyl. 4,5,6  
 0x016D44B1 44B1 Injectors, activation, cyl. 4,5,6  
 0x016D44B2 44B2 Injectors, activation, cyl. 4,5,6  
 0x016D44B3 44B3 Injectors, activation, cyl. 4,5,6  
 0x016D44BC 44BC Injectors, activation, cyl. 4,5,6  
 0x016D44C0 44C0 Number of desired injections limited  
 0x016D44C1 44C1 Number of desired injections limited  
 0x016D44C2 44C2 Number of desired injections limited  
 0x016D44D0 44D0 Generator  
 0x016D44D2 44D2 Generator  
 0x016D44D3 44D3 Generator  
 0x016D44E2 44E2 Generator  
 0x016D44E3 44E3 Generator  
 0x016D44F0 44F0 Rail-pressure plausibility pressure-controlled(-)  
 0x016D4501 4501 Exhaust-gas recirculation  
 0x016D4507 4507 Exhaust-gas recirculation  
 0x016D4512 4512 Thermal oil-level sensor, signal  
 0x016D4513 4513 Thermal oil-level sensor, signal  
 0x016D4521 4521 Charge-air pressure control  
 0x016D4530 4530 Charge-air pressure control  
 0x016D4536 4536 Power management, battery  
 0x016D4538 4538 Power management, battery  
 0x016D4541 4541 Thermal oil-level sensor  
 0x016D4545 4545 Power management, vehicle electrical system  
 0x016D4546 4546 Power management, vehicle electrical system  
 0x016D4547 4547 Power management, vehicle electrical system  
 0x016D4548 4548 Power management, vehicle electrical system  
 0x016D4560 4560 Rail-pressure plausibility delivery-controlled  
 0x016D4570 4570 Rail-pressure plausibility delivery-controlled  
 0x016D4580 4580 Rail-pressure plausibility delivery-controlled  
 0x016D4587 4587 Heated fuel filter  
 0x016D4590 4590 Rail-pressure plausibility delivery-controlled  
 0x016D45A0 45A0 Rail-pressure plausibility delivery-controlled

# Bmw Code Sheet.txt

0x016D45C0 45C0 Rail-pressure plausibility delivery-controlled(-)  
 0x016D45F6 45F6 Message(torque ACCB7)  
 0x016D4600 4600 Rail-pressure plausibility pressure-controlled  
 0x016D4610 4610 Rail-pressure plausibility pressure-controlled  
 0x016D4620 4620 Rail-pressure plausibility pressure-controlled  
 0x016D4630 4630 Rail-pressure plausibility pressure-controlled  
 0x016D4640 4640 Rail-pressure plausibility pressure-controlled  
 0x016D4650 4650 Rail-pressure plausibility pressure-controlled(-)  
 0x016D4660 4660 Power supply  
 0x016D4661 4661 Power supply  
 0x016D4670 4670 Supply voltage 1  
 0x016D4671 4671 Supply voltage 1  
 0x016D4680 4680 Supply voltage 2  
 0x016D4681 4681 Supply voltage 2  
 0x016D4690 4690 Supply voltage 3  
 0x016D4691 4691 Supply voltage 3  
 0x016D46A0 46A0 Control unit, internal 1  
 0x016D46A1 46A1 Control unit, internal 1  
 0x016D46A2 46A2 Control unit, internal 1  
 0x016D46A3 46A3 Control unit, internal 1  
 0x016D46B0 46B0 Control unit, internal 2  
 0x016D46B1 46B1 Control unit, internal 2  
 0x016D46B2 46B2 Control unit, internal 2  
 0x016D46B3 46B3 Control unit, internal 2  
 0x016D46C0 46C0 Control unit, internal 3  
 0x016D46C1 46C1 Control unit, internal 3  
 0x016D46D0 46D0 Control unit, internal 4  
 0x016D46D1 46D1 Control unit, internal 4  
 0x016D46D2 46D2 Control unit, internal 4  
 0x016D46D3 46D3 Control unit, internal 4  
 0x016D4703 4703 Control unit, internal 7  
 0x016D4711 4711 Control unit, internal 8  
 0x016D4712 4712 Control unit, internal 8  
 0x016D4713 4713 Control unit, internal 8  
 0x016D4723 4723 Control unit, internal 9  
 0x016D4730 4730 Delivery control valve, current control  
 0x016D4731 4731 Delivery control valve, current control  
 0x016D4732 4732 Delivery control valve, current control  
 0x016D4740 4740 Control unit, internal 11  
 0x016D4750 4750 Control unit, internal 12  
 0x016D4753 4753 Control unit, internal 12  
 0x016D4763 4763 Control unit, internal 13(-)  
 0x016D4773 4773 Control unit, internal 14  
 0x016D4780 4780 Control unit, internal 15  
 0x016D4781 4781 Control unit, internal 15  
 0x016D4782 4782 Control unit, internal 15  
 0x016D4783 4783 Control unit, internal 15  
 0x016D4830 4830 Intake-air temperature sensor  
 0x016D4831 4831 Intake-air temperature sensor  
 0x016D4863 4863 Cruise control  
 0x016D48F2 48F2 PT-CAN bus  
 0x016D48F3 48F3 PT-CAN bus  
 0x016D4900 4900 Torque intervention DSC(-)  
 0x016D4912 4912 PT-CAN bus  
 0x016D4913 4913 PT-CAN bus  
 0x016D4920 4920 Torque intervention, gearbox(-)  
 0x016D4A02 4A02 Terminal 15  
 0x016D4A03 4A03 Terminal 15  
 0x016D4A10 4A10 Bit-serial data interface BSD  
 0x016D4A13 4A13 Bit-serial data interface BSD  
 0x016D4A41 4A41 EWS interface error  
 0x016D4A42 4A42 EWS interface error  
 0x016D4A43 4A43 EWS interface error



0x016D4A51 4A51 EWS random-code storage  
 0x016D4A60 4A60 EWS tampering  
 0x016D4A61 4A61 EWS tampering  
 0x016D4A62 4A62 EWS tampering  
 0x016D4A63 4A63 EWS tampering  
 0x016D4A70 4A70 Map values incorrect  
 0x016D4A80 4A80 Charge-air tube monitoring  
 0x016D4AB2 4AB2 Electric auxiliary heater  
 0x016D4AE0 4AE0 Electronics-box fan, activation  
 0x016D4AE1 4AE1 Electronics-box fan, activation  
 0x016D4AE2 4AE2 Electronics-box fan, activation  
 0x016D4AE3 4AE3 Electronics-box fan, activation  
 0x016D4AF0 4AF0 Control-unit temperature sensor, signal  
 0x016D4AF1 4AF1 Control-unit temperature sensor, signal  
 0x016D4B00 4B00 Control-unit temperature  
 0x016D4B10 4B10 Smooth running controller  
 0x016D4B11 4B11 Smooth running controller  
 0x016D4B22 4B22 Electric fan  
 0x016D4B50 4B50 Rate adjustment  
 0x016D4B60 4B60 Volume drift compensation  
 0x016D4B80 4B80 Rail-pressure plausibility delivery-controlled(-)  
 0x016D4B90 4B90 Rail-pressure monitoring on engine start  
 0x016D4BA0 4BA0 Intake-air temperature sensor, signal  
 0x016D4BA1 4BA1 Intake-air temperature sensor, signal  
 0x016D4BB0 4BB0 Supply voltage, air-mass flow sensor  
 0x016D4BB1 4BB1 Supply voltage, air-mass flow sensor  
 0x016D4BB5 4BB5 Air-mass flow sensor  
 0x016D4BB6 4BB6 Air-mass flow sensor  
 0x016D4BC0 4BC0 Air-mass flow sensor  
 0x016D4BC1 4BC1 Air-mass flow sensor  
 0x016D4BC2 4BC2 Air-mass flow sensor  
 0x016D4BC5 4BC5 Intake-air temperature sensor  
 0x016D4BC6 4BC6 Intake-air temperature sensor  
 0x016D4BC7 4BC7 Intake-air temperature sensor  
 0x016D4BD2 4BD2 Torque request ARS  
 0x016D4BD5 4BD5 Engine mount, activation  
 0x016D4BD6 4BD6 Engine mount, activation  
 0x016D4BD7 4BD7 Engine mount, activation  
 0x016D4BD8 4BD8 Engine mount, activation  
 0x016D4BF2 4BF2 Message (air conditioning, 0x1B5)  
 0x016D4BF3 4BF3 Message (air conditioning, 0x1B5)  
 0x016D4BF7 4BF7 Message (range, 0x330)  
 0x016D4BF8 4BF8 Message (range, 0x330)  
 0x016D4C00 4C00 Message (cruise control/ACC, 0x194)  
 0x016D4C01 4C01 Message (cruise control/ACC, 0x194)  
 0x016D4C02 4C02 Message (cruise control/ACC, 0x194)  
 0x016D4C03 4C03 Message (cruise control/ACC, 0x194)  
 0x016D4C06 4C06 Message (status ARS, 0x1AC)  
 0x016D4C07 4C07 Message (status ARS, 0x1AC)  
 0x016D4C08 4C08 Message (status ARS, 0x1AC)  
 0x016D4C12 4C12 Message (status DSC, 0x19E)  
 0x016D4C13 4C13 Message (status DSC, 0x19E)  
 0x016D4C15 4C15 Message (terminal 15, 0x130)  
 0x016D4C16 4C16 Message (terminal 15, 0x130)  
 0x016D4C17 4C17 Message (terminal 15, 0x130)  
 0x016D4C18 4C18 Message (terminal 15, 0x130)  
 0x016D4C20 4C20 Message (torque DSC, 0xB6)  
 0x016D4C21 4C21 Message (torque DSC, 0xB6)  
 0x016D4C22 4C22 Message (torque DSC, 0xB6)  
 0x016D4C23 4C23 Message (torque DSC, 0xB6)  
 0x016D4C27 4C27 Message (speed, 0x1A0)  
 0x016D4C28 4C28 Message (speed, 0x1A0)  
 0x016D4DF0 4DF0 Message (torque transmission, 0xB5)

# Bmw Code Sheet.txt

0x016D4DF1 4DF1 Message(torque transmission, 0xB5)  
 0x016D4DF2 4DF2 Message(torque transmission, 0xB5)  
 0x016D4DF3 4DF3 Message(torque transmission, 0xB5)  
 0x016E3E90 3E90 Crankshaft sensor, signal  
 0x016E3E91 3E91 Crankshaft sensor, signal  
 0x016E3E9C 3E9C Particulate filter system, bank 2  
 0x016E3EA5 3EA5 Intake-air temperature sensor 2, signal  
 0x016E3EA6 3EA6 Intake-air temperature sensor 2, signal  
 0x016E3EAA 3EAA Rail pressure plausibility(coupled pressure/quantity control)  
 0x016E3EB0 3EB0 Speed calculation  
 0x016E3EBA 3EBA Rail pressure plausibility(coupled pressure/quantity control)  
 0x016E3EC0 3EC0 Camshaft sensor, signal  
 0x016E3EC1 3EC1 Camshaft sensor, signal  
 0x016E3EC7 3EC7 Monitoring master/slave  
 0x016E3ECA 3ECA Rail pressure plausibility(coupled pressure/quantity control)  
 0x016E3ED5 3ED5 Air-mass flow sensor 2  
 0x016E3ED6 3ED6 Air-mass flow sensor 2  
 0x016E3EDC 3EDC Variant coding  
 0x016E3EDD 3EDD Variant coding  
 0x016E3EE0 3EE0 Coolant temperature sensor, signal  
 0x016E3EE1 3EE1 Coolant temperature sensor, signal  
 0x016E3EE5 3EE5 Air-mass flow sensor 2  
 0x016E3EE6 3EE6 Air-mass flow sensor 2  
 0x016E3EE7 3EE7 Air-mass flow sensor 2  
 0x016E3EED 3EED Power management closed-circuit current  
 0x016E3EF3 3EF3 Coolant temperature sensor, plausibility  
 0x016E3EF5 3EF5 Intake-air temperature sensor 2(reference signal for air-mass flow sensor)  
 0x016E3EF6 3EF6 Intake-air temperature sensor 2(reference signal for air-mass flow sensor)  
 0x016E3EF7 3EF7 Intake-air temperature sensor 2(reference signal for air-mass flow sensor)  
 0x016E3EFB 3EFB Thermal oil-level sensor  
 0x016E3EFC 3EFC Thermal oil-level sensor  
 0x016E3EFD 3EFD Thermal oil-level sensor  
 0x016E3F00 3F00 Charge-air pressure sensor, signal  
 0x016E3F01 3F01 Charge-air pressure sensor, signal  
 0x016E3F03 3F03 Charge-air pressure sensor, signal  
 0x016E3F10 3F10 Accelerator-pedal module, potentiometer 1, signal  
 0x016E3F11 3F11 Accelerator-pedal module, potentiometer 1, signal  
 0x016E3F20 3F20 Accelerator-pedal module, potentiometer 2, signal  
 0x016E3F21 3F21 Accelerator-pedal module, potentiometer 2, signal  
 0x016E3F25 3F25 Charge-air tube monitoring  
 0x016E3F30 3F30 Rail-pressure sensor, signal  
 0x016E3F31 3F31 Rail-pressure sensor, signal  
 0x016E3F35 3F35 Charge-air tube monitoring at idle  
 0x016E3F40 3F40 Rail pressure sensor, offset test  
 0x016E3F41 3F41 Rail pressure sensor, offset test  
 0x016E3F50 3F50 Roadspeed signal  
 0x016E3F52 3F52 Roadspeed signal  
 0x016E3F53 3F53 Roadspeed signal  
 0x016E3F57 3F57 Charge-air pressure controller  
 0x016E3F62 3F62 Roadspeed signal via CAN  
 0x016E3F67 3F67 Charge-air pressure controller 2  
 0x016E3F77 3F77 Charge-air pressure actuator, activation  
 0x016E3F87 3F87 Charge-air pressure actuator 2, activation  
 0x016E3F97 3F97 Charge-air pressure actuator, supply voltage  
 0x016E3FA7 3FA7 Charge-air pressure actuator 2, supply voltage  
 0x016E3FB5 3FB5 Monitoring master/slave  
 0x016E3FB6 3FB6 Monitoring master/slave  
 0x016E3FB7 3FB7 Monitoring master/slave  
 0x016E3FC0 3FC0 Air-mass flow sensor  
 0x016E3FD0 3FD0 Air-mass flow sensor

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0x016E3FF0 3FF0 Air-mass flow sensor  
 0x016E3FF1 3FF1 Air-mass flow sensor  
 0x016E4000 4000 Fuel temperature sensor, signal  
 0x016E4001 4001 Fuel temperature sensor, signal  
 0x016E4010 4010 Exhaust backpressure sensor before particulate filter, bank 1, signal  
 0x016E4011 4011 Exhaust backpressure sensor before particulate filter, bank 1, signal  
 0x016E4020 4020 Exhaust temperature sensor before particulate filter, bank 1, signal  
 0x016E4021 4021 Exhaust temperature sensor before particulate filter, bank 1, signal  
 0x016E4030 4030 Exhaust temperature sensor before catalytic converter, bank 1, signal  
 0x016E4031 4031 Exhaust temperature sensor before catalytic converter, bank 1, signal  
 0x016E404B 404B Exhaust-gas recirculation controller 2  
 0x016E405B 405B Exhaust-gas recirculation controller 2  
 0x016E4060 4060 Ambient-pressure sensor(installed in control unit), signal  
 0x016E4061 4061 Ambient-pressure sensor(installed in control unit), signal  
 0x016E4063 4063 Ambient-pressure sensor(installed in control unit), signal  
 0x016E406B 406B Exhaust-gas recirculation controller  
 0x016E407B 407B Exhaust-gas recirculation controller  
 0x016E4083 4083 Brake-light/brake-test switch, signals  
 0x016E408A 408A Exhaust-gas recirculation controller  
 0x016E408B 408B Exhaust-gas recirculation controller  
 0x016E409A 409A Exhaust-gas recirculation controller 2  
 0x016E409B 409B Exhaust-gas recirculation controller 2  
 0x016E40A1 40A1 Alternator load signal  
 0x016E40DA 40DA Throttle valve actuator 1  
 0x016E40DB 40DB Throttle valve actuator 1  
 0x016E40EA 40EA Throttle valve actuator 2  
 0x016E40EB 40EB Throttle valve actuator 2  
 0x016E40FC 40FC Throttle valve actuator 2  
 0x016E4108 4108 Monitoring master/slave  
 0x016E410C 410C Swirl-flap actuator  
 0x016E4117 4117 Monitoring master/slave  
 0x016E4118 4118 Monitoring master/slave  
 0x016E4120 4120 DDE main relay  
 0x016E4121 4121 DDE main relay  
 0x016E4125 4125 Supply voltage 4  
 0x016E4126 4126 Supply voltage 4  
 0x016E4130 4130 Swirl-flap actuator, activation  
 0x016E4135 4135 Supply voltage 5  
 0x016E4136 4136 Supply voltage 5  
 0x016E4140 4140 Swirl-flap actuator, activation  
 0x016E4145 4145 Supply voltage 6  
 0x016E4146 4146 Supply voltage 6  
 0x016E4152 4152 Swirl-flap actuator, activation  
 0x016E4153 4153 Swirl-flap actuator, activation  
 0x016E4155 4155 Exhaust flap actuator, activation  
 0x016E4156 4156 Exhaust flap actuator, activation  
 0x016E4157 4157 Exhaust flap actuator, activation  
 0x016E4158 4158 Exhaust flap actuator, activation  
 0x016E4166 4166 Particulate filter system, bank 1  
 0x016E4175 4175 Exhaust temperature sensor before particulate filter, bank 1, signal  
 0x016E4180 4180 Charge-air pressure actuator, activation  
 0x016E4185 4185 Exhaust-gas temperature sensor before cat. conv., bank 1, signal  
 0x016E4191 4191 Charge-air pressure actuator, activation  
 0x016E419A 419A Ambient-pressure sensor(installed in DDE control unit)  
 0x016E419B 419B Ambient-pressure sensor(installed in DDE control unit)  
 0x016E41A2 41A2 Charge-air pressure actuator, activation  
 0x016E41A3 41A3 Charge-air pressure actuator, activation  
 0x016E41AA 41AA Charge-air pressure sensor  
 0x016E41AB 41AB Charge-air pressure sensor

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0x016E41B0 41B0 Exhaust-gas recirculation controller, activation  
 0x016E41BA 41BA Exhaust backpressure sensor, bank 1  
 0x016E41BB 41BB Exhaust backpressure sensor, bank 1  
 0x016E41CD 41CD Plausibility, pressure sensors  
 0x016E41D1 41D1 Exhaust-gas recirculation controller, activation  
 0x016E41D5 41D5 Oxygen sensor, bank 1, signal, Nernst voltage  
 0x016E41D6 41D6 Oxygen sensor, bank 1, signal, Nernst voltage  
 0x016E41D7 41D7 Oxygen sensor, bank 1, signal, Nernst voltage  
 0x016E41E2 41E2 Exhaust-gas recirculation controller, activation  
 0x016E41E3 41E3 Exhaust-gas recirculation controller, activation  
 0x016E41E5 41E5 Oxygen sensor, bank 1, signal, pump current  
 0x016E41E6 41E6 Oxygen sensor, bank 1, signal, pump current  
 0x016E41E7 41E7 Oxygen sensor, bank 1, signal, pump current  
 0x016E41F0 41F0 Electric fan, activation  
 0x016E41F1 41F1 Electric fan, activation  
 0x016E41F2 41F2 Electric fan, activation  
 0x016E41F3 41F3 Electric fan, activation  
 0x016E41F5 41F5 Oxygen sensor, bank 1, signal, virtual ground  
 0x016E41F6 41F6 Oxygen sensor, bank 1, signal, virtual ground  
 0x016E41F7 41F7 Oxygen sensor, bank 1, signal, virtual ground  
 0x016E4203 4203 Glow control unit  
 0x016E4205 4205 Oxygen sensor, bank 1, activation, heating  
 0x016E4206 4206 Oxygen sensor, bank 1, activation, heating  
 0x016E4207 4207 Oxygen sensor, bank 1, activation, heating  
 0x016E4211 4211 Glow plug, cylinder 1, activation  
 0x016E4212 4212 Glow plug, cylinder 1, activation  
 0x016E4213 4213 Glow plug, cylinder 1, activation  
 0x016E4217 4217 Oxygen sensor, bank 1  
 0x016E4221 4221 Glow plug, cylinder 2, activation  
 0x016E4222 4222 Glow plug, cylinder 2, activation  
 0x016E4223 4223 Glow plug, cylinder 2, activation  
 0x016E4225 4225 Oxygen sensor, bank 1  
 0x016E4226 4226 Oxygen sensor, bank 1  
 0x016E4231 4231 Glow plug, cylinder 3, activation  
 0x016E4232 4232 Glow plug, cylinder 3, activation  
 0x016E4233 4233 Glow plug, cylinder 3, activation  
 0x016E4235 4235 Control unit, internal 21  
 0x016E4236 4236 Control unit, internal 21  
 0x016E4241 4241 Glow plug, cylinder 4, activation  
 0x016E4242 4242 Glow plug, cylinder 4, activation  
 0x016E4243 4243 Glow plug, cylinder 4, activation  
 0x016E4245 4245 Control unit, internal 22  
 0x016E4246 4246 Control unit, internal 22  
 0x016E4251 4251 Glow plug, cylinder 5, activation  
 0x016E4252 4252 Glow plug, cylinder 5, activation  
 0x016E4253 4253 Glow plug, cylinder 5, activation  
 0x016E4258 4258 Control unit, internal 23  
 0x016E425D 425D Accelerator pedal module potentiometer, plausibility  
 0x016E4261 4261 Glow plug, cylinder 6, activation  
 0x016E4262 4262 Glow plug, cylinder 6, activation  
 0x016E4263 4263 Glow plug, cylinder 6, activation  
 0x016E4271 4271 Glow plug, cylinder 7, activation  
 0x016E4272 4272 Glow plug, cylinder 7, activation  
 0x016E4273 4273 Glow plug, cylinder 7, activation  
 0x016E4275 4275 Oxygen sensor, bank 1,heating  
 0x016E4276 4276 Oxygen sensor, bank 1,heating  
 0x016E4281 4281 Glow plug, cylinder 8, activation  
 0x016E4282 4282 Glow plug, cylinder 8, activation  
 0x016E4283 4283 Glow plug, cylinder 8, activation  
 0x016E4288 4288 Oxygen sensor, bank 1  
 0x016E4293 4293 Control unit, internal 16  
 0x016E4298 4298 Oxygen sensor, bank 1  
 0x016E42B5 42B5 Engine speed monitoring

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0x016E42CA 42CA Injectors, cyl. 1,2,3, activation  
 0x016E42CB 42CB Injectors, cyl. 1,2,3, activation  
 0x016E42CC 42CC Injectors, cyl. 1,2,3, activation(control unit internal)  
 0x016E42CD 42CD Injectors, cyl. 1,2,3, activation  
 0x016E42D5 42D5 Injector, cylinder 7, activation  
 0x016E42D6 42D6 Injector, cylinder 7, activation  
 0x016E42D7 42D7 Injector, cylinder 7, activation  
 0x016E42D8 42D8 Injector, cylinder 7, activation  
 0x016E42DA 42DA Injectors, cyl. 1,2,3, activation  
 0x016E42E2 42E2 Changeover, rail-pressure control  
 0x016E42E7 42E7 Injector, cylinder 7, activation  
 0x016E42EA 42EA Injectors, cyl. 4,5,6, activation  
 0x016E42EB 42EB Injectors, cyl. 4,5,6, activation  
 0x016E42EC 42EC Injectors, cyl. 4,5,6, activation(control unit internal)  
 0x016E42ED 42ED Injectors, cyl. 4,5,6, activation  
 0x016E42F2 42F2 Changeover, rail-pressure control  
 0x016E42F5 42F5 Injector, cylinder 8, activation  
 0x016E42F6 42F6 Injector, cylinder 8, activation  
 0x016E42F7 42F7 Injector, cylinder 8, activation  
 0x016E42F8 42F8 Injector, cylinder 8, activation  
 0x016E42FA 42FA Injectors, cyl. 4,5,6, activation  
 0x016E4302 4302 Delivery control valve, activation  
 0x016E4303 4303 Delivery control valve, activation  
 0x016E4307 4307 Injector, cylinder 8, activation  
 0x016E430A 430A Injectors, chip A(control unit internal)  
 0x016E430B 430B Injectors, chip A(control unit internal)  
 0x016E430C 430C Injectors, chip A(control unit internal)  
 0x016E430D 430D Injectors, chip A(control unit internal)  
 0x016E4310 4310 Delivery control valve, activation  
 0x016E431A 431A Injectors, chip B(control unit internal)  
 0x016E431B 431B Injectors, chip B(control unit internal)  
 0x016E431C 431C Injectors, chip B(control unit internal)  
 0x016E4321 4321 Delivery control valve, activation  
 0x016E4332 4332 Rail-pressure control valve, activation  
 0x016E4333 4333 Rail-pressure control valve, activation  
 0x016E4340 4340 Rail-pressure control valve, activation  
 0x016E4351 4351 Rail-pressure control valve, activation  
 0x016E4362 4362 Current control for rail-pressure control valve  
 0x016E4373 4373 Plausibility, air masses  
 0x016E4390 4390 Charge-air temperature sensor, signal  
 0x016E4391 4391 Charge-air temperature sensor, signal  
 0x016E43A0 43A0 Starter interlock relay, activation  
 0x016E43A1 43A1 Starter interlock relay, activation  
 0x016E43A2 43A2 Starter interlock relay, activation  
 0x016E43A3 43A3 Starter interlock relay, activation  
 0x016E43C0 43C0 Throttle-valve actuator, activation  
 0x016E43D1 43D1 Throttle-valve actuator, activation  
 0x016E43E2 43E2 Throttle-valve actuator, activation  
 0x016E43E3 43E3 Throttle-valve actuator, activation  
 0x016E4410 4410 Injector, cylinder 1, activation  
 0x016E4411 4411 Injector, cylinder 1, activation  
 0x016E4412 4412 Injector, cylinder 1, activation  
 0x016E4413 4413 Injector, cylinder 1, activation  
 0x016E4417 4417 Monitoring master/slave  
 0x016E441C 441C Injector, cylinder 1, activation  
 0x016E4420 4420 Injector, cylinder 2, activation  
 0x016E4421 4421 Injector, cylinder 2, activation  
 0x016E4422 4422 Injector, cylinder 2, activation  
 0x016E4423 4423 Injector, cylinder 2, activation  
 0x016E4428 4428 Monitoring master/slave  
 0x016E442C 442C Injector, cylinder 2, activation  
 0x016E4430 4430 Injector, cylinder 3, activation  
 0x016E4431 4431 Injector, cylinder 3, activation

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0x016E4432 4432 Injector, cylinder 3, activation  
 0x016E4433 4433 Injector, cylinder 3, activation  
 0x016E4438 4438 Monitoring master/slave  
 0x016E443C 443C Injector, cylinder 3, activation  
 0x016E4440 4440 Injector, cylinder 4, activation  
 0x016E4441 4441 Injector, cylinder 4, activation  
 0x016E4442 4442 Injector, cylinder 4, activation  
 0x016E4443 4443 Injector, cylinder 4, activation  
 0x016E444C 444C Injector, cylinder 4, activation  
 0x016E4450 4450 Injector, cylinder 5, activation  
 0x016E4451 4451 Injector, cylinder 5, activation  
 0x016E4452 4452 Injector, cylinder 5, activation  
 0x016E4453 4453 Injector, cylinder 5, activation  
 0x016E445C 445C Injector, cylinder 5, activation  
 0x016E4460 4460 Injector, cylinder 6, activation  
 0x016E4461 4461 Injector, cylinder 6, activation  
 0x016E4462 4462 Injector, cylinder 6, activation  
 0x016E4463 4463 Injector, cylinder 6, activation  
 0x016E446C 446C Injector, cylinder 6, activation  
 0x016E4473 4473 Control unit, internal 18  
 0x016E4480 4480 Control unit, internal 19  
 0x016E4491 4491 Control unit, internal 20  
 0x016E44C0 44C0 Number of desired injections limited  
 0x016E44C1 44C1 Number of desired injections limited  
 0x016E44C2 44C2 Number of desired injections limited  
 0x016E4501 4501 Exhaust-gas recirculation, control deviation  
 0x016E4507 4507 Exhaust-gas recirculation, control deviation  
 0x016E4521 4521 Charge-air pressure control, control deviation  
 0x016E4530 4530 Charge-air pressure control, control deviation  
 0x016E453C 453C Power Train CAN bus  
 0x016E453D 453D Power Train CAN bus  
 0x016E454B 454B Private CAN bus(master)  
 0x016E454C 454C Private CAN bus(master)  
 0x016E454D 454D Private CAN bus(master)  
 0x016E4550 4550 Charge-air pressure actuator 2, activation  
 0x016E4560 4560 Rail-pressure plausibility delivery-controlled  
 0x016E4570 4570 Rail-pressure plausibility delivery-controlled  
 0x016E4580 4580 Rail-pressure plausibility delivery-controlled  
 0x016E4590 4590 Rail-pressure plausibility delivery-controlled  
 0x016E45A0 45A0 Rail-pressure plausibility delivery-controlled  
 0x016E45A5 45A5 Charge-air temperature sensor 2, signal  
 0x016E45A6 45A6 Charge-air temperature sensor 2, signal  
 0x016E45E3 45E3 Monitoring master/slave  
 0x016E45F2 45F2 Monitoring master/slave  
 0x016E45F3 45F3 Monitoring master/slave  
 0x016E45F5 45F5 Message(torque request, 0xB7)  
 0x016E45F6 45F6 Message(torque request, 0xB7)  
 0x016E45F8 45F8 Message(torque request, 0xB7)  
 0x016E4600 4600 Rail-pressure plausibility pressure-controlled  
 0x016E4610 4610 Rail-pressure plausibility pressure-controlled  
 0x016E4620 4620 Rail-pressure plausibility pressure-controlled  
 0x016E4630 4630 Rail-pressure plausibility pressure-controlled  
 0x016E4640 4640 Rail-pressure plausibility pressure-controlled  
 0x016E4656 4656 Control unit, internal 24  
 0x016E4660 4660 Power supply  
 0x016E4661 4661 Power supply  
 0x016E4667 4667 Particulate-filter system, bank 1  
 0x016E4670 4670 Supply voltage 1  
 0x016E4671 4671 Supply voltage 1  
 0x016E4677 4677 Throttle-valve actuator  
 0x016E4680 4680 Supply voltage 2  
 0x016E4681 4681 Supply voltage 2  
 0x016E4687 4687 Throttle-valve actuator

0x016E4690 4690 Supply voltage 3  
 0x016E4691 4691 Supply voltage 3  
 0x016E4697 4697 Throttle-valve actuator  
 0x016E46C0 46C0 Control unit, internal 3  
 0x016E46D0 46D0 Control unit, internal 4  
 0x016E46D1 46D1 Control unit, internal 4  
 0x016E46D2 46D2 Control unit, internal 4  
 0x016E46D3 46D3 Control unit, internal 4  
 0x016E4703 4703 Control unit, internal 7  
 0x016E4711 4711 Control unit, internal 8  
 0x016E4712 4712 Control unit, internal 8  
 0x016E4713 4713 Control unit, internal 8  
 0x016E4723 4723 Control unit, internal 9  
 0x016E4732 4732 Delivery control valve, current control  
 0x016E4735 4735 Injectors, cyl.1,2,3, buffer voltage measurement(control unit internal)  
 0x016E4736 4736 Injectors, cyl.1,2,3, buffer voltage measurement(control unit internal)  
 0x016E4740 4740 Control unit, internal 11  
 0x016E4747 4747 Injectors, amplifier adjustment(control unit internal)  
 0x016E475A 475A Exhaust backpressure sensor, bank 2  
 0x016E475B 475B Exhaust backpressure sensor, bank 2  
 0x016E4765 4765 Injector, cylinder 1, activation  
 0x016E4766 4766 Injector, cylinder 1, activation  
 0x016E4767 4767 Injector, cylinder 1, activation  
 0x016E4768 4768 Injector, cylinder 1, activation  
 0x016E476A 476A Injector, cyl.4,5,6, buffer voltage measurement(control unit internal)  
 0x016E476B 476B Injector, cyl.4,5,6, buffer voltage measurement(control unit internal)  
 0x016E4773 4773 Control unit, internal 14  
 0x016E477C 477C Injectors, activation duration(control unit internal)  
 0x016E4780 4780 Control unit, internal 15  
 0x016E4781 4781 Control unit, internal 15  
 0x016E4782 4782 Control unit, internal 15  
 0x016E4783 4783 Control unit, internal 15  
 0x016E4785 4785 Injector, cylinder 2, activation  
 0x016E4786 4786 Injector, cylinder 2, activation  
 0x016E4787 4787 Injector, cylinder 2, activation  
 0x016E4788 4788 Injector, cylinder 2, activation  
 0x016E478C 478C Injector, activation duration(control unit internal)  
 0x016E4792 4792 Monitoring master/slave  
 0x016E4793 4793 Monitoring master/slave  
 0x016E4795 4795 Injector, cylinder 3, activation  
 0x016E4796 4796 Injector, cylinder 3, activation  
 0x016E4797 4797 Injector, cylinder 3, activation  
 0x016E4798 4798 Injector, cylinder 3, activation  
 0x016E47A5 47A5 Injector, cylinder 4, activation  
 0x016E47A6 47A6 Injector, cylinder 4, activation  
 0x016E47A7 47A7 Injector, cylinder 4, activation  
 0x016E47A8 47A8 Injector, cylinder 4, activation  
 0x016E47AB 47AB Private CAN bus(slave)  
 0x016E47AC 47AC Private CAN bus(slave)  
 0x016E47AD 47AD Private CAN bus(slave)  
 0x016E47B5 47B5 Injector, cylinder 5, activation  
 0x016E47B6 47B6 Injector, cylinder 5, activation  
 0x016E47B7 47B7 Injector, cylinder 5, activation  
 0x016E47B8 47B8 Injector, cylinder 5, activation  
 0x016E47BB 47BB Power Train CAN bus(slave)  
 0x016E47BC 47BC Power Train CAN bus(slave)  
 0x016E47BD 47BD Power Train CAN bus(slave)  
 0x016E47C5 47C5 Injector, cylinder 6, activation  
 0x016E47C6 47C6 Injector, cylinder 6, activation

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0x016E47C7 47C7 Injector, cylinder 6, activation  
 0x016E47C8 47C8 Injector, cylinder 6, activation  
 0x016E47D5 47D5 Injector, cylinder 7, activation  
 0x016E47D6 47D6 Injector, cylinder 7, activation  
 0x016E47D7 47D7 Injector, cylinder 7, activation  
 0x016E47D8 47D8 Injector, cylinder 7, activation  
 0x016E47E5 47E5 Injector, cylinder 8, activation  
 0x016E47E6 47E6 Injector, cylinder 8, activation  
 0x016E47E7 47E7 Injector, cylinder 8, activation  
 0x016E47E8 47E8 Injector, cylinder 8, activation  
 0x016E480A 480A Particulate filter system, bank 1  
 0x016E481A 481A Particulate filter system, bank 1  
 0x016E483D 483D Throttle actuator  
 0x016E4841 4841 Exhaust-gas recirculation 2, control deviation  
 0x016E484A 484A Accelerator-pedal module, potentiometer, signal  
 0x016E4850 4850 Exhaust-gas recirculation 2, control deviation  
 0x016E4857 4857 Swirl-flap actuator  
 0x016E4863 4863 Cruise control  
 0x016E4867 4867 Swirl-flap actuator  
 0x016E486D 486D Control unit, software fault  
 0x016E4877 4877 Swirl-flap actuator  
 0x016E487A 487A Oxygen sensor, bank 2, signal, Nernst voltage  
 0x016E487B 487B Oxygen sensor, bank 2, signal, Nernst voltage  
 0x016E487C 487C Oxygen sensor, bank 2, signal, Nernst voltage  
 0x016E4887 4887 Swirl-flap actuator  
 0x016E488A 488A Oxygen sensor, bank 2, signal, pump current  
 0x016E488B 488B Oxygen sensor, bank 2, signal, pump current  
 0x016E488C 488C Oxygen sensor, bank 2, signal, pump current  
 0x016E4896 4896 Swirl-flap actuator  
 0x016E489A 489A Oxygen sensor, bank 2, signal, virtual ground  
 0x016E489B 489B Oxygen sensor, bank 2, signal, virtual ground  
 0x016E489C 489C Oxygen sensor, bank 2, signal, virtual ground  
 0x016E48AA 48AA Oxygen sensor, bank 2, activation, heating  
 0x016E48AB 48AB Oxygen sensor, bank 2, activation, heating  
 0x016E48AC 48AC Oxygen sensor, bank 2, activation, heating  
 0x016E48B5 48B5 Injectors, charge measurement(control unit internal)  
 0x016E48B6 48B6 Injectors, charge measurement(control unit internal)  
 0x016E48B7 48B7 Injectors, charge measurement(control unit internal)  
 0x016E48BC 48BC Oxygen sensor, bank 2  
 0x016E48C5 48C5 Injectors, voltage measurement(control unit internal)  
 0x016E48C6 48C6 Injectors, charge measurement(control unit internal)  
 0x016E48C7 48C7 Injectors, charge measurement(control unit internal)  
 0x016E48CA 48CA Oxygen sensor, bank 2  
 0x016E48CB 48CB Oxygen sensor, bank 2  
 0x016E48DA 48DA Control unit, internal 25  
 0x016E48DB 48DB Control unit, internal 25  
 0x016E48EA 48EA Control unit, internal 26  
 0x016E48EB 48EB Control unit, internal 26  
 0x016E48F7 48F7 Injectors, wiring harness  
 0x016E48FD 48FD Control unit, internal 27  
 0x016E4907 4907 Injectors, selector switch(control unit internal)  
 0x016E490B 490B Control unit, internal 28  
 0x016E4917 4917 Injectors, charge switch(control unit internal)  
 0x016E4925 4925 Throttle valve actuator 2, activation  
 0x016E492A 492A Oxygen sensor, bank 2, heating  
 0x016E492B 492B Oxygen sensor, bank 2, heating  
 0x016E4936 4936 Throttle valve actuator 2, activation  
 0x016E493D 493D Oxygen sensor, bank 2  
 0x016E4947 4947 Throttle valve actuator 2, activation  
 0x016E4948 4948 Throttle valve actuator 2, activation  
 0x016E494D 494D Oxygen sensor, bank 2  
 0x016E4957 4957 Throttle valve actuator 2  
 0x016E495A 495A Exhaust temperature sensor before particulate filter, bank 2, signal



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0x016E495B 495B Exhaust temperature sensor before particulate filter, bank 2, signal  
0x016E4967 4967 Throttle valve actuator 2  
0x016E496A 496A Particulate filter system, bank 2  
0x016E497A 497A Particulate filter system, bank 2  
0x016E4997 4997 Throttle valve actuator 2  
0x016E49E7 49E7 Throttle actuator  
0x016E4A02 4A02 Terminal 15  
0x016E4A03 4A03 Terminal 15  
0x016E4A07 4A07 Alternator  
0x016E4A08 4A08 Alternator  
0x016E4A10 4A10 Bit-serial data interface BSD  
0x016E4A13 4A13 Bit-serial data interface BSD  
0x016E4A15 4A15 Alternator  
0x016E4A17 4A17 Alternator  
0x016E4A18 4A18 Alternator  
0x016E4A22 4A22 Charge-air pressure actuator 2, activation  
0x016E4A23 4A23 Charge-air pressure actuator 2, activation  
0x016E4A41 4A41 EWS interface error  
0x016E4A42 4A42 EWS interface error  
0x016E4A43 4A43 EWS interface error  
0x016E4A50 4A50 EWS EEPROM random-code storage faulty  
0x016E4A51 4A51 EWS EEPROM random-code storage faulty  
0x016E4A56 4A56 Power management, battery  
0x016E4A58 4A58 Power management, battery  
0x016E4A60 4A60 EWS tampering  
0x016E4A61 4A61 EWS tampering  
0x016E4A62 4A62 EWS tampering  
0x016E4A63 4A63 EWS tampering  
0x016E4A65 4A65 Power management, vehicle electrical system  
0x016E4A66 4A66 Power management, vehicle electrical system  
0x016E4A67 4A67 Power management, vehicle electrical system  
0x016E4A70 4A70 Map values incorrect  
0x016E4AD5 4AD5 Zero-quantity adaptation, injector, cylinder 1  
0x016E4AD6 4AD6 Zero-quantity adaptation, injector, cylinder 1  
0x016E4AE0 4AE0 Electronics-box fan, activation  
0x016E4AE1 4AE1 Electronics-box fan, activation  
0x016E4AE2 4AE2 Electronics-box fan, activation  
0x016E4AE3 4AE3 Electronics-box fan, activation  
0x016E4AE5 4AE5 Zero-quantity adaptation, injector, cylinder 2  
0x016E4AE6 4AE6 Zero-quantity adaptation, injector, cylinder 2  
0x016E4AF0 4AF0 Control-unit temperature sensor, signal  
0x016E4AF1 4AF1 Control-unit temperature sensor, signal  
0x016E4AF5 4AF5 Zero-quantity adaptation, injector, cylinder 3  
0x016E4AF6 4AF6 Zero-quantity adaptation, injector, cylinder 3  
0x016E4B00 4B00 Control-unit temperature  
0x016E4B05 4B05 Zero-quantity adaptation, injector, cylinder 4  
0x016E4B06 4B06 Zero-quantity adaptation, injector, cylinder 4  
0x016E4B10 4B10 Smooth running controller  
0x016E4B11 4B11 Smooth running controller  
0x016E4B15 4B15 Zero-quantity adaptation, injector, cylinder 5  
0x016E4B16 4B16 Zero-quantity adaptation, injector, cylinder 5  
0x016E4B22 4B22 Electric fan  
0x016E4B25 4B25 Zero-quantity adaptation, injector, cylinder 6  
0x016E4B26 4B26 Zero-quantity adaptation, injector, cylinder 6  
0x016E4B35 4B35 Oil condition sensor  
0x016E4B36 4B36 Oil condition sensor  
0x016E4B37 4B37 Oil condition sensor  
0x016E4B38 4B38 Oil condition sensor  
0x016E4B45 4B45 Injector, cylinder 1, energy consumption measurement  
0x016E4B50 4B50 Rate adjustment  
0x016E4B55 4B55 Injector, cylinder 2, energy consumption measurement  
0x016E4B60 4B60 Volume drift compensation  
0x016E4B65 4B65 Injector, cylinder 3, energy consumption measurement

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0x016E4B75 4B75 Injector, cylinder 4, energy consumption measurement  
 0x016E4B85 4B85 Injector, cylinder 5, energy consumption measurement  
 0x016E4B90 4B90 Rail-pressure monitoring on engine start  
 0x016E4B95 4B95 Injector, cylinder 6, energy consumption measurement  
 0x016E4BA0 4BA0 Intake-air temperature sensor, signal  
 0x016E4BA1 4BA1 Intake-air temperature sensor, signal  
 0x016E4BB0 4BB0 Supply voltage, air-mass flow sensor  
 0x016E4BB1 4BB1 Supply voltage, air-mass flow sensor  
 0x016E4BB5 4BB5 Air-mass flow sensor  
 0x016E4BB6 4BB6 Air-mass flow sensor  
 0x016E4BC0 4BC0 Air-mass flow sensor  
 0x016E4BC1 4BC1 Air-mass flow sensor  
 0x016E4BC2 4BC2 Air-mass flow sensor  
 0x016E4BC5 4BC5 Intake-air temperature sensor(reference signal for air-mass sensor)  
 0x016E4BC6 4BC6 Intake-air temperature sensor(reference signal for air-mass sensor)  
 0x016E4BC7 4BC7 Intake-air temperature sensor(reference signal for air-mass sensor)  
 0x016E4BD2 4BD2 Torque request ARS  
 0x016E4BD5 4BD5 Engine mount, activation  
 0x016E4BD6 4BD6 Engine mount, activation  
 0x016E4BD7 4BD7 Engine mount, activation  
 0x016E4BD8 4BD8 Engine mount, activation  
 0x016E4C23 4C23 Message(torque DSC, 0xB6)  
 0x016E4C28 4C28 Message(speed, 0x1A0)  
 0x016E4C45 4C45 Injector, cylinder 7, energy consumption measurement  
 0x016E4C55 4C55 Injector, cylinder 8, energy consumption measurement  
 0x016E4C65 4C65 Zero-quantity adaptation, injector, cylinder 7  
 0x016E4C66 4C66 Zero-quantity adaptation, injector, cylinder 7  
 0x016E4C75 4C75 Supply voltage, air-mass flow sensor 2  
 0x016E4C76 4C76 Supply voltage, air-mass flow sensor 2  
 0x016E4C95 4C95 Zero-quantity adaptation, injector, cylinder 8  
 0x016E4C96 4C96 Zero-quantity adaptation, injector, cylinder 8  
 0x016E4CB3 4CB3 Message(power management, 0x334)  
 0x016E4CF3 4CF3 Exhaust backpressure sensor, bank 1, signal  
 0x016E4D00 4D00 Exhaust backpressure sensor, bank 1  
 0x016E4D03 4D03 Exhaust backpressure sensor, bank 1  
 0x016E4D25 4D25 Exhaust temperature sensor before catalytic converter, bank 2, signal  
 0x016E4D26 4D26 Exhaust temperature sensor before catalytic converter, bank 2, signal  
 0x016E4D45 4D45 Exhaust backpressure sensor before particulate filter, bank 2, signal  
 0x016E4D46 4D46 Exhaust backpressure sensor before particulate filter, bank 2, signal  
 0x016E4D56 4D56 Particulate filter system, bank 2  
 0x016E4D65 4D65 Particulate filter system  
 0x016E4D75 4D75 Particulate filter system  
 0x016E4D81 4D81 Charge-air pressure actuator 2, activation  
 0x016E4D98 4D98 Exhaust backpressure sensor, bank 2, signal  
 0x016E4DA3 4DA3 Charge-air pressure control  
 0x016E4DA5 4DA5 Exhaust backpressure sensor, bank 2  
 0x016E4DA8 4DA8 Exhaust backpressure sensor, bank 2  
 0x016E4DB0 4DB0 Exhaust-gas recirculation controller 2, activation  
 0x016E4DC1 4DC1 Exhaust-gas recirculation controller 2, activation  
 0x016E4DD2 4DD2 Exhaust-gas recirculation controller 2, activation  
 0x016E4DD3 4DD3 Exhaust-gas recirculation controller 2, activation  
 0x016E4DD5 4DD5 Exhaust temperature sensor before particulate filter, bank 2, signal  
 0x016E4DE0 4DE0 Monitoring master/slave, private CAN  
 0x016E4DE1 4DE1 Monitoring master/slave, private CAN  
 0x016E4DE3 4DE3 Monitoring master/slave, private CAN  
 0x016E4DF3 4DF3 Message(torque transmission, 0xB5)  
 0x016E4DF5 4DF5 Exhaust temperature sensor before cat., bank 2, signal  
 0x016F3E90 3E90 Crankshaft sensor, signal  
 0x016F3E91 3E91 Crankshaft sensor, signal

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0x016F3EB0 3EB0 Speed calculation  
 0x016F3EC0 3EC0 Camshaft sensor, signal  
 0x016F3EC1 3EC1 Camshaft sensor, signal  
 0x016F3EDC 3EDC Variant coding  
 0x016F3EDD 3EDD Variant coding  
 0x016F3EE0 3EE0 Coolant temperature sensor, signal  
 0x016F3EE1 3EE1 Coolant temperature sensor, signal  
 0x016F3EE2 3EE2 Coolant temperature sensor, signal  
 0x016F3EED 3EED Power management closed-circuit current  
 0x016F3EF3 3EF3 Coolant temperature sensor, plausibility  
 0x016F3EFB 3EFB Thermal oil-level sensor  
 0x016F3EFC 3EFC Thermal oil-level sensor  
 0x016F3EFD 3EFD Thermal oil-level sensor  
 0x016F3F00 3F00 Charge-air pressure sensor, signal  
 0x016F3F01 3F01 Charge-air pressure sensor, signal  
 0x016F3F02 3F02 Charge-air pressure sensor, signal  
 0x016F3F03 3F03 Charge-air pressure sensor, signal  
 0x016F3F10 3F10 Accelerator-pedal module, potentiometer 1, signal  
 0x016F3F11 3F11 Accelerator-pedal module, potentiometer 1, signal  
 0x016F3F13 3F13 Accelerator-pedal module, potentiometer 1, signal  
 0x016F3F20 3F20 Accelerator-pedal module, potentiometer 2, signal  
 0x016F3F21 3F21 Accelerator-pedal module, potentiometer 2, signal  
 0x016F3F23 3F23 Accelerator-pedal module, potentiometer 2, signal  
 0x016F3F25 3F25 Charge-air tube monitoring  
 0x016F3F30 3F30 Rail-pressure sensor, signal  
 0x016F3F31 3F31 Rail-pressure sensor, signal  
 0x016F3F35 3F35 Charge-air tube monitoring at idle  
 0x016F3F40 3F40 Rail pressure sensor, offset test  
 0x016F3F41 3F41 Rail pressure sensor, offset test  
 0x016F3F48 3F48 Evaluation brake light/brake-test switch  
 0x016F3F50 3F50 Roadspped signal  
 0x016F3F52 3F52 Roadspped signal  
 0x016F3F53 3F53 Roadspped signal  
 0x016F3F62 3F62 Roadspped signal via CAN  
 0x016F3F70 3F70 Intake-air temperature sensor, signal  
 0x016F3F71 3F71 Intake-air temperature sensor, signal  
 0x016F3F72 3F72 Intake-air temperature sensor, signal  
 0x016F3F82 3F82 Ambient temperature sensor, signal  
 0x016F3FC0 3FC0 Air-mass flow sensor  
 0x016F3FD0 3FD0 Air-mass flow sensor  
 0x016F3FF0 3FF0 Air-mass flow sensor  
 0x016F3FF1 3FF1 Air-mass flow sensor  
 0x016F4000 4000 Fuel temperature sensor, signal  
 0x016F4001 4001 Fuel temperature sensor, signal  
 0x016F4010 4010 Exhaust backpressure sensor before particulate filter, signal  
 0x016F4011 4011 Exhaust backpressure sensor before particulate filter, signal  
 0x016F4020 4020 Exhaust backpressure sensor before particulate filter, signal  
 0x016F4021 4021 Exhaust backpressure sensor before particulate filter, signal  
 0x016F4030 4030 Exhaust backpressure sensor before particulate filter, signal  
 0x016F4031 4031 Exhaust backpressure sensor before particulate filter, signal  
 0x016F4032 4032 Exhaust backpressure sensor before particulate filter, signal  
 0x016F4060 4060 Ambient-pressure sensor(installed in control unit), signal  
 0x016F4061 4061 Ambient-pressure sensor(installed in control unit), signal  
 0x016F4062 4062 Ambient-pressure sensor(installed in control unit), signal  
 0x016F4063 4063 Ambient-pressure sensor(installed in control unit), signal  
 0x016F4082 4082 Brake-light/brake-test switch, signals  
 0x016F4083 4083 Brake-light/brake-test switch, signals  
 0x016F40E0 40E0 Generator  
 0x016F410C 410C Swirl-flap actuator  
 0x016F4120 4120 DDE main relay  
 0x016F4121 4121 DDE main relay  
 0x016F4130 4130 Swirl flaps, activation  
 0x016F4141 4141 Swirl-flap actuator, activation

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0x016F4152 4152 Swirl-flap actuator, activation  
 0x016F4153 4153 Swirl-flap actuator, activation  
 0x016F4155 4155 Exhaust flap actuator, activation  
 0x016F4156 4156 Exhaust flap actuator, activation  
 0x016F4157 4157 Exhaust flap actuator, activation  
 0x016F4158 4158 Exhaust flap actuator, activation  
 0x016F4165 4165 Particulate-filter system  
 0x016F4166 4166 Particulate-filter system  
 0x016F4175 4175 Exhaust-gas temperature sensor before particulate filter, signal  
 0x016F4180 4180 Turbine control flap, activation  
 0x016F4185 4185 Exhaust-gas temperature sensor before cat. conv., signal  
 0x016F4186 4186 Exhaust-gas temperature sensor before cat. conv., signal  
 0x016F4188 4188 Exhaust-gas temperature sensor before cat. conv., signal  
 0x016F4191 4191 Turbine control flap, activation  
 0x016F419A 419A Ambient-pressure sensor(installed in DDE control unit)  
 0x016F419B 419B Ambient-pressure sensor(installed in DDE control unit)  
 0x016F41A2 41A2 Turbine control flap, activation  
 0x016F41A3 41A3 Turbine control flap, activation  
 0x016F41AA 41AA Charge-air pressure sensor  
 0x016F41AB 41AB Charge-air pressure sensor  
 0x016F41B0 41B0 Exhaust-gas recirculation controller, activation  
 0x016F41BA 41BA Exhaust backpressure sensor  
 0x016F41BB 41BB Exhaust backpressure sensor  
 0x016F41CD 41CD Plausibility, pressure sensors  
 0x016F41D1 41D1 Exhaust-gas recirculation controller, activation  
 0x016F41D5 41D5 Oxygen sensor, signal, Nernst voltage  
 0x016F41D6 41D6 Oxygen sensor, signal, Nernst voltage  
 0x016F41D7 41D7 Oxygen sensor, signal, Nernst voltage  
 0x016F41E2 41E2 Exhaust-gas recirculation controller, activation  
 0x016F41E3 41E3 Exhaust-gas recirculation controller, activation  
 0x016F41E5 41E5 Oxygen sensor, signal, pump current  
 0x016F41E6 41E6 Oxygen sensor, signal, pump current  
 0x016F41E7 41E7 Oxygen sensor, signal, pump current  
 0x016F41F0 41F0 Electric fan, activation  
 0x016F41F1 41F1 Electric fan, activation  
 0x016F41F2 41F2 Electric fan, activation  
 0x016F41F3 41F3 Electric fan, activation  
 0x016F41F5 41F5 Oxygen sensor, signal, virtral ground  
 0x016F41F6 41F6 Oxygen sensor, signal, virtral ground  
 0x016F41F7 41F7 Oxygen sensor, signal, virtral ground  
 0x016F4203 4203 Glow control unit  
 0x016F4205 4205 Oxygen sensor, heater activation  
 0x016F4206 4206 Oxygen sensor, heater activation  
 0x016F4207 4207 Oxygen sensor, heater activation  
 0x016F420B 420B Exhaust-gas recirculation in regeneration mode  
 0x016F4211 4211 Glow plug, cylinder 1, activation  
 0x016F4212 4212 Glow plug, cylinder 1, activation  
 0x016F4213 4213 Glow plug, cylinder 1, activation  
 0x016F4217 4217 Oxygen sensor  
 0x016F4221 4221 Glow plug, cylinder 2, activation  
 0x016F4222 4222 Glow plug, cylinder 2, activation  
 0x016F4223 4223 Glow plug, cylinder 2, activation  
 0x016F4225 4225 Oxygen sensor  
 0x016F4226 4226 Oxygen sensor  
 0x016F422A 422A Exhaust-gas recirculation regeneration mode  
 0x016F4231 4231 Glow plug, cylinder 3, activation  
 0x016F4232 4232 Glow plug, cylinder 3, activation  
 0x016F4233 4233 Glow plug, cylinder 3, activation  
 0x016F4235 4235 Control unit, internal 21  
 0x016F4236 4236 Control unit, internal 21  
 0x016F4241 4241 Glow plug, cylinder 4, activation  
 0x016F4242 4242 Glow plug, cylinder 4, activation  
 0x016F4243 4243 Glow plug, cylinder 4, activation

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0x016F4245 4245 Control unit, internal 22  
 0x016F4246 4246 Control unit, internal 22  
 0x016F4251 4251 Glow plug, cylinder 5, activation  
 0x016F4252 4252 Glow plug, cylinder 5, activation  
 0x016F4253 4253 Glow plug, cylinder 5, activation  
 0x016F4258 4258 Control unit, internal 23  
 0x016F425D 425D Accelerator pedal module potentiometer, plausibility  
 0x016F4261 4261 Glow plug, cylinder 6, activation  
 0x016F4262 4262 Glow plug, cylinder 6, activation  
 0x016F4263 4263 Glow plug, cylinder 6, activation  
 0x016F4267 4267 Oxygen sensor, shunt detection  
 0x016F4275 4275 Oxygen sensor, heater  
 0x016F4276 4276 Oxygen sensor, heater  
 0x016F4288 4288 Oxygen sensor  
 0x016F428B 428B Charge-air-pressure control of large turbocharger, control deviation  
 0x016F4293 4293 Control unit, internal 16  
 0x016F4296 4296 Oxygen sensor  
 0x016F4298 4298 Oxygen sensor  
 0x016F429A 429A Charge-air-pressure control of large turbocharger, control deviation  
 0x016F42B5 42B5 Engine speed monitoring  
 0x016F42E2 42E2 Changeover, rail-pressure control  
 0x016F42F2 42F2 Changeover, rail-pressure control  
 0x016F4302 4302 Delivery control valve, activation  
 0x016F4303 4303 Delivery control valve, activation  
 0x016F4310 4310 Delivery control valve, activation  
 0x016F4321 4321 Delivery control valve, activation  
 0x016F4332 4332 Rail-pressure control valve, activation  
 0x016F4333 4333 Rail-pressure control valve, activation  
 0x016F4340 4340 Rail-pressure control valve, activation  
 0x016F4351 4351 Rail-pressure control valve, activation  
 0x016F4362 4362 Current control for rail-pressure control valve  
 0x016F4390 4390 Charge-air temperature sensor, signal  
 0x016F4391 4391 Charge-air temperature sensor, signal  
 0x016F4392 4392 Charge-air temperature sensor, signal  
 0x016F43C0 43C0 Throttle valve actuator, activation  
 0x016F43D1 43D1 Throttle valve actuator, activation  
 0x016F43E2 43E2 Throttle valve actuator, activation  
 0x016F43E3 43E3 Throttle valve actuator, activation  
 0x016F43F0 43F0 Electric auxiliary heater, activation  
 0x016F43F1 43F1 Electric auxiliary heater, activation  
 0x016F43F2 43F2 Electric auxiliary heater, activation  
 0x016F43F3 43F3 Electric auxiliary heater, activation  
 0x016F4403 4403 Control unit, internal 17  
 0x016F4410 4410 Injector, cylinder 1, activation  
 0x016F4411 4411 Injector, cylinder 1, activation  
 0x016F4412 4412 Injector, cylinder 1, activation  
 0x016F4413 4413 Injector, cylinder 1, activation  
 0x016F441C 441C Injector, cylinder 1, activation  
 0x016F4420 4420 Injector, cylinder 2, activation  
 0x016F4421 4421 Injector, cylinder 2, activation  
 0x016F4422 4422 Injector, cylinder 2, activation  
 0x016F4423 4423 Injector, cylinder 2, activation  
 0x016F442C 442C Injector, cylinder 2, activation  
 0x016F4430 4430 Injector, cylinder 3, activation  
 0x016F4431 4431 Injector, cylinder 3, activation  
 0x016F4432 4432 Injector, cylinder 3, activation  
 0x016F4433 4433 Injector, cylinder 3, activation  
 0x016F443C 443C Injector, cylinder 3, activation  
 0x016F4440 4440 Injector, cylinder 4, activation  
 0x016F4441 4441 Injector, cylinder 4, activation  
 0x016F4442 4442 Injector, cylinder 4, activation  
 0x016F4443 4443 Injector, cylinder 4, activation  
 0x016F444C 444C Injector, cylinder 4, activation

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0x016F4450 4450 Injector, cylinder 5, activation  
 0x016F4451 4451 Injector, cylinder 5, activation  
 0x016F4452 4452 Injector, cylinder 5, activation  
 0x016F4453 4453 Injector, cylinder 5, activation  
 0x016F445C 445C Injector, cylinder 5, activation  
 0x016F4460 4460 Injector, cylinder 6, activation  
 0x016F4461 4461 Injector, cylinder 6, activation  
 0x016F4462 4462 Injector, cylinder 6, activation  
 0x016F4463 4463 Injector, cylinder 6, activation  
 0x016F446B 446B Injector, cylinder 6, activation  
 0x016F446C 446C Injector, cylinder 6, activation  
 0x016F4473 4473 Control unit, internal 18  
 0x016F4480 4480 Control unit, internal 19  
 0x016F4491 4491 Control unit, internal 20  
 0x016F44A0 44A0 Injectors, activation, cyl. 1, 2, 3  
 0x016F44A1 44A1 Injectors, activation, cyl. 1, 2, 3  
 0x016F44A2 44A2 Injectors, activation, cyl. 1, 2, 3  
 0x016F44A3 44A3 Injectors, activation, cyl. 1, 2, 3  
 0x016F44AC 44AC Injectors, activation, cyl. 1, 2, 3  
 0x016F44B0 44B0 Injectors, activation, cyl. 4, 5, 6  
 0x016F44B1 44B1 Injectors, activation, cyl. 4, 5, 6  
 0x016F44B2 44B2 Injectors, activation, cyl. 4, 5, 6  
 0x016F44B3 44B3 Injectors, activation, cyl. 4, 5, 6  
 0x016F44BC 44BC Injectors, activation, cyl. 4, 5, 6  
 0x016F44C0 44C0 Number of desired injections limited  
 0x016F44C1 44C1 Number of desired injections limited  
 0x016F44C2 44C2 Number of desired injections limited  
 0x016F4501 4501 Exhaust-gas recirculation, control deviation  
 0x016F4507 4507 Exhaust-gas recirculation, control deviation  
 0x016F4521 4521 Charge-air pressure control of small turbocharger, control deviation  
 0x016F452A 452A Particulate-filter system  
 0x016F4530 4530 Charge-air pressure control of small turbocharger, control deviation  
 0x016F453B 453B PT CAN bus  
 0x016F453C 453C PT CAN bus  
 0x016F453D 453D PT CAN bus  
 0x016F4560 4560 Rail-pressure plausibility delivery-controlled  
 0x016F4570 4570 Rail-pressure plausibility delivery-controlled  
 0x016F4580 4580 Rail-pressure plausibility delivery-controlled  
 0x016F4587 4587 Fuel filter  
 0x016F4590 4590 Rail-pressure plausibility delivery-controlled  
 0x016F45A0 45A0 Rail-pressure plausibility delivery-controlled  
 0x016F4600 4600 Rail-pressure plausibility pressure-controlled  
 0x016F4605 4605 Particulate-filter system  
 0x016F4610 4610 Rail-pressure plausibility pressure-controlled  
 0x016F4620 4620 Rail-pressure plausibility pressure-controlled  
 0x016F4628 4628 Particulate-filter system  
 0x016F4630 4630 Rail-pressure plausibility pressure-controlled  
 0x016F4640 4640 Rail-pressure plausibility pressure-controlled  
 0x016F4645 4645 Exhaust-gas recirculation controller  
 0x016F4650 4650 Rail-pressure plausibility pressure-controlled(-)  
 0x016F4656 4656 Control unit, internal 24  
 0x016F4660 4660 Power supply  
 0x016F4661 4661 Power supply  
 0x016F4665 4665 Particulate-filter system  
 0x016F4666 4666 Particulate-filter system  
 0x016F4667 4667 Particulate-filter system  
 0x016F4670 4670 Supply voltage 1  
 0x016F4671 4671 Supply voltage 1  
 0x016F4677 4677 Throttle valve actuator  
 0x016F4680 4680 Supply voltage 2  
 0x016F4681 4681 Supply voltage 2  
 0x016F4687 4687 Throttle valve actuator  
 0x016F4690 4690 Supply voltage 3

0x016F4691	4691	Supply voltage 3
0x016F4697	4697	Throttle valve actuator
0x016F46A0	46A0	Control unit, internal 1
0x016F46A1	46A1	Control unit, internal 1
0x016F46A2	46A2	Control unit, internal 1
0x016F46A3	46A3	Control unit, internal 1
0x016F46A7	46A7	Swirl-flap actuator
0x016F46B0	46B0	Control unit, internal 2
0x016F46B1	46B1	Control unit, internal 2
0x016F46B2	46B2	Control unit, internal 2
0x016F46B3	46B3	Control unit, internal 2
0x016F46B7	46B7	Swirl-flap actuator
0x016F46C0	46C0	Control unit, internal 3
0x016F46C7	46C7	Swirl-flap actuator
0x016F46D0	46D0	Control unit, internal 4
0x016F46D1	46D1	Control unit, internal 4
0x016F46D2	46D2	Control unit, internal 4
0x016F46D3	46D3	Control unit, internal 4
0x016F46D5	46D5	Compressor bypass plate, activation
0x016F46D6	46D6	Compressor bypass plate, activation
0x016F46D7	46D7	Compressor bypass plate, activation
0x016F46D8	46D8	Compressor bypass plate, activation
0x016F46E5	46E5	wastegate valve, activation
0x016F46F6	46F6	wastegate valve, activation
0x016F4703	4703	Control unit, internal 7
0x016F4707	4707	wastegate valve, activation
0x016F4708	4708	wastegate valve, activation
0x016F4711	4711	Control unit, internal 8
0x016F4712	4712	Control unit, internal 8
0x016F4713	4713	Control unit, internal 8
0x016F4723	4723	Control unit, internal 9
0x016F4732	4732	Delivery control valve, current control
0x016F4740	4740	Control unit, internal 11
0x016F4763	4763	Control unit, internal 13(-)
0x016F4772	4772	Control unit, internal 14
0x016F4773	4773	Control unit, internal 14
0x016F4780	4780	Control unit, internal 15
0x016F4781	4781	Control unit, internal 15
0x016F4782	4782	Control unit, internal 15
0x016F4783	4783	Control unit, internal 15
0x016F4803	4803	Torque monitoring ACC
0x016F480A	480A	Particulate-filter system
0x016F4810	4810	Torque intervention ACC
0x016F481A	481A	Particulate-filter system
0x016F4830	4830	Intake-air temperature sensor
0x016F4831	4831	Intake-air temperature sensor
0x016F4832	4832	Intake-air temperature sensor
0x016F4863	4863	Cruise control
0x016F49E7	49E7	Swirl-flap actuator
0x016F4A02	4A02	Terminal 15
0x016F4A03	4A03	Terminal 15
0x016F4A07	4A07	Alternator
0x016F4A08	4A08	Alternator
0x016F4A10	4A10	Bit-serial data interface BSD
0x016F4A13	4A13	Bit-serial data interface BSD
0x016F4A15	4A15	Alternator
0x016F4A17	4A17	Alternator
0x016F4A18	4A18	Alternator
0x016F4A25	4A25	Intelligent battery sensor
0x016F4A27	4A27	Intelligent battery sensor
0x016F4A28	4A28	Intelligent battery sensor
0x016F4A35	4A35	Intelligent battery sensor
0x016F4A37	4A37	Intelligent battery sensor

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0x016F4A38	4A38	Intelligent battery sensor
0x016F4A41	4A41	EWS interface error
0x016F4A42	4A42	EWS interface error
0x016F4A43	4A43	EWS interface error
0x016F4A45	4A45	Intelligent battery sensor
0x016F4A47	4A47	Intelligent battery sensor
0x016F4A48	4A48	Intelligent battery sensor
0x016F4A50	4A50	EWS EEPROM random-code storage faulty
0x016F4A51	4A51	EWS EEPROM random-code storage faulty
0x016F4A56	4A56	Power management, battery
0x016F4A58	4A58	Power management, battery
0x016F4A60	4A60	EWS tampering
0x016F4A61	4A61	EWS tampering
0x016F4A62	4A62	EWS tampering
0x016F4A63	4A63	EWS tampering
0x016F4A65	4A65	Power management, vehicle electrical system
0x016F4A66	4A66	Power management, vehicle electrical system
0x016F4A67	4A67	Power management, vehicle electrical system
0x016F4A70	4A70	Characteristic map incorrect
0x016F4A80	4A80	Charge-air tube monitoring
0x016F4AD5	4AD5	Zero-quantity adaptation, injector, cylinder 1
0x016F4AD6	4AD6	Zero-quantity adaptation, injector, cylinder 1
0x016F4AE0	4AE0	Electronics-box fan, activation
0x016F4AE1	4AE1	Electronics-box fan, activation
0x016F4AE2	4AE2	Electronics-box fan, activation
0x016F4AE3	4AE3	Electronics-box fan, activation
0x016F4AE5	4AE5	Zero-quantity adaptation, injector, cylinder 2
0x016F4AE6	4AE6	Zero-quantity adaptation, injector, cylinder 2
0x016F4AF0	4AF0	Control-unit temperature sensor, signal
0x016F4AF1	4AF1	Control-unit temperature sensor, signal
0x016F4AF5	4AF5	Zero-quantity adaptation, injector, cylinder 3
0x016F4AF6	4AF6	Zero-quantity adaptation, injector, cylinder 3
0x016F4B00	4B00	Control-unit temperature
0x016F4B05	4B05	Zero-quantity adaptation, injector, cylinder 4
0x016F4B06	4B06	Zero-quantity adaptation, injector, cylinder 4
0x016F4B10	4B10	Smooth running controller
0x016F4B11	4B11	Smooth running controller
0x016F4B15	4B15	Zero-quantity adaptation, injector, cylinder 5
0x016F4B16	4B16	Zero-quantity adaptation, injector, cylinder 5
0x016F4B20	4B20	Electric fan
0x016F4B22	4B22	Electric fan
0x016F4B25	4B25	Zero-quantity adaptation, injector, cylinder 6
0x016F4B26	4B26	Zero-quantity adaptation, injector, cylinder 6
0x016F4B50	4B50	Rate adjustment
0x016F4B60	4B60	Volume drift compensation
0x016F4B90	4B90	Rail-pressure monitoring on engine start
0x016F4BA0	4BA0	Intake-air temperature sensor, signal
0x016F4BA1	4BA1	Intake-air temperature sensor, signal
0x016F4BB0	4BB0	Supply voltage, air-mass flow sensor
0x016F4BB1	4BB1	Supply voltage, air-mass flow sensor
0x016F4BB5	4BB5	Air-mass flow sensor
0x016F4BB6	4BB6	Air-mass flow sensor
0x016F4BC0	4BC0	Air-mass flow sensor
0x016F4BC1	4BC1	Air-mass flow sensor
0x016F4BC2	4BC2	Air-mass flow sensor
0x016F4BC5	4BC5	Intake-air temperature sensor(reference signal for air-mass sensor)
0x016F4BC6	4BC6	Intake-air temperature sensor(reference signal for air-mass sensor)
0x016F4BC7	4BC7	Intake-air temperature sensor(reference signal for air-mass sensor)
0x016F4BD5	4BD5	Engine mount, activation
0x016F4BD6	4BD6	Engine mount, activation
0x016F4BD7	4BD7	Engine mount, activation
0x016F4BD8	4BD8	Engine mount, activation
0x016F4CE0	4CE0	Particulate-filter system



# Bmw Code Sheet.txt

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0x016F4CF3 4CF3 Exhaust backpressure sensor, signal
0x016F4D00 4D00 Exhaust backpressure sensor, signal
0x016F4D01 4D01 Exhaust backpressure sensor, signal
0x016F4D03 4D03 Exhaust backpressure sensor, signal
0x016F4D13 4D13 Particulate-filter system
0x016F4D23 4D23 Particulate-filter system
0x016F4D40 4D40 Particulate-filter system
0x016F4D73 4D73 Particulate-filter system

//EGS 1.XX 4HP-22/4HP gearbox
0x02010001 1 transmission relay
0x02010002 2 EPROM checksum
0x02010003 3 Kickdown switch
0x02010004 4 Program switch
0x02010005 5 throttle signal, accelerator pedal
0x02010006 6 solenoid valve MV 1
0x02010007 7 solenoid valve MV 2
0x02010008 8 MV1,MV2
0x02010009 9 P/N shift-Lock, solenoid valve R-Lock
0x0201000a 10 MV1,P/N shift-Lock, solenoid valve R-Lock]
0x0201000b 11 MV2,P/N shift-Lock, solenoid valve R-Lock
0x0201000c 12 MV1 2,P/N shift-Lock, solenoid valve R-Lock
0x0201000d 13 MV torque converter clutch
0x0201000e 14 MV 1,MV-WK
0x0201000f 15 MV 2,MV-WK
0x02010010 16 MV 1,MV 2,MV-WK
0x02010011 17 MV-WK,P/N shift-lock solenoid valve R-lock
0x02010012 18 MV 1,P/N shift-lock solenoid R-lock MV-WK
0x02010013 19 MV 2,P/N shift-lock solenoid R-lock MV-WK
0x02010014 20 voltage supply,MV and DR
0x02010015 21 Speed Signal,n-mot(TR)
0x02010016 22 pressure regulator
0x02010017 23 ignition timing intervention
0x02010018 24 speed sensor n-ab,downshift protection
0x02010019 25 overrun protection
0x0201001a 26 injection signal
0x0201001b 27 DZF,torque converter
0x0201001c 28 fault display
0x0201001d 29 checksum,program
0x0201001e 30 battery voltage
0x0201001f 31 selector lever pos.
0x020100c8 200 no kickdown shifts
0x020100c9 201 only kickdown shifts
0x020100ca 202 no s-program
0x020100cb 203 no M-program
0x020100cc 204 no program switchover
0x020100cd 205 no engine intervention
0x020100ce 206 incorrect fault display
0x020100cf 207 only full load shifts(without EML)
//EGS 2.XX 4HP-24
0x02020001 1 voltage supply
0x02020002 2 transmission output speed sensor
0x02020003 3 engine speed signal
0x02020005 5 solenoid valve 1
0x02020006 6 pressure regulator
0x0202000d 13 P/N shift-lock
0x0202000e 14 Selector pos. L2
0x02020013 19 volt. supply,MV/EDS
0x02020015 21 injector,pulse width signal
0x02020018 24 solenoid valve 2
0x0202002d 29 selector pos. L3 L4
0x02020020 32 engine intervention
0x02020027 39 voltage supply

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0x02020029 41 kickdown switch  
 0x0202002a 42 clutch lockup valve,torque converter  
 0x0202002b 43 program switch  
 0x0202003f 47 Throttle pedal position signal  
 0x02020032 50 selector pos L1  
 0x02020064 100 control unit internal fault  
 0x02020065 101 program checksum  
 0x02020066 102 volt. supply relay  
 0x02020068 104 transmission speed monitoring  
 0x02020067 105 wheel slip speed monitoring  
 //EGS 7.XX A5S 310Z (5HP-18)  
 0x02030002 2 P/N shift-lock  
 0x02030003 3 solenoid valve 5  
 0x02030004 4 torque converter clutch solenoid valve  
 0x02030005 5 pressure regulator  
 0x02030008 8 selector pos. L2  
 0x02030009 9 selector pos L3 L4  
 0x0203000c 12 program button  
 0x02030010 16 stall monitoring  
 0x02030012 18 kickdown switch  
 0x02030016 22 oil temp.sensor  
 0x0203001a 26 battery voltage  
 0x0203001e 30 solenoid valve 1  
 0x0203001f 31 solenoid valve 4  
 0x02030020 32 solenoid valve 3  
 0x02030021 33 solenoid valve 2  
 0x02030023 35 throttle signal(DKT)  
 0x02030024 36 selector pos. L1  
 0x02030028 40 engine intervention  
 0x02030029 41 KVA signal  
 0x0203002a 42 speed signal n-ab  
 0x0203002b 43 speed signal n-mod  
 0x02030035 53 voltage supply MV  
 0x02030036 54 voltage supply  
 0x02030064 100 gear monitoring  
 0x02030065 101 eeprom checksum  
 0x02030066 102 program checksum  
 0x02030067 103 transmission relay  
 0x02030068 104 temp. information (DKT-signal)  
 0x02030069 105 load information(DKT-signal)  
 0x020300c8 200 no kickdown shifts  
 0x020300c9 201 no S-program  
 0x020300ca 202 no \*-program  
 0x020300cb 203 no program switchover  
 0x020300cc 204 no engine intervention  
 0x020300cd 205 defective brake-light switch  
 0x020300ce 206 incorrect fault display  
 //EGS 9.XX 5HP-30 (A5S 560Z)  
 0x02040001 1 pressure regulator,EDS 2  
 0x02040002 2 P/N shift-lock  
 0x02040004 4 pressure regulator,EDS 4  
 0x02040005 5 pressure regulator,EDS 1  
 0x02040008 8 selector pos. L2  
 0x02040009 9 selector pos. L3 L4  
 0x0204000c 12 program button  
 0x02040010 16 turbo-charger rotational speed sensor  
 0x02040012 18 kickdown switch  
 0x02040013 19 ASC monitoring  
 0x02040016 22 ATF temp. sensor  
 0x0204001a 26 battery voltage  
 0x0204001d 29 pressure regulator,EDS 3  
 0x0204001e 30 solenoid valve 1  
 0x0204001f 31 solenoid valve 4

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0x02040020 32 solenoid valve 3
0x02040021 33 solenoid valve 2
0x02040023 35 throttle signal(DKT)
0x02040024 36 selector pos L1
0x02040028 40 engine intervention
0x02040029 41 KVA signal
0x0204002a 42 speed signal n-ab
0x0204002b 43 speed signal n-mot
0x02040035 53 voltage supply MV
0x02040064 100 speed monitoring
0x02040065 101 eprom checksum
0x02040066 102 program checksum
0x02040067 103 transmission relay
0x02040068 104 temp. information(DKT-signal)
0x02040069 105 load information (DKT-signal)
0x0204006a 106 speed monitoring
//EGS 4.XX E34 Gasoline Eng
0x02050001 1 P/N shift-lock
0x02050002 2 Program select
0x02050004 4 engine intervention
0x02050009 9 KVA signal
0x0205000b 11 speed signal n-mot
0x02050014 20 speed signal n-ab
0x02050016 22 ATF temp. sensor
0x02050017 23 selector lever pos.
0x0205001c 28 battery voltage
0x0205001e 30 kickdown switch
0x02050033 35 brake-light switch
0x02050025 37 voltage supply
0x02050026 38 solenoid valve torque converter cluth
0x02050027 39 brake-light switch
0x02050028 40 pressure regulator
0x0205002b 43 solenoid valve 2]
0x0205002d 45 solenoid valve,brake band
0x02050030 48 solenoid valve 1
0x02050036 54 ground solenoid valve
0x02050037 55 throttle-valve signal
0x02050064 100 gear monitoring
0x02050065 101 downshift protection
0x02050066 102 overrun protection
0x02050067 103 eprom checksum
0x02050068 104 DKT engine temp.info
0x02050069 105 DKT throttle-valve info
0x0205006e 110 control unit has not been programmed
0x020500c8 200 no kicksown shifts
0x020500c9 201 no S-program
0x020500ca 202 no M-program
0x020500cb 203 no S-program display
0x020500cc 204 no M-program display
0x020500cd 205 no program switchover
0x020500ce 206 no engine intervention
0x020500cf 207 adoption AC defective
0x020500d0 208 defective brake-light switch
0x020500d1 209 incorrect fault display
//Jecs 5-speed trans.\n A5S 300J(Jatco RLA)
0x02060001 1 solenoid check
0x02060002 2 solenoid valve compressor
0x02060004 4 voltage supply
0x02060006 6 solenoid valve A
0x02060007 7 solenoid valve B
0x0206000a 10 engine intervention
0x02060014 20 program buttom
0x02060017 23 voltage supply

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0x02060018 24 speed signal n-mod  
 0x02060019 25 speed signal n-ab  
 0x0206001b 27 speed-A signal  
 0x0206001d 29 solenoid valve WK  
 0x02060021 33 ATF temp sensor  
 0x02060022 34 throttle signal(DKT)  
 0x02060029 41 kickdown switch  
 0x0206002b 43 slip solenoid valve  
 0x0206002c 44 R shift solenoid fuse  
 0x0206002e 46 solenoid valve c  
 0x0206002f 47 P/N shift lock  
 0x02060032 50 WK slip test  
 0x02060033 51 shift test  
 0x02060034 52 engine overrev  
 0x02060035 53 A/D converter  
 0x020600c8 200 no kickdown shifts  
 0x020600c9 201 no S-program  
 0x020600ca 202 no \*-program  
 0x020600cb 203 no program switchover  
 0x020600cc 204 no engine intervention  
 0x020600cd 205 defective brake-light switch  
 0x020600ce 206 incorrect fault display  
 //0x21 EGS 7.32 M60B30  
 0x02210001 001 Pressure regulator,EDS 2  
 0x02210002 002 Solenoid,P/N lock  
 0x02210003 003 Solenoid valve 5  
 0x02210004 004 Solenoid valve,converter lockup clutch  
 0x02210005 005 Pressure regulator,EDS 1  
 0x02210008 008 Selector-lever position L2  
 0x02210009 009 Selector-lever position L4  
 0x0221000c 012 Program-selector switch  
 0x02210010 016 Rotational-speed sensor,turbocharger  
 0x02210012 018 Kickdown switch  
 0x02210013 019 ASC monitoring  
 0x02210016 022 ATF-sump temperature sensor  
 0x0221001A 026 Batt.+ supply (perm.)  
 0x0221001D 029 Pressure regulator,EDS 3  
 0x0221001E 030 Solenoid valve 1  
 0x0221001F 031 Solenoid valve 4  
 0x02210020 032 Solenoid valve 3  
 0x02210021 033 Solenoid valve 2  
 0x02210024 036 Selector-lever position L1  
 0x02210026 038 wheel speed,front left  
 0x02210027 039 wheel speed,front right  
 0x02210028 040 wheel speed,rear left  
 0x02210029 041 wheel speed,rear right  
 0x0221002A 042 Rotat.-sp.signal n-ab(output)  
 0x02210033 051 Pressure regulator,EDS 5  
 0x02210036 054 Batt.+ supply  
 0x02210064 100 Speed monitoring  
 0x02210065 101 Speed monitoring  
 0x02210066 102 Speed monitoring  
 0x02210067 103 Internal SG fault 1  
 0x02210068 104 Gearbox relay in the EGS  
 0x02210069 105 Engine overrevving interlock  
 0x0221006A 106 Stall-speed monitoring  
 0x0221006B 107 wheel speeds  
 0x0221006C 108 No programming  
 0x0221006D 109 Internal SG fault 2  
 0x0221006E 110 Internal SG fault 3  
 0x02210096 150 CAN bus monitoring  
 0x02210097 151 CAN status,fault  
 0x02210098 152 CAN engine intervention

# Bmw Code Sheet.txt

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0x02210099 153 CAN DME load signal
0x0221009A 154 CAN throttle-valve position
0x0221009B 155 CAN DME engine temperature
0x0221009C 156 CAN timeout 1(ignition ON)
0x0221009D 157 CAN timeout 2(operating)
0x0221009E 158 CAN throttle-valve and load signals
//0x22 EGS 8.60.0
0x02220001 001 Pressure actuator 1(P0748)
0x02220002 002 Pressure actuator 2(P0700,P1734)
0x02220003 003 Pressure actuator 3(P0700,P1738)
0x02220004 004 Pressure actuator 4(P0743)
0x0222001F 015 Pressure actuator,resultant current(P0700,P1748)
0x02220010 016 Solenoid valve 1(P0753)
0x02220011 017 Solenoid valve 2(P0758)
0x02220012 018 Solenoid valve 3(P0763)
0x02220013 019 Solenoid,shiftlock(P0700,P1761)
0x02220020 032 Speed signal,output(P0720)
0x02220021 033 Turbine speed sensor(P0715)
0x02220022 034 Transmission-fluid temperature sensor
0x02220030 048 Conv.lockup clutch,excessive slip(P0740)
0x02220031 049 Symptom,gear monitoring
0x02220032 050 Gear monitoring(P0731)
0x02220033 051 Gear monitoring 1M(P0731)
0x02220034 052 Gear monitoring 2(P0732)
0x02220035 053 Gear monitoring 3(P0733)
0x02220036 054 Gear monitoring 4(P0734)
0x02220037 055 Gear monitoring 5(P0735)
0x02220038 056 Symptom GLUE
0x02220039 057 GLUE monitoring 2/3(P0733)
0x0222003A 058 GLUE monitoring 3/4(P0734)
0x0222003B 059 Stall speed(P0720)
0x0222003C 060 Gearbox switch(P0705)
0x0222003D 061 Temperature monitoring,transmission
0x0222003E 062 Double fault n_ab
0x02220050 080 Control unit,internal fault 1(EPROM)(P0700,P1749)
0x02220051 081 Control unit,internal fault 2(EPROM)(P0700,P1748)
0x02220052 082 Control unit,internal fault 3(watchdog)(P0700,P1748)
0x02220053 083 Control unit,internal fault 4(FET)(P0700,P1746)
0x02220060 096 Battery voltage,supply,term.87(P0700,P1750)
0x02220061 097 Battery voltage,supply terminal 30
0x02220070 112 Program button
0x02220071 113 Kickdown switch
0x02220072 114 Steptronic switch
0x02220080 128 Monitoring CAN bus(P0700,P1747)
0x02220081 129 CAN timeout DME(P0700,P1747)
0x02220082 130 CAN timeout ASC
0x02220090 144 CAN-version erroe(P0700,P1747)
0x02220091 145 CAN torque reduction(P0700,P1750)
0x02220093 147 CAN throttle(P0700,P1765)
0x02220095 149 CAN wheel speeds
0x02220097 151 CAN brake signal

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//0x23 EGS 8.51 M62
0x02230001 001 Pressure actuator 2
0x02230002 002 Solenoid,shift-lock
0x02230003 003 Solenoid,valve 5
0x02230004 004 Pressure actuator 4
0x02230005 005 Pressure actuator 1
0x02230008 008 Selector-lever position L2
0x02230009 009 Selector-lever position L4
0x0223000C 012 Program-selector switch
0x02230010 016 Speed sensor,turbocharger
0x02230012 018 Kickdown switch

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# Bmw Code Sheet.txt

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0x02230013 019 ASC interface
0x02230016 022 ATF-sump temperature sensor
0x0223001A 026 Term.30 supply
0x0223001D 029 Pressure actuator 3
0x0223001E 030 Solenoid valve 1
0x0223001F 031 Solenoid valve 4
0x02230020 032 Solenoid valve 3
0x02230021 033 Solenoid valve 2
0x02230024 036 Selector-lever position L1
0x02230026 038 wheel speed,front left
0x02230027 039 wheel speed,front right
0x02230028 040 wheel speed,rear left
0x02230029 041 wheel speed,rear right
0x0223002A 042 Speed signal n-out(output)
0x0223002E 046 Stepper shift system
0x02230033 051 Pressure actuator 5
0x02230036 054 Batt.+supply
0x02230064 100 Gear monitoring 1(2nd-4th gear)
0x02230065 101 Gear monitoring 2(5th gear)
0x02230066 102 Speed monitoring
0x02230067 103 Control-unit-internal fault 1
0x02230068 104 voltage supply to EDS and MV
0x02230069 105 Engine overrevving interlock
0x0223006A 106 Stall-speed monitoring
0x0223006B 107 wheel speeds
0x0223006C 108 No programming
0x0223006D 109 Control-unit-internal fault 2
0x0223006E 110 Control-unit-internal fault 3
0x0223006F 111 Converter lockup clutch
0x0223007A 122 Gear monitoring(2nd-3rd gear)
0x0223007B 123 Gear monitoring(3rd-4th gear)
0x02230083 131 Gear monitoring 1
0x02230084 132 Gear monitoring 2
0x02230085 133 Gear monitoring 3
0x02230086 134 Gear monitoring 4
0x02230087 135 Gear monitoring 5
0x02230096 150 CAN bus monitoring
0x02230097 151 CAN version fault
0x02230098 152 CAN engine intervention
0x02230099 153 CAN DME load signal
0x0223009A 154 CAN accelerator pedal setting
0x0223009B 155 CAN engine temperature
0x0223009C 156 CAN Timeout
0x0223009D 157 CAN Timeout
0x0223009E 158 CAN throttle-valve and load signals
0x0223009F 159 CAN ABS/DSC wheel speeds
0x022300A0 160 CAN ABS/DSC signal

//0x24 SMG Sequential M Gearbox
0x02240001 001 CAN bus
0x02240003 003 Transmission temperature
0x02240005 005 Hydraulic pump
0x02240007 007 wheel speed,rear left
0x02240008 008 Starter release
0x0224000A 010 Solenoid valve,clutch
0x0224000D 013 Engine-bonnet contact during driving
0x02240012 018 Selector-lever switch,sequential channel
0x02240013 019 Door contact
0x0224001A 026 Position sensor,channel
0x0224001B 027 voltage supply
0x0224001D 029 Sensor,longitudinal acceleration
0x0224001E 030 Selector lever,position sensor,economy channel
0x02240022 034 wheel speed,front left

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# Bmw Code Sheet.txt

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0x02240028 040 Solenoid valve,channel(selection angle)
0x02240033 051 Sensor,voltage supply
0x02240034 052 Hand brake always active
0x02240036 054 Position sensor,gear
0x02240037 055 Position sensor,clutch
0x02240038 056 Hydraulic pressure
0x02240039 057 transversal acceleration
0x0224003A 058 Accelerator pedal
0x0224003E 062 Function display/buzzer
0x0224003F 063 Transmission input speed
0x02240040 064 wheel speed,front right
0x02240041 065 wheel speed,rear right
0x02240042 066 Shift indicator
0x02240046 070 Kickdown switch
0x02240048 072 Solenoid valve,gear forward
0x02240049 073 Selector-lever switch,economy channel
0x0224004C 076 Solenoid valve,gear back
0x0224004E 078 Service brake
0x0224004F 079 FGR interface
0x02240057 087 Idle switch
0x02240058 088 Engine speed
0x02240064 100 Control electronics
0x02240065 101 CAN timeout
0x02240069 105 Hydraulic pressure
0x0224006B 107 wheel speeds
0x02240071 113 Engine-bonnet contacts while stationary
0x02240080 130 Selector lever,economy channel
0x0224009C 156 Hydraulic pressure too high/too low
0x0224009E 158 Accelerator pedal and throttle valve
0x022400BC 188 Engine speed
0x022400C8 200 Adaptation incomplete
0x022400C9 201 Transmission fault
0x022400CA 202 Transmission fault

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//0x25 EGS 8.32 M Adaptive gearbox control
0x02250001 001 Pressure regulator,EDS 2
0x02250002 002 Solenoid,P/N lock
0x02250003 003 Solenoid valve 5
0x02250004 004 Solenoid valve,converter lockup clutch
0x02250005 005 Pressure regulator,EDS 1
0x02250008 008 Selector-lever position L2
0x02250009 009 Selector-lever position L4
0x0225000C 012 Program-selector switch
0x02250010 016 Rotational-speed sensor,turbocharger
0x02250012 018 Kickdown switch
0x02250013 019 ASC monitoring
0x02250016 022 ATF-sump temperature sensor
0x0225001A 026 Batt.+ supply (perm.)
0x0225001D 029 Pressure regulator,EDS 3
0x0225001E 030 Solenoid valve 1
0x0225001F 031 Solenoid valve 4
0x02250020 032 Solenoid valve 3
0x02250021 033 Solenoid valve 2
0x02250024 036 Selector-lever position L1
0x02250026 038 wheel speed,front left
0x02250027 039 wheel speed,front right
0x02250028 040 wheel speed,rear left
0x02250029 041 wheel speed,rear right
0x0225002A 042 Rotat.-sp.signal n-ab(output)
0x02250033 051 Pressure regulator,EDS 5
0x02250036 054 Batt.+ supply
0x02250064 100 Speed monitoring
0x02250065 101 Speed monitoring

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# Bmw Code Sheet.txt

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0x02250066 102 Speed monitoring
0x02250067 103 Internal SG fault 1
0x02250068 104 Gearbox relay in the EGS
0x02250069 105 Engine overrevving interlock
0x0225006A 106 Stall-speed monitoring
0x0225006B 107 wheel speeds
0x0225006C 108 No programming
0x0225006D 109 Internal SG fault 2
0x0225006E 110 Internal SG fault 3
0x02250096 150 CAN bus monitoring
0x02250097 151 CAN status,fault
0x02250098 152 CAN engine intervention
0x02250099 153 CAN DME load signal
0x0225009A 154 CAN throttle-valve position
0x0225009B 155 CAN DME engine temperature
0x0225009C 156 CAN timeout 1(ignition ON)
0x0225009D 157 CAN timeout 2(operating)
0x0225009E 158 CAN throttle-valve and load signals

//0x26 EGS 8.55 Electronic gearbox control
0x02260001 1 Pressure actuator 2
0x02260002 2 Solenoid, shift-lock
0x02260003 3 Solenoid, valve 5
0x02260004 4 Pressure actuator 4
0x02260005 5 Pressure actuator 1
0x02260008 8 Selector-lever position L2
0x02260009 9 Selector-lever position L4
0x0226000C 12 Program-selector switch
0x02260010 16 Speed sensor, turbocharger
0x02260012 18 Kickdown switch
0x02260013 19 ASC interface
0x02260016 22 ATF-sump temperature sensor
0x0226001A 26 Term. 30 supply
0x0226001D 29 Pressure actuator 3
0x0226001E 30 Solenoid valve 1
0x0226001F 31 Solenoid valve 4
0x02260020 32 Solenoid valve 3
0x02260021 33 Solenoid valve 2
0x02260024 36 Selector-lever position L1
0x02260026 38 wheel speed, front left
0x02260027 39 wheel speed, front right
0x02260028 40 wheel speed, rear left
0x02260029 41 wheel speed, rear right
0x0226002A 42 Speed signal n-out (output)
0x0226002E 46 Steeper shift system
0x02260033 51 Pressure actuator 5
0x02260036 54 Batt. + supply
0x02260064 100 Gear monitoring 1 (2nd -4th gear)
0x02260065 101 Gear monitoring 2 (5th gear)
0x02260066 102 Speed monitoring
0x02260067 103 Control-unit-internal fault 1
0x02260068 104 voltage supply to EDS and solenoid valve
0x02260069 105 Engine overdriving interlock
0x0226006A 106 Stall-speed monitoring
0x0226006B 107 wheel speeds
0x0226006C 108 No programming
0x0226006D 109 Control-unit-internal fault 2
0x0226006E 110 Control-unit-internal fault 3
0x0226006F 111 Converter lockup clutch has too high a level of slip
0x0226007A 122 Gear monitoring (2nd-3rd gear)
0x0226007B 123 Gear monitoring (3rd-4th gear)
0x02260082 130 Gear monitoring 1M
0x02260083 131 Gear monitoring 1

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# Bmw Code Sheet.txt

0x02260084 132 Gear monitoring 2  
 0x02260085 133 Gear monitoring 3  
 0x02260086 134 Gear monitoring 4  
 0x02260087 135 Gear monitoring 5  
 0x02260096 150 CAN bus monitoring  
 0x02260097 151 CAN version fault  
 0x02260098 152 CAN engine intervention  
 0x02260099 153 CAN DME load signal  
 0x0226009A 154 CAN accelerator pedal setting  
 0x0226009B 155 CAN engine temperature  
 0x0226009C 156 CAN Timeout  
 0x0226009D 157 CAN Timeout  
 0x0226009E 158 CAN throttle-valve and load signals  
 0x0226009F 159 CAN ABS/DSC wheel speeds  
 0x022600A0 160 CAN ABS/DSC signal  
 //0x27 EGS Transmission control GS 20 [ E46 X5\_E53 X3\_E83 ]  
 0x02270001 001 Pressure actuator 1(main pressure)  
 0x02270004 004 Pressure actuator 4(converter lockup clutch)  
 0x02270010 016 Solenoid valve 1  
 0x02270011 017 Solenoid valve 2  
 0x02270012 018 Solenoid valve 3  
 0x02270013 019 Solenoid,shiftlock  
 0x02270020 032 Speed signal n-ou(output)  
 0x02270021 033 Speed sensor,turbine  
 0x02270022 034 Transmission-fluid temperature sensor  
 0x02270030 048 Converter lockup clutch,excessive slip  
 0x02270032 050 Gear monitoring  
 0x02270034 052 Gear monitoring 2  
 0x02270035 053 Gear monitoring 3  
 0x02270036 054 Gear monitoring 4  
 0x02270037 055 Gear monitoring 5  
 0x0227003B 059 Stall speed  
 0x0227003C 060 Transmission switch  
 0x0227003D 061 Oil ageing  
 0x0227003F 063 Brake signal(cabled)  
 0x02270050 080 Control unit,internal fault 1(EPROM)  
 0x02270051 081 Control unit,internal fault 2(EPROM)  
 0x02270052 082 Control unit,internal fault 3(watchdog)  
 0x02270053 083 Control unit,internal fault 4(FET1)  
 0x02270054 084 Control unit,internal fault 5(FET2)  
 0x02270060 096 Battery voltage,supply terminal 87  
 0x02270070 112 Program button  
 0x02270072 114 Steptronic switch  
 0x02270078 120 Cruise control system FGR  
 0x02270080 128 Monitoring,CAN bus  
 0x02270081 129 CAN timeout DME/DDE  
 0x02270082 130 CAN timeout ASC  
 0x02270083 131 CAN timeout,instrument cluster  
 0x02270090 144 CAN version fault  
 0x02270091 145 CAN torque reduction  
 0x02270092 146 CAN torque interface  
 0x02270093 147 CAN throttle  
 0x02270094 148 CAN engine temperature  
 0x02270095 149 CAN wheel speeds  
 0x02270096 150 CAN engine speed  
 0x02270097 151 CAN brake signal  
 //0x28 Adaptive gearbox control  
 0x02280001 001 Pressure actuator 2  
 0x02280002 002 Solenoid,shift-lock  
 0x02280003 003 Solenoid valve 5  
 0x02280005 005 Pressure actuator 1  
 0x02280008 008 Selector-lever position L2  
 0x02280009 009 Selector-lever position L4

0x0228000C 012 Program-selector switch  
 0x02280010 016 Speed sensor,turbocharger  
 0x02280012 018 Kickdown switch  
 0x02280013 019 ASC interface  
 0x02280016 022 ATF-sump temperature sensor  
 0x0228001A 026 Term.30 supply  
 0x0228001D 029 Pressure actuator 3  
 0x0228001E 030 Solenoid valve 1  
 0x0228001F 031 Solenoid valve 4  
 0x02280020 032 Solenoid valve 3  
 0x02280021 033 Solenoid valve 2  
 0x02280024 036 Selector-lever position L1  
 0x02280026 038 wheel speed,front left  
 0x02280027 039 wheel speed,front right  
 0x02280028 040 wheel speed,rear left  
 0x02280029 041 wheel speed,rear right  
 0x0228002A 042 Speed signal n-out(output)  
 0x0228002E 046 Stepper shift system  
 0x02280033 051 Pressure actuator 5  
 0x02280036 054 Batt.+supply  
 0x02280064 100 Speed monitoring  
 0x02280065 101 Speed monitoring  
 0x02280066 102 Speed monitoring  
 0x02280067 103 Control-unit-internal fault 1  
 0x02280068 104 Voltage supply to EDS and MV  
 0x02280069 105 Engine overrevving interlock  
 0x0228006A 106 Stall-speed monitoring  
 0x0228006B 107 wheel speeds  
 0x0228006C 108 No programming  
 0x0228006D 109 Control-unit-internal fault 2  
 0x0228006E 110 Control-unit-internal fault 3  
 0x0228006F 111 Converter lockup clutch  
 0x0228007A 122 Gear monitoring(2nd-3rd gear)  
 0x0228007B 123 Gear monitoring(3rd-4th gear)  
 0x02280082 130 Gear monitoring 1M  
 0x02280083 131 Gear monitoring 1  
 0x02280084 132 Gear monitoring 2  
 0x02280085 133 Gear monitoring 3  
 0x02280086 134 Gear monitoring 4  
 0x02280087 135 Gear monitoring 5  
 0x02280096 150 CAN bus monitoring  
 0x02280097 151 CAN version fault  
 0x02280098 152 CAN engine intervention  
 0x02280099 153 CAN DME load signal  
 0x0228009A 154 CAN accelerator pedal setting  
 0x0228009B 155 CAN engine temperature  
 0x0228009C 156 CAN Timeout  
 0x0228009D 157 CAN Timeout  
 0x0228009E 158 CAN throttle-valve and load signals  
 0x0228009F 159 CAN ABS/DSC wheel speeds  
 0x022800A0 160 CAN ABS/DSC signal  
 //0x29 EGS 9.22 M62/M73B54  
 0x02290001 001 Pressure actuator 2  
 0x02290002 002 Solenoid,shift-lock  
 0x02290003 003 Solenoid,valve 5  
 0x02290004 004 Pressure actuator 4  
 0x02290005 005 Pressure actuator 1  
 0x02290008 008 Selector-lever position L2  
 0x02290009 009 Selector-lever position L4  
 0x0229000C 012 Program-selector switch  
 0x02290010 016 Speed sensor,turbocharger  
 0x02290012 018 Kickdown switch  
 0x02290013 019 ASC interface

# Bmw Code Sheet.txt

0x02290016 022 ATF-sump temperature sensor  
 0x0229001A 026 Term.30 supply  
 0x0229001D 029 Pressure actuator 3  
 0x0229001E 030 Solenoid valve 1  
 0x0229001F 031 Solenoid valve 4  
 0x02290020 032 Solenoid valve 3  
 0x02290021 033 Solenoid valve 2  
 0x02290024 036 Selector-lever position L1  
 0x02290026 038 wheel speed,front left  
 0x02290027 039 wheel speed,front right  
 0x02290028 040 wheel speed,rear left  
 0x02290029 041 wheel speed,rear right  
 0x0229002A 042 Speed signal n-out(output)  
 0x0229002E 046 Stepper shift system  
 0x02290033 051 Pressure actuator 5  
 0x02290036 054 Batt.+supply  
 0x02290064 100 Gear monitoring 1(2nd-4th gear)  
 0x02290065 101 Gear monitoring 2(5th gear)  
 0x02290066 102 Speed monitoring  
 0x02290067 103 Control-unit-internal fault 1  
 0x02290068 104 Voltage supply to EDS and MV  
 0x02290069 105 Engine overrevving interlock  
 0x0229006A 106 Stall-speed monitoring  
 0x0229006B 107 wheel speeds  
 0x0229006C 108 No programming  
 0x0229006D 109 Control-unit-internal fault 2  
 0x0229006E 110 Control-unit-internal fault 3  
 0x0229006F 111 Converter lockup clutch  
 0x0229007A 122 Gear monitoring(2nd-3rd gear)  
 0x0229007B 123 Gear monitoring(3rd-4th gear)  
 0x02290083 131 Gear monitoring 1  
 0x02290084 132 Gear monitoring 2  
 0x02290085 133 Gear monitoring 3  
 0x02290086 134 Gear monitoring 4  
 0x02290087 135 Gear monitoring 5  
 0x02290096 150 CAN bus monitoring  
 0x02290097 151 CAN version fault  
 0x02290098 152 CAN engine intervention  
 0x02290099 153 CAN DME load signal  
 0x0229009A 154 CAN accelerator pedal setting  
 0x0229009B 155 CAN engine temperature  
 0x0229009C 156 CAN Timeout  
 0x0229009D 157 CAN Timeout  
 0x0229009E 158 CAN throttle-valve and load signals  
 0x0229009F 159 CAN ABS/DSC wheel speeds  
 0x022900A0 160 CAN ABS/DSC signal

//0x2A EGS 8.32 M52

0x022A0001 001 Pressure regulator,EDS 2  
 0x022A0002 002 Solenoid,P/N lock  
 0x022A0003 003 Solenoid valve 5  
 0x022A0004 004 Solenoid valve,converter clutch lockup  
 0x022A0005 005 Pressure regulator,EDS 1  
 0x022A0008 008 Selector-lever position L2  
 0x022A0009 009 Selector-lever position L4  
 0x022A000C 012 Program-selector switch  
 0x022A0010 016 Rotational-speed sensor,turbocharger  
 0x022A0012 018 Kickdown switch  
 0x022A0013 019 ASC monitoring  
 0x022A0016 022 ATF-sump temperature sensor  
 0x022A001A 026 Batt.+ supply (perm.)  
 0x022A001D 029 Pressure regulator,EDS 3  
 0x022A001E 030 Solenoid valve 1

# Bmw Code Sheet.txt

0x022A001F 031 Solenoid valve 4  
 0x022A0020 032 Solenoid valve 3  
 0x022A0021 033 Solenoid valve 2  
 0x022A0024 036 Selector-lever position L1  
 0x022A0026 038 wheel speed,front left  
 0x022A0027 039 wheel speed,front right  
 0x022A0028 040 wheel speed,rear left  
 0x022A0029 041 wheel speed,rear right  
 0x022A002A 042 Rotat.-sp.signal n-ab(output)  
 0x022A0033 051 Pressure regulator,EDS 5  
 0x022A0036 054 Batt.+ supply  
 0x022A0064 100 Speed monitoring  
 0x022A0065 101 Speed monitoring  
 0x022A0066 102 Speed monitoring  
 0x022A0067 103 Internal SG fault 1  
 0x022A0068 104 Gearbox relay in the EGS  
 0x022A0069 105 Engine overrevving interlock  
 0x022A006A 106 Stall-speed monitoring  
 0x022A006B 107 wheel speeds  
 0x022A006C 108 No programming  
 0x022A006D 109 Internal SG fault 2  
 0x022A006E 110 Internal SG fault 3  
 0x022A0096 150 CAN bus monitoring  
 0x022A0097 151 CAN status,fault  
 0x022A0098 152 CAN engine intervention  
 0x022A0099 153 CAN DME load signal  
 0x022A009A 154 CAN throttle-valve position  
 0x022A009B 155 CAN DME engine temperature  
 0x022A009C 156 CAN timeout 1(ignition ON)  
 0x022A009D 157 CAN timeout 2(operating)  
 0x022A009E 158 CAN throttle-valve and load signals

//0x2B EGS 8.34 M43/M44/M52

0x022B0001 001 Pressure actuator 2  
 0x022B0002 002 Solenoid,shiftlock(OBDII:p1761;EUIII:P0700)  
 0x022B0003 003 Solenoid value,reverse-gear lock  
 0x022B0004 004 Solenoid valve,brake band(OBDII:P1743;EUIII:P0700)  
 0x022B0005 005 Pressure actuator 1(OBDII:P0748;EUIII:P0748)  
 0x022B0008 008 Selector-lever position(OBDII:P0705;EUIII:P0705)  
 0x022B0009 009 Selector-lever position L4  
 0x022B0010 016 Speed sensor,turbocharger  
 0x022B000C 012 Program button  
 0x022B0012 018 Kickdown switch  
 0x022B0013 019 ASC interface  
 0x022B0016 022 Transmission-fluid temperature sensor  
 0x022B001A 026 Term,30 supply  
 0x022B001D 029 Pressure actuator 3  
 0x022B001E 030 Solenoid valve,1-2/3-4 shift(OBDII:P0753;EUIII:P0753)  
 0x022B001F 031 Solenoid value,overrunning clutch  
 0x022B0020 032 Solenoid valve,conv.lockup clutch(OBDII:p0743;EUIII:P0743)  
 0x022B0021 033 Solenoid valve,2-3 shift(OBDII:P0758;EUIII:P0758)  
 0x022B0024 036 Selector-lever position L1  
 0x022B0026 038 wheel speed,front left  
 0x022B0027 039 wheel speed,front right  
 0x022B0028 040 wheel speed,rear left  
 0x022B0029 041 wheel speed,rear right  
 0x022B002A 042 Output speed signal(OBDII:P0720;EUIII:P0720)  
 0x022B002E 046 Stepper shift system  
 0x022B0033 051 Engine intervention  
 0x022B0036 054 Batt.+supply(OBDII:P1750;EUIII:P0700)  
 0x022B0064 100 Gear monitoring(OBDII:P0730;EUIII:P0730)  
 0x022B0065 101 Speed monitoring  
 0x022B0067 103 Control unit,internal fault 1(EPROM)(OBDII:P1748;EUIII:P0700)

# Bmw Code Sheet.txt

0x022B0068 104 Control unit,internal fault 4(FET)(OBDII:P1746;EUIII:P0700)  
 0x022B0069 105 Engine overrevving lock(OBDII:P1748;EUIII:P0700)  
 0x022B006A 106 Stall-speed monitoring  
 0x022B006B 107 wheel speeds  
 0x022B006C 108 No programming(OBDII:P1749;EUIII:P0700)  
 0x022B006D 109 Control unit,internal fault 2(EEPROM)  
 0x022B006E 110 Control unit,internal fault 3(watchdog)(OBDII:P1748;EUIII:P0700)  
 0x022B006F 111 Conv.lockup clutch/gear monitoring(OBDII:P0740;EUIII:P0740)  
 0x022B0070 112 N to D shift at high RPM  
 0x022B0072 114 DKT signal,load information  
 0x022B0096 150 CAN bus monitoring(OBDII:P1747;EUIII:P0700)  
 0x022B0097 151 CAN version fault(OBDII:P1747;EUIII:P0700)  
 0x022B0098 152 CAN engine intervention(OBDII:P1780;EUIII:P0700)  
 0x022B0099 153 CAN DME load signal  
 0x022B009A 154 CAN accel.-pedal position(OBDII:P1765;EUIII:P0700)  
 0x022B009B 155 CAN engine temperature  
 0x022B009C 156 CAN timeout DME(OBDII:P1747;EUIII:P0700)  
 0x022B009D 157 CAN Timeout  
 0x022B009E 158 CAN throttle and load signal(OBDII:P1765;EUIII:P0700)  
 0x022B009F 159 CAN ABS/DSC wheel speeds  
 0x022B00A0 160 CAN timeout ASC  
 0x022B00A1 161 CAN engine speed  
 0x022B00A2 162 Brake signal  
 0x022B00A3 163 Torque intervention(OBDII:P1780;EUIII:P0700)

//0x2C EGS 8.70 M52

0x022C0001 1 Pressure actuator 2  
 0x022C0002 2 P/N shift-lock  
 0x022C0003 3 solenoid valve 5  
 0x022C0004 4 torque converter clutch solenoid valve  
 0x022C0005 5 Pressure regulator  
 0x022C0006 8 Selector pos. L2  
 0x022C0009 9 Selector pos. L4  
 0x022C000C 12 Program button  
 0x022C0010 16 Turbocharger, speed sensor  
 0x022C0012 18 Kickdown switch  
 0x022C0013 19 ASC interface  
 0x022C001A 26 Battery voltage  
 0x022C001D 29 Pressure actuator 3  
 0x022C001E 30 Solenoid valve 1  
 0x022C001F 31 Solenoid valve 4  
 0x022C0020 32 Solenoid valve 3  
 0x022C0021 33 Solenoid valve 2  
 0x022C0023 35 Throttle signal (DKT)  
 0x022C0024 36 Selector pos. L1  
 0x022C0025 37 Selector pos. L3  
 0x022C0026 38 Front-left wheel rpm  
 0x022C0027 39 Front-right wheel rpm  
 0x022C0028 40 Rear-left wheel rpm  
 0x022C0029 41 Rear-right wheel rpm  
 0x022C002A 42 Speed signal n-out  
 0x022C002B 43 Speed signal n-Mot  
 0x022C002E 46 Step-shift system  
 0x022C0033 51 pressure actuator 5  
 0x022C0035 53 voltage supply solenoid valve  
 0x022C0036 54 Voltage supply  
 0x022C0064 100 Gear monitoring  
 0x022C0065 101 EPROM checksum  
 0x022C0066 102 Program checksum  
 0x022C0067 103 Transmission relay  
 0x022C0068 104 Temp. information (DKT-signal)  
 0x022C0069 105 Engine overrun interlock  
 0x022C006A 106 Stall monitoring

# Bmw Code Sheet.txt

0x022C006B 107 wheel speed  
 0x022C006C 108 Control unit program  
 0x022C006F 111 Converter lookup clutch slippery  
 0x022C007B 123 Gear monitoring, 2nd/3rd gear  
 0x022C007C 124 Gear monitoring, 3rd/4th gear  
 0x022C0082 130 Gear monitoring 1M  
 0x022C0083 131 Gear monitoring 1  
 0x022C0084 132 Gear monitoring 2  
 0x022C0085 133 Gear monitoring 3  
 0x022C0086 134 Gear monitoring 4  
 0x022C0087 135 Gear monitoring 5  
 0x022C0096 150 CAN bus monitoring  
 0x022C0097 151 Faulty CAN status  
 0x022C0098 152 CAN: engine intervention  
 0x022C0099 153 CAN: DME load signal  
 0x022C009A 154 CAN: throttle valve position  
 0x022C009B 155 CAN: DME engine temp.  
 0x022C009C 156 CAN: timeout (ign. on)  
 0x022C009D 157 CAN: timeout (operate)  
 0x022C009E 158 CAN: throttle-valve and load signals  
 0x022C009F 159 CAN: ABS/DSC wheel speed signal  
 0x022C00A0 160 CAN: ABS/DSC wheel speed signal  
 0x022C00C8 200 No kickdown shifts  
 0x022C00C9 201 No s-program  
 0x022C00CA 202 no M-program  
 0x022C00CC 203 no program switchover  
 0x022C00CD 204 no engine intervention  
 0x022C00CE 205 defective brake-light switch  
 0x022C00CF 206 incorrect fault display  
 //0x2D EGS 8.36 M52  
 0x022D0001 1 Pressure actuator 2  
 0x022D0002 2 P/N shift-lock  
 0x022D0003 3 solenoid valve 5  
 0x022D0004 4 torque converter clutch solenoid valve  
 0x022D0005 5 Pressure regulator  
 0x022D0008 8 Selector pos. L2  
 0x022D0009 9 Selector pos. L4  
 0x022D000C 12 Program button  
 0x022D0010 16 Turbocharger, speed sensor  
 0x022D0012 18 Kickdown switch  
 0x022D0013 19 ASC interface  
 0x022D001A 26 Battery voltage  
 0x022D001D 29 Pressure actuator 3  
 0x022D001E 30 Solenoid valve 1  
 0x022D001F 31 Solenoid valve 4  
 0x022D0020 32 Solenoid valve 3  
 0x022D0021 33 Solenoid valve 2  
 0x022D0023 35 Throttle signal (DKT)  
 0x022D0024 36 Selector pos. L1  
 0x022D0025 37 Selector pos. L3  
 0x022D0026 38 Front-left wheel rpm  
 0x022D0027 39 Front-right wheel rpm  
 0x022D0028 40 Rear-left wheel rpm  
 0x022D0029 41 Rear-right wheel rpm  
 0x022D002A 42 Speed signal n-out  
 0x022D002B 43 Speed signal n-Mot  
 0x022D002E 46 Step-shift system  
 0x022D0033 51 pressure actuator 5  
 0x022D0035 53 Voltage supply solenoid valve  
 0x022D0036 54 voltage supply  
 0x022D0064 100 Gear monitoring  
 0x022D0065 101 EPROM checksum  
 0x022D0066 102 Program checksum

# Bmw Code Sheet.txt

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0x022D0067 103 Transmission relay
0x022D0068 104 Temp. information (DKT-signal)
0x022D0069 105 Engine overrun interlock
0x022D006A 106 Stall monitoring
0x022D006B 107 wheel speed
0x022D006C 108 Control unit program
0x022D006F 111 Converter lookup clutch slippery
0x022D007B 123 Gear monitoring 2nd/3rd gear
0x022D007C 124 Gear monitoring 3rd/4th gear
0x022D0082 130 Gear monitoring 1M
0x022D0083 131 Gear monitoring 1
0x022D0084 132 Gear monitoring 2
0x022D0085 133 Gear monitoring 3
0x022D0086 134 Gear monitoring 4
0x022D0087 135 Gear monitoring 5
0x022D0096 150 CAN bus monitoring
0x022D0097 151 Faulty CAN status
0x022D0098 152 CAN: engine intervention
0x022D0099 153 CAN: DME load signal
0x022D009A 154 CAN: throttle valve position
0x022D009B 155 CAN: DME engine temp.
0x022D009C 156 CAN: timeout (ign. on)
0x022D009D 157 CAN: timeout (operate)
0x022D009E 158 CAN: throttle-valve and load signals
0x022D009F 159 CAN: ABS/DSC wheel speed signal
0x022D00A0 160 CAN: ABS/DSC wheel speed signal
0x022D00C8 200 No kickdown shifts
0x022D00C9 201 No s-program
0x022D00CA 202 no M-program
0x022D00CB 203 no program switchover
0x022D00CC 204 no engine intervention
0x022D00CD 205 defective brake-light switch
0x022D00CE 206 incorrect fault display

//0x2E EGS 8.60.2 M62/M57 5-speed auto. trans. A5S 440Z (5HP-24)
0x022E0001 001 Pressure actuator EDS 1
0x022E0002 002 Pressure actuator EDS 2
0x022E0003 003 Pressure actuator EDS 3
0x022E0004 004 Pressure actuator EDS 4
0x022E0005 005 Pressure actuator EDS 5
0x022E000F 015 Pressure actuator EDS,total current
0x022E0010 016 Solenoid valve 1
0x022E0011 017 Solenoid valve 2
0x022E0012 018 Solenoid valve 3
0x022E0013 019 Solenoid,shiftlock
0x022E0020 032 Speed signal n-ou(output)
0x022E0021 033 Speed sensor,turbine
0x022E0022 034 Oil-sump temperature sensor
0x022E0030 048 Converter lockup clutch,excessive slip
0x022E0031 049 Symptom,gear monitoring
0x022E0032 050 Gear monitoring 1
0x022E0033 051 Gear monitoring 1M
0x022E0034 052 Gear monitoring 2
0x022E0035 053 Gear monitoring 3
0x022E0036 054 Gear monitoring 4
0x022E0037 055 Gear monitoring 5
0x022E0038 056 Symptom GLUE
0x022E0039 057 GLUE monitoring 2/3
0x022E003A 058 GLUE monitoring 3/4
0x022E003B 059 Stall speed
0x022E003C 060 Transmission switch
0x022E003D 061 Temperature monitoring,transmission
0x022E0050 080 ECU internal fault 1(EPROM)

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# Bmw Code Sheet.txt

0x022E0051 081 ECU internal fault 2(EEPROM)  
 0x022E0052 082 ECU internal fault 3(watchdog)  
 0x022E0053 083 ECU internal fault 4(FET)  
 0x022E0060 096 Batt.+supply,term.87  
 0x022E0061 097 Batt.+supply,term.30  
 0x022E0070 112 Program button  
 0x022E0071 113 Kickdown button  
 0x022E0072 114 Steptronic switch  
 0x022E0080 128 Monitoring,CAN bus  
 0x022E0081 129 CAN timeout DME  
 0x022E0082 130 CAN timeout ASC  
 0x022E0090 144 CAN version fault  
 0x022E0093 147 CAN throttle  
 0x022E0094 148 CAN engine temperature  
 0x022E0095 149 CAN wheel speeds  
 0x022E0097 151 CAN brake signal  
 0x022E00FF 255 Unknown fault location

//0x2F EGS 8.60.3 M73/M67 5-speed auto. Gearbox A5S 440Z(5HP-24)

0x022F0001 1 Pressure actuator EDS 1  
 0x022F0002 2 Pressure actuator EDS 2  
 0x022F0003 3 Pressure actuator EDS 3  
 0x022F0004 4 Pressure actuator 4  
 0x022F0005 5 Pressure actuator EDS 5  
 0x022F000F 15 Pressure actuator EDS, total current  
 0x022F0010 16 Solenoid valve 1  
 0x022F0011 17 Solenoid valve 2  
 0x022F0012 18 Solenoid valve 3  
 0x022F0013 19 Solenoid, shift-lock  
 0x022F0020 32 Speed signal n-ab (output)  
 0x022F0021 33 Speed signal, turbine  
 0x022F0022 34 ATF temperature  
 0x022F0030 48 Mechanical converter lockup  
 0x022F0031 49 Gear monitoring  
 0x022F0032 50 Speed monitoring 1  
 0x022F0033 51 Speed monitoring 1M  
 0x022F0034 52 Speed monitoring 2  
 0x022F0035 53 Speed monitoring 3  
 0x022F0036 54 Speed monitoring 4  
 0x022F0037 55 Speed monitoring 5  
 0x022F0038 56 Speed monitoring  
 0x022F0039 57 Speed monitoring (2nd-3rd gear)  
 0x022F003A 58 Speed monitoring (3rd-4th gear)  
 0x022F003B 59 Stall-speed monitoring  
 0x022F003C 60 Selector-lever switch  
 0x022F003D 61 Temperature monitoring, transmission  
 0x022F0040 64 Gear monitoring, flare  
 0x022F0050 80 SG internal fault 1  
 0x022F0051 81 SG internal fault 2  
 0x022F0052 82 SG internal fault 3  
 0x022F0053 84 EDS/MV supply  
 0x022F0060 96 Batt. + supply  
 0x022F0061 97 Term. 30 supply  
 0x022F0070 112 Program-selector switch  
 0x022F0071 113 Kickdown switch  
 0x022F0072 114 Step-by-step shift  
 0x022F0080 128 CAN bus monitoring  
 0x022F0081 129 CAN temeout DME  
 0x022F0082 130 CAN ABS/DSC signal  
 0x022F0084 132 CAN timeout EML  
 0x022F0090 144 CAN version fault  
 0x022F0091 145 CAN troque reduction  
 0x022F0093 147 CAN throttle-valve and load signal



0x022F0095 149 CAN ABS/DSC wheel speeds  
 0x022F0097 151 CAN brake signal  
 0x022F0098 152 CAN rotation uniformity  
 //0x30 Electronic gearbox control EGS 8.60.4  
 0x02300001 001 Pressure actuator 1 (P0748)  
 0x02300002 002 Pressure actuator 2 (P0700,P0778)  
 0x02300003 003 Pressure actuator 3 (P0700,P0778)  
 0x02300004 004 Pressure actuator 4 (P0743)  
 0x0230000F 015 Pressure actuator, resultant current (P0700,P1748)  
 0x02300010 016 Solenoid valve 1 (P0753)  
 0x02300011 017 Solenoid valve 2 (P0758)  
 0x02300012 018 Solenoid valve 3 (P0763)  
 0x02300013 019 Solenoid, shiftlock (P0700,P1761)  
 0x02300020 032 Speed signal, output (P0720)  
 0x02300021 033 Turbine speed sensor (P0715)  
 0x02300022 034 Transmission-fluid temperature sensor  
 0x02300030 048 Conv. lockup clutch,excessive slip (P0740,P0741)  
 0x02300035 053 Gear monitoring 3 (P0733)  
 0x02300036 054 Gear monitoring 4 (P0734)  
 0x02300037 055 Gear monitoring 5 (P0735)  
 0x02300038 056 Symptom GLUE  
 0x02300039 057 GLUE monitoring 2/3 (P0733)  
 0x0230003A 058 GLUE monitoring 3/4 (P0734)  
 0x0230003B 059 Stall speed (P0720)  
 0x0230003C 060 Gearbox switch (P0705)  
 0x0230003D 061 Temperature monitoring, transmission  
 0x0230003E 062 Double fault n\_ab  
 0x02300041 065 Gear monitoring 4 (limp-home program)  
 0x02300050 080 Control unit, internal fault 1 (EPROM) (P0700,P0601)  
 0x02300051 081 Control unit, internal fault 2 (EPROM) (P0700,P0603)  
 0x02300052 082 Control unit, internal fault 3 (EPROM) (P0700,P0606)  
 0x02300053 083 Control unit, internal fault 4 (FET) (P0700,P1746)  
 0x02300060 096 Battery voltage, supply, term. 87 (P0700,P0560)  
 0x02300061 097 Battery voltage, supply terminal 30  
 0x02300070 112 Program button  
 0x02300071 113 Kickdown switch  
 0x02300072 114 Steptronic switch  
 0x02300080 128 Monitoring, CAN bus (P0700,P1747)  
 0x02300081 129 CAN timeout DME (P0700,P0600)  
 0x02300082 130 CAN timeout ASC  
 0x02300090 144 CAN-version error (P0700,P0600)  
 0x02300095 149 CAN wheel speeds  
 0x02300097 151 CAN brake signal  
 0x023000FF 255 Unknown fault location

//0x31 SMG2-2.1

0x02310010 016 Activation, solenoid value shift travel up(OBDII:P0750)  
 0x02310011 017 Activation, solenoid value, shift travel down(OBDII:P0755)  
 0x02310012 018 Activation, solenoid value, selection angel(OBDII:P0760)  
 0x02310013 019 Activation, shiftlock  
 0x02310014 020 Starter-motor enable  
 0x02310015 021 Activation, hydraulic-pump relay  
 0x02310016 022 Activation, reversing-light switch  
 0x02310017 023 Activation, solenoid, clutch(OBDII:P1740)  
 0x02310020 032 Transmission input speed  
 0x02310021 033 Engine speed(sensor)  
 0x02310022 034 Transmission temperature  
 0x02310023 035 Hydraulic pressure sensor  
 0x02310024 036 Position sensor, selection angle(OBDII:P1849)  
 0x02310025 037 Position sensor, shift travel(OBDII:P1848)  
 0x02310026 038 Longitudinal acceleration  
 0x02310027 039 Hydraulic temperature sensor  
 0x02310028 040 PLCD sensor for clutch position

# Bmw Code Sheet.txt

0x02310030 048 Gear cannot be engaged(OBDII:P1756)  
 0x02310031 049 Gear pops out(OBDII:P1757)  
 0x02310032 050 Selection angle cannot be engaged(OBDII:P1758)  
 0x02310033 051 Engine-hood contact while driving  
 0x02310034 052 Engine-hood contact while stationary  
 0x02310035 053 Hydraulic pressure loss in system(OBDII:P1715)  
 0x02310036 054 Activation, hydraulic pump  
 0x02310037 055 Switch on frequency, hydraulic unit(OBDII:P1716)  
 0x02310038 056 ON period, hydraulic unit(OBDII:P1717)  
 0x02310039 057 Misuse, hydraulic unit  
 0x0231003A 058 Actuation, clutch, static(OBDII:P1756)  
 0x0231003B 059 Actuation, clutch, dynamic  
 0x02310050 080 SMG control module, internal fault(OBDII:P1790)  
 0x02310051 081 Engine-speed switch for safety function(estate)  
 0x02310053 083 Transmission adaptation  
 0x02310054 084 Selection angle, offset-current adaptation  
 0x02310055 085 Clutch adaptation  
 0x02310056 086 Ventings  
 0x02310057 087 Fault, test function  
 0x02310058 088 Adaptation values, transmission  
 0x02310061 097 Voltage supply  
 0x02310062 098 Sensor voltage supply A  
 0x02310063 099 Sensor voltage supply B  
 0x02310064 100 Voltage supply solenoid values, shift travel(OBDII:P0753)  
 0x02310065 101 voltage supply solenoid values, clutch and selection  
 angle(OBDII:P0763)  
 0x02310072 114 Selector lever  
 0x02310073 115 Load deactivation  
 0x02310074 116 Program selector switch, plus  
 0x02310075 117 Program selector switch, minus  
 0x02310076 118 Steering-wheel switch +(plus)  
 0x02310077 119 Steering-wheel switch -(minus)  
 0x02310078 120 Evaluation, ignition-lock signal  
 0x02310080 128 CAN faulty message(OBDII:P1747)  
 0x02310081 129 CAN bus error(OBDII:P1720)  
 0x02310090 144 Evaluation, door contact, via CAN  
 0x02310091 145 Evaluation, roadspeed, rear left  
 0x02310092 146 Evaluation, roadspeed, rear right  
 0x02310093 147 Evaluation, speed, front left  
 0x02310094 148 Evaluation, roadspeed, front right  
 0x02310095 149 Evaluation, roadspeeds(more than one signal)  
 0x02310096 150 Evaluation, engine speed(sensor and CAN)  
 0x02310097 151 Evaluation, service brake signals, via CAN  
 0x02310098 152 Evaluation, steering angle via CAN  
 0x02310099 153 Evaluation, lateral acceleration via CAN  
 0x0231009A 154 Evaluation, longitudinal acceleration via CAN  
 0x0231009B 155 Evaluation, accelerator pedal via CAN  
 0x023100B0 176 Safety concept, level 2,transmission(OBDII:P1707)  
 0x023100B1 177 Safety concept, level 2,clutch(OBDII:P1708)  
 0x023100B2 178 Safety concept, level 3(OBDII:P1709)  
 0x023100B3 179 Safety concept, level 2,RAM(OBDII:P1797)  
 0x023100B4 180 Safety concept, level 2,INPUT(OBDII:P0701)

## //0x41 SGM

0x02414E20 4E20 Solenoid valve, gear selection, fuel injector 1  
 0x02414E21 4E21 Solenoid valve, gear selection, fuel injector 2  
 0x02414E26 4E26 Solenoid valve, clutch  
 0x02414E8E 4E8E Shift lock, activation  
 0x02414E90 4E90 Solenoid valve, selection angle brake  
 0x02414E91 4E91 Relay, hydraulic pump  
 0x02414E92 4E92 Relay, reversing lights  
 0x02414EF4 4EF4 Shift-travel sensor  
 0x02414EF5 4EF5 Selection angle sensor

# Bmw Code Sheet.txt

0x02414EF6 4EF6 Clutch travel sensor  
 0x02414EF7 4EF7 Hydraulic pressure sensor  
 0x02414EF8 4EF8 Engine speed directly wired  
 0x02414EF9 4EF9 Clutch speed sensor  
 0x02414F6C 4F6C Transmission/clutch  
 0x02414F6D 4F6D Clutch: overtemperature  
 0x02414F6E 4F6E Hydraulic pressure: too low  
 0x02414F6F 4F6F Hydraulic pump, activation  
 0x02414F72 4F72 Clutch, actuation  
 0x02414F73 4F73 Transmission: gear deselection unsuccessful  
 0x02414F74 4F74 Transmission: gear deselection unintentional  
 0x02414F75 4F75 Transmission: gear selection not possible  
 0x02414F76 4F76 Clutch: overspeed  
 0x02414FB0 4FB0 Control module: internal fault  
 0x02414FB1 4FB1 Control module: internal fault  
 0x02414FB2 4FB2 Control module: internal fault  
 0x02414FB3 4FB3 Control module: internal fault  
 0x02414FB4 4FB4 Control module: internal fault  
 0x02414FB5 4FB5 Control module: internal fault  
 0x02414FB6 4FB6 Control module: internal fault  
 0x02415014 5014 Control module, voltage supply  
 0x02415016 5016 Clutch travel sensor, voltage supply  
 0x02415017 5017 Selector lever, voltage supply  
 0x02415018 5018 Selector lever, ground  
 0x02415019 5019 Control module, ground  
 0x0241507E 507E Selector lever, analog line 0  
 0x0241507F 507F Selector lever, analog line 1  
 0x02415080 5080 Selector lever, analog line 2  
 0x02415081 5081 Selector lever, analog line 3  
 0x02415082 5082 Steering column shift  
 0x02415083 5083 Selector lever, digital line  
 0x02415084 5084 Selector lever, Hall sensors: single fault  
 0x02415085 5085 Selector lever, Hall sensors: multiple fault  
 0x02415086 5086 Starter enable, signal  
 0x024150DE 50DE Engine speed, signal: double fault  
 0x02415140 5140 No message from engine management  
 0x02415141 5141 No message from ASC/DSC  
 0x02415142 5142 No message from instrument cluster  
 0x024151A5 51A5 Message: engine torque implausible  
 0x024151A7 51A7 Message: engine speed implausible  
 0x024151A8 51A8 Message: accelerator pedal implausible  
 0x024151A9 51A9 Message: engine-coolant temperature implausible  
 0x024151AD 51AD Message: accelerator pedal implausible  
 0x024151AE 51AE Message: brake-light switch implausible  
 0x024151B0 51B0 Message: wheel speeds on front axle implausible  
 0x024151B1 51B1 Message: wheel speeds on rear axle implausible  
 0x024151B2 51B2 Message: virtual accelerator pedal implausible  
 0x024151B3 51B3 Message: engine oil temperature implausible  
 0x024151B4 51B4 Message: outside temperature implausible  
 0x024151B5 51B5 CAN brake signal inconsistent with hardwired signal  
 0x024151B6 51B6 Message: engine intervention implausible  
  
 0x02614E20 4E20 Electronic pressure control valve 1  
 0x02614E21 4E21 Electronic pressure control valve 2  
 0x02614E22 4E22 Electronic pressure control valve 3  
 0x02614E23 4E23 Electronic pressure control valve 4  
 0x02614E24 4E24 Electronic pressure control valve 5  
 0x02614E25 4E25 Electronic pressure control valve 6 (converter clutch)  
 0x02614E26 4E26 Current fault, electronic pressure actuator in P/R/N  
 0x02614E84 4E84 Solenoid valve 1  
 0x02614E85 4E85 Solenoid valve 2  
 0x02614E86 4E86 Solenoid valve 3 (interlock)  
 0x02614E87 4E87 Solenoid valve 4 (shift lock)

# Bmw Code Sheet.txt

0x02614E89 4E89 Solenoid valve 1 or Solenoid valve 2 mechanically jammed  
 0x02614EE8 4EE8 Turbine speed sensor  
 0x02614EE9 4EE9 Output speed sensor  
 0x02614EEB 4EEB Output speed sensor - gradient too high  
 0x02614EF2 4EF2 Gear-oil temperature sensor  
 0x02614EF3 4EF3 Control module temperature sensor  
 0x02614EFB 4EFB Transmission overtemperature  
 0x02614EFC 4EFC Transmission control: internal component faulty (CG122)  
 0x02614EFD 4EFD Transmission control: internal component faulty (CG122-HS-FET)  
 0x02614EFE 4EFE Transmission control: internal component faulty (CG122), voltage inputs  
 0x02614F53 4F53 Fault in disengagement of converter lockup clutch  
 0x02614F6F 4F6F Highly irregular rotation  
 0x02614F70 4F70 Engine over speed  
 0x02614F71 4F71 No message from instrument cluster during emergency release process parking lock activated  
 0x02614F81 4F81 Ratio monitoring, clutch A  
 0x02614F82 4F82 Ratio monitoring, clutch B  
 0x02614F83 4F83 Ratio monitoring, clutch C  
 0x02614F84 4F84 Ratio monitoring, clutch D  
 0x02614F85 4F85 Ratio monitoring, clutch E  
 0x02614F87 4F87 Ratio monitoring, gearshift 1 - 2  
 0x02614F88 4F88 Ratio monitoring, gearshift 2 - 3  
 0x02614F89 4F89 Ratio monitoring, gearshift 3 - 4  
 0x02614F8A 4F8A Ratio monitoring, gearshift 4 - 5  
 0x02614F8B 4F8B Ratio monitoring, gearshift 5 - 6  
 0x02614F8C 4F8C Ratio monitoring, gearshift 6 - 5  
 0x02614F8D 4F8D Ratio monitoring, gearshift 5 - 4  
 0x02614F8E 4F8E Ratio monitoring, gearshift 4 - 3  
 0x02614F8F 4F8F Ratio monitoring, gearshift 3 - 2  
 0x02614F90 4F90 Ratio monitoring, gearshift 2 - 1  
 0x02614F91 4F91 Ratio monitoring, clutches A - D  
 0x02614F92 4F92 Ratio monitoring, clutches A - C  
 0x02614F93 4F93 Ratio monitoring, clutches A - B  
 0x02614F94 4F94 Ratio monitoring, clutches A - E  
 0x02614F95 4F95 Ratio monitoring, clutches B - E  
 0x02614F96 4F96 Ratio monitoring, clutches C - E  
 0x02614F97 4F97 Ratio monitoring, clutches B - D  
 0x02614FB0 4FB0 Transmission control: Internal fault (EPROM/FLASH)  
 0x02614FB1 4FB1 Transmission control: Internal fault (EEPROM)  
 0x02614FB2 4FB2 Transmission control: Internal fault (watchdog)  
 0x02614FB7 4FB7 Transmission control: Internal fault (EEPROM writing)  
 0x02614FB8 4FB8 Transmission control: Internal fault (monitoring level 2)  
 0x02614FB9 4FB9 Transmission control: Internal fault (TPU/QADC)  
 0x02614FBA 4FBA Actuator activation and selector-lever position implausible, speed above threshold value  
 0x02614FBB 4FBB Actuator activation and selector-lever position implausible, speed below threshold value  
 0x02615014 5014 Supply voltage, transmission control  
 0x02615015 5015 EPA/SV Supply voltage  
 0x02615016 5016 Sensor voltage  
 0x02615079 5079 No message via serial cable  
 0x0261507A 507A Information, serial cable  
 0x0261507B 507B Parking gear sensors implausible  
 0x0261507C 507C Parking gear incorrectly engaged  
 0x0261507D 507D Parking gear incorrectly disengaged  
 0x02615087 5087 One-touch or M gate switch  
 0x02615088 5088 Transmission-selector-switch sensor faulty  
 0x02615089 5089 P/N line does not match transmission position  
 0x026150DC 50DC Transmission position sensor  
 0x026150DD 50DD Activation of two substitute functions of same priority  
 0x026151A8 51A8 No message (throttle valve/accelerator pedal) from engine management  
 0x026151AC 51AC Message, identification sensor connected

# Bmw Code Sheet.txt

0x026151AE 51AE No message (brake-light switch) from engine management  
 0x026151B0 51B0 Message from DSC (brake-light switch/brake pressure) implausible  
 0x02614E20 4E20 EDS1  
 0x02614E21 4E21 EDS2  
 0x02614E22 4E22 EDS3  
 0x02614E23 4E23 EDS4  
 0x02614E24 4E24 EDS5  
 0x02614E25 4E25 EDS6(converter lockup clutch)  
 0x02614E26 4E26 Current fault,pressure regulator in P/R/N  
 0x02614E84 4E84 SV1  
 0x02614E85 4E85 SV2  
 0x02614E86 4E86 SV3  
 0x02614E87 4E87 SV4  
 0x02614E89 4E89 SV1/SV2 mechanically jammed  
 0x02614EE8 4EE8 Sensor,turbocharger speed  
 0x02614EE9 4EE9 Seneor,output speed  
 0x02614EEB 4EEB Output-speed sensor - gradient too high  
 0x02614EF2 4EF2 Temperature sensor,gear oil  
 0x02614EF3 4EF3 Temperature sensor,E module  
 0x02614F4B 4F4B Gear monitoring R  
 0x02614F4C 4F4C Symptom,speed monitoring  
 0x02614F4D 4F4D 1 Gear monitoring  
 0x02614F4E 4F4E 2 Gear monitoring  
 0x02614F4F 4F4F 3 Gear monitoring  
 0x02614F50 4F50 4 Gear monitoring  
 0x02614F51 4F51 5 Gear monitoring  
 0x02614F52 4F52 6 Gear monitoring  
 0x02614F53 4F53 Conveter lockup clutch faulty/opened  
 0x02614F56 4F56 Shift monitoring  
 0x02614F57 4F57 Shift monitoring 1-2  
 0x02614F58 4F58 Shift monitoring 2-3  
 0x02614F59 4F59 Shift monitoring 3-4  
 0x02614F5A 4F5A Shift monitoring 4-5  
 0x02614F5B 4F5B Shift monitoring 5-6  
 0x02614F5C 4F5C Shift monitoring 2-1  
 0x02614F5D 4F5D Shift monitoring 3-2  
 0x02614F5E 4F5E Shift monitoring 4-3  
 0x02614F5F 4F5F Shift monitoring 5-4  
 0x02614F60 4F60 Shift monitoring 6-5  
 0x02614F6A 4F6A Sensor,temperature,E module  
 0x02614F6B 4F6B Oil ageing threshold  
 0x02614F6F 4F6F Highly irregular rotation  
 0x02614F70 4F70 Engine overspeed  
 0x02614F71 4F71 Instrument-cluster timeout,emergency release actuated  
 0x02614FB0 4FB0 Internal fault 1(EPROM)  
 0x02614FB1 4FB1 Internal fault 2(EEPROM)  
 0x02614FB2 4FB2 Internal fault 3(watchdog)  
 0x02614FB3 4FB3 Internal fault 4(VRAM)  
 0x02615014 5014 Battery voltage  
 0x02615015 5015 Pressure regulator/solenoid valve,supply voltage  
 0x02615016 5016 Sensor supply voltage  
 0x02615079 5079 Serial line,time out  
 0x0261507A 507A Serial line,position info  
 0x0261507B 507B Parking-gear sensors implausible  
 0x0261507C 507C Parking gear incorrectly engaged  
 0x0261507D 507D Parking gear incorrectly disengaged  
 0x026150DC 50DC Double fault,position info CAN/serial line  
 0x026150DD 50DD Two substitute functions active  
 0x02615140 5140 No CAN message from DME  
 0x02615141 5141 No CAN message from DSC  
 0x02615142 5142 No CAN message from instrument cluster  
 0x02615143 5143 No CAN message from ACC  
 0x02615144 5144 No CAN message from CAS

# Bmw Code Sheet.txt

0x02615145 5145 No CAN message from EMF  
 0x02615146 5146 No CAN message from SSV  
 0x02615147 5147 No CAN message from SZL  
 0x02615149 5149 No CAN message from power module  
 0x02615150 5150 No CAN message from AHM  
 0x026151A5 51A5 CAN torque interface  
 0x026151A7 51A7 CAN engine speed  
 0x026151A8 51A8 No message(throttle valve/accelerator pedal)from engine management  
 0x026151AA 51AA CAN position info  
 0x026151AB 51AB CAN P button  
 0x026151AC 51AC No message(identification sensor connected)from engine management  
 0x026151AE 51AE No message(brake-light switch)from engine management  
 0x02625147 5147 No message from steering column switch cluster  
 0x026251A4 51A4 Message CAN11 status incorrect  
 0x026251A8 51A8 No message (throttle valve/accelerator pedal) from engine management  
 0x026251AC 51AC No message (identification sensor connected) from Car Access System  
 0x026251B0 51B0 Message from DSC (brake-light switch/brake pressure) implausible  
 0x02625147 5147 No message from steering column switch cluster  
 0x026251A4 51A4 Message CAN 11 status incorrect  
 0x026251A8 51A8 No message (throttle valve/accelerator pedal) from engine management  
 0x026251AC 51AC No message (identification sensor connected) from Car Access System  
 0x026251AE 51AE No message (brake signal) from engine management  
 0x026251B0 51B0 Message from DSC (brake-light switch/brake pressure) implausible  
 0x02624E20 4E20 Electronic pressure control valve 1  
 0x02624E21 4E21 Electronic pressure control valve 2  
 0x02624E22 4E22 Electronic pressure control valve 3  
 0x02624E23 4E23 Electronic pressure control valve 4  
 0x02624E24 4E24 Electronic pressure control valve 5  
 0x02624E25 4E25 Electronic pressure control valve 6 (converter clutch)  
 0x02624E26 4E26 Current fault, electronic pressure actuator in P/R/N  
 0x02624E84 4E84 Solenoid valve 1  
 0x02624E85 4E85 Solenoid valve 2  
 0x02624E86 4E86 Solenoid valve 3  
 0x02624E87 4E87 Solenoid valve 4 (shift lock)  
 0x02624E89 4E89 SV 1 or SV 2 mechanically jammed  
 0x02624EE8 4EE8 Turbine speed sensor  
 0x02624EE9 4EE9 Output speed sensor  
 0x02624EEA 4EEA Output rpm sensor - plausibility  
 0x02624EEB 4EEB Output speed sensor - gradient too high  
 0x02624EF2 4EF2 Temperature sensor, gear oil  
 0x02624EF3 4EF3 Temperature sensor, electronics module  
 0x02624F4B 4F4B Gear monitoring R  
 0x02624F4C 4F4C Symptom, speed monitoring  
 0x02624F4D 4F4D 1 Gear monitoring  
 0x02624F4E 4F4E 2 Gear monitoring  
 0x02624F4F 4F4F 3 Gear monitoring  
 0x02624F50 4F50 4 Gear monitoring  
 0x02624F51 4F51 5 Gear monitoring  
 0x02624F52 4F52 6 Gear monitoring  
 0x02624F53 4F53 Converter lockup clutch faulty / opened  
 0x02624F56 4F56 Shift monitoring  
 0x02624F57 4F57 Shift monitoring 1 - 2  
 0x02624F58 4F58 Shift monitoring 2 - 3  
 0x02624F59 4F59 Shift monitoring 3 - 4  
 0x02624F5A 4F5A Shift monitoring 4 - 5  
 0x02624F5B 4F5B Shift monitoring 5 - 6  
 0x02624F5C 4F5C Shift monitoring 2 - 1  
 0x02624F5D 4F5D Shift monitoring 3 - 2  
 0x02624F5E 4F5E Shift monitoring 4 - 3  
 0x02624F5F 4F5F Shift monitoring 5 - 4  
 0x02624F60 4F60 Shift monitoring 6 - 5  
 0x02624F6A 4F6A Temperature sensor: plausibilization  
 0x02624F6B 4F6B Oil aging threshold

# Bmw Code Sheet.txt

0x02624F6F 4F6F Highly irregular rotation  
 0x02624F70 4F70 Engine over speed  
 0x02624F71 4F71 Instrument - cluster time-out, emergency release actuated  
 0x02624F81 4F81 Ratio monitoring, clutch A  
 0x02624F82 4F82 Ratio monitoring, clutch B  
 0x02624F83 4F83 Ratio monitoring, clutch C  
 0x02624F84 4F84 Ratio monitoring, clutch D  
 0x02624F85 4F85 Ratio monitoring, clutch E  
 0x02624F87 4F87 Ratio monitoring, gearshift 1 - 2  
 0x02624F88 4F88 Ratio monitoring, gearshift 2 - 3  
 0x02624F89 4F89 Ratio monitoring, gearshift 3 - 4  
 0x02624F8A 4F8A Ratio monitoring, gearshift 4 - 5  
 0x02624F8B 4F8B Ratio monitoring, gearshift 5 - 6  
 0x02624F8C 4F8C Ratio monitoring, gearshift 6 - 5  
 0x02624F8D 4F8D Ratio monitoring, gearshift 5 - 4  
 0x02624F8E 4F8E Ratio monitoring, gearshift 4 - 3  
 0x02624F8F 4F8F Ratio monitoring, gearshift 3 - 2  
 0x02624F90 4F90 Ratio monitoring, gearshift 2 - 1  
 0x02624F91 4F91 Ratio monitoring, clutch A - D  
 0x02624F92 4F92 Ratio monitoring, clutch A - C  
 0x02624F93 4F93 Ratio monitoring, clutch A - B  
 0x02624F94 4F94 Ratio monitoring, clutch A - E  
 0x02624F95 4F95 Ratio monitoring, clutch B - E  
 0x02624F96 4F96 Ratio monitoring, clutch C - E  
 0x02624F97 4F97 Ratio monitoring, clutch B - D  
 0x02624FB0 4FB0 Internal fault 1 (EPROM)  
 0x02624FB1 4FB1 Internal fault 2 (EEPROM)  
 0x02624FB2 4FB2 Internal fault 3 (watchdog)  
 0x02624FB3 4FB3 Internal fault 4 (VRAM)  
 0x02624FB7 4FB7 Internal fault 5 (EEPROM writing)  
 0x02624FB8 4FB8 Transmission control: Internal fault (monitoring level 2)  
 0x02624FB9 4FB9 Transmission control: Internal fault (TPU/QADC)  
 0x02625014 5014 Battery voltage  
 0x02625015 5015 Pressure regulator/solenoid valve, supply voltage  
 0x02625016 5016 Sensor supply voltage  
 0x02625079 5079 Serial line, timeout  
 0x0262507A 507A Serial line, position info  
 0x0262507B 507B Parking gear sensors implausible  
 0x0262507C 507C Parking gear incorrectly engaged  
 0x0262507D 507D Parking gear incorrectly disengaged  
 0x02625087 5087 One - touch gearshift or M gate switch  
 0x02625088 5088 Sensors, transmission switch L1 - L4  
 0x02625089 5089 Line status does not match transmission position  
 0x026250DC 50DC Double fault, position info CAN/serial line  
 0x026250DD 50DD Two substitute functions active  
  
 0x02634E20 4E20 Electronic pressure control valve 1  
 0x02634E21 4E21 Electronic pressure control valve 2  
 0x02634E22 4E22 Electronic pressure control valve 3  
 0x02634E23 4E23 Electronic pressure control valve 4  
 0x02634E24 4E24 Electronic pressure control valve 5  
 0x02634E25 4E25 Electronic pressure control valve 6 (converter clutch)  
 0x02634E26 4E26 Current fault, electronic pressure actuator in P/R/N  
 0x02634E84 4E84 Solenoid valve 1  
 0x02634E85 4E85 Solenoid valve 2  
 0x02634E86 4E86 Solenoid valve 3 (interlock)  
 0x02634E87 4E87 Solenoid valve 4 (shift lock)  
 0x02634E89 4E89 Solenoid valve 1 or Solenoid valve 2 mechanically jammed  
 0x02634EE8 4EE8 Turbine speed sensor  
 0x02634EE9 4EE9 Output speed sensor  
 0x02634EEA 4EEA Output rpm sensor - plausibility  
 0x02634EEB 4EEB Output speed sensor - gradient too high  
 0x02634EF2 4EF2 Gear-oil temperature sensor

# Bmw Code Sheet.txt

0x02634EF3 4EF3 Control-unit temperature sensor  
 0x02634EFB 4EFB Transmission overtemperature  
 0x02634EFC 4EFC Gearbox control: internal component faulty (CG122)  
 0x02634EFD 4EFD Gearbox control: internal component faulty (CG122-HS-FET)  
 0x02634EFE 4EFE Gearbox control: internal component faulty (CG122), voltage inmutts  
 0x02634EFF 4EFF Oil damage  
 0x02634F4B 4F4B Gear monitoring R  
 0x02634F4C 4F4C Symptom, speed monitoring  
 0x02634F4D 4F4D 1 Gear monitoring  
 0x02634F4E 4F4E 2 Gear monitoring  
 0x02634F4F 4F4F 3 Gear monitoring  
 0x02634F50 4F50 4 Gear monitoring  
 0x02634F51 4F51 5 Gear monitoring  
 0x02634F52 4F52 6 Gear monitoring  
 0x02634F53 4F53 Fault in disengagement of converter lockup clutch  
 0x02634F56 4F56 Shift monitoring  
 0x02634F57 4F57 Shift monitoring 1 - 2  
 0x02634F58 4F58 Shift monitoring 2 - 3  
 0x02634F59 4F59 Shift monitoring 3 - 4  
 0x02634F5A 4F5A Shift monitoring 4 - 5  
 0x02634F5B 4F5B Shift monitoring 5 - 6  
 0x02634F5C 4F5C Shift monitoring 2 - 1  
 0x02634F5D 4F5D Shift monitoring 3 - 2  
 0x02634F5E 4F5E Shift monitoring 4 - 3  
 0x02634F5F 4F5F Shift monitoring 5 - 4  
 0x02634F60 4F60 Shift monitoring 6 - 5  
 0x02634F6A 4F6A Temperature sensor: plausibilization  
 0x02634F6B 4F6B Oil aging threshold  
 0x02634F6F 4F6F Highly irregular rotation  
 0x02634F70 4F70 Engine over speed  
 0x02634F71 4F71 No message from instrument cluster during emergency release process  
 parking lock activated  
 0x02634F77 4F77 Faulty positive engine intervention  
 0x02634F81 4F81 Ratio monitoring, clutch A  
 0x02634F82 4F82 Ratio monitoring, clutch B  
 0x02634F83 4F83 Ratio monitoring, clutch C  
 0x02634F84 4F84 Ratio monitoring, clutch D  
 0x02634F85 4F85 Ratio monitoring, clutch E  
 0x02634F87 4F87 Ratio monitoring, gearshift 1 - 2  
 0x02634F88 4F88 Ratio monitoring, gearshift 2 - 3  
 0x02634F89 4F89 Ratio monitoring, gearshift 3 - 4  
 0x02634F8A 4F8A Ratio monitoring, gearshift 4 - 5  
 0x02634F8B 4F8B Ratio monitoring, gearshift 5 - 6  
 0x02634F8C 4F8C Ratio monitoring, gearshift 6 - 5  
 0x02634F8D 4F8D Ratio monitoring, gearshift 5 - 4  
 0x02634F8E 4F8E Ratio monitoring, gearshift 4 - 3  
 0x02634F8F 4F8F Ratio monitoring, gearshift 3 - 2  
 0x02634F90 4F90 Ratio monitoring, gearshift 2 - 1  
 0x02634F91 4F91 Ratio monitoring, clutch A - D  
 0x02634F92 4F92 Ratio monitoring, clutch A - C  
 0x02634F93 4F93 Ratio monitoring, clutch A - B  
 0x02634F94 4F94 Ratio monitoring, clutch A - E  
 0x02634F95 4F95 Ratio monitoring, clutch B - E  
 0x02634F96 4F96 Ratio monitoring, clutch C - E  
 0x02634F97 4F97 Ratio monitoring, clutch B - D  
 0x02634F98 4F98 Ratio monitoring, clutch 6-4  
 0x02634F99 4F99 Ratio monitoring, clutch 5-3  
 0x02634F9A 4F9A Ratio monitoring, clutch 4-2  
 0x02634F9B 4F9B Ratio monitoring, clutch 3-1  
 0x02634F9C 4F9C Fault, transmission line amplification factor  
 0x02634FB0 4FB0 Transmission control: Internal fault (EPROM/FLASH)  
 0x02634FB1 4FB1 Transmission control: Internal fault (EPROM)  
 0x02634FB2 4FB2 Transmission control: Internal fault (watchdog)



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0x02634FB3 4FB3 Internal fault 4 (VRAM)
0x02634FB7 4FB7 Transmission control: Internal fault (EEPROM writing)
0x02634FB8 4FB8 Transmission control: Internal fault (monitoring level 2)
0x02634FB9 4FB9 Transmission control: Internal fault (TPU/QADC)
0x02634FBA 4FBA Actuator activation and selector-lever position implausible, speed
above threshold value
0x02634FBB 4FBB Actuator activation and selector-lever position implausible, speed
below threshold value
0x02635014 5014 Supply voltage, transmission control
0x02635015 5015 EPA/SV Supply voltage
0x02635016 5016 Sensor supply voltage
0x02635079 5079 No message via serial cable
0x0263507A 507A Information, serial cable, implausible
0x0263507B 507B Parking-lock sensor implausible
0x0263507C 507C Parking gear incorrectly engaged
0x0263507D 507D Parking gear incorrectly disengaged
0x02635087 5087 One - touch gearshift or M gate switch
0x02635088 5088 Transmission-selector-switch sensors faulty
0x02635089 5089 P/N line does not match transmission position
0x026350DC 50DC Transmission position sensor
0x026350DD 50DD Activation of two substitute functions of same priority
0x0263511B 511B Fault, coding
0x026351A5 51A5 No message (torque interface) from engine management
0x026351A7 51A7 No message (engine speed) from engine management
0x026351A8 51A8 No message (throttle valve/accelerator pedal) from engine management
0x026351AC 51AC No message (identification sensor connected) from Car Access System
0x026351AE 51AE No message (brake-light switch) from engine management
0x026351B0 51B0 Message (Brake light switch) from DSC implausible
0x0263CF07 CF07 Communication fault: PT-CAN
0x0263CF14 CF14 No message from engine management
0x0263CF15 CF15 No message from engine management
0x0263CF16 CF16 No message from engine management
0x0263CF17 CF17 No message from engine management
0x0263CF18 CF18 No message from engine management
//ABS
0x03010004 4 rear left wheel speed sensor fault
0x03010005 5 rear right wheel speed sensor fault
0x03010006 6 front left wheel speed sensor fault
0x03010007 7 front right wheel speed sensor fault
0x03010008 8 rear left ABS valve fault
0x03010009 9 rear right ABS valve fault
0x0301000A 10 front left ABS valve fault
0x0301000B 11 front right ABS valve fault
0x0301000E 14 valve relay fault
0x0301000F 15 ABS return-pump fault
0x03010015 21 ABS control unit internal fault
0x03010018 24 wrong pulse gear at one wheel
0x03010019 25 stop-light switch

0x03210003 3 Ignition timing adjustment
0x03210004 4 RL wheel-speed signal
0x03210005 5 RR wheel-speed signal
0x03210006 6 FR wheel-speed signal
0x03210007 7 FL wheel-speed signal
0x0321001E 14 ABS valve pump
0x0321001F 15 Return pump
0x03210014 20 Transmission intervention
0x03210015 21 ABS/ASC control module
0x03210016 22 Speed signal from DME
0x03210017 23 Incorrect coding
0x03210018 24 Pulse gears
0x0321001B 27 Idle speed increase
0x0321001E 30 RL wheel-speed sensor wiring

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0x0321001F 31 RR wheel-speed sensor wiring  
 0x03210020 32 FR wheel-speed sensor wiring  
 0x03210021 33 FL wheel-speed sensor wiring  
 0x03210022 34 ASC changeover valve  
 0x03210024 36 Ignition fadeout  
 0x03210025 37 ABS/ASC control module  
 0x03210026 38 Choke valve control faulty  
 0x03210027 39 Choke valve servomotor  
 0x03210028 40 Choke valve potentiometer  
 0x0321002F 47 RL outlet valve  
 0x03210030 48 RR outlet valve  
 0x03210031 49 FR outlet valve  
 0x03210032 50 FL outlet valve  
 0x03210033 51 Rear axle inlet valve  
 0x03210034 52 RR inlet valve  
 0x03210035 53 FR inlet valve  
 0x03210036 54 FL inlet valve  
 0x03210037 55 ASC intake valve  
 0x03210038 56 CAN:short circuit  
 0x03210039 57 TPS signal from DME  
 0x0321003A 58 CAN:interrupt to AGS  
 0x0321003B 59 CAN:open circuit to DME  
 0x0321003F 63 ABS/ASC control module  
 0x03210040 64 Signal interference  
 0x03210042 66 Speed sensor voltage supply  
 0x03210043 67 Intermittent interference  
 0x03210044 68 Intermittent interference after ignition on  
 0x03210047 71 ABS moter relay service life  
 0x03210049 73 Throttle valve angle fault from DME  
 0x0321004A 74 Engine torque fault from DME  
 0x0321004B 75 Engine speed fault from DME  
 0x0321004C 76 CAN: open circuit to DME  
 0x0321005D 93 DDE fault  
 0x0321005E 94 DDE fault  
 0x03220011 17 Operation of front left inlet valve faulty  
 0x03220012 18 Operation of front left outlet valve faulty  
 0x03220014 20 Operation of front right inlet valve faulty  
 0x03220018 24 Operation of front right outlet valve faulty  
 0x03220021 33 Operation of rear inlet valve faulty  
 0x03220022 34 Operation of rear axle outlet valve faulty  
 0x03220044 68 ABS microprocessor disturbed or faulty  
 0x03220048 72 Internal fault in control  
 0x03220051 81 wheel-speed sensor, front left, not installed or faulty  
 0x03220052 82 wheel-speed sensor, front right, not installed or faulty  
 0x03220054 84 wheel-speed sensor, rear left, not installed or faulty  
 0x03220058 88 wheel-speed sensor, rear right, not installed or faulty  
 0x03220061 97 wheel-speed signal, front left, not plausible  
 0x03220062 98 wheel-speed signal, front right, not plausible  
 0x03220064 100 wheel-speed signal, rear left, not plausible  
 0x03220068 104 wheel-speed signal, rear right, not plausible  
 0x03220071 113 wheel-speed information, front left, not detected  
 0x03220072 114 wheel-speed information, front right, not detected  
 0x03220074 116 wheel-speed information, rear left, not detected  
 0x03220078 120 wheel-speed information, rear right, not detected  
 0x03220091 145 Pump not functioning  
 0x03220094 148 Vehicle voltage was greater than 16.5V  
 0x032200A1 161 Outlet valve, front left, not functioning  
 0x032200A2 162 Outlet valve, front right, not functioning  
 0x032200A4 164 Outlet valve, rear axle, not functioning  
 0x032200A8 168 Outlet valve, rear right, not functioning  
 0x032200B1 177 Fault, valve load circuit fuse  
 0x032200B2 178 Valve fault  
 0x032200B3 180 valve fault

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0x032200B8 184 Controller hardware monitoring  
 0x032200FF 255 access to memory in control unit disturbed  
 0x03230002 02 CAN fault (open circuit to EML)  
 0x03230004 04 wheel speed, rear left (Plausibility)  
 0x03230005 05 wheel speed, rear right (Plausibility)  
 0x03230006 06 wheel speed, front right (Plausibility)  
 0x03230007 07 wheel speed, front left (Plausibility)  
 0x0323000E 14 ABS valve-relay fault  
 0x0323000F 15 Return-pump fault  
 0x03230015 21 ABS/ASC control-unit fault  
 0x03230017 23 Variant Coding fault  
 0x03230018 24 Pulse-gears fault  
 0x0323001E 30 wheel-speed signal, rear left (wire)  
 0x0323001F 31 wheel-speed signal, rear right (wire)  
 0x03230020 32 wheel-speed signal, front right (wire)  
 0x03230021 33 wheel-speed signal, front left (wire)  
 0x03230022 34 Change-over valve fault  
 0x03230029 41 Steering-angle sensor  
 0x0323002F 47 Fault, outlet valve, rear left  
 0x03230030 48 Fault, outlet valve, rear right  
 0x03230031 49 Fault, outlet valve, front right  
 0x03230032 50 Fault, outlet valve, front left  
 0x03230033 51 Fault, inlet valve, rear left  
 0x03230034 52 Fault, inlet valve, rear right  
 0x03230035 53 Fault, inlet valve, front right  
 0x03230036 54 Fault, inlet valve, front left  
 0x03230037 55 Intake-valve fault  
 0x03230038 56 CAN fault (short circuit)  
 0x0323003A 58 CAN fault (Open circuit to AGS)  
 0x0323003B 59 CAN fault (Open circuit to DME1)  
 0x0323003F 63 ABS/ASC control unit fault (microprocessor)  
 0x03230040 64 Long-term scatter  
 0x03230042 66 Supply voltage, speed sensor  
 0x03230045 69 CAN fault (interrupt to DME2)  
 0x03230047 71 ABS motor-relay service life  
 0x03230048 72 Steering-angle-sensor adjustment fault

0x03240004 04 wheel-speed signal, rear left  
 0x03240005 05 wheel-speed signal, rear right  
 0x03240006 06 wheel-speed signal, front right  
 0x03240007 07 wheel-speed signal, front left  
 0x0324000E 14 ABS valve relay  
 0x0324000F 15 Return pump  
 0x03240015 21 ABS/ASC control unit  
 0x03240017 23 Variant coding  
 0x03240018 24 Pulse gears  
 0x0324001E 30 wheel-speed signal, rear left  
 0x0324001F 31 wheel-speed signal, rear right  
 0x03240020 32 wheel-speed signal, front right  
 0x03240021 33 wheel-speed signal, front left  
 0x03240022 34 ASC change-over valve  
 0x0324002F 47 Outlet valve, rear left  
 0x03240030 48 Outlet valve, rear right  
 0x03240031 49 Outlet valve, front right  
 0x03240032 50 Outlet valve, front left  
 0x03240033 51 Inlet valve, rear left  
 0x03240034 52 Inlet valve, rear right  
 0x03240035 53 Inlet valve, front right  
 0x03240036 54 Inlet valve, front left  
 0x03240037 55 ASC intake valve  
 0x03240038 56 CAN fault (short circuit)  
 0x0324003A 58 CAN fault (Open circuit to AGS)  
 0x0324003F 63 ABS/ASC control unit

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0x03240040 64 Long-term scatter  
 0x03240042 66 Power supply, wheel-speed sensors  
 0x03240044 68 Intermittent interference after "Ignition on"  
 0x03240047 71 ABS motor-relay service life  
 0x0324004C 76 CAN fault (open circuit to DME/DDE)  
 0x0324005D 93 Accelerator-pedal-travel sensor  
 0x0324005E 94 DDE fault  
 0x03250004 04 wheel-speed signal, rear left  
 0x03250005 05 wheel-speed signal, rear right  
 0x03250006 06 wheel-speed signal, front right  
 0x03250007 07 wheel-speed signal, front left  
 0x0325000E 14 ABS valve relay  
 0x0325000F 15 Return pump  
 0x03250015 21 ABS/ASC control unit  
 0x03250017 23 Variant coding  
 0x03250018 24 Pulse gears  
 0x0325001E 30 wheel-speed signal, rear left  
 0x0325001F 31 wheel-speed signal, rear right  
 0x03250020 32 wheel-speed signal, front right  
 0x03250021 33 wheel-speed signal, front left  
 0x03250022 34 ASC change-over valve  
 0x03250025 37 ABS/ASC control unit  
 0x03250026 38 Control fault, choke valve  
 0x03250027 39 Servomotor, choke valve  
 0x03250028 40 Potentiometer, choke valve  
 0x0325002F 47 Outlet valve, rear left  
 0x03250030 48 Outlet valve, rear right  
 0x03250031 49 Outlet valve, front right  
 0x03250032 50 Outlet valve, front left  
 0x03250033 51 Inlet valve, rear left  
 0x03250034 52 Inlet valve, rear right  
 0x03250035 53 Inlet valve, front right  
 0x03250036 54 Inlet valve, front left  
 0x03250037 55 ASC intake valve  
 0x03250038 56 CAN fault (short circuit)  
 0x03250039 57 Throttle-valve signal from the DME  
 0x0325003A 58 CAN fault (Open circuit to AGS)  
 0x0325003B 59 CAN fault (Open circuit to DME)  
 0x0325003F 63 ABS/ASC control unit  
 0x03250040 64 Long-term scatter  
 0x03250042 66 Power supply, wheel-speed sensors  
 0x03250043 67 Intermittent interference  
 0x03250044 68 Intermittent interference after "Ignition on"  
 0x03250047 71 ABS motor-relay service life  
 0x0325004A 74 DME fault (engine torque)  
 0x0325004B 75 DME fault (engine speed)  
 0x03260002 02 CAN fault (open circuit to EML)  
 0x03260004 04 wheel speed, rear left (Plausibility)  
 0x03260005 05 wheel speed, rear right (Plausibility)  
 0x03260006 06 wheel speed, front right (Plausibility)  
 0x03260007 07 wheel speed, front left (Plausibility)  
 0x0326000E 14 ABS valve-relay fault  
 0x0326000F 15 Return-pump fault  
 0x03260015 21 ABS/ASC control-unit fault  
 0x03260018 24 Pulse gears fault  
 0x0326001E 30 wheel-speed signal, rear left (wire)  
 0x0326001F 31 wheel-speed signal, rear right (wire)  
 0x03260020 32 wheel-speed signal, front right (wire)  
 0x03260021 33 wheel-speed signal, front left (wire)  
 0x03260022 34 Changeover valve, front axle  
 0x03260029 41 Steering-angle sensor (Plausibility)  
 0x0326002F 47 Fault, outlet valve, rear left  
 0x03260030 48 Fault, outlet valve, rear right

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0x03260031 49 fault, outlet valve, front right  
 0x03260032 50 Fault, outlet valve, front left  
 0x03260033 51 Fault, inlet valve, rear left  
 0x03260034 52 Fault, inlet valve, rear right  
 0x03260035 53 Fault, inlet valve, front right  
 0x03260036 54 Fault, inlet valve, front left  
 0x03260037 55 High-pressure changeover valve, front axle  
 0x03260038 56 CAN fault (short circuit)  
 0x0326003A 58 CAN fault (Open circuit to AGS)  
 0x0326003B 59 CAN fault (Open circuit to DME1)  
 0x0326003F 63 ABS/ASC control unit fault (microprocessor)  
 0x03260040 64 Long-term scatter  
 0x03260042 66 Supply voltage, speed sensor  
 0x03260045 69 CAN fault (interrupt to DME2)  
 0x03260047 71 ABS motor-relay service life  
 0x03260051 81 Pressure sensor (wire/offset)  
 0x03260052 82 Rotation-rate sensor (wire)  
 0x03260053 83 Transversal-accel. sensor (plausibility)  
 0x03260054 84 Rotation-rate sensor (plausibility)  
 0x03260056 86 Changeover valve, rear axle  
 0x03260057 87 Precharging valve, rear axle  
 0x03260058 88 Precharging pump  
 0x0326005B 91 CAN fault (open circuit to LWS)  
 0x0326005C 92 Pressure sensor (Precharging pump/plausibility)  
 0x0326005E 94 Rotation-rate sensor (test)  
 0x0326005F 95 Interference  
 0x03260060 96 Actuator test  
 0x03260061 97 Steering-angle sensor (adjustment)  
 0x03260064 100 Transversal-acceleration sensor (gradient)  
 0x03260067 103 Steering-angle sensor (revolution identification)  
 0x03260068 104 Steering-angle sensor (control module)  
 0x03260069 105 Brake-light switch (plausibility)  
 0x0326006A 106 Transversal-acceleration sensor (plausibility)  
 0x0326006B 107 Rotation-rate sensor (gradient)  
 0x0326006C 108 Brake fluid  
 0x0326006D 109 End-of-belt test  
 0x03270003 03 Ignition-timing adjustment  
 0x03270004 04 wheel-speed signal, rear left  
 0x03270005 05 wheel-speed signal, rear right  
 0x03270006 06 wheel-speed signal, front right  
 0x03270007 07 wheel-speed signal, front left  
 0x0327000E 14 ABS valve relay  
 0x0327000F 15 Return pump  
 0x03270014 20 Gearbox intervention  
 0x03270015 21 ABS/ASC control unit  
 0x03270016 22 wheel-speed signal from the DME  
 0x03270017 23 Variant coding  
 0x03270018 24 Pulse gears  
 0x0327001B 27 Idle-speed increase  
 0x0327001E 30 wheel-speed signal, rear left  
 0x0327001F 31 wheel-speed signal, rear right  
 0x03270020 32 wheel-speed signal, front right  
 0x03270021 33 wheel-speed signal, front left  
 0x03270022 34 ASC change-over valve  
 0x03270024 34 Ignition fadeout  
 0x03270025 37 ABS/ASC control unit  
 0x03270026 38 Control fault, choke valve  
 0x03270027 39 Servomotor, choke valve  
 0x03270028 40 Potentiometer, choke valve  
 0x0327002F 47 Outlet valve, rear left  
 0x03270030 48 Outlet valve, rear right  
 0x03270031 49 Outlet valve, front right  
 0x03270032 50 Outlet valve, front left

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0x03270033 51 Inlet valve, rear left  
 0x03270034 52 Inlet valve, rear right  
 0x03270035 53 Inlet valve, front right  
 0x03270036 54 Inlet valve, front left  
 0x03270037 55 ASC intake valve  
 0x03270039 57 Throttle-valve signal from the DME  
 0x0327003F 63 ABS/ASC control unit  
 0x03270040 64 Long-term scatter  
 0x03270042 66 Power supply, wheel-speed sensors  
 0x03270043 67 Intermittent interference  
 0x03270044 68 Intermittent interference after "Ignition on"  
 0x03270047 71 ABS motor-relay service life  
 0x03280002 02 CAN fault (open circuit to EML)  
 0x03280004 04 wheel speed, rear left (Plausibility)  
 0x03280005 05 wheel speed, rear right (Plausibility)  
 0x03280006 06 wheel speed, front right (Plausibility)  
 0x03280007 07 wheel speed, front left (Plausibility)  
 0x0328000E 14 ABS valve-relay fault  
 0x0328000F 15 Return-pump fault  
 0x03280015 21 ABS/ASC control-unit fault  
 0x03280018 24 Pulse gears fault  
 0x0328001E 30 wheel-speed signal, rear left (wire)  
 0x0328001F 31 wheel-speed signal, rear right (wire)  
 0x03280020 32 wheel-speed signal, front right (wire)  
 0x03280021 33 wheel-speed signal, front left (wire)  
 0x03280022 34 Changeover valve, front axle  
 0x03280025 37 ABS/DSC control module  
 0x03280026 38 Control fault, choke valve  
 0x03280027 39 Servomotor, choke valve  
 0x03280028 40 Potentiometer, choke valve  
 0x03280029 41 Steering-angle sensor (Plausibility)  
 0x0328002F 47 Fault, outlet valve, rear left  
 0x03280030 48 Fault, outlet valve, rear right  
 0x03280031 49 fault, outlet valve, front right  
 0x03280032 50 Fault, outlet valve, front left  
 0x03280033 51 Fault, inlet valve, rear left  
 0x03280034 52 Fault, inlet valve, rear right  
 0x03280035 53 Fault, inlet valve, front right  
 0x03280036 54 Fault, inlet valve, front left  
 0x03280037 55 High-pressure changeover valve, front axle  
 0x03280038 56 CAN fault (short circuit)  
 0x03280039 57 Throttle-valve signal from the DME  
 0x0328003A 58 CAN fault (Open circuit to AGS)  
 0x0328003B 59 CAN fault (Open circuit to DME1)  
 0x0328003F 63 ABS/ASC control unit fault (microprocessor)  
 0x03280040 64 Long-term scatter  
 0x03280045 69 CAN fault (interrupt to DME2)  
 0x03280047 71 ABS motor-relay service life  
 0x03280051 81 Pressure sensor (wire/offset)  
 0x03280052 82 Rotation-rate sensor (wire)  
 0x03280053 83 Transversal-accel. sensor (plausibility)  
 0x03280054 84 Rotation-rate sensor (plausibility)  
 0x03280056 86 Changeover valve, rear axle  
 0x03280057 87 High-pressure changeover valve, rear axle  
 0x03280058 88 Precharging pump  
 0x0328005B 91 CAN fault (open circuit to LWS)  
 0x0328005C 92 Pressure sensor (Precharging pump/plausibility)  
 0x0328005E 94 Rotation-rate sensor (test)  
 0x0328005F 95 Interference  
 0x03280060 96 Actuator test  
 0x03280061 97 Steering-angle sensor (adjustment)  
 0x03280064 100 Transversal-acceleration sensor (gradient)  
 0x03280067 103 Steering-angle sensor (revolution identification)

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0x03280068 104 Steering-angle sensor (control module)  
 0x03280069 105 Brake-light switch (plausibility)  
 0x0328006A 106 Transversal-acceleration sensor (plausibility)  
 0x0328006B 107 Rotation-rate sensor (gradient)  
 0x0328006C 108 Brake fluid  
 0x0328006D 109 End-of-belt test  
  
 0x03290004 04 wheel-speed signal, rear left  
 0x03290005 05 wheel-speed signal, rear right  
 0x03290006 06 wheel-speed signal, front right  
 0x03290007 07 wheel-speed signal, front left  
 0x0329000E 14 ABS valve relay  
 0x0329000F 15 Return pump  
 0x03290015 21 ABS/ASC control unit  
 0x03290017 23 Variant coding  
 0x03290018 24 Pulse gears  
 0x0329001E 30 wheel-speed signal, rear left  
 0x0329001F 31 wheel-speed signal, rear right  
 0x03290020 32 wheel-speed signal, front right  
 0x03290021 33 wheel-speed signal, front left  
 0x03290022 34 ASC change-over valve  
 0x0329002F 47 Outlet valve, rear left  
 0x03290030 48 Outlet valve, rear right  
 0x03290031 49 Outlet valve, front right  
 0x03290032 50 Outlet valve, front left  
 0x03290033 51 Inlet valve, rear left  
 0x03290034 52 Inlet valve, rear right  
 0x03290035 53 Inlet valve, front right  
 0x03290036 54 Inlet valve, front left  
 0x03290037 55 ASC intake valve  
 0x03290038 56 CAN fault (short circuit)  
 0x03290039 57 Throttle-valve signal from the DME  
 0x0329003A 58 CAN fault (Open circuit to AGS)  
 0x0329003B 59 CAN fault (Open circuit to DME)  
 0x0329003F 63 ABS/ASC control unit  
 0x03290040 64 Long-term scatter  
 0x03290042 66 Power supply, wheel-speed sensors  
 0x03290043 67 Intermittent interference  
 0x03290044 68 Intermittent interference after "Ignition on"  
 0x0329004B 75 DME fault (engine speed)  
 0x0329004C 76 CAN fault (Open circuit to DME)  
 0x032A0011 17 Speed signal, front left (electrical fault)  
 0x032A0012 18 Speed signal, front left (continuity)  
 0x032A0014 20 Speed signal, front left (drive-off detection)  
 0x032A0015 21 outlet valve, front left Speed sensor, front left (Position)  
 0x032A0021 33 Speed signal, front right (electrical fault)  
 0x032A0022 34 Speed signal, front right (Continuity)  
 0x032A0024 36 Speed signal, front right (drive-off detection)  
 0x032A0025 37 Outlet valve, front right speed sensor, front right (position)  
 0x032A0031 49 Speed signal, rear left (electrical fault)  
 0x032A0032 50 Speed signal, rear left (continuity)  
 0x032A0034 52 Speed signal, rear left (drive-off detection)  
 0x032A0035 53 Outlet valve, rear axle speed sensor, rear left (position)  
 0x032A0041 65 Speed signal, rear right (electrical fault)  
 0x032A0042 66 Speed signal, rear right (continuity)  
 0x032A0044 68 Speed signal, rear right (drive-off detection)  
 0x032A0045 69 Outlet valve, rear axle speed sensor, rear right (position)  
 0x032A0051 81 Inlet valve, front left  
 0x032A0052 82 Inlet valve, front right  
 0x032A0053 83 Inlet valve, rear left  
 0x032A0054 84 Inlet valve, rear right  
 0x032A0055 85 Outlet valve, front left  
 0x032A0056 86 Outlet valve, front right

0x032A0057 87 Outlet valve, rear left  
 0x032A0058 88 Outlet valve, rear right  
 0x032A0061 97 ASC special valve  
 0x032A0071 11 ABS pump-motor fault  
 0x032A0073 11 ABS/ASC control unit  
 0x032A0076 11 Electromagnetic or mechanical influence on wheel-speed signals  
 0x032A0078 12 Battery voltage  
 0x032A0081 12 ABS/ASC main relay  
 0x032A0082 13 Power supply, solenoid valves  
 0x032A0083 13 Power input, solenoid valves  
 0x032A0091 14 CAN chip in ABS/ASC control unit  
 0x032A0092 14 CAN bus  
 0x032A0093 14 Engine intervention via CAN  
 0x032A0094 14 Engine speed via CAN  
 0x032A0095 14 Connection of DME/DDE to CAN bus  
 0x032A0096 15 Connection of EGS to CAN bus  
 0x032A0097 15 Variant coding, ABS/ASC control unit  
 0x032A0098 152 ASC button  
 0x032B0011 17 Speed signal, front left (electrical fault)  
 0x032B0012 18 Speed signal, front left (continuity)  
 0x032B0014 20 Speed signal, front left (drive-off detection)  
 0x032B0015 21 outlet valve, front left Speed sensor, front left (Position)  
 0x032B0021 33 Speed signal, front right (electrical fault)  
 0x032B0022 34 Speed signal, front right (Continuity)  
 0x032B0024 36 Speed signal, front right (drive-off detection)  
 0x032B0025 37 Outlet valve, front right speed sensor, front right (position)  
 0x032B0031 49 Speed signal, rear left (electrical fault)  
 0x032B0032 50 Speed signal, rear left (continuity)  
 0x032B0034 52 Speed signal, rear left (drive-off detection)  
 0x032B0035 53 Outlet valve, rear axle speed sensor, rear left (position)  
 0x032B0041 65 Speed signal, rear right (electrical fault)  
 0x032B0042 66 Speed signal, rear right (continuity)  
 0x032B0044 68 Speed signal, rear right (drive-off detection)  
 0x032B0045 69 Outlet valve, rear axle speed sensor, rear right (position)  
 0x032B0051 81 Inlet valve, front left  
 0x032B0052 82 Inlet valve, front right  
 0x032B0053 83 Inlet valve, rear left  
 0x032B0054 84 Inlet valve, rear right  
 0x032B0055 85 Outlet valve, front left  
 0x032B0056 86 Outlet valve, front right  
 0x032B0057 87 Outlet valve, rear left  
 0x032B0058 88 Outlet valve, rear right  
 0x032B0061 97 ASC special valve  
 0x032B0071 11 ABS pump-motor fault  
 0x032B0073 11 ABS/ASC control unit  
 0x032B0076 11 Electromagnetic or mechanical influence of wheel speed signal  
 0x032B0078 12 Battery voltage  
 0x032B0081 12 ABS/ASC main relay  
 0x032B0082 13 Power supply, solenoid valves  
 0x032B0083 13 Power input, solenoid valves  
 0x032B0091 14 CAN chip in ABS/ASC control unit  
 0x032B0092 14 CAN bus  
 0x032B0093 14 Engine intervention via CAN  
 0x032B0094 14 Engine speed via CAN  
 0x032B0095 14 Connection of DME/DDE to CAN bus  
 0x032B0096 15 Connection of EGS to CAN bus  
 0x032B0097 15 Variant coding, ABS/ASC control unit  
 0x032B0098 152 ASC button  
 0x032C0011 17 Speed signal, front left (electrical fault)  
 0x032C0012 18 Speed signal, front left (continuity)  
 0x032C0014 20 Speed signal, front left (drive-off detection)  
 0x032C0015 21 outlet valve, front left Speed sensor, front left (Position)  
 0x032C0021 33 Speed signal, front right (electrical fault)



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0x032C0022 34 Speed signal, front right (Continuity)  
 0x032C0024 36 Speed signal, front right (drive-off detection)  
 0x032C0025 37 Outlet valve, front right speed sensor, front right (position)  
 0x032C0031 49 Speed signal, rear left (electrical fault)  
 0x032C0032 50 Speed signal, rear left (continuity)  
 0x032C0034 52 Speed signal, rear left (drive-off detection)  
 0x032C0035 53 Outlet valve, rear axle speed sensor, rear left (position)  
 0x032C0041 65 Speed signal, rear right (electrical fault)  
 0x032C0042 66 Speed signal, rear right (continuity)  
 0x032C0044 68 Speed signal, rear right (drive-off detection)  
 0x032C0045 69 Outlet valve, rear axle speed sensor, rear right (position)  
 0x032C0051 81 Inlet valve, front left  
 0x032C0052 82 Inlet valve, front right  
 0x032C0053 83 Inlet valve, rear axle  
 0x032C0055 85 Outlet valve, front left  
 0x032C0056 86 Outlet valve, front right  
 0x032C0057 87 Outlet valve, rear axle  
 0x032C0071 113 ABS pump-motor fault  
 0x032C0076 118 Electromagnetic or mechanical influence on wheel-speed signals  
 0x032C0078 120 Battery voltage  
 0x032C0081 129 ABS/ASC main relay  
 0x032C0082 130 Power supply, solenoid valves  
 0x032C0083 131 Power input, solenoid valves  
 0x032C0085 133 Solenoid-valve coil  
 0x032D0011 17 FL wheel-speed signal  
 0x032D0012 18 FL wheel-speed signal  
 0x032D0014 20 FL wheel-speed signal  
 0x032D0015 21 FL wheel-speed sensor or FL outlet valve  
 0x032D0021 33 FR wheel-speed signal  
 0x032D0022 34 FR wheel-speed signal  
 0x032D0024 36 FR wheel-speed signal  
 0x032D0025 37 FR wheel-speed signal or FR outlet valve  
 0x032D0031 49 FL wheel-speed signal  
 0x032D0032 50 FL wheel-speed signal  
 0x032D0034 52 FL wheel-speed signal  
 0x032D0035 53 RL wheel-speed signal or rear axle outlet valve  
 0x032D0041 65 RR wheel-speed signal  
 0x032D0042 66 RR wheel-speed signal  
 0x032D0044 68 RR wheel-speed signal  
 0x032D0045 69 RR wheel-speed signal or rear axle outlet valve  
 0x032D0051 81 FL inlet valve  
 0x032D0052 82 FR inlet valve  
 0x032D0053 83 RL inlet valve  
 0x032D0054 84 RR inlet valve  
 0x032D0055 85 FL outlet valve  
 0x032D0056 86 FR outlet valve  
 0x032D0057 87 RL outlet valve  
 0x032D0058 88 RR outlet valve  
 0x032D0061 97 ASC intake valve  
 0x032D0062 98 Monitoring of throttle valve control motor disturbed  
 0x032D0063 99 Fault in choke valve potentiometer  
 0x032D0064 100 Electric fault in throttle valve actuator  
 0x032D0065 101 Mechanical fault in throttle valve actuator  
 0x032D0066 102 Mechanical fault in throttle valve actuator(min.or max.value exceeded)  
 0x032D0067 103 Break light switch  
 0x032D0068 104 Pump motor relay service life  
 0x032D0071 113 Pump motor  
 0x032D0073 115 ABS/ASC control unit  
 0x032D0076 118 Electromagnetic or mechanical influence of wheel speed signal  
 0x032D0078 120 Battery voltage  
 0x032D0081 129 ABS/ASC main relay  
 0x032D0082 130 Solenoid valves power supply

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0X032D0083 131 Solenoid valves power input  
 0X032D0085 133 Solenoid valves voltage  
 0X032D0091 145 CAN: chip in ABS/ASC control unit  
 0X032D0092 146 CAN: bus faulty  
 0X032D0093 147 CAN: engine intervention  
 0X032D0094 148 CAN: engine speed  
 0X032D0095 149 CAN: connection failed with DME/DDE  
 0X032D0096 150 CAN: connection failed with EGS  
 0X032D0097 151 Incorrect coding  
 0X032D0098 152 ASC button  
 0x032E0011 11 wheel-speed sensor, front left  
 0x032E0012 12 wheel-speed sensor, front left  
 0x032E0014 14 wheel-speed sensor, front left  
 0x032E0015 15 wheel-speed sensor position, front left  
 0x032E0021 21 wheel- speed sensor, front right  
 0x032E0022 22 wheel-speed sensor, front right  
 0x032E0024 24 wheel-speed sensor, front right  
 0x032E0025 25 wheel-speed sensor position, front right  
 0x032E0031 31 wheel-speed sensor, rear left  
 0x032E0032 32 wheel-speed sensor, rear left  
 0x032E0034 34 wheel-speed sensor, rear left  
 0x032E0035 35 wheel-speed sensor position, rear left  
 0x032E0041 41 wheel-speed sensor, rear right  
 0x032E0042 42 wheel-speed sensor, rear right  
 0x032E0044 44 wheel-speed sensor, rear right  
 0x032E0045 45 wheel-speed-sensor position, rear right  
 0x032E0051 51 Intake valve, front left  
 0x032E0052 52 Intake valve, front right  
 0x032E0053 53 Intake valve, rear left  
 0x032E0054 54 Intake valve, rear right  
 0x032E0055 55 Exhaust valve, front left  
 0x032E0056 56 Exhaust valve, front right  
 0x032E0057 57 Exhaust valve, rear left  
 0x032E0058 58 Exhaust valve, rear right  
 0x032E0061 61 Distribution valve  
 0x032E0067 67 Brake-light switch  
 0x032E0071 71 Pump motor  
 0x032E0073 73 Internal fault  
 0x032E0076 76 Speed sensor, signal interference  
 0x032E0078 78 Vehicle power > 18 v  
 0x032E0081 81 Positive supply, solenoid valves  
 0x032E0082 82 Main relay,voltage fault  
 0x032E0083 83 Current consumption, solenoid valves  
 0x032E0085 85 Overvoltage, valve coil  
 0x032E0091 91 CAN fault in control unit  
 0x032E0092 92 CAN bus fault  
 0x032E0093 93 CAN data fault from DME/DDE  
 0x032E0094 94 CAN data fault from DME/DDE  
 0x032E0095 95 CAN connection to DME/DDE  
 0x032E0096 96 CAN connection to EGS  
 0x032E0097 97 Variant coding  
 0x032E0098 98 Button  
 0x032F0011 11 wheel-speed sensor, front left  
 0x032F0012 12 wheel-speed sensor, front left  
 0x032F0014 14 wheel-speed sensor, front left  
 0x032F0021 21 wheel- speed sensor, front right  
 0x032F0022 22 wheel-speed sensor, front right  
 0x032F0024 24 wheel-speed sensor, front right  
 0x032F0025 25 wheel-speed sensor position, front right  
 0x032F0031 31 wheel-speed sensor, rear left  
 0x032F0032 32 wheel-speed sensor, rear left  
 0x032F0034 34 wheel-speed sensor, rear left  
 0x032F0035 35 wheel-speed sensor position, rear left

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0x032F0041 41 wheel-speed sensor, rear right  
 0x032F0042 42 wheel-speed sensor, rear right  
 0x032F0044 44 wheel-speed sensor, rear right  
 0x032F0045 45 wheel-speed-sensor position, rear right  
 0x032F0051 51 Intake valve, front left  
 0x032F0052 52 Intake valve, front right  
 0x032F0053 53 Intake valve, rear left  
 0x032F0054 54 Intake valve, rear right  
 0x032F0055 55 Exhaust valve, front left  
 0x032F0056 56 Exhaust valve, front right  
 0x032F0057 57 Exhaust valve, rear left  
 0x032F0058 58 Exhaust valve, rear right  
 0x032F0061 61 Distribution valve  
 0x032F0067 67 Brake-light switch  
 0x032F0071 71 Pump motor  
 0x032F0073 73 Internal fault  
 0x032F0076 76 Speed sensor, signal interference  
 0x032F0078 78 Vehicle power > 18 V  
 0x032F0081 81 Positive supply, solenoid valves  
 0x032F0083 83 Current consumption, solenoid valves  
 0x032F0085 85 Overvoltage, valve coil  
 0x032F0091 91 CAN fault in control unit  
 0x032F0092 92 CAN bus fault  
 0x032F0093 93 CAN data fault from DME/DDE  
 0x032F0094 94 CAN data fault from DME/DDE  
 0x032F0095 95 CAN connection to DME/DDE  
 0x032F0096 96 CAN connection to EGS  
 0x032F0097 97 Variant coding  
 0x032F0098 98 Button  
 0x03300011 17 Speed signal, front left (electrical fault)  
 0x03300012 18 Speed signal, front left (continuity)  
 0x03300014 20 Speed signal, front left (drive-off detection)  
 0x03300015 21 outlet valve, front left Speed sensor, front left (Position)  
 0x03300021 33 Speed signal, front right (electrical fault)  
 0x03300022 34 Speed signal, front right (Continuity)  
 0x03300024 36 Speed signal, front right (drive-off detection)  
 0x03300025 37 Outlet valve, front right speed sensor, front right (position)  
 0x03300031 49 Speed signal, rear left (electrical fault)  
 0x03300032 50 Speed signal, rear left (continuity)  
 0x03300034 52 Speed signal, rear left (drive-off detection)  
 0x03300035 53 Outlet valve, rear axle speed sensor, rear left (position)  
 0x03300041 65 Speed signal, rear right (electrical fault)  
 0x03300042 66 Speed signal, rear right (continuity)  
 0x03300044 68 Speed signal, rear right (drive-off detection)  
 0x03300045 69 Outlet valve, rear axle speed sensor, rear right (position)  
 0x03300051 81 Inlet valve, front left  
 0x03300052 82 Inlet valve, front right  
 0x03300053 83 Inlet valve, rear axle  
 0x03300055 85 Outlet valve, front left  
 0x03300056 86 Outlet valve, front right  
 0x03300057 87 Outlet valve, rear axle  
 0x03300071 113 ABS pump-motor fault  
 0x03300076 118 Electromagnetic or mechanical influence on wheel-speed signals  
 0x03300078 120 Battery voltage  
 0x03300081 129 ABS/ASC main relay  
 0x03300082 130 Power supply, solenoid valves  
 0x03300083 131 Power input, solenoid valves  
 0x03300085 133 Solenoid-valve coil  
 0x03310002 XX CAN engine-power control  
 0x03310004 04 wheel-speed sensor, rear left, transmits implausible signals  
 0x03310005 05 wheel-speed sensor, rear right, transmits implausible signals  
 0x03310006 06 wheel-speed sensor, front right, transmits implausible signals  
 0x03310007 07 wheel-speed sensor, front left, transmits implausible signals

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0x0331000E 0E Valve-relay fault  
 0x0331000F 0F Return-pump fault  
 0x03310015 15 Fault int DSC control unit  
 0x03310017 17 Coding error  
 0x03310018 18 Pulse-gear fault  
 0x0331001E 1E wheel-speed sensor, rear left, transmits no signals  
 0x0331001F 1F wheel-speed sensor, rear right, transmits no signals  
 0x03310020 20 wheel-speed sensor, front right, transmits no signals  
 0x03310021 21 wheel-speed sensor, front left, transmits no signals  
 0x03310022 22 Changerover valve, front axle  
 0x0331002F 2F Outlet valve, rear left  
 0x03310030 30 outlet valve, rear right  
 0x03310031 31 Outlet valve, front right  
 0x03310032 32 Outler valve, front left  
 0x03310033 33 Inlet valve, rear left  
 0x03310034 34 Inlet valve, rear right  
 0x03310035 35 Inlet valve, front right  
 0x03310036 36 Inlet valve, front left  
 0x03310037 37 High-pressure switching valve, front axle  
 0x03310038 38 DSC cannot transmit/receive on CAN  
 0x0331003A 3A No message from EGS control unit  
 0x0331003B 3B No message (DMER1) from DME/DDE control unit  
 0x0331003F 3F Speed processing in DSC control unit faulty  
 0x03310040 40 Continuous control  
 0x03310041 XX Voltage fault, active speed sensors  
 0x03310042 XX Voltage fault, active speed sensors  
 0x03310044 44 DSC passive switching  
 0x03310045 45 No message (DMER2) from DME/DDE control unit  
 0x03310051 51 Pressure sensor, line  
 0x03310052 52 Rotation-rate sensor, line  
 0x03310053 53 Transversal-acceleration sensor, line  
 0x03310054 54 Rotation-rate sensor, plausibility  
 0x03310056 56 Changerover valve, rear axle  
 0x03310057 57 High-pressure switching valve, rear axle  
 0x03310058 58 Precharging pump  
 0x03310059 59 Undervoltage  
 0x0331005A 5A Brief power interruption  
 0x0331005C 5C Pressure-sensor test  
 0x0331005E 5E Rotation-reat sensor, self-test  
 0x0331005F XX Scatter  
 0x03310060 XX Actuators  
 0x03310061 61 Steering-angle sensor,identification  
 0x03310062 62 Swerve detection  
 0x03310063 63 Continuous control  
 0x03310064 XX Transversal-acceleration sensor  
 0x03310067 67 Steering-angle sensor not transmitting a complete steering angle  
 0x03310068 68 Steering-angle sensor,internal"  
 0x03310069 69 Brake-light switch, plausibility  
 0x0331006A 6A Transversal-acceleration sensor  
 0x0331006B 6B Rotation rate sensor  
 0x0331006C 6C Brake-fluid switch  
 0x0331006D 6D End-of belt test not carried out  
 0x0331006E 6E Overvoltage  
 0x0331006F 6F No message from DME/DDE  
 0x03310072 72 Pressure sensor, zero deviation  
 0x03310073 73 Pressure sensor, line  
 0x03310074 74 Brake-light switch (DME/DDE)  
 0x03310075 75 Brake-light switch, line  
 0x03310076 76 DDE/DME does not fulfil torque request  
 0x03310077 77 HDC speed control  
 0x03310078 78 Rotation-rate sensor, suspicion of incorrect installation position  
 0x03310079 79 Rotation-rate sensor, incorrect installation position  
 0x0331007A 7A No message from ACC control unit"

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0x0331007B 7B Deceleration request from ACC implausible"
0x0331007C 7C ACC has switched off"
0x0331007D 7D Fault in ACC control unit"
0x0331007E 7E ACC fault,brake-light activation"
0x03310080 80 Brakes were overheated
0x0331008A 8A No message from ride-level-control unit
0x0331008B XX TXU OFF-road reduction gear, CAN message error

0x03320003 XX CAN engine-power control
0x03320004 04 wheel speed, rear left (Plausibility)
0x03320005 05 wheel speed, rear right (Plausibility)
0x03320006 06 wheel speed, front right (Plausibility)
0x03320007 07 wheel speed, front left (Plausibility)
0x0332000E 14 ABS valve-relay fault
0x0332000F 15 Return-pump fault
0x03320015 21 ABS/ASC control-unit fault
0x03320017 23 Variant coding
0x03320018 24 Pulse gears fault
0x03320019 XX Stop-light switch,open circuit
0x0332001E 30 wheel-speed signal, rear left (wire)
0x0332001F 31 wheel-speed signal, rear right (wire)
0x03320020 32 wheel-speed signal, front right (wire)
0x03320021 33 wheel-speed signal, front left (wire)
0x03320022 34 Changeover valve, front axle
0x03320029 41 Steering-angle sensor (Plausibility)
0x0332002F 47 Fault, outlet valve, rear left
0x03320030 48 Fault, outlet valve, rear right
0x03320031 49 fault, outlet valve, front right
0x03320032 50 Fault, outlet valve, front left
0x03320033 51 Fault, inlet valve, rear left
0x03320034 52 Fault, inlet valve, rear right
0x03320035 53 Fault, inlet valve, front right
0x03320036 54 Fault, inlet valve, front left
0x03320037 55 High-pressure changeover valve, front axle
0x03320038 56 CAN fault (short circuit)
0x0332003A 58 CAN fault (Open circuit to AGS)
0x0332003B 59 CAN fault (Open circuit to DME1)
0x0332003F 63 ABS/ASC control unit fault (microprocessor)
0x03320040 64 Long-term scatter
0x03320042 XX Voltage fault,active speed sensors
0x03320044 XX DSC passive switching
0x03320045 69 CAN fault (interrupt to DME2)
0x03320047 71 ABS motor-relay service life
0x03320051 81 Pressure sensor (wire/offset)
0x03320052 82 Rotation-rate sensor (wire)
0x03320053 83 Transversal-accel. sensor (plausibility)
0x03320054 84 Rotation-rate sensor (plausibility)
0x03320056 86 Changeover valve, rear axle
0x03320057 87 High-pressure changeover valve, rear axle
0x03320058 88 Precharging pump
0x03320059 89 Undervoltage
0x0332005A 90 Temporary system failure
0x0332005B 91 CAN fault (open circuit to LWS)
0x0332005C 92 Pressure sensor (Precharging pump/plausibility)
0x0332005E 94 Rotation-rate sensor (test)
0x0332005F 95 Interference
0x03320060 96 Actuator test
0x03320061 97 Steering-angle sensor (adjustment)
0x03320062 98 Skid detection
0x03320063 99 Permanent brake intervention
0x03320064 XX Lateral acceleration sensor
0x03320067 103 Steering-angle sensor (revolution identification)
0x03320068 104 Steering-angle sensor (control module)

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0x03320069 105 Brake-light switch (plausibility)  
 0x0332006A 106 Transversal-acceleration sensor (plausibility)  
 0x0332006B 107 Rotation-rate sensor (gradient)  
 0x0332006C 108 Brake fluid  
 0x0332006D 109 End-of-belt test (Commissioning of a new control unit)  
 0x0332006E 110 Voltage supply too high  
 0x0332006F 111 ASC acknowledgment  
 0x03320072 114 Pressure-sensor offset  
 0x03320073 115 Pressure-sensor interference  
 0x03320074 116 Brake-light switch  
 0x03320075 117 Brake-light switch (WIRE)  
 0x03320076 118 DME status fault  
 0x03320077 119 HDC speed control  
 0x03320078 120 Suspicion incorrect installation of yaw-rate sensor  
 0x03320079 121 Incorrect installation, yaw-rate sensor  
 0x0332007A 122 No message from ACC control module  
 0x0332007B 123 Deceleration request from ACC implausible  
 0x0332007C 124 ACC has switched off  
 0x0332007D 125 Fault in ACC control module  
 0x0332007E 126 ACC fault, stop-light activation  
 0x03320080 128 Overheating of service brake  
 0x0332008A 138 No message from ride-level-control control module  
 0x0332008B XX TXU Off-road reduction gear, CAN message error  
 0x03330011 11 wheel-speed sensor, front left  
 0x03330012 12 wheel-speed sensor, front left  
 0x03330014 14 wheel-speed sensor, front left  
 0x03330015 15 wheel-speed sensor, position, front left  
 0x03330021 21 wheel-speed sensor, front right  
 0x03330022 22 wheel-speed sensor, front right  
 0x03330024 24 wheel-speed sensor, front right  
 0x03330025 25 wheel-speed sensor position, front right  
 0x03330031 31 wheel-speed sensor, rear left  
 0x03330032 32 wheel-speed sensor, rear left  
 0x03330034 34 wheel-speed sensor, rear left  
 0x03330035 35 wheel-speed sensor position, rear left  
 0x03330041 41 wheel-speed sensor, rear right  
 0x03330042 42 wheel-speed sensor, rear right  
 0x03330044 44 wheel-speed sensor, rear right  
 0x03330045 45 wheel-speed sensor position, rear right  
 0x03330051 51 Intake valve, front left  
 0x03330052 52 Intake valve, front right  
 0x03330053 53 Intake valve, rear left  
 0x03330054 54 Intake valve, rear right  
 0x03330055 55 Exhaust valve, front left  
 0x03330056 56 Exhaust valve, front right  
 0x03330057 57 Exhaust valve, rear left  
 0x03330058 58 Exhaust valve, rear right  
 0x03330061 61 Distribution valve 1  
 0x03330062 62 Distribution valve 2  
 0x03330063 63 Electric changeover valve 1  
 0x03330064 64 Electric changeover valve 2  
 0x03330067 67 Brake-light switch  
 0x03330071 71 Pump motor  
 0x03330073 73 Internal fault  
 0x03330076 76 Speed sensor, signal interference  
 0x03330078 78 Vehicle power >18 V  
 0x03330081 81 Positive supply, solenoid valves  
 0x03330082 82 voltage fault, main relay  
 0x03330083 83 Current consumption, solenoid valves  
 0x03330085 85 Overvoltage, valve coil  
 0x03330091 91 CAN fault in control module  
 0x03330092 92 CAN bus fault  
 0x03330093 93 CAN data fault from DME/DDE

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0x03330094 94 CAN data fault from DME/DDE  
 0x03330095 95 CAN connection from DME/DDE  
 0x03330096 96 CAN connection to EGS  
 0x03330097 97 Coding error  
 0x03330098 98 DSC button  
 0x033300A1 A1 Rotation-rate sensor  
 0x033300A2 A2 Rotation-rate signal  
 0x033300A3 A3 Lateral-acceleration sensor  
 0x033300A4 A4 Lateral-acceleration signal  
 0x033300A5 A5 Pressure sensor 1  
 0x033300A6 A6 Pressure sensor 2  
 0x033300A7 A7 Pressure sensors  
 0x033300A8 A8 Voltage supply, sensors  
 0x033300B1 B1 Precharging pump  
 0x033300B2 B2 Precharging pump  
 0x033300B3 B3 Brake fluid level sensor  
 0x033300B4 B4 Steering angle implausible  
 0x033300B5 B5 Steering-angle sensor, identification  
 0x033300B6 B6 Steering-angle sensor, CAN  
 0x033300B7 B7 Steering angle sensor, internal  
 0x033300B8 B8 Steering angle sensor not transmitting a complete steering angle  
 0x03340002 02 CAN engine-power control  
 0x03340004 04 wheel-speed sensor, rear left, transmits implausible signals  
 0x03340005 05 wheel-speed sensor, rear right, transmits implausible signals  
 0x03340006 06 wheel-speed sensor, front right, transmits implausible signals  
 0x03340007 07 wheel-speed sensor, front left, transmits implausible signals  
 0x0334000E 0E Valve-relay fault  
 0x0334000F 0F Return-pump fault  
 0x03340015 15 Fault in DSC control unit  
 0x03340017 17 Coding error  
 0x03340018 18 Pulse-gear fault  
 0x03340019 19 Brake-light switch, open circuit  
 0x0334001E 1E wheel-speed sensor, rear left, transmits no signals  
 0x0334001F 1F wheel-speed sensor, rear right, transmits no signals  
 0x03340020 20 wheel-speed sensor, front right, transmits implausible signals  
 0x03340021 21 wheel-speed sensor, front left, transmits no signals  
 0x03340022 22 Changeover valve, front axle  
 0x03340029 29 Steering angle implausible  
 0x0334002F 2F Output valve, rear left  
 0x03340030 30 Output valve, rear right  
 0x03340031 31 Output value, front right  
 0x03340032 32 Output value, front left  
 0x03340033 33 Inlet valve, rear left  
 0x03340034 34 Inlet valve, rear right  
 0x03340035 35 Inlet valve, front right  
 0x03340036 36 Inlet valve, front left  
 0x03340037 37 High-pressure switching valve, front axle  
 0x03340038 38 DSC cannot transmit/receive on CAN  
 0x0334003A 3A No message from EGS control unit  
 0x0334003B 3B No message(DMER1) from DME/DDE control unit  
 0x0334003F 3F Speed processing in DSC control unit faulty  
 0x03340040 40 Continuous control  
 0x03340042 42 Voltage fault, active speed sensors  
 0x03340044 44 DSC passive switching  
 0x03340045 45 No message(DMER2) from DME/DDE control unit  
 0x03340051 51 Pressure sensor, line  
 0x03340052 52 Rotation-rate sensor, line  
 0x03340053 53 Transversal-acceleration sensor, line  
 0x03340054 54 Rotation-rate sensor, plausibility  
 0x03340056 56 Changeover valve, rear axle  
 0x03340057 57 High-pressure switching valve, rear axle  
 0x03340058 58 Precharging pump  
 0x03340059 59 Undervoltage

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0x0334005A 5A Brief power interruption  
 0x0334005B 5B No message from steering-angle-sensor control unit  
 0x0334005C 5C Pressure-sensor test  
 0x0334005E 5E Rotation-rate sensor,self-test  
 0x0334005F 5F Scatter  
 0x03340060 60 Actuators  
 0x03340061 61 Steering-angle sensor,identification  
 0x03340062 62 Swerve detection  
 0x03340063 63 Continuous control  
 0x03340064 64 Transversal-acceleration sensor  
 0x03340067 67 Steering-angle sensor not transmitting a complete steering angle  
 0x03340068 68 Steering-angle sensor,internal  
 0x03340069 69 Brake-light switch,plausibility  
 0x0334006A 6A Transversal-acceleration sensor,plausibility  
 0x0334006B 6B Rotation rate sensor  
 0x0334006C 6C Brake-fluid switch  
 0x0334006D 6D End-of-belt test not carried out  
 0x0334006E 6E Overvoltage  
 0x0334006F 6F No message from DME/DDE  
 0x03340072 72 Pressure sensor,zero deviation  
 0x03340073 73 Pressure sensor,line  
 0x03340074 74 Brake-light switch(DME/DDE)  
 0x03340075 75 Brake-light switch,line  
 0x03340076 76 DME/DDE does not fulfil torque request  
 0x03340077 77 HDC speed control  
 0x03340078 78 Rotation-rate sensor,suspicion of incorrect installation position  
 0x03340079 79 Rotation-rate sensor,incorrect installation position  
 0x0334007A 7A No message from ACC control unit  
 0x0334007B 7B Deceleration request from ACC implausible  
 0x0334007C 7C ACC has switched off  
 0x0334007D 7D Fault in ACC control unit  
 0x0334007E 7E ACC fault,brake-light activation  
 0x03340080 80 Brakes were overheater  
 0x0334008A 8A No message from ride-level-control control unit  
 0x0334008B 8B TXU off-road reduction gear,CAN message error  
  
 0x03415D8C 5D8C DSC sensor CAN timeout  
 0x03415D8E 5D8E DSC sensor incorrect  
 0x03415D8F 5D8F DSC sensor fault, internal  
 0x03415D90 5D90 wheel-speed sensor, front left  
 0x03415D91 5D91 wheel-speed sensor, front left  
 0x03415D92 5D92 wheel-speed sensor, pluse gear, front left  
 0x03415D93 5D93 wheel-speed sensor, front left  
 0x03415D94 5D94 wheel-speed sensor, front left  
 0x03415D96 5D96 DSC sensor CAN bus-off  
 0x03415D97 5D97 DSC sensor, voltage supply  
 0x03415D99 5D99 DSC sensor CAN fault  
 0x03415DA0 5DA0 wheel-speed sensor, front right  
 0x03415DA1 5DA1 wheel-speed sensor, front right  
 0x03415DA2 5DA2 wheel-speed sensor, pulse gear, front right  
 0x03415DA3 5DA3 wheel-speed sensor, front right  
 0x03415DA4 5DA4 wheel-speed sensor, front right  
 0x03415DB0 5DB0 wheel-speed sensor, rear left  
 0x03415DB1 5DB1 wheel-speed sensor, rear left  
 0x03415DB2 5DB2 wheel-speed sensor, pulse gear, rear left  
 0x03415DB3 5DB3 wheel-speed sensor, rear left  
 0x03415DB4 5DB4 wheel-speed sensor, rear left  
 0x03415DC0 5DC0 wheel-speed sensor, rear right  
 0x03415DC1 5DC1 wheel-speed sensor, rear right  
 0x03415DC2 5DC2 wheel-speed sensor, pulse gear, rear right  
 0x03415DC3 5DC3 wheel-speed sensor, rear right  
 0x03415DC4 5DC4 wheel-speed sensor, rear right  
 0x03415DF0 5DF0 Pump motor



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0x03415DF2 5DF2 Internal fault  
 0x03415DF4 5DF4 System voltage < 9 volts  
 0x03415DF5 5DF5 Internal fault  
 0x03415DF7 5DF7 System voltage > 18 volts  
 0x03415E00 5E00 End-of-belt test  
 0x03415E01 5E01 End-of-belt test  
 0x03415E02 5E02 End-of-belt test  
 0x03415E03 5E03 End-of-belt test  
 0x03415E04 5E04 End-of-belt test  
 0x03415E05 5E05 End-of-belt test  
 0x03415E06 5E06 End-of-belt test  
 0x03415E07 5E07 End-of-belt test  
 0x03415E08 5E08 End-of-belt test  
 0x03415E11 5E11 CAN fault in control unit  
 0x03415E14 5E14 CAN connection to DME/DDE  
 0x03415E15 5E15 CAN connection to EGS  
 0x03415E16 5E16 CAN connection to instrument  
 0x03415E18 5E18 CAN data fault from DME/DDE  
 0x03415E19 5E19 CAN data fault from DME/DDE  
 0x03415E1A 5E1A CAN data fault from DME/DDE  
 0x03415E1E 5E1E Steering-angle sensor CAN  
 0x03415E1F 5E1F Steering-angle sensor, identification  
 0x03415E20 5E20 Pressure sensor 1  
 0x03415E21 5E21 Pressure sensor 2  
 0x03415E24 5E24 Pressure sensors  
 0x03415E26 5E26 Voltage supply, sensors  
 0x03415E2F 5E2F Temperature, sensor  
 0x03415E30 5E30 Transverse acceleration sensor  
 0x03415E32 5E32 Transverse acceleration signal  
 0x03415E38 5E38 Rotation rate sensor  
 0x03415E3C 5E3C Rotation rate signal  
 0x03415E40 5E40 Steering angle implausible  
 0x03415E43 5E43 Steering-angle sensor, internal  
 0x03415E4E 5E4E DSC sensor, offset  
 0x03415E4F 5E4F Continuous control  
 0x03415E58 5E58 Wrong control-unit variant  
 0x03415E59 5E59 Coding error  
 0x03415E5B 5E5B ASC/DSC button  
 0x03415E5C 5E5C DDS-button fault  
 0x03415E5D 5E5D Level sensor, break fluid  
 0x03415E5E 5E5E Brake-light switch  
 0x03425D8C 5D8C DSC sensor CAN timeout  
 0x03425D8E 5D8E DSC sensor incorrect  
 0x03425D8F 5D8F DSC sensor fault, internal  
 0x03425D90 5D90 wheel-speed sensor, front left  
 0x03425D91 5D91 wheel-speed sensor, front left  
 0x03425D92 5D92 wheel-speed sensor, pluse gear, front left  
 0x03425D93 5D93 wheel-speed sensor, front left  
 0x03425D94 5D94 wheel-speed sensor, front left  
 0x03425D95 5D95 wheel-speed sensor, front left, double frequency  
 0x03425D96 5D96 DSC sensor CAN bus-off  
 0x03425D97 5D97 DSC sensor, voltage supply  
 0x03425D99 5D99 DSC sensor CAN fault  
 0x03425DA0 5DA0 wheel-speed sensor, front right  
 0x03425DA1 5DA1 wheel-speed sensor, front right  
 0x03425DA2 5DA2 wheel-speed sensor, pluse gear, front right  
 0x03425DA3 5DA3 wheel-speed sensor, front right  
 0x03425DA4 5DA4 wheel-speed sensor, front right  
 0x03425DA5 5DA5 wheel-speed sensor, front right, double frequency  
 0x03425DB0 5DB0 wheel-speed sensor, rear left  
 0x03425DB1 5DB1 wheel-speed sensor, rear left  
 0x03425DB2 5DB2 wheel-speed sensor, pluse gear, rear left  
 0x03425DB3 5DB3 wheel-speed sensor, rear left

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0x03425DB4 5DB4 wheel-speed sensor, rear left  
 0x03425DB5 5DB5 wheel-speed sensor, rear left, double frequency  
 0x03425DC0 5DC0 wheel-speed sensor, rear right  
 0x03425DC1 5DC1 wheel-speed sensor, rear right  
 0x03425DC2 5DC2 wheel-speed sensor, pulse gear, rear right  
 0x03425DC3 5DC3 wheel-speed sensor, rear right  
 0x03425DC4 5DC4 wheel-speed sensor, rear right  
 0x03425DC5 5DC5 wheel-speed sensor, rear right, double frequency  
 0x03425DF0 5DF0 Pump motor  
 0x03425DF2 5DF2 Internal fault  
 0x03425DF4 5DF4 System voltage < 9 volts  
 0x03425DF5 5DF5 Internal fault  
 0x03425DF7 5DF7 System voltage > 18 volts  
 0x03425E00 5E00 End-of-belt test  
 0x03425E01 5E01 End-of-belt test  
 0x03425E02 5E02 End-of-belt test  
 0x03425E03 5E03 End-of-belt test  
 0x03425E04 5E04 End-of-belt test  
 0x03425E05 5E05 End-of-belt test  
 0x03425E06 5E06 End-of-belt test  
 0x03425E07 5E07 End-of-belt test  
 0x03425E08 5E08 End-of-belt test  
 0x03425E11 5E11 CAN fault in control unit  
 0x03425E14 5E14 CAN connection to DME/DDE  
 0x03425E16 5E16 CAN connection to instrument  
 0x03425E18 5E18 CAN data fault from DME/DDE  
 0x03425E19 5E19 CAN data fault from DME/DDE  
 0x03425E1A 5E1A CAN data fault from DME/DDE  
 0x03425E1E 5E1E Steering-angle sensor CAN  
 0x03425E1F 5E1F Vehicle identification no. different  
 0x03425E20 5E20 Pressure sensor 1  
 0x03425E21 5E21 Pressure sensor 2  
 0x03425E24 5E24 Pressure sensors  
 0x03425E26 5E26 voltage supply, sensors  
 0x03425E2F 5E2F Control unit: internal fault  
 0x03425E30 5E30 Transverse acceleration sensor  
 0x03425E32 5E32 Transverse acceleration signal  
 0x03425E38 5E38 Rotation rate sensor  
 0x03425E3C 5E3C Rotation rate signal  
 0x03425E40 5E40 Steering angle implausible  
 0x03425E43 5E43 Steering-angle sensor, internal  
 0x03425E4E 5E4E DSC sensor, offset  
 0x03425E4F 5E4F Continuous control  
 0x03425E58 5E58 Wrong control-unit variant  
 0x03425E59 5E59 Coding error  
 0x03425E5B 5E5B ASC/DSC button  
 0x03425E5C 5E5C Initialize Run Flat Indicator; see Owner's Handbook  
 0x03425E5D 5E5D Level sensor, brake fluid  
 0x03425E5E 5E5E Brake-light switch  
 0x03435D8C 5D8C Hydraulic unit: pump  
 0x03435D8D 5D8D Hydraulic unit: pump  
 0x03435D8E 5D8E Hydraulic unit: pump  
 0x03435D8F 5D8F Hydraulic unit: pump  
 0x03435D90 5D90 Control module, valve relay  
 0x03435D91 5D91 Control module, valve relay  
 0x03435D92 5D92 Control module, valve relay  
 0x03435D93 5D93 Control module, valve relay  
 0x03435D94 5D94 Control module, valve relay  
 0x03435D95 5D95 Control module, valve relay  
 0x03435D96 5D96 Control module, valve relay  
 0x03435D97 5D97 Control module, valve relay  
 0x03435D98 5D98 Hydraulic unit: valve IVFL  
 0x03435D99 5D99 Hydraulic unit: valve IVFL

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0x03435D9B 5D9B Hydraulic unit: valve IVFL  
 0x03435D9D 5D9D Hydraulic unit: valve EVFL  
 0x03435D9E 5D9E Hydraulic unit: valve EVFL  
 0x03435DA1 5DA1 Hydraulic unit: valve IVFR  
 0x03435DA2 5DA2 Hydraulic unit: valve IVFR  
 0x03435DA6 5DA6 Hydraulic unit: valve EVFR  
 0x03435DA7 5DA7 Hydraulic unit: valve EVFR  
 0x03435DAA 5DAA Hydraulic unit: valve IVRL  
 0x03435DAB 5DAB Hydraulic unit: valve IVRL  
 0x03435DAD 5DAD Hydraulic unit: valve IVRL  
 0x03435DAF 5DAF Hydraulic unit: valve EVRL  
 0x03435DB0 5DB0 Hydraulic unit: valve EVRL  
 0x03435DB3 5DB3 Hydraulic unit: valve IVRR  
 0x03435DB4 5DB4 Hydraulic unit: valve IVRR  
 0x03435DB8 5DB8 Hydraulic unit: valve EVRR  
 0x03435DB9 5DB9 Hydraulic unit: valve EVRR  
 0x03435DBC 5DBC Hydraulic unit: changeover valve 1  
 0x03435DBD 5DBD Hydraulic unit: changeover valve 1  
 0x03435DBF 5DBF Hydraulic unit: changeover valve 1  
 0x03435DC1 5DC1 Hydraulic unit: changeover valve 2  
 0x03435DC2 5DC2 Hydraulic unit: changeover valve 2  
 0x03435DC5 5DC5 Brake-light switch, open circuit  
 0x03435DC6 5DC6 Hydraulic unit, high-pressure switching valve 1  
 0x03435DC7 5DC7 Hydraulic unit, high-pressure switching valve 1  
 0x03435DC8 5DC8 Hydraulic unit, high-pressure switching valve 1  
 0x03435DC9 5DC9 Hydraulic unit, high-pressure switching valve 1  
 0x03435DCA 5DCA Hydraulic unit, high-pressure switching valve 2  
 0x03435DCB 5DCB Hydraulic unit, high-pressure switching valve 2  
 0x03435DCC 5DCC Hydraulic unit, high-pressure switching valve 2  
 0x03435DCD 5DCD Hydraulic unit, high-pressure switching valve 2  
 0x03435DCE 5DCE Control module, undervoltage  
 0x03435DCF 5DCF Control module, undervoltage  
 0x03435DD0 5DD0 Control module, overvoltage  
 0x03435DD1 5DD1 Control module, internal  
 0x03435DD2 5DD2 Control module, overvoltage  
 0x03435DD3 5DD3 Control module, internal  
 0x03435DD4 5DD4 Control module, internal  
 0x03435DD5 5DD5 Control module, internal  
 0x03435DD6 5DD6 Control module, internal  
 0x03435DD7 5DD7 EHC Ride-height control, ride heights invalid  
 0x03435DD8 5DD8 Control module, internal  
 0x03435DD9 5DD9 Control module, internal  
 0x03435DDA 5DDA Hydraulic unit: valve IVFL  
 0x03435ddb 5ddb Hydraulic unit: valve IVFL  
 0x03435DDC 5DDC Control module, internal  
 0x03435DDD 5DDD Control module, internal  
 0x03435DDE 5DDE Control module, internal  
 0x03435DDF 5DDF Control module, internal  
 0x03435DE0 5DE0 Control module, internal  
 0x03435DE1 5DE1 Control module, internal  
 0x03435DE2 5DE2 Control module, internal  
 0x03435DE3 5DE3 Control module, internal  
 0x03435DE4 5DE4 Control module, internal  
 0x03435DE5 5DE5 Hydraulic unit: valve EVFL  
 0x03435DE6 5DE6 Hydraulic unit: valve EVFL  
 0x03435DE7 5DE7 Transfer case  
 0x03435DE9 5DE9 Transfer case  
 0x03435DEA 5DEA Transfer case  
 0x03435DEB 5DEB Insignificant: clear fault memory  
 0x03435DEC 5DEC All-wheel control: check wheel-speed sensors  
 0x03435DED 5DED Control module, internal  
 0x03435DEE 5DEE Control module, internal  
 0x03435DEF 5DEF Control module, internal

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0x03435DF0	5DF0	Control module, internal
0x03435DF1	5DF1	Control module, internal
0x03435DF2	5DF2	Control module, internal
0x03435DF3	5DF3	Control module, internal
0x03435DF5	5DF5	Control module, internal
0x03435DF6	5DF6	Control module, internal
0x03435DF7	5DF7	Control module, internal
0x03435DF8	5DF8	Control module, internal
0x03435DF9	5DF9	Control module, internal
0x03435DFA	5DFA	Control module, internal
0x03435DFB	5DFB	Control module, internal
0x03435DFC	5DFC	Control module, internal
0x03435DFD	5DFD	Control module, internal
0x03435DFE	5DFE	Control module, internal
0x03435DFF	5DFF	Control module, internal
0x03435E00	5E00	Control module, internal
0x03435E01	5E01	Control module, internal
0x03435E02	5E02	Control module, internal
0x03435E03	5E03	Control module, internal
0x03435E04	5E04	Control module, internal
0x03435E05	5E05	Control module, internal
0x03435E06	5E06	Control module, internal
0x03435E07	5E07	Control module, internal
0x03435E08	5E08	Control module, internal
0x03435E09	5E09	Control module, internal
0x03435E0A	5E0A	Control module, internal
0x03435E0B	5E0B	Control module, internal
0x03435E0C	5E0C	Control module, internal
0x03435E0D	5E0D	Control module, internal
0x03435E0E	5E0E	Control module, internal
0x03435E0F	5E0F	Control module, internal
0x03435E10	5E10	Control module, internal
0x03435E11	5E11	Control module, internal
0x03435E12	5E12	Control module, internal
0x03435E13	5E13	Control module, internal
0x03435E14	5E14	Control module, internal
0x03435E15	5E15	Control module, internal
0x03435E16	5E16	Control module, internal
0x03435E17	5E17	Control module, internal
0x03435E18	5E18	Control module, internal
0x03435E19	5E19	Control module, internal
0x03435E1A	5E1A	Control module, internal
0x03435E1B	5E1B	Control module, internal
0x03435E1C	5E1C	Control module, internal
0x03435E1D	5E1D	Control module, internal
0x03435E20	5E20	Control module, internal
0x03435E21	5E21	Control module, internal
0x03435E22	5E22	wheel-speed sensor, supply, front left
0x03435E23	5E23	wheel-speed sensor, plausibility, front left
0x03435E24	5E24	wheel-speed sensor, supply, front left
0x03435E25	5E25	wheel-speed sensor, plausibility, front left
0x03435E26	5E26	wheel-speed sensor, air gap, front left
0x03435E27	5E27	wheel-speed sensor, plausibility, front left
0x03435E28	5E28	wheel-speed sensor, EMC, front left
0x03435E29	5E29	Hydraulic unit, valve IVFR
0x03435E2A	5E2A	Hydraulic unit, valve IVFR
0x03435E2B	5E2B	Hydraulic unit, valve EVFR
0x03435E2D	5E2D	wheel-speed sensor, wheel bearing, front left
0x03435E2E	5E2E	wheel-speed sensor, plausibility, front left
0x03435E2F	5E2F	wheel-speed sensor, plausibility, front left
0x03435E30	5E30	wheel-speed sensor, supply, rear left
0x03435E31	5E31	wheel-speed sensor, plausibility, rear left
0x03435E32	5E32	wheel-speed sensor, supply, rear left

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0x03435E33 5E33 wheel-speed sensor, plausibility, rear left  
 0x03435E34 5E34 wheel-speed sensor, air gap, rear left  
 0x03435E35 5E35 wheel-speed sensor, plausibility, rear left  
 0x03435E36 5E36 wheel-speed sensor, EMC, rear left  
 0x03435E3B 5E3B wheel-speed sensor, wheel bearing, rear left  
 0x03435E3C 5E3C wheel-speed sensor, plausibility, rear left  
 0x03435E3D 5E3D wheel-speed sensor, plausibility, rear left  
 0x03435E3E 5E3E wheel-speed sensor, supply, rear right  
 0x03435E3F 5E3F wheel-speed sensor, plausibility, rear right  
 0x03435E40 5E40 wheel-speed sensor, supply, rear right  
 0x03435E41 5E41 wheel-speed sensor, plausibility, rear right  
 0x03435E42 5E42 wheel-speed sensor, air gap, rear right  
 0x03435E43 5E43 wheel-speed sensor, plausibility, rear right  
 0x03435E44 5E44 wheel-speed sensor, EMC, rear right  
 0x03435E47 5E47 Hydraulic unit, valve IVFR  
 0x03435E48 5E48 Hydraulic unit, valve IVRL  
 0x03435E49 5E49 wheel-speed sensor, wheel bearing, rear right  
 0x03435E4A 5E4A wheel-speed sensor, plausibility, rear right  
 0x03435E4B 5E4B wheel-speed sensor, plausibility, rear right  
 0x03435E4C 5E4C wheel-speed sensor, supply, front right  
 0x03435E4D 5E4D wheel-speed sensor, plausibility, front right  
 0x03435E4E 5E4E wheel-speed sensor, supply, front right  
 0x03435E4F 5E4F wheel-speed sensor, plausibility, front right  
 0x03435E50 5E50 wheel-speed sensor, air gap, front right  
 0x03435E51 5E51 wheel-speed sensor, plausibility, front right  
 0x03435E52 5E52 wheel-speed sensor, EMC, front right  
 0x03435E57 5E57 wheel-speed sensor, wheel bearing, front right  
 0x03435E58 5E58 wheel-speed sensor, plausibility, front right  
 0x03435E59 5E59 wheel-speed sensor, plausibility, front right  
 0x03435E5A 5E5A wheel-speed sensor, general  
 0x03435E5B 5E5B wheel-speed sensor, general  
 0x03435E5C 5E5C wheel-speed sensor, direction-of-rotation detection  
 0x03435E5D 5E5D wheel-speed sensor, general  
 0x03435E5E 5E5E wheel-speed sensor, general  
 0x03435E5F 5E5F wheel-speed sensor, general  
 0x03435E60 5E60 Brake-light switch, plausibility  
 0x03435E61 5E61 DSC sensor, lateral acceleration, plausibility  
 0x03435E62 5E62 Brake-light switch permanently actuated  
 0x03435E63 5E63 Brake-light switch permanently actuated  
 0x03435E64 5E64 CAN communication fault  
 0x03435E66 5E66 wheel-speed sensors on front axle mixed up  
 0x03435E67 5E67 wheel-speed sensors on rear axle mixed up  
 0x03435E68 5E68 wheel-speed sensors on front axle mixed up  
 0x03435E69 5E69 wheel-speed sensors on rear axle mixed up  
 0x03435E6A 5E6A CAN fault  
 0x03435E6B 5E6B CAN fault  
 0x03435E6E 5E6E Hydraulic unit, valve EVRL  
 0x03435E6F 5E6F Hydraulic unit, valve EVRL  
 0x03435E70 5E70 CAN fault  
 0x03435E71 5E71 Hydraulic unit, valve IVRR  
 0x03435E73 5E73 Hydraulic unit, valve IVRR  
 0x03435E74 5E74 CAN fault  
 0x03435E76 5E76 CAN fault  
 0x03435E77 5E77 CAN fault  
 0x03435E78 5E78 Hydraulic unit, valve EVFR  
 0x03435E7C 5E7C Hydraulic unit, valve EVRR  
 0x03435E7D 5E7D Hydraulic unit, valve EVRR  
 0x03435E7F 5E7F Hydraulic unit, changeover valve 1  
 0x03435E80 5E80 Hydraulic unit, changeover valve 1  
 0x03435E81 5E81 Hydraulic unit, changeover valve 2  
 0x03435E82 5E82 Hydraulic unit, changeover valve 2  
 0x03435E8E 5E8E DSC sensor, internal  
 0x03435E90 5E90 DSC sensor, lateral acceleration, plausibility

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0x03435E91 5E91 DSC sensor,lateral acceleration, plausibility  
 0x03435E92 5E92 DSC sensor,lateral acceleration, plausibility  
 0x03435E93 5E93 DSC sensor,lateral acceleration, plausibility  
 0x03435E95 5E95 DSC sensor,lateral acceleration, plausibility  
 0x03435E96 5E96 DSC sensor,lateral acceleration, plausibility  
 0x03435E97 5E97 DSC sensor, internal  
 0x03435E9A 5E9A DSC sensor, installation  
 0x03435E9B 5E9B DSC sensor, rotation rate, plausibility  
 0x03435E9C 5E9C DSC sensor, rotation rate, plausibility  
 0x03435E9D 5E9D DSC sensor, internal  
 0x03435E9F 5E9F DSC sensor, rotation rate, plausibility  
 0x03435EA0 5EA0 DSC sensor, rotation rate, plausibility  
 0x03435EA1 5EA1 DSC sensor, rotation rate, plausibility  
 0x03435EA2 5EA2 DSC sensor, rotation rate, plausibility  
 0x03435EA3 5EA3 DSC sensor, rotation rate, plausibility  
 0x03435EA4 5EA4 DSC sensor, rotation rate, plausibility  
 0x03435EA5 5EA5 DSC sensor, rotation rate, plausibility  
 0x03435EA6 5EA6 DSC sensor, rotation rate, plausibility  
 0x03435EA8 5EA8 DSC sensor, internal  
 0x03435EA9 5EA9 DSC sensor, rotation rate, plausibility  
 0x03435EAA 5EAA DSC sensor, rotation rate, plausibility  
 0x03435EAB 5EAB DSC sensor, rotation rate, plausibility  
 0x03435EAC 5EAC DSC sensor, rotation rate, plausibility  
 0x03435EAE 5EAE DSC sensor, internal  
 0x03435EB0 5EB0 Steering-angle sensor, internal  
 0x03435EB1 5EB1 Steering-angle sensor, supply  
 0x03435EB2 5EB2 Steering-angle-sensor calibration  
 0x03435EB3 5EB3 Steering-angle-sensor calibration  
 0x03435EB7 5EB7 Variant coding: code again  
 0x03435EB8 5EB8 Variant coding: code again  
 0x03435EB9 5EB9 Variant coding: code again  
 0x03435EBB 5EBB Steering-angle sensor, internal  
 0x03435EBD 5EBD Steering-angle sensor, plausibility  
 0x03435EBE 5EBE Steering-angle sensor, plausibility  
 0x03435EBF 5EBF Steering-angle sensor, internal  
 0x03435EC0 5EC0 Steering-angle sensor, plausibility  
 0x03435EC1 5EC1 Steering-angle sensor, plausibility  
 0x03435EC2 5EC2 Steering-angle sensor, plausibility  
 0x03435EC3 5EC3 Steering-angle sensor, plausibility  
 0x03435EC4 5EC4 Steering-angle sensor, plausibility  
 0x03435EC5 5EC5 Steering-angle sensor CAN  
 0x03435ED4 5ED4 Implausible sensor signals  
 0x03435ED5 5ED5 Skid detection: clear fault memory  
 0x03435ED6 5ED6 Control module, internal  
 0x03435EDA 5EDA Variant coding: code again  
 0x03435EDB 5EDB Variant coding: code again  
 0x03435EDC 5EDC Variant coding: code again  
 0x03435EE0 5EE0 DSC sensor, supply  
 0x03435EE2 5EE2 Hydraulic unit, pressure sensor: internal  
 0x03435EE4 5EE4 Hydraulic unit, pressure sensor: internal  
 0x03435EE5 5EE5 Hydraulic unit, pressure sensor: internal  
 0x03435EE6 5EE6 Hydraulic unit, pressure sensor: internal  
 0x03435EE7 5EE7 Hydraulic unit, pressure sensor: internal  
 0x03435EED 5EED Hydraulic unit, pressure sensor: internal  
 0x03435EEE 5EEE Hydraulic unit, pressure sensor: plausibility  
 0x03435EEF 5EEF Hydraulic unit, pressure sensor: plausibility  
 0x03435EF0 5EF0 Hydraulic unit, pressure sensor: plausibility  
 0x03435EF9 5EF9 Variant coding: code again  
 0x03435EFA 5EFA Control module, internal  
 0x03435EFE 5EFE wheel-speed sensor, plausibility, front left  
 0x03435EFF 5EFF wheel-speed sensor, plausibility, rear left  
 0x03435F00 5F00 wheel-speed sensor, plausibility, rear right  
 0x03435F01 5F01 wheel-speed sensor, plausibility, front right

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0x03435F02 5F02 wheel-speed sensor, general  
 0x03435F03 5F03 Control module, internal  
 0x03435F04 5F04 Control module, internal  
 0x03435F05 5F05 Control module, internal  
 0x03435F06 5F06 Control module, internal  
 0x03435F07 5F07 DSC sensor, lateral acceleration, plausibility  
 0x03435F08 5F08 DSC sensor, lateral acceleration, plausibility  
 0x03435F09 5F09 DSC sensor, internal  
 0x03435F0A 5F0A DSC sensor, yaw, plausibility  
 0x03435F0B 5F0B DSC sensor, internal  
 0x03435F0C 5F0C DSC sensor, internal  
 0x03435F0D 5F0D DSC sensor, internal  
 0x03435F0F 5F0F DSC sensor, supply  
 0x03435F10 5F10 DSC sensor, supply  
 0x03435F11 5F11 Variant coding: code again  
 0x03435F12 5F12 Variant coding: code again  
 0x03435F15 5F15 Insignificant: clear fault memory  
 0x03435F16 5F16 Engine management: interface  
 0x03435F17 5F17 Control module, internal  
 0x03435F18 5F18 Variant coding: code again  
 0x03435F19 5F19 Insignificant: clear fault memory  
 0x03435F1A 5F1A Performance reduction  
 0x03435F1B 5F1B Control module, internal  
 0x03435F1C 5F1C Insignificant: clear fault memory  
 0x03435F1D 5F1D Engine management: interface  
 0x03435F21 5F21 Engine management: interface  
 0x03435F22 5F22 Engine management: interface  
 0x03435F23 5F23 Engine management: interface  
 0x03435F24 5F24 Engine management: interface  
 0x03435F2C 5F2C Variant coding: code again  
 0x03435F38 5F38 Control module, internal  
 0x03435F39 5F39 Transfer case  
 0x03435F3A 5F3A Transfer case  
 0x03435F3B 5F3B Transfer case  
 0x03435F3C 5F3C Transfer case  
 0x03435F3D 5F3D Transfer case  
 0x03435F3E 5F3E Transfer case  
 0x03435F3F 5F3F Transfer case  
 0x03435F41 5F41 Transfer case: limp-home operation  
 0x03435F42 5F42 Transmission control, limp-home operation  
 0x03435F43 5F43 Transmission control, internal  
 0x03435F58 5F58 DSC sensor, rotation rate, plausibility  
 0x03435F59 5F59 DSC sensor, rotation rate, plausibility  
 0x03435F5A 5F5A Instrument cluster, internal  
 0x03435F5B 5F5B Instrument cluster, internal  
 0x03435F5C 5F5C Instrument cluster, internal  
 0x03445D8C 5D8C Hydraulic unit: pump  
 0x03445D8D 5D8D Hydraulic unit: pump  
 0x03445D8E 5D8E Hydraulic unit: pump  
 0x03445D8F 5D8F Hydraulic unit: pump  
 0x03445D90 5D90 Control module, valve relay  
 0x03445D91 5D91 Control module, valve relay  
 0x03445D92 5D92 Control module, valve relay  
 0x03445D93 5D93 Control module, valve relay  
 0x03445D94 5D94 Control module, valve relay  
 0x03445D95 5D95 Control module, valve relay  
 0x03445D96 5D96 Control module, valve relay  
 0x03445D97 5D97 Control module, valve relay  
 0x03445D98 5D98 Hydraulic unit: valve IVFL  
 0x03445D99 5D99 Hydraulic unit: valve IVFL  
 0x03445D9B 5D9B Hydraulic unit: valve IVFL  
 0x03445D9D 5D9D Hydraulic unit: valve EVFL  
 0x03445D9E 5D9E Hydraulic unit: valve EVFL

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0x03445DA1 5DA1 Hydraulic unit: valve IVFR  
 0x03445DA2 5DA2 Hydraulic unit: valve IVFR  
 0x03445DA6 5DA6 Hydraulic unit: valve EVFR  
 0x03445DA7 5DA7 Hydraulic unit: valve EVFR  
 0x03445DAA 5DAA Hydraulic unit: valve IVRL  
 0x03445DAB 5DAB Hydraulic unit: valve IVRL  
 0x03445DAD 5DAD Hydraulic unit: valve IVRL  
 0x03445DAF 5DAF Hydraulic unit: valve EVRL  
 0x03445DB0 5DB0 Hydraulic unit: valve EVRL  
 0x03445DB3 5DB3 Hydraulic unit: valve IVRR  
 0x03445DB4 5DB4 Hydraulic unit: valve IVRR  
 0x03445DB8 5DB8 Hydraulic unit: valve EVRR  
 0x03445DB9 5DB9 Hydraulic unit: valve EVRR  
 0x03445DBC 5DBC Hydraulic unit: changeover valve 1  
 0x03445DBD 5DBD Hydraulic unit: changeover valve 1  
 0x03445DBF 5DBF Hydraulic unit: changeover valve 1  
 0x03445DC1 5DC1 Hydraulic unit: changeover valve 2  
 0x03445DC2 5DC2 Hydraulic unit: changeover valve 2  
 0x03445DC5 5DC5 Brake-light switch, open circuit  
 0x03445DC6 5DC6 Hydraulic unit, high-pressure switching valve 1  
 0x03445DC7 5DC7 Hydraulic unit, high-pressure switching valve 1  
 0x03445DC8 5DC8 Hydraulic unit, high-pressure switching valve 1  
 0x03445DC9 5DC9 Hydraulic unit, high-pressure switching valve 1  
 0x03445DCA 5DCA Hydraulic unit, high-pressure switching valve 2  
 0x03445DCB 5DCB Hydraulic unit, high-pressure switching valve 2  
 0x03445DCC 5DCC Hydraulic unit, high-pressure switching valve 2  
 0x03445DCD 5DCD Hydraulic unit, high-pressure switching valve 2  
 0x03445DCE 5DCE Control module, undervoltage  
 0x03445DCF 5DCF Control module, undervoltage  
 0x03445DD0 5DD0 Control module, overvoltage  
 0x03445DD1 5DD1 Control module, internal  
 0x03445DD2 5DD2 Control module, overvoltage  
 0x03445DD3 5DD3 Control module, internal  
 0x03445DD4 5DD4 Control module, internal  
 0x03445DD5 5DD5 Control module, internal  
 0x03445DD6 5DD6 Control module, internal  
 0x03445DD7 5DD7 EHC Ride-height control, ride heights invalid  
 0x03445DD8 5DD8 Control module, internal  
 0x03445DD9 5DD9 Control module, internal  
 0x03445DDA 5DDA Hydraulic unit: valve IVFL  
 0x03445ddb 5ddb Hydraulic unit: valve IVFL  
 0x03445DDC 5DDC Control module, internal  
 0x03445DDD 5DDD Control module, internal  
 0x03445DDE 5DDE Control module, internal  
 0x03445DDF 5DDF Control module, internal  
 0x03445DE0 5DE0 Control module, internal  
 0x03445DE1 5DE1 Control module, internal  
 0x03445DE2 5DE2 Control module, internal  
 0x03445DE3 5DE3 Control module, internal  
 0x03445DE4 5DE4 Control module, internal  
 0x03445DE5 5DE5 Hydraulic unit: valve EVFL  
 0x03445DE6 5DE6 Hydraulic unit: valve EVFL  
 0x03445DE7 5DE7 Transfer box  
 0x03445DE9 5DE9 Transfer box  
 0x03445DEA 5DEA Transfer case: Temperature  
 0x03445DEB 5DEB Insufficient: clear fault memory  
 0x03445DEC 5DEC Transfer case: malfunction  
 0x03445DED 5DED Control module, internal  
 0x03445DEE 5DEE Control module, internal  
 0x03445DEF 5DEF Control module, internal  
 0x03445DF0 5DF0 Control module, internal  
 0x03445DF1 5DF1 Control module, internal  
 0x03445DF2 5DF2 Control module, internal



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0x03445DF3	5DF3	Control module, internal
0x03445DF5	5DF5	Control module, internal
0x03445DF6	5DF6	Control module, internal
0x03445DF7	5DF7	Control module, internal
0x03445DF8	5DF8	Control module, internal
0x03445DF9	5DF9	Control module, internal
0x03445DFA	5DFA	Control module, internal
0x03445DFB	5DFB	Control module, internal
0x03445DFC	5DFC	Control module, internal
0x03445DFD	5DFD	Control module, internal
0x03445DFE	5DFE	Control module, internal
0x03445DFF	5DFF	Control module, internal
0x03445E00	5E00	Control module, internal
0x03445E01	5E01	Control module, internal
0x03445E02	5E02	Control module, internal
0x03445E03	5E03	Control module, internal
0x03445E04	5E04	Control module, internal
0x03445E05	5E05	Control module, internal
0x03445E06	5E06	Control module, internal
0x03445E07	5E07	Control module, internal
0x03445E08	5E08	Control module, internal
0x03445E09	5E09	Control module, internal
0x03445E0A	5E0A	Control module, internal
0x03445E0B	5E0B	Control module, internal
0x03445E0C	5E0C	Control module, internal
0x03445E0D	5E0D	Control module, internal
0x03445E0E	5E0E	Control module, internal
0x03445E0F	5E0F	Control module, internal
0x03445E10	5E10	Control module, internal
0x03445E11	5E11	Control module, internal
0x03445E12	5E12	Control module, internal
0x03445E13	5E13	Control module, internal
0x03445E14	5E14	Control module, internal
0x03445E15	5E15	Control module, internal
0x03445E16	5E16	Control module, internal
0x03445E17	5E17	Control module, internal
0x03445E18	5E18	Control module, internal
0x03445E19	5E19	Control module, internal
0x03445E1A	5E1A	Control module, internal
0x03445E1B	5E1B	Control module, internal
0x03445E1C	5E1C	Control module, internal
0x03445E1D	5E1D	Control module, internal
0x03445E20	5E20	Control module, internal
0x03445E21	5E21	Control module, internal
0x03445E22	5E22	wheel-speed sensor, supply, front left
0x03445E23	5E23	wheel-speed sensor, plausibility, front left
0x03445E24	5E24	wheel-speed sensor, supply, front left
0x03445E25	5E25	wheel-speed sensor, plausibility, front left
0x03445E26	5E26	wheel-speed sensor, air gap, front left
0x03445E27	5E27	wheel-speed sensor, plausibility, front left
0x03445E28	5E28	wheel-speed sensor, EMC, front left
0x03445E29	5E29	Hydraulic unit, valve IVFR
0x03445E2A	5E2A	Hydraulic unit, valve IVFR
0x03445E2B	5E2B	Hydraulic unit, valve EVFR
0x03445E2D	5E2D	wheel-speed sensor, wheel bearing, front left
0x03445E2E	5E2E	wheel-speed sensor, plausibility, front left
0x03445E2F	5E2F	wheel-speed sensor, plausibility, front left
0x03445E30	5E30	wheel-speed sensor, supply, rear left
0x03445E31	5E31	wheel-speed sensor, plausibility, rear left
0x03445E32	5E32	wheel-speed sensor, supply, rear left
0x03445E33	5E33	wheel-speed sensor, plausibility, rear left
0x03445E34	5E34	wheel-speed sensor, air gap, rear left
0x03445E35	5E35	wheel-speed sensor, plausibility, rear left

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0x03445E36 5E36 wheel-speed sensor, EMC, rear left  
 0x03445E3B 5E3B wheel-speed sensor, wheel bearing, rear left  
 0x03445E3C 5E3C wheel-speed sensor, plausibility, rear left  
 0x03445E3D 5E3D wheel-speed sensor, plausibility, rear left  
 0x03445E3E 5E3E wheel-speed sensor, supply, rear right  
 0x03445E3F 5E3F wheel-speed sensor, plausibility, rear right  
 0x03445E40 5E40 wheel-speed sensor, supply, rear right  
 0x03445E41 5E41 wheel-speed sensor, plausibility, rear right  
 0x03445E42 5E42 wheel-speed sensor, air gap, rear right  
 0x03445E43 5E43 wheel-speed sensor, plausibility, rear right  
 0x03445E44 5E44 wheel-speed sensor, EMC, rear right  
 0x03445E47 5E47 Hydraulic unit, valve IVFR  
 0x03445E48 5E48 Hydraulic unit, valve IVRL  
 0x03445E49 5E49 wheel-speed sensor, wheel bearing, rear right  
 0x03445E4A 5E4A wheel-speed sensor, plausibility, rear right  
 0x03445E4B 5E4B wheel-speed sensor, plausibility, rear right  
 0x03445E4C 5E4C wheel-speed sensor, supply, front right  
 0x03445E4D 5E4D wheel-speed sensor, plausibility, front right  
 0x03445E4E 5E4E wheel-speed sensor, supply, front right  
 0x03445E4F 5E4F wheel-speed sensor, plausibility, front right  
 0x03445E50 5E50 wheel-speed sensor, air gap, front right  
 0x03445E51 5E51 wheel-speed sensor, plausibility, front right  
 0x03445E52 5E52 wheel-speed sensor, EMC, front right  
 0x03445E57 5E57 wheel-speed sensor, wheel bearing, front right  
 0x03445E58 5E58 wheel-speed sensor, plausibility, front right  
 0x03445E59 5E59 wheel-speed sensor, plausibility, front right  
 0x03445E5A 5E5A wheel-speed sensor, general  
 0x03445E5B 5E5B wheel-speed sensor, general  
 0x03445E5C 5E5C wheel-speed sensor, direction-of-rotation detection  
 0x03445E5D 5E5D wheel-speed sensor, general  
 0x03445E5E 5E5E wheel-speed sensor, general  
 0x03445E5F 5E5F wheel-speed sensor, general  
 0x03445E60 5E60 Brake-light switch, plausibility  
 0x03445E61 5E61 DSC sensor, lateral acceleration, plausibility  
 0x03445E62 5E62 Brake-light switch permanently actuated  
 0x03445E63 5E63 Brake-light switch permanently actuated  
 0x03445E64 5E64 CAN communication fault  
 0x03445E66 5E66 wheel-speed sensors on front axle mixed up  
 0x03445E67 5E67 wheel-speed sensors on rear axle mixed up  
 0x03445E68 5E68 wheel-speed sensors on front axle mixed up  
 0x03445E69 5E69 wheel-speed sensors on rear axle mixed up  
 0x03445E6A 5E6A CAN fault  
 0x03445E6B 5E6B CAN fault  
 0x03445E6E 5E6E Hydraulic unit, valve EVRL  
 0x03445E6F 5E6F Hydraulic unit, valve EVRL  
 0x03445E70 5E70 CAN fault  
 0x03445E71 5E71 Hydraulic unit, valve IVRR  
 0x03445E73 5E73 Hydraulic unit, valve IVRR  
 0x03445E74 5E74 CAN fault  
 0x03445E76 5E76 CAN fault  
 0x03445E77 5E77 CAN fault  
 0x03445E78 5E78 Hydraulic unit, valve EVFR  
 0x03445E7C 5E7C Hydraulic unit, valve EVRR  
 0x03445E7D 5E7D Hydraulic unit, valve EVRR  
 0x03445E7F 5E7F Hydraulic unit, changeover valve 1  
 0x03445E80 5E80 Hydraulic unit, changeover valve 1  
 0x03445E81 5E81 Hydraulic unit, changeover valve 2  
 0x03445E82 5E82 Hydraulic unit, changeover valve 2  
 0x03445E8E 5E8E DSC sensor, internal  
 0x03445E90 5E90 DSC sensor, lateral acceleration, plausibility  
 0x03445E91 5E91 DSC sensor, lateral acceleration, plausibility  
 0x03445E92 5E92 DSC sensor, lateral acceleration, plausibility  
 0x03445E93 5E93 DSC sensor, lateral acceleration, plausibility

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0x03445E95 5E95 DSC sensor, lateral acceleration, plausibility  
 0x03445E96 5E96 DSC sensor, lateral acceleration, plausibility  
 0x03445E97 5E97 DSC sensor, internal  
 0x03445E9A 5E9A DSC sensor, installation  
 0x03445E9B 5E9B DSC sensor, rotation rate, plausibility  
 0x03445E9C 5E9C DSC sensor, rotation rate, plausibility  
 0x03445E9D 5E9D DSC sensor, internal  
 0x03445E9F 5E9F DSC sensor, rotation rate, plausibility  
 0x03445EA0 5EA0 DSC sensor, rotation rate, plausibility  
 0x03445EA1 5EA1 DSC sensor, rotation rate, plausibility  
 0x03445EA2 5EA2 DSC sensor, rotation rate, plausibility  
 0x03445EA3 5EA3 DSC sensor, rotation rate, plausibility  
 0x03445EA4 5EA4 DSC sensor, rotation rate, plausibility  
 0x03445EA5 5EA5 DSC sensor, rotation rate, plausibility  
 0x03445EA6 5EA6 DSC sensor, rotation rate, plausibility  
 0x03445EA8 5EA8 DSC sensor, internal  
 0x03445EA9 5EA9 DSC sensor, rotation rate, plausibility  
 0x03445EAA 5EAA DSC sensor, rotation rate, plausibility  
 0x03445EAB 5EAB DSC sensor, rotation rate, plausibility  
 0x03445EAC 5EAC DSC sensor, rotation rate, plausibility  
 0x03445EAE 5EAE DSC sensor, internal  
 0x03445EB0 5EB0 Steering-angle sensor, internal  
 0x03445EB1 5EB1 Steering-angle sensor, supply  
 0x03445EB2 5EB2 Steering-angle-sensor adjustment  
 0x03445EB3 5EB3 Steering-angle-sensor adjustment  
 0x03445EB7 5EB7 Variant coding: code again  
 0x03445EB8 5EB8 Variant coding: code again  
 0x03445EB9 5EB9 Variant coding: code again  
 0x03445EBB 5EBB Steering-angle sensor, internal  
 0x03445EBD 5EBD Steering-angle sensor, plausibility  
 0x03445EBE 5EBE Steering-angle sensor, plausibility  
 0x03445EBF 5EBF Steering-angle sensor, internal  
 0x03445EC0 5EC0 Steering-angle sensor, plausibility  
 0x03445EC1 5EC1 Steering-angle sensor, plausibility  
 0x03445EC2 5EC2 Steering-angle sensor, plausibility  
 0x03445EC3 5EC3 Steering-angle sensor, plausibility  
 0x03445EC4 5EC4 Steering-angle sensor, plausibility  
 0x03445EC5 5EC5 Steering-angle sensor CAN  
 0x03445ED4 5ED4 Implausible sensor signals  
 0x03445ED5 5ED5 Skid detection: clear fault memory  
 0x03445ED6 5ED6 Control module, internal  
 0x03445EDA 5EDA Variant coding: code again  
 0x03445EDB 5EDB Variant coding: code again  
 0x03445EDC 5EDC Variant coding: code again  
 0x03445EE0 5EE0 DSC sensor, supply  
 0x03445EE2 5EE2 Hydraulic unit, pressure sensor: internal  
 0x03445EE4 5EE4 Hydraulic unit, pressure sensor: internal  
 0x03445EE5 5EE5 Hydraulic unit, pressure sensor: internal  
 0x03445EE6 5EE6 Hydraulic unit, pressure sensor: internal  
 0x03445EE7 5EE7 Hydraulic unit, pressure sensor: internal  
 0x03445EED 5EED Hydraulic unit, pressure sensor: internal  
 0x03445EEE 5EEE Hydraulic unit, pressure sensor: plausibility  
 0x03445EEF 5EEF Hydraulic unit, pressure sensor: plausibility  
 0x03445EF0 5EF0 Hydraulic unit, pressure sensor: plausibility  
 0x03445EF9 5EF9 Variant coding: code again  
 0x03445EFA 5EFA Control module, internal  
 0x03445EFE 5EFE wheel-speed sensor, plausibility, front left  
 0x03445EFF 5EFF wheel-speed sensor, plausibility, rear left  
 0x03445F00 5F00 wheel-speed sensor, plausibility, rear right  
 0x03445F01 5F01 wheel-speed sensor, plausibility, front right  
 0x03445F02 5F02 wheel-speed sensor, general  
 0x03445F03 5F03 Control module, internal  
 0x03445F04 5F04 Control module, internal

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0x03445F05 5F05 Control module, internal  
 0x03445F06 5F06 Control module, internal  
 0x03445F07 5F07 DSC sensor, lateral acceleration, plausibility  
 0x03445F08 5F08 DSC sensor, lateral acceleration, plausibility  
 0x03445F09 5F09 DSC sensor, internal  
 0x03445F0A 5F0A DSC sensor, yaw, plausibility  
 0x03445F0B 5F0B DSC sensor, internal  
 0x03445F0C 5F0C DSC sensor, internal  
 0x03445F0D 5F0D DSC sensor, internal  
 0x03445F0F 5F0F DSC sensor, supply  
 0x03445F10 5F10 DSC sensor, supply  
 0x03445F11 5F11 Variant coding: code again  
 0x03445F12 5F12 Variant coding: code again  
 0x03445F15 5F15 Insignificant: clear fault memory  
 0x03445F16 5F16 Engine management: interface  
 0x03445F17 5F17 Control module, internal  
 0x03445F18 5F18 Variant coding: code again  
 0x03445F19 5F19 Insignificant: clear fault memory  
 0x03445F1A 5F1A Performance reduction  
 0x03445F1B 5F1B Control module, internal  
 0x03445F1C 5F1C Insignificant: clear fault memory  
 0x03445F1D 5F1D Engine management: interface  
 0x03445F21 5F21 Engine management: interface  
 0x03445F22 5F22 Engine management: interface  
 0x03445F23 5F23 Engine management: interface  
 0x03445F24 5F24 Engine management: interface  
 0x03445F2C 5F2C Variant coding: code again  
 0x03445F38 5F38 Control module, internal  
 0x03445F39 5F39 Transfer case: internal  
 0x03445F3A 5F3A Transfer case: Malfunction  
 0x03445F3B 5F3B Transfer case: internal  
 0x03445F3C 5F3C Transfer case: internal  
 0x03445F3D 5F3D Transfer case: internal  
 0x03445F3E 5F3E Transfer case: internal  
 0x03445F3F 5F3F Transfer case: internal  
 0x03445F41 5F41 Transfer case: limp-home operation  
 0x03445F42 5F42 Transmission control, limp-home operation  
 0x03445F43 5F43 Transmission control, internal  
 0x03445F58 5F58 DSC sensor, yaw, plausibility  
 0x03445F59 5F59 DSC sensor, yaw, plausibility  
 0x03445F5A 5F5A Instrument cluster, internal  
 0x03445F5B 5F5B Instrument cluster, internal  
 0x03445F5C 5F5C Instrument cluster, internal  
 0x034460AC 60AC Tyre defect indicator: coding data implausible  
 0x034460AD 60AD Tyre defect indicator: initialization implausible  
 0x034460AE 60AE Insignificant: clear fault memory  
 0x034460AF 60AF Run Flat Indicator: check height of front axle EHC  
 0x034460B0 60B0 Run Flat Indicator: check height of rear axle EHC

0x03615E90 5E90 wheel speed sensor, rear left (plausibility)  
 0x03615E91 5E91 wheel speed sensor, rear right (plausibility)  
 0x03615E92 5E92 wheel speed sensor, front right (plausibility)  
 0x03615E93 5E93 wheel speed sensor, front left (plausibility)  
 0x03615E9A 5E9A Valve relay  
 0x03615E9B 5E9B Return pump  
 0x03615EA1 5EA1 Control module  
 0x03615EA3 5EA3 Car coding  
 0x03615EA4 5EA4 wheel slip  
 0x03615EAA 5EAA wheel speed sensor, rear left (line)  
 0x03615EAB 5EAB wheel speed sensor, rear right (line)  
 0x03615EAC 5EAC wheel speed sensor, front right (line)  
 0x03615EAD 5EAD wheel speed sensor, front left (line)  
 0x03615EAE 5EAE Changeover valve, front axle

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0X03615EB5 5EB5 Steering angle sensor, plausibility  
 0X03615EBB 5EBB Outlet valve, rear left  
 0X03615EBC 5EBC Outlet valve, rear right  
 0X03615EBD 5EBD Outlet valve, front right  
 0X03615EBE 5EBE Outlet valve, front left  
 0X03615EBF 5EBF Inlet valve, rear left  
 0X03615EC0 5EC0 Inlet valve, rear right  
 0X03615EC1 5EC1 Inlet valve, front right  
 0X03615EC2 5EC2 Inlet valve, front left  
 0X03615EC3 5EC3 Precharging valve, front axle  
 0X03615ECB 5ECB Processing, speed signal  
 0X03615ECC 5ECC Continuous control  
 0X03615ED0 5ED0 EMC scatter  
 0X03615EDD 5EDD Pressure sensor (line)  
 0X03615EE0 5EE0 Rotation rate sensor, plausibility  
 0X03615EE2 5EE2 Changeover valve, rear axle  
 0X03615EE3 5EE3 Precharging valve, rear axle  
 0X03615EE4 5EE4 Precharging pump  
 0X03615EE5 5EE5 Under-voltage  
 0X03615EE6 5EE6 Steering angle sensor, continuation error  
 0X03615EE8 5EE8 Pressure sensor (plausibility/precharging pump)  
 0X03615EEA 5EEA Rotation rate sensor, self test  
 0X03615EEE 5EEE Swerve detection  
 0X03615EEF 5EEF Continuous control  
 0X03615EF3 5EF3 Steering angle sensor, number of turns  
 0X03615EF4 5EF4 Steering angle sensor, fault, internal  
 0X03615EF5 5EF5 brake light switch (plausibility)  
 0X03615EF6 5EF6 Lateral acceleration sensor, plausibility  
 0X03615EF7 5EF7 Rotation rate sensor, gradient  
 0X03615EF8 5EF8 Brake fluid warning switch  
 0X03615EF9 5EF9 Longtime adjustment of DSC sensors prevented  
 0X03615EFA 5EFA Over-voltage  
 0X03615EFE 5EFE Pressure sensor (offset)  
 0X03615EFF 5EFF Pressure sensor (interference)  
 0X03615F00 5F00 Brake signal from engine control module  
 0X03615F01 5F01 Brake light switch (line)  
 0X03615F02 5F02 Internal fault, DME/DDE  
 0X03615F04 5F04 Rotation rate sensor, suspicion of incorrect installation position  
 0X03615F05 5F05 Rotation rate sensor, incorrect installation position  
 0X03615F07 5F07 Deceleration request from Active Cruise Control too high  
 0X03615F08 5F08 Active Cruise Control has shut down  
 0X03615F0B 5F0B Direction of rotation of all wheels (plausibility)  
 0X03615F0E 5F0E Rotation rate sensor, CAN fault  
 0X03615F0F 5F0F Rotation rate sensor, undervoltage  
 0X03615F11 5F11 All wheel speed sensors (supply)  
 0X03615F16 5F16 Rotation rate sensor, under-voltage  
 0X03615F17 5F17 wheel speed sensor, front left (wrong type)  
 0X03615F18 5F18 wheel speed sensor, front left (air gap)  
 0X03615F19 5F19 wheel speed sensor, front left (supply/signal)  
 0X03615F1A 5F1A wheel speed sensor, rear right (wrong type)  
 0X03615F1B 5F1B wheel speed sensor, rear right (air gap)  
 0X03615F1C 5F1C wheel speed sensor, rear right (supply/signal)  
 0X03615F1D 5F1D wheel speed sensor, front right (wrong type)  
 0X03615F1E 5F1E wheel speed sensor, front right (air gap)  
 0X03615F1F 5F1F wheel speed sensor, front right (supply/signal)  
 0X03615F20 5F20 wheel speed sensor, rear left (wrong gap)  
 0X03615F21 5F21 wheel speed sensor, rear left (air gap)  
 0X03615F22 5F22 wheel speed sensor, rear left (supply/signal)  
 0X03615F23 5F23 Reduction of driving performance by overheating of brake  
 0X03615F24 5F24 Parking brake, risk of overheating  
 0X03615F25 5F25 Parking brake overheating  
 0X03615F26 5F26 Brake pad wear implausible, front axle  
 0X03615F27 5F27 Brake pad thickness, front axle

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0X03615F28 5F28 Brake pad wear implausible, rear axle  
 0X03615F29 5F29 brake pad thickness, rear axle  
 0X03615F2A 5F2A DME/DDE signal  
 0X03615F2B 5F2B Rotation rate sensor, voltage supply  
  
 0X03625D8E 5D8E DSC sensor: incorrect variant.  
 0X03625D8F 5D8F DSC sensor: internal fault  
 0X03625D90 5D90 wheel-speed sensor: power supply, front left  
 0X03625D91 5D91 wheel-speed sensor, plausibility, front left  
 0X03625D92 5D92 wheel-speed sensor, increment gear, front left  
 0X03625D93 5D93 wheel-speed sensor, plausibility, front left  
 0X03625D94 5D94 wheel-speed sensor: long-term monitoring, front left  
 0X03625D95 5D95 wheel-speed sensor, increment gear, front left  
 0X03625D96 5D96 wheel-speed sensor: direction of rotation, front left  
 0X03625D97 5D97 Control module: power supply, DSC sensor  
 0X03625D9A 5D9A Hydraulic unit: pressure sensor, internal  
 0X03625D9B 5D9B Hydraulic unit: pressure sensor, plausibility  
 0X03625D9C 5D9C Hydraulic unit: pressure sensor, internal  
 0X03625D9E 5D9E Hydraulic unit: pressure sensor, internal  
 0X03625D9F 5D9F Hydraulic unit: pressure sensor, plausibility  
 0X03625DA0 5DA0 wheel-speed sensor: supply, front right  
 0X03625DA1 5DA1 wheel-speed sensor: plausibility, front right  
 0X03625DA2 5DA2 wheel-speed sensor: increment gear, front right  
 0X03625DA3 5DA3 wheel-speed sensor: plausibility, front right  
 0X03625DA4 5DA4 wheel-speed sensor: long-term monitoring, front right  
 0X03625DA5 5DA5 wheel-speed sensor: increment gear, front right  
 0X03625DA6 5DA6 wheel-speed sensor: direction of rotation, front right  
 0X03625DAA 5DAA Hydraulic unit: pressure sensor, internal  
 0X03625DAB 5DAB Hydraulic unit: pressure sensor, plausibility  
 0X03625DAC 5DAC Hydraulic unit: pressure sensor, internal  
 0X03625DAE 5DAE Hydraulic unit: pressure sensor, internal  
 0X03625DAF 5DAF Hydraulic unit: pressure sensor, plausibility  
 0X03625DB0 5DB0 wheel-speed sensor, supply, rear left  
 0X03625DB1 5DB1 wheel-speed sensor: plausibility, rear left  
 0X03625DB2 5DB2 wheel-speed sensor: increment gear, rear left  
 0X03625DB3 5DB3 wheel-speed sensor: plausibility, rear left  
 0X03625DB4 5DB4 wheel-speed sensor: long-term monitoring, rear left  
 0X03625DB5 5DB5 wheel-speed sensor: increment gear, rear left  
 0X03625DB6 5DB6 wheel-speed sensor: direction of rotation, rear left  
 0X03625DBA 5DBA Hydraulic unit: pressure sensor, internal  
 0X03625DBB 5DBB Hydraulic unit: pressure sensor, plausibility  
 0X03625DBC 5DBC Hydraulic unit: pressure sensor, plausibility  
 0X03625DBE 5DBE Hydraulic unit: pressure sensor, plausibility  
 0X03625DBF 5DBF Hydraulic unit: pressure sensor, plausibility  
 0X03625DC0 5DC0 wheel-speed sensor: supply, rear right  
 0X03625DC1 5DC1 wheel-speed sensor: plausibility, rear right  
 0X03625DC2 5DC2 wheel-speed sensor: increment gear, rear right  
 0X03625DC3 5DC3 wheel-speed sensor: plausibility, rear right  
 0X03625DC4 5DC4 wheel-speed sensor: long-term monitoring, rear right  
 0X03625DC5 5DC5 wheel-speed sensor: increment gear, rear right  
 0X03625DC6 5DC6 wheel-speed sensor: direction of rotation, rear right  
 0X03625DCA 5DCA Hydraulic unit: pressure sensor, internal  
 0X03625DCB 5DCB Hydraulic unit: pressure sensor, plausibility  
 0X03625DCC 5DCC Hydraulic unit: pressure sensor, internal  
 0X03625DCE 5DCE Hydraulic unit: pressure sensor, internal  
 0X03625DCF 5DCF Hydraulic unit: pressure sensor, plausibility  
 0X03625DD0 5DD0 Hydraulic unit: valve calibration  
 0X03625DD1 5DD1 Control module: Run Flat Indicator  
 0X03625DD2 5DD2 Hydraulic unit: valve calibration  
 0X03625DE0 5DE0 Brake-pad wear: plausibility, front axle  
 0X03625DE1 5DE1 Brake-pad wear: plausibility, rear axle  
 0X03625DE2 5DE2 Brake-pad wear: brake pads, front axle  
 0X03625DE3 5DE3 Brake-pad wear: brake pads, rear axle

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0X03625DF0 5DF0 Hydraulic unit: pump motor  
 0X03625DF2 5DF2 Control module: internal fault  
 0X03625DF4 5DF4 System voltage too low  
 0X03625DF5 5DF5 Control module: internal fault  
 0X03625DF7 5DF7 System voltage too high  
 0X03625E00 5E00 End of belt test  
 0X03625E01 5E01 End of belt test  
 0X03625E02 5E02 End of belt test  
 0X03625E03 5E03 End of belt test  
 0X03625E04 5E04 End of belt test  
 0X03625E05 5E05 End of belt test  
 0X03625E06 5E06 End of belt test  
 0X03625E07 5E07 End of belt test  
 0X03625E08 5E08 End of belt test  
 0X03625E18 5E18 Engine management: interface  
 0X03625E19 5E19 Engine management: interface  
 0X03625E1A 5E1A Engine management: interface  
 0X03625E1B 5E1B Engine management: interface  
 0X03625E1C 5E1C Sequential M gearbox: longitudinal acceleration signal  
 0X03625E1D 5E1D CAS interface: vehicle identification number invalid  
 0X03625E1F 5E1F Control module: incorrect vehicle identification number, calibration required  
 0X03625E20 5E20 Hydraulic unit: pressure sensor, internal  
 0X03625E24 5E24 Hydraulic unit: pressure sensor, plausibility  
 0X03625E25 5E25 Hydraulic unit: pressure sensor, plausibility  
 0X03625E26 5E26 DSC sensor: voltage supply  
 0X03625E28 5E28 LDM: accelerator pedal monitoring  
 0X03625E29 5E29 LDM: enable monitoring  
 0X03625E2D 5E2D LDM: differential pressure monitoring FA/RA  
 0X03625E2F 5E2F Control module: temperature sensor  
 0X03625E30 5E30 DSC sensor, lateral acceleration, plausibility  
 0X03625E32 5E32 DSC sensor, lateral acceleration, plausibility  
 0X03625E38 5E38 DSC sensor: rotation rate, plausibility  
 0X03625E3C 5E3C DSC sensor: rotation rate, plausibility  
 0X03625E3F 5E3F Steering column switching centre: coding DSC required  
 0X03625E40 5E40 Steering-angle sensor: plausibility  
 0X03625E43 5E43 Steering-angle sensor: initialization  
 0X03625E4E 5E4E Control module: DSC sensor; calibration values  
 0X03625E4F 5E4F DSC sensor: continuous control  
 0X03625E50 5E50 Steering-angle sensor: serial number; calibration required  
 0X03625E51 5E51 Steering-angle sensor: serial number invalid  
 0X03625E52 5E52 Active steering: interface  
 0X03625E53 5E53 Active steering: interface  
 0X03625E54 5E54 Active steering: interface  
 0X03625E58 5E58 Insignificant: clear fault memory  
 0X03625E59 5E59 Control module: recode  
 0X03625E5B 5E5B DSC button  
 0X03625E5C 5E5C RPA actuation  
 0X03625E5D 5E5D Brake-fluid level too low  
 0X03625E5E 5E5E Brake-light switch, plausibility  
 0X036294B0 94B0 Steering column switching centre:internal fault  
 0X036294B1 94B1 Steering column switching centre:internal fault  
 0X036294B2 94B2 Steering column switching centre:internal fault  
 0X036294B3 94B3 Steering column switching centre:internal fault  
 0X036294B4 94B4 Steering column switching centre:internal fault  
 0X036294B5 94B5 Steering column switching centre:internal fault  
 0X036294B6 94B6 Steering column switching centre:internal fault  
 0X036294B7 94B7 Steering-angle sensor:signal implausible  
 0X036294BA 94BA Steering-angle sensor:internal fault  
 0X036294BB 94BB Steering-angle sensor:internal fault  
 0X036294BC 94BC Steering-angle sensor:internal fault  
 0X036294BF 94BF Steering-angle sensor:internal fault  
 0X036294C0 94C0 Steering-angle sensor:internal fault

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0X036294C1 94C1 Steering-angle sensor:internal fault  
 0X036294C2 94C2 Steering-angle sensor:serial number,calibration required  
 0X036294C3 94C3 Steering-angle sensor:internal fault  
 0X036294C5 94C5 Steering-angle sensor:internal fault  
 0X036294C8 94C8 Steering-angle sensor:internal fault  
 0X036294C9 94C9 Steering-angle sensor:internal fault  
 0X036294E1 94E1 Steering column switching centre:coding DSC required  
 0X03629510 9510 Steering column switching centre:internal fault  
 0X03629511 9511 Steering column switching centre:internal fault  
 0X03629512 9512 Steering column switching centre:internal fault  
 0X03629518 9518 Steering column switching centre:internal fault  
 0X03629519 9519 Steering column switching centre:internal fault  
 0X0362951A 951A Steering column switching centre:internal fault  
 0X03629520 9520 Steering column switching centre,multifunction  
 0X03635D8C 5D8C Hydraulic unit: pump  
 0X03635D8D 5D8D Hydraulic unit: pump  
 0X03635D8E 5D8E Hydraulic unit: pump  
 0X03635D8F 5D8F Hydraulic unit: pump  
 0X03635D90 5D90 Control module, valve relay  
 0X03635D91 5D91 Control module, valve relay  
 0X03635D92 5D92 Control module, valve relay  
 0X03635D93 5D93 Control module, valve relay  
 0X03635D94 5D94 Control module, valve relay  
 0X03635D95 5D95 Control module, valve relay  
 0X03635D96 5D96 Control module, valve relay  
 0X03635D97 5D97 Control module, valve relay  
 0X03635D98 5D98 Hydraulic unit: valve IVFL  
 0X03635D99 5D99 Hydraulic unit: valve IVFL  
 0X03635D9B 5D9B Hydraulic unit: valve IVFL  
 0X03635D9D 5D9D Hydraulic unit: valve EVFL  
 0X03635D9E 5D9E Hydraulic unit: valve EVFL  
 0X03635DA1 5DA1 Hydraulic unit: valve IVFR  
 0X03635DA2 5DA2 Hydraulic unit: valve IVFR  
 0X03635DA6 5DA6 Hydraulic unit: valve EVFR  
 0X03635DA7 5DA7 Hydraulic unit: valve EVFR  
 0X03635DAA 5DAA Hydraulic unit: valve IVRL  
 0X03635DAB 5DAB Hydraulic unit: valve IVRL  
 0X03635DAD 5DAD Hydraulic unit: valve IVRL  
 0X03635DAF 5DAF Hydraulic unit: valve EVRL  
 0X03635DB0 5DB0 Hydraulic unit: valve EVRL  
 0X03635DB3 5DB3 Hydraulic unit: valve IVRR  
 0X03635DB4 5DB4 Hydraulic unit: valve IVRR  
 0X03635DB8 5DB8 Hydraulic unit: valve EVRR  
 0X03635DB9 5DB9 Hydraulic unit: valve EVRR  
 0X03635DBC 5DBC Hydraulic unit: changeover valve 1  
 0X03635DBD 5DBD Hydraulic unit: changeover valve 1  
 0X03635DBF 5DBF Hydraulic unit: changeover valve 1  
 0X03635DC1 5DC1 Hydraulic unit: changeover valve 2  
 0X03635DC2 5DC2 Hydraulic unit: changeover valve 2  
 0X03635DC6 5DC6 Hydraulic unit: high-pressure switching valve 1  
 0X03635DC7 5DC7 Hydraulic unit: high-pressure switching valve 1  
 0X03635DCA 5DCA Hydraulic unit: high-pressure switching valve 2  
 0X03635DCB 5DCB Hydraulic unit: high-pressure switching valve 2  
 0X03635DCE 5DCE Control module, under-voltage  
 0X03635DCF 5DCF Control module, under-voltage  
 0X03635DD0 5DD0 Control module, over-voltage  
 0X03635DD1 5DD1 Control module, internal  
 0X03635DD2 5DD2 Control module, over-voltage  
 0X03635DD3 5DD3 Control module, internal  
 0X03635DD4 5DD4 Control module, internal  
 0X03635DD5 5DD5 Control module, internal  
 0X03635DD6 5DD6 Control module, internal  
 0X03635DD8 5DD8 Control module, internal



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0X03635DD9	5DD9	Control module, internal
0X03635DDC	5DDC	Control module, internal
0X03635DDD	5DDD	Control module, internal
0X03635DDE	5DDE	Control module, internal
0X03635DDF	5DDF	Control module, internal
0X03635DE0	5DE0	Control module, internal
0X03635DE1	5DE1	Control module, internal
0X03635DE2	5DE2	Control module, internal
0X03635DE3	5DE3	Control module, internal
0X03635DE4	5DE4	Control module, internal
0X03635DEE	5DEE	Control module, internal
0X03635DEF	5DEF	Control module, internal
0X03635DF0	5DF0	Control module, internal
0X03635DF1	5DF1	Control module, internal
0X03635DF2	5DF2	Control module, internal
0X03635DF3	5DF3	Control module, internal
0X03635DF5	5DF5	Control module, internal
0X03635DF6	5DF6	Control module, internal
0X03635DF7	5DF7	Control module, internal
0X03635DF8	5DF8	Control module, internal
0X03635DF9	5DF9	Control module, internal
0X03635DFA	5DFA	Control module, internal
0X03635DFB	5DFB	Control module, internal
0X03635DFC	5DFC	Control module, internal
0X03635DFD	5DFD	Control module, internal
0X03635DFE	5DFE	Control module, internal
0X03635DFF	5DFF	Control module, internal
0X03635E00	5E00	Control module, internal
0X03635E01	5E01	Control module, internal
0X03635E02	5E02	Control module, internal
0X03635E03	5E03	Control module, internal
0X03635E04	5E04	Control module, internal
0X03635E05	5E05	Control module, internal
0X03635E06	5E06	Control module, internal
0X03635E07	5E07	Control module, internal
0X03635E08	5E08	Control module, internal
0X03635E09	5E09	Control module, internal
0X03635E0A	5E0A	Control module, internal
0X03635E0B	5E0B	Control module, internal
0X03635E0C	5E0C	Control module, internal
0X03635E0D	5E0D	Control module, internal
0X03635E0E	5E0E	Control module, internal
0X03635E0F	5E0F	Control module, internal
0X03635E10	5E10	Control module, internal
0X03635E11	5E11	Control module, internal
0X03635E12	5E12	Control module, internal
0X03635E13	5E13	Control module, internal
0X03635E14	5E14	Control module, internal
0X03635E15	5E15	Control module, internal
0X03635E16	5E16	Control module, internal
0X03635E17	5E17	Control module, internal
0X03635E18	5E18	Control module, internal
0X03635E19	5E19	Control module, internal
0X03635E1A	5E1A	Control module, internal
0X03635E1B	5E1B	Control module, internal
0X03635E1C	5E1C	Control module, internal
0X03635E1D	5E1D	Control module, internal
0X03635E1E	5E1E	Control module, flash programming
0X03635E1F	5E1F	Control module, status message
0X03635E20	5E20	Control module, internal
0X03635E21	5E21	Control module, internal
0X03635E22	5E22	wheel-speed sensor, supply, front left
0X03635E24	5E24	wheel-speed sensor, supply, front left

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0X03635E25 5E25 wheel-speed sensor, plausibility, front left  
 0X03635E26 5E26 wheel-speed sensor, air gap, front left  
 0X03635E27 5E27 wheel-speed sensor, plausibility, front left  
 0X03635E28 5E28 wheel-speed sensor, EMC, front left  
 0X03635E2D 5E2D wheel-speed sensor, wheel bearing, front left  
 0X03635E2E 5E2E wheel-speed sensor, plausibility, front left  
 0X03635E2F 5E2F wheel-speed sensor, plausibility, front left  
 0X03635E30 5E30 wheel-speed sensor, supply, rear left  
 0X03635E32 5E32 wheel-speed sensor, supply, rear left  
 0X03635E33 5E33 wheel-speed sensor, plausibility, rear left  
 0X03635E34 5E34 wheel-speed sensor, air gap, rear left  
 0X03635E35 5E35 wheel-speed sensor, plausibility, rear left  
 0X03635E36 5E36 wheel-speed sensor, EMC, rear left  
 0X03635E3B 5E3B wheel-speed sensor, wheel bearing, rear left  
 0X03635E3C 5E3C wheel-speed sensor, plausibility, rear left  
 0X03635E3D 5E3D wheel-speed sensor, plausibility, rear left  
 0X03635E3E 5E3E wheel-speed sensor, supply, rear right  
 0X03635E40 5E40 wheel-speed sensor, supply, rear right  
 0X03635E41 5E41 wheel-speed sensor, plausibility, rear right  
 0X03635E42 5E42 wheel-speed sensor, air gap, rear right  
 0X03635E43 5E43 wheel-speed sensor, plausibility, rear right  
 0X03635E44 5E44 wheel-speed sensor, EMC, rear right  
 0X03635E49 5E49 wheel-speed sensor, wheel bearing, rear right  
 0X03635E4A 5E4A wheel-speed sensor, plausibility, rear right  
 0X03635E4B 5E4B wheel-speed sensor, plausibility, rear right  
 0X03635E4C 5E4C wheel-speed sensor, supply, front right  
 0X03635E4E 5E4E wheel-speed sensor, supply, front right  
 0X03635E4F 5E4F wheel-speed sensor, plausibility, front right  
 0X03635E50 5E50 wheel-speed sensor, air gap, front right  
 0X03635E51 5E51 wheel-speed sensor, plausibility, front right  
 0X03635E52 5E52 wheel-speed sensor, EMC, front right  
 0X03635E57 5E57 wheel-speed sensor, wheel bearing, front right  
 0X03635E58 5E58 wheel-speed sensor, plausibility, front right  
 0X03635E59 5E59 wheel-speed sensor, plausibility, front right  
 0X03635E5C 5E5C wheel-speed sensor, direction-of-rotation detection  
 0X03635E5D 5E5D wheel-speed sensor, general  
 0X03635E5E 5E5E wheel-speed sensor, general  
 0X03635E60 5E60 Brake-light switch, plausibility  
 0X03635E62 5E62 Brake-light switch permanently actuated  
 0X03635E8E 5E8E DSC sensor, internal  
 0X03635E90 5E90 DSC sensor, lateral acceleration, plausibility  
 0X03635E91 5E91 DSC sensor, lateral acceleration, plausibility  
 0X03635E92 5E92 DSC sensor, lateral acceleration, plausibility  
 0X03635E93 5E93 DSC sensor, lateral acceleration, plausibility  
 0X03635E95 5E95 DSC sensor, lateral acceleration, plausibility  
 0X03635E96 5E96 DSC sensor, lateral acceleration, plausibility  
 0X03635E97 5E97 DSC sensor, internal  
 0X03635E98 5E98 DSC sensor, lateral acceleration, plausibility  
 0X03635E99 5E99 DSC sensor, lateral acceleration, plausibility  
 0X03635E9A 5E9A DSC sensor, installation  
 0X03635E9B 5E9B DSC sensor, rotation rate, plausibility  
 0X03635E9C 5E9C DSC sensor, rotation rate, plausibility  
 0X03635E9D 5E9D DSC sensor, internal  
 0X03635E9E 5E9E DSC sensor, installation  
 0X03635E9F 5E9F DSC sensor, rotation rate, plausibility  
 0X03635EA0 5EA0 DSC sensor, rotation rate, plausibility  
 0X03635EA1 5EA1 DSC sensor, rotation rate, plausibility  
 0X03635EA2 5EA2 DSC sensor, rotation rate, plausibility  
 0X03635EA3 5EA3 DSC sensor, rotation rate, plausibility  
 0X03635EA4 5EA4 DSC sensor, rotation rate, plausibility  
 0X03635EA5 5EA5 DSC sensor, rotation rate, plausibility  
 0X03635EA6 5EA6 DSC sensor, rotation rate, plausibility  
 0X03635EA7 5EA7 DSC sensor, rotation rate, plausibility

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0X03635EA8 5EA8 DSC sensor, internal  
 0X03635EA9 5EA9 DSC sensor, rotation rate, plausibility  
 0X03635EAA 5EAA DSC sensor, rotation rate, plausibility  
 0X03635EAB 5EAB DSC sensor, rotation rate, plausibility  
 0X03635EAC 5EAC DSC sensor, rotation rate, plausibility  
 0X03635EAD 5EAD DSC sensor, internal  
 0X03635EAE 5EAE DSC sensor, internal  
 0X03635EAF 5EAF DSC sensor, internal  
 0X03635EB0 5EB0 DSC sensor, internal  
 0X03635EB1 5EB1 DSC sensor, internal  
 0X03635EB2 5EB2 DSC sensor, internal  
 0X03635EB3 5EB3 DSC sensor, supply  
 0X03635EB4 5EB4 DSC sensor, supply  
 0X03635EB5 5EB5 DSC sensor, supply  
 0X03635EBA 5EBA Steering-angle sensor, plausibility  
 0X03635EBB 5EBB Steering-angle sensor, plausibility  
 0X03635EBC 5EBC Steering-angle sensor, plausibility  
 0X03635EBD 5EBD Steering-angle sensor F-CAN  
 0X03635EBE 5EBE Steering-angle sensor, plausibility  
 0X03635EBF 5EBF Steering-angle sensor, internal  
 0X03635EC0 5EC0 Steering-angle-sensor, calibration  
 0X03635EC1 5EC1 Steering-angle sensor, plausibility  
 0X03635ED4 5ED4 Implausible sensor signals  
 0X03635ED5 5ED5 Skid detection: clear fault memory  
 0X03635ED6 5ED6 Control module, internal  
 0X03635EDA 5EDA Variant coding, control module, internal  
 0X03635EDB 5EDB Variant coding, control module, internal  
 0X03635EDC 5EDC Variant coding, control module, internal  
 0X03635EE2 5EE2 Hydraulic unit, pressure sensor: internal  
 0X03635EE4 5EE4 Hydraulic unit, pressure sensor: internal  
 0X03635EE5 5EE5 Hydraulic unit, pressure sensor: internal  
 0X03635EE6 5EE6 Hydraulic unit, pressure sensor: internal  
 0X03635EE7 5EE7 Hydraulic unit, pressure sensor: internal  
 0X03635EED 5EED Hydraulic unit, pressure sensor: internal  
 0X03635EEE 5EEE Hydraulic unit, pressure sensor: plausibility  
 0X03635EEF 5EEF Hydraulic unit, pressure sensor: plausibility  
 0X03635EF0 5EF0 Hydraulic unit, pressure sensor: plausibility  
 0X03635EF2 5EF2 Pressure sensor, front axle: internal  
 0X03635EF3 5EF3 Pressure sensor, rear axle: internal  
 0X03635EF4 5EF4 Pressure sensor, front axle: internal  
 0X03635EF5 5EF5 Pressure sensor, rear axle: internal  
 0X03635EF6 5EF6 Pressure sensor, front axle: line  
 0X03635EF7 5EF7 Pressure sensor, rear axle: line  
 0X03635EF8 5EF8 Pressure sensors FA/RA: supply  
 0X03635EF9 5EF9 Control module, internal  
 0X03635EFA 5EFA Control module, internal  
 0X03635EFB 5EFB Variant coding, control module, internal  
 0X03635EFC 5EFC No vehicle type data  
 0X03635EFD 5EFD Insignificant: clear fault memory  
 0X03635EFE 5EFE wheel-speed sensor, plausibility, front left  
 0X03635EFF 5EFF wheel-speed sensor, plausibility, rear left  
 0X03635F00 5F00 wheel-speed sensor, plausibility, rear right  
 0X03635F01 5F01 wheel-speed sensor, plausibility, front right  
 0X03635F02 5F02 wheel-speed sensor, general  
 0X03635F03 5F03 Control module, internal  
 0X03635F04 5F04 Control module, internal  
 0X03635F05 5F05 Control module, internal  
 0X03635F06 5F06 Control module, internal  
 0X03635F07 5F07 ACC sensor, internal  
 0X03635F08 5F08 ACC sensor, internal  
 0X03635F09 5F09 ACC sensor, internal  
 0X03635F0A 5F0A Insignificant: clear fault memory  
 0X03635F0C 5F0C Steering-angle sensor, steering gear

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0X03635F0D 5F0D Steering-angle sensor, steering gear  
 0X03635F0E 5F0E Steering-angle sensor, steering gear  
 0X03635F0F 5F0F Steering-angle sensor, steering gear  
 0X03635F10 5F10 Brake-pad wear, front axle, sensor  
 0X03635F11 5F11 Brake-pad wear, rear axle, sensor  
 0X03635F12 5F12 Brake-pad wear, front axle, brake pads  
 0X03635F13 5F13 Brake-pad wear, rear axle, brake pads  
 0X03635F14 5F14 Brake-pad wear, front axle, plausibility  
 0X03635F15 5F15 Brake-pad wear, rear axle, plausibility  
 0X03635F16 5F16 Control module, internal  
 0X03635F17 5F17 Control module, internal  
 0X03635F18 5F18 Insignificant: clear fault memory  
 0X03635F1A 5F1A Performance reduction  
 0X03635F1B 5F1B Control module, internal  
 0X03635F1F 5F1F Dynamic Drive: internal  
 0X03635F20 5F20 Control module, internal  
 0X03635F21 5F21 Control module, internal  
 0X03635F22 5F22 Control module, internal  
 0X03635F23 5F23 Control module, internal  
 0X03635F24 5F24 Insignificant: clear fault memory  
 0X03635F25 5F25 Dynamic Drive: internal  
 0X03635F26 5F26 Dynamic Drive: internal  
 0X03635F2C 5F2C Control module, internal  
 0X03635F2D 5F2D ACC sensor: internal  
 0X03635F2E 5F2E Transmission control: internal  
 0X03635F2F 5F2F Transmission control: internal  
 0X03635F30 5F30 Engine management: interface  
 0X03635F31 5F31 Engine management: interface  
 0X03635F32 5F32 Engine management: interface  
 0X03635F33 5F33 Engine management: interface  
 0X03635F34 5F34 Engine management: interface  
 0X03635F35 5F35 Engine management: interface  
 0X03635F36 5F36 Engine management: interface  
 0X03635F37 5F37 Engine management: interface  
 0X03635F40 5F40 Insignificant: clear fault memory  
 0X03635F45 5F45 Brake-fluid level too low  
 0X03635F47 5F47 Instrument cluster: internal  
 0X03635F48 5F48 Instrument cluster: internal  
 0X03635F49 5F49 Instrument cluster: internal  
 0X03635F4A 5F4A Instrument cluster: internal  
 0X03635F4B 5F4B Instrument cluster: internal  
 0X03635F50 5F50 Insignificant: clear fault memory  
 0X03635F52 5F52 CCC fault: internal  
 0X03635F54 5F54 Car Access System: internal  
 0X03635F55 5F55 Car Access System: internal  
 0X03635F60 5F60 Control module not for vehicle with active front steering  
 0X03635F61 5F61 Active front steering: internal  
 0X03635F63 5F63 Steering-angle sensor, steering gear  
 0X03635F64 5F64 DSC sensor 2, lateral acceleration, plausibility  
 0X03635F65 5F65 DSC sensor 2, lateral acceleration, plausibility  
 0X03635F66 5F66 DSC sensor 2, internal  
 0X03635F67 5F67 DSC sensor 2, internal  
 0X03635F68 5F68 DSC sensor 2, internal  
 0X03635F69 5F69 DSC sensor 2, internal  
 0X03635F6A 5F6A DSC sensor 2, internal  
 0X03635F6B 5F6B DSC sensor 2, internal  
 0X03635F6C 5F6C DSC sensor 2, supply  
 0X03635F6D 5F6D DSC sensor 2, supply  
 0X03635F6E 5F6E DSC sensor 2, supply  
 0X03635F6F 5F6F Engine management: interface  
 0X03635F70 5F70 Engine management: interface  
 0X03635F71 5F71 Engine management: interface  
 0X03635F72 5F72 Engine management: interface

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0X03635F73 5F73 Engine management: interface  
 0X03635F74 5F74 Engine management: interface  
 0X03635F75 5F75 Engine management: interface  
 0X03635F76 5F76 Engine management: interface  
 0X03635F77 5F77 Engine management: interface  
 0X03635F78 5F78 Engine management: interface  
 0X03635F79 5F79 Trailer, signal invalid  
 0X03635F7A 5F7A DSC sensor fault  
 0X03635F7B 5F7B DSC sensor 2 fault  
 0X036360AC 60AC Tyre defect indicator: coding data implausible  
 0X036360AD 60AD Tyre defect indicator: initialization implausible  
 0X036360AE 60AE Insignificant: clear fault memory

0X03645D8C 5D8C Hydraulic unit: pump  
 0X03645D8D 5D8D Hydraulic unit: pump  
 0X03645D8E 5D8E Hydraulic unit: pump  
 0X03645D8F 5D8F Hydraulic unit: pump  
 0X03645D90 5D90 Control module, valve relay  
 0X03645D91 5D91 Control module, valve relay  
 0X03645D92 5D92 Control module, valve relay  
 0X03645D93 5D93 Control module, valve relay  
 0X03645D94 5D94 Control module, valve relay  
 0X03645D95 5D95 Control module, valve relay  
 0X03645D96 5D96 Control module, valve relay  
 0X03645D97 5D97 Control module, valve relay  
 0X03645D98 5D98 Hydraulic unit: valve IVFL  
 0X03645D99 5D99 Hydraulic unit: valve IVFL  
 0X03645D9B 5D9B Hydraulic unit: valve IVFL  
 0X03645D9D 5D9D Hydraulic unit: valve EVFL  
 0X03645D9E 5D9E Hydraulic unit: valve EVFL  
 0X03645DA1 5DA1 Hydraulic unit: valve IVFR  
 0X03645DA2 5DA2 Hydraulic unit: valve IVFR  
 0X03645DA6 5DA6 Hydraulic unit: valve EVFR  
 0X03645DA7 5DA7 Hydraulic unit: valve EVFR  
 0X03645DAA 5DAA Hydraulic unit: valve IVRL  
 0X03645DAB 5DAB Hydraulic unit: valve IVRL  
 0X03645DAD 5DAD Hydraulic unit: valve IVRL  
 0X03645DAF 5DAF Hydraulic unit: valve EVRL  
 0X03645DB0 5DB0 Hydraulic unit: valve EVRL  
 0X03645DB3 5DB3 Hydraulic unit: valve IVRR  
 0X03645DB4 5DB4 Hydraulic unit: valve IVRR  
 0X03645DB8 5DB8 Hydraulic unit: valve EVRR  
 0X03645DB9 5DB9 Hydraulic unit: valve EVRR  
 0X03645DBC 5DBC Hydraulic unit: changeover valve 1  
 0X03645DBD 5DBD Hydraulic unit: changeover valve 1  
 0X03645DBF 5DBF Hydraulic unit: changeover valve 1  
 0X03645DC1 5DC1 Hydraulic unit: changeover valve 2  
 0X03645DC2 5DC2 Hydraulic unit: changeover valve 2  
 0X03645DC6 5DC6 Hydraulic unit: high-pressure switching valve 1  
 0X03645DC7 5DC7 Hydraulic unit: high-pressure switching valve 1  
 0X03645DCA 5DCA Hydraulic unit: high-pressure switching valve 2  
 0X03645DCB 5DCB Hydraulic unit: high-pressure switching valve 2  
 0X03645DCE 5DCE Control module, under-voltage  
 0X03645DCF 5DCF Control module, under-voltage  
 0X03645DD0 5DD0 Control module, over-voltage  
 0X03645DD1 5DD1 Control module, internal  
 0X03645DD2 5DD2 Control module, over-voltage  
 0X03645DD3 5DD3 Control module, internal  
 0X03645DD4 5DD4 Control module, internal  
 0X03645DD5 5DD5 Control module, internal  
 0X03645DD6 5DD6 Control module, internal  
 0X03645DD8 5DD8 Control module, internal  
 0X03645DD9 5DD9 Control module, internal

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0X03645DDC	5DDC	Control module, internal
0X03645DDD	5DDD	Control module, internal
0X03645DDE	5DDE	Control module, internal
0X03645DDF	5DDF	Control module, internal
0X03645DE0	5DE0	Control module, internal
0X03645DE1	5DE1	Control module, internal
0X03645DE2	5DE2	Control module, internal
0X03645DE3	5DE3	Control module, internal
0X03645DE4	5DE4	Control module, internal
0X03645DEE	5DEE	Control module, internal
0X03645DEF	5DEF	Control module, internal
0X03645DF0	5DF0	Control module, internal
0X03645DF1	5DF1	Control module, internal
0X03645DF2	5DF2	Control module, internal
0X03645DF3	5DF3	Control module, internal
0X03645DF5	5DF5	Control module, internal
0X03645DF6	5DF6	Control module, internal
0X03645DF7	5DF7	Control module, internal
0X03645DF8	5DF8	Control module, internal
0X03645DF9	5DF9	Control module, internal
0X03645DFA	5DFA	Control module, internal
0X03645DFB	5DFB	Control module, internal
0X03645DFC	5DFC	Control module, internal
0X03645DFD	5DFD	Control module, internal
0X03645DFE	5DFE	Control module, internal
0X03645DFF	5DFF	Control module, internal
0X03645E00	5E00	Control module, internal
0X03645E01	5E01	Control module, internal
0X03645E02	5E02	Control module, internal
0X03645E03	5E03	Control module, internal
0X03645E04	5E04	Control module, internal
0X03645E05	5E05	Control module, internal
0X03645E06	5E06	Control module, internal
0X03645E07	5E07	Control module, internal
0X03645E08	5E08	Control module, internal
0X03645E09	5E09	Control module, internal
0X03645E0A	5E0A	Control module, internal
0X03645E0B	5E0B	Control module, internal
0X03645E0C	5E0C	Control module, internal
0X03645E0D	5E0D	Control module, internal
0X03645E0E	5E0E	Control module, internal
0X03645E0F	5E0F	Control module, internal
0X03645E10	5E10	Control module, internal
0X03645E11	5E11	Control module, internal
0X03645E12	5E12	Control module, internal
0X03645E13	5E13	Control module, internal
0X03645E14	5E14	Control module, internal
0X03645E15	5E15	Control module, internal
0X03645E16	5E16	Control module, internal
0X03645E17	5E17	Control module, internal
0X03645E18	5E18	Control module, internal
0X03645E19	5E19	Control module, internal
0X03645E1A	5E1A	Control module, internal
0X03645E1B	5E1B	Control module, internal
0X03645E1C	5E1C	Control module, internal
0X03645E1D	5E1D	Control module, internal
0X03645E1E	5E1E	Control module, flash programming
0X03645E1F	5E1F	Control module, status message
0X03645E20	5E20	Control module, internal
0X03645E21	5E21	Control module, internal
0X03645E22	5E22	wheel-speed sensor, supply, front left
0X03645E24	5E24	wheel-speed sensor, supply, front left
0X03645E25	5E25	wheel-speed sensor, plausibility, front left

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0X03645E26	5E26	wheel-speed sensor, air gap, front left
0X03645E27	5E27	wheel-speed sensor, plausibility, front left
0X03645E28	5E28	wheel-speed sensor, EMC, front left
0X03645E2D	5E2D	wheel-speed sensor, wheel bearing, front left
0X03645E2E	5E2E	wheel-speed sensor, plausibility, front left
0X03645E2F	5E2F	wheel-speed sensor, plausibility, front left
0X03645E30	5E30	wheel-speed sensor, supply, rear left
0X03645E32	5E32	wheel-speed sensor, supply, rear left
0X03645E33	5E33	wheel-speed sensor, plausibility, rear left
0X03645E34	5E34	wheel-speed sensor, air gap, rear left
0X03645E35	5E35	wheel-speed sensor, plausibility, rear left
0X03645E36	5E36	wheel-speed sensor, EMC, rear left
0X03645E3B	5E3B	wheel-speed sensor, wheel bearing, rear left
0X03645E3C	5E3C	wheel-speed sensor, plausibility, rear left
0X03645E3D	5E3D	wheel-speed sensor, plausibility, rear left
0X03645E3E	5E3E	wheel-speed sensor, supply, rear right
0X03645E40	5E40	wheel-speed sensor, supply, rear right
0X03645E41	5E41	wheel-speed sensor, plausibility, rear right
0X03645E42	5E42	wheel-speed sensor, air gap, rear right
0X03645E43	5E43	wheel-speed sensor, plausibility, rear right
0X03645E44	5E44	wheel-speed sensor, EMC, rear right
0X03645E49	5E49	wheel-speed sensor, wheel bearing, rear right
0X03645E4A	5E4A	wheel-speed sensor, plausibility, rear right
0X03645E4B	5E4B	wheel-speed sensor, plausibility, rear right
0X03645E4C	5E4C	wheel-speed sensor, supply, front right
0X03645E4E	5E4E	wheel-speed sensor, supply, front right
0X03645E4F	5E4F	wheel-speed sensor, plausibility, front right
0X03645E50	5E50	wheel-speed sensor, air gap, front right
0X03645E51	5E51	wheel-speed sensor, plausibility, front right
0X03645E52	5E52	wheel-speed sensor, EMC, front right
0X03645E57	5E57	wheel-speed sensor, wheel bearing, front right
0X03645E58	5E58	wheel-speed sensor, plausibility, front right
0X03645E59	5E59	wheel-speed sensor, plausibility, front right
0X03645E5C	5E5C	wheel-speed sensor, direction-of-rotation detection
0X03645E5D	5E5D	wheel-speed sensor, general
0X03645E5E	5E5E	wheel-speed sensor, general
0X03645E60	5E60	Brake-light switch, plausibility
0X03645E62	5E62	Brake-light switch permanently actuated
0X03645E8E	5E8E	DSC sensor, internal
0X03645E90	5E90	DSC sensor, lateral acceleration, plausibility
0X03645E91	5E91	DSC sensor, lateral acceleration, plausibility
0X03645E92	5E92	DSC sensor, lateral acceleration, plausibility
0X03645E93	5E93	DSC sensor, lateral acceleration, plausibility
0X03645E95	5E95	DSC sensor, lateral acceleration, plausibility
0X03645E96	5E96	DSC sensor, lateral acceleration, plausibility
0X03645E97	5E97	DSC sensor, internal
0X03645E98	5E98	DSC sensor, lateral acceleration, plausibility
0X03645E99	5E99	DSC sensor, lateral acceleration, plausibility
0X03645E9A	5E9A	DSC sensor, installation
0X03645E9B	5E9B	DSC sensor, rotation rate, plausibility
0X03645E9C	5E9C	DSC sensor, rotation rate, plausibility
0X03645E9D	5E9D	DSC sensor, internal
0X03645E9E	5E9E	DSC sensor, installation
0X03645E9F	5E9F	DSC sensor, rotation rate, plausibility
0X03645EA0	5EA0	DSC sensor, rotation rate, plausibility
0X03645EA1	5EA1	DSC sensor, rotation rate, plausibility
0X03645EA2	5EA2	DSC sensor, rotation rate, plausibility
0X03645EA3	5EA3	DSC sensor, rotation rate, plausibility
0X03645EA4	5EA4	DSC sensor, rotation rate, plausibility
0X03645EA5	5EA5	DSC sensor, rotation rate, plausibility
0X03645EA6	5EA6	DSC sensor, rotation rate, plausibility
0X03645EA7	5EA7	DSC sensor, rotation rate, plausibility
0X03645EA8	5EA8	DSC sensor, internal

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0X03645EA9 5EA9 DSC sensor, rotation rate, plausibility  
 0X03645EAA 5EAA DSC sensor, rotation rate, plausibility  
 0X03645EAB 5EAB DSC sensor, rotation rate, plausibility  
 0X03645EAC 5EAC DSC sensor, rotation rate, plausibility  
 0X03645EAD 5EAD DSC sensor, internal  
 0X03645EAE 5EAE DSC sensor, internal  
 0X03645EAF 5EAF DSC sensor, internal  
 0X03645EB0 5EB0 DSC sensor, internal  
 0X03645EB1 5EB1 DSC sensor, internal  
 0X03645EB2 5EB2 DSC sensor, internal  
 0X03645EB3 5EB3 DSC sensor, supply  
 0X03645EB4 5EB4 DSC sensor, supply  
 0X03645EB5 5EB5 DSC sensor, supply  
 0X03645EBA 5EBA Steering-angle sensor, plausibility  
 0X03645EBB 5EBB Steering-angle sensor, plausibility  
 0X03645EBC 5EBC Steering-angle sensor, plausibility  
 0X03645EBD 5EBD Steering-angle sensor F-CAN  
 0X03645EBE 5EBE Steering-angle sensor, plausibility  
 0X03645EBF 5EBF Steering-angle sensor, internal  
 0X03645EC0 5EC0 Steering-angle-sensor, calibration  
 0X03645EC1 5EC1 Steering-angle sensor, plausibility  
 0X03645ED4 5ED4 Implausible sensor signals  
 0X03645ED5 5ED5 Skid detection: clear fault memory  
 0X03645ED6 5ED6 Control module, internal  
 0X03645EDA 5EDA Variant coding, control module, internal  
 0X03645EDB 5EDB Variant coding, control module, internal  
 0X03645EDC 5EDC Variant coding, control module, internal  
 0X03645EE2 5EE2 Hydraulic unit, pressure sensor: internal  
 0X03645EE4 5EE4 Hydraulic unit, pressure sensor: internal  
 0X03645EE5 5EE5 Hydraulic unit, pressure sensor: internal  
 0X03645EE6 5EE6 Hydraulic unit, pressure sensor: internal  
 0X03645EE7 5EE7 Hydraulic unit, pressure sensor: internal  
 0X03645EED 5EED Hydraulic unit, pressure sensor: internal  
 0X03645EEE 5EEE Hydraulic unit, pressure sensor: plausibility  
 0X03645EEF 5EEF Hydraulic unit, pressure sensor: plausibility  
 0X03645EF0 5EF0 Hydraulic unit, pressure sensor: plausibility  
 0X03645EF2 5EF2 Pressure sensor, front axle: internal  
 0X03645EF3 5EF3 Pressure sensor, rear axle: internal  
 0X03645EF4 5EF4 Pressure sensor, front axle: internal  
 0X03645EF5 5EF5 Pressure sensor, rear axle: internal  
 0X03645EF6 5EF6 Pressure sensor, front axle: line  
 0X03645EF7 5EF7 Pressure sensor, rear axle: line  
 0X03645EF8 5EF8 Pressure sensors FA/RA: supply  
 0X03645EF9 5EF9 Control module, internal  
 0X03645EFA 5EFA Control module, internal  
 0X03645EFB 5EFB Variant coding, control module, internal  
 0X03645EFC 5EFC No vehicle type data  
 0X03645EFD 5EFD Insignificant: clear fault memory  
 0X03645EFE 5EFE wheel-speed sensor, plausibility, front left  
 0X03645EFF 5EFF wheel-speed sensor, plausibility, rear left  
 0X03645F00 5F00 wheel-speed sensor, plausibility, rear right  
 0X03645F01 5F01 wheel-speed sensor, plausibility, front right  
 0X03645F02 5F02 wheel-speed sensor, general  
 0X03645F03 5F03 Control module, internal  
 0X03645F04 5F04 Control module, internal  
 0X03645F05 5F05 Control module, internal  
 0X03645F06 5F06 Control module, internal  
 0X03645F07 5F07 ACC sensor, internal  
 0X03645F08 5F08 ACC sensor, internal  
 0X03645F09 5F09 ACC sensor, internal  
 0X03645F0A 5F0A Insignificant: clear fault memory  
 0X03645F0C 5F0C Steering-angle sensor, steering gear  
 0X03645F0D 5F0D Steering-angle sensor, steering gear



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0X03645F0E 5F0E Steering-angle sensor, steering gear  
 0X03645F0F 5F0F Steering-angle sensor, steering gear  
 0X03645F10 5F10 Brake-pad wear, front axle, sensor  
 0X03645F11 5F11 Brake-pad wear, rear axle, sensor  
 0X03645F12 5F12 Brake-pad wear, front axle, brake pads  
 0X03645F13 5F13 Brake-pad wear, rear axle, brake pads  
 0X03645F14 5F14 Brake-pad wear, front axle, plausibility  
 0X03645F15 5F15 Brake-pad wear, rear axle, plausibility  
 0X03645F16 5F16 Control module, internal  
 0X03645F17 5F17 Control module, internal  
 0X03645F18 5F18 Insignificant: clear fault memory  
 0X03645F1A 5F1A Performance reduction  
 0X03645F1B 5F1B Control module, internal  
 0X03645F1F 5F1F Dynamic Drive: internal  
 0X03645F20 5F20 Control module, internal  
 0X03645F21 5F21 Control module, internal  
 0X03645F22 5F22 Control module, internal  
 0X03645F23 5F23 Control module, internal  
 0X03645F24 5F24 Insignificant: clear fault memory  
 0X03645F25 5F25 Dynamic Drive: internal  
 0X03645F26 5F26 Dynamic Drive: internal  
 0X03645F2C 5F2C Control module, internal  
 0X03645F2D 5F2D ACC sensor: internal  
 0X03645F2E 5F2E Transmission control: internal  
 0X03645F2F 5F2F Transmission control: internal  
 0X03645F30 5F30 Engine management: interface  
 0X03645F31 5F31 Engine management: interface  
 0X03645F32 5F32 Engine management: interface  
 0X03645F33 5F33 Engine management: interface  
 0X03645F34 5F34 Engine management: interface  
 0X03645F35 5F35 Engine management: interface  
 0X03645F36 5F36 Engine management: interface  
 0X03645F37 5F37 Engine management: interface  
 0X03645F40 5F40 Insignificant: clear fault memory  
 0X03645F45 5F45 Brake-fluid level too low  
 0X03645F47 5F47 Instrument cluster: internal  
 0X03645F48 5F48 Instrument cluster: internal  
 0X03645F49 5F49 Instrument cluster: internal  
 0X03645F4A 5F4A Instrument cluster: internal  
 0X03645F4B 5F4B Instrument cluster: internal  
 0X03645F50 5F50 Insignificant: clear fault memory  
 0X03645F52 5F52 CCC fault: internal  
 0X03645F54 5F54 Car Access System: internal  
 0X03645F55 5F55 Car Access System: internal  
 0X03645F60 5F60 Control module not for vehicle with active front steering  
 0X03645F61 5F61 Active front steering: internal  
 0X03645F63 5F63 Steering-angle sensor, steering gear  
 0X03645F64 5F64 DSC sensor 2, lateral acceleration, plausibility  
 0X03645F65 5F65 DSC sensor 2, lateral acceleration, plausibility  
 0X03645F66 5F66 DSC sensor 2, internal  
 0X03645F67 5F67 DSC sensor 2, internal  
 0X03645F68 5F68 DSC sensor 2, internal  
 0X03645F69 5F69 DSC sensor 2, internal  
 0X03645F6A 5F6A DSC sensor 2, internal  
 0X03645F6B 5F6B DSC sensor 2, internal  
 0X03645F6C 5F6C DSC sensor 2, supply  
 0X03645F6D 5F6D DSC sensor 2, supply  
 0X03645F6E 5F6E DSC sensor 2, supply  
 0X03645F6F 5F6F Engine management: interface  
 0X03645F70 5F70 Engine management: interface  
 0X03645F71 5F71 Engine management: interface  
 0X03645F72 5F72 Engine management: interface  
 0X03645F73 5F73 Engine management: interface

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0X03645F74 5F74 Engine management: interface  
 0X03645F75 5F75 Engine management: interface  
 0X03645F76 5F76 Engine management: interface  
 0X03645F77 5F77 Engine management: interface  
 0X03645F78 5F78 Engine management: interface  
 0X03645F79 5F79 Trailer, signal invalid  
 0X03645F7A 5F7A DSC sensor fault  
 0X03645F7B 5F7B DSC sensor 2 fault  
 0X036460AC 60AC Tyre defect indicator:coding data implausible  
 0X036460AD 60AD Tyre defect indicator:initialization implausible  
 0X036460AE 60AE Insignificant:clear fault memory

0x03810011 17 Power supply to solenoid valves  
 0x03810012 18 Front left outlet valve faulty  
 0x03810014 20 Front right inlet valve faulty  
 0x03810018 24 Front right outlet valve faulty  
 0x03810021 33 Rear left inlet valve faulty  
 0x03810022 34 Rear left outlet valve faulty  
 0x03810032 50 Throttle-valve actuator mechanically faulty  
 0x03810044 68 ABS microprocessor disturbed faulty  
 0x03810048 72 Control unit internal fault  
 0x03810051 81 Front left wheel speed sensor faulty  
 0x03810052 82 Front right wheel speed sensor faulty  
 0x03810054 84 Rear left wheel speed sensor faulty  
 0x03810058 88 Rear right wheel speed sensor faulty  
 0x03810061 97 Front left wheel speed signal  
 0x03810062 98 Front right wheel speed signal  
 0x03810064 100 Rear left wheel speed signal  
 0x03810068 104 Rear right wheel speed signal  
 0x03810071 113 Front left wheel speed info.  
 0x03810072 114 Front right wheel speed info.  
 0x03810074 116 Rear left wheel speed info.  
 0x03810088 120 Rear right wheel speed info.  
 0x03810091 145 Pump faulty  
 0x03810098 152 Pedal-travel sensor  
 0x038100A1 161 Front left outlet valve faulty  
 0x038100A2 162 Front right outlet valve faulty  
 0x038100A4 164 Rear left outlet valve faulty  
 0x038100A8 168 Rear right outlet valve faulty  
 0x038100C8 200 Transmission type wrong coded  
 0x038100FF 255 Control unit NV-RAM faulty

//srs

0x04210001 1 control unit internal faulty  
 0x04210002 2 firing circuit,driver's airbag  
 0x04210003 3 firing circuit,belt-tensioner(driver)  
 0x04210004 4 firing circuit,belt-tensioner(passenger)  
 0x04210005 5 firing circuit,passenger airbag  
 0x04210011 17 power supply failure  
 0x04210013 19 warning lamp faulty  
 0x04210014 20 passenger seat occupancy detector  
 0x04210015 21 pressure sensor,driver's side  
 0x04210016 22 pressure sensor,passenger's side  
 0x04210018 24 seat-belt lock,driver's side  
 0x04210019 25 seat-belt lock,passenger's side  
 0x04220001 1 control unit internal faulty  
 0x04220002 2 firing circuit,driver's airbag  
 0x04220003 3 firing circuit,belt-tensioner(driver)  
 0x04220004 4 firing circuit,belt-tensioner(passenger)  
 0x04220005 5 firing circuit,passenger airbag  
 0x04220011 17 power supply failure  
 0x04220013 19 warning lamp faulty  
 0x04220014 20 passenger seat occupancy detector  
 0x04220015 21 pressure sensor,driver's side

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0x04220016 22 pressure sensor,passenger's side  
0x04220018 24 seat-belt lock,driver's side  
0x04220019 25 seat-belt lock,passenger's side  
  
0x04230001 1 control unit internal faulty  
0x04230002 2 warning lamp faulty  
0x04230003 3 Voltage supply  
0x04230004 4 firing circuit,driver's airbag  
0x04230005 5 firing circuit,belt-tensioner(driver)  
0x04230006 6 firing circuit,belt-tensioner(passenger)  
0x04230007 7 firing circuit,passenger airbag  
0x04230010 16 driver side belt switch  
0x04230011 17 Passenger side belt switch  
0x04230018 24 passenger seat occupancy detector  
0x04230019 25 passenger seat occupancy detector  
0x0423001A 26 passenger seat occupancy detector  
  
0x04240001 1 Internal control-unit fault  
0x04240002 2 Failure warning lamp  
0x04240003 3 Voltage supply  
0x04240004 4 Firing circuit for driver airbag  
0x04240005 5 Firing circuit, belt tensioner, driver's side  
0x04240006 6 Firing circuit, belt tensioner, passenger side  
0x04240007 7 Firing circuit for passenger airbag  
0x04240008 8 Firing circuit, side airbag, left side  
0x04240009 9 Firing circuit, side airbag, right side  
0x04240010 16 Buckle switch, driver  
0x04240011 17 Buckle switch, passenger  
0x04240012 18 Satellite, left(sensor for side airbag)  
0x04240013 18 Satellite, left(sensor for side airbag)  
0x04240014 18 Satellite, left(sensor for side airbag)  
0x04240015 21 Satellite, right(sensor for side airbag)  
0x04240016 21 Satellite, right(sensor for side airbag)  
0x04240017 21 Satellite, right(sensor for side airbag)  
0x04240018 25 Seat-occupation recognition, passenger  
0x04240019 25 Seat-occupation recognition, passenger  
0x0424001A 25 Seat-occupation recognition, passenger  
0x0424001B 251 Seat-occupancy detector  
0x0424001D 251 Seat-occupancy detector  
0x0424001F 251 Seat-occupancy detector  
0x04240020 18 Satellite, left(sensor for side airbag)  
0x04240021 21 Satellite, right(sensor for side airbag)  
0x04250001 01 Internal control-unit fault  
0x04250002 02 \_Failure warning lamp  
0x04250003 03 Power supply  
0x04250004 04 Driver's airbag  
0x04250005 05 Belt tensioner, driver's side  
0x04250006 06 Belt tensioner, passenger side  
0x04250007 07 Passenger airbag  
0x04250008 08 Side airbag, front left  
0x04250009 09 Side airbag, front right  
0x0425000A 0A Side airbag, rear left  
0x0425000B 0B Side airbag, rear right  
0x0425000C 0C Airbag, head, left  
0x0425000D 0D Airbag, head, left  
0x0425000E 0E Battery disconnection  
0x0425000F 0F Passenger airbag, stage 2  
0x04250010 10 Seat-belt buckle, driver  
0x04250012 12 Sensor, side airbag, left, data line  
0x04250013 13 Sensor, side airbag, left, parameter fault  
0x04250014 14 Sensor, side airbag, left, data fault  
0x04250015 15 Sensor, side airbag, right, data line  
0x04250016 16 Sensor, side airbag, right, parameter fault

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0x04250017 17 Sensor, side airbag, right, data fault
0x04250018 18 Seat occupancy detector
0x0425001A 1A Seat occupancy detector: coding data
0x0425001C 1C Seat-occupancy detector: plausibility
0x0425001D 1D Seat-occupancy detector: plausibility
0x0425001F 1F Seat-occupancy detector: plausibility
0x04250020 20 Sensor, side airbag, left, line fault
0x04250021 21 Sensor, side airbag, right, line fault
0x04250035 35 Sensor, side airbag, left: coding data
0x04250036 36 Sensor, side airbag, right: coding data

0x04260001 01 Airbag, driver
0x04260002 02 Belt tensioner, driver
0x04260003 03 Belt tensioner, front passenger
0x04260004 04 Airbag, front passenger
0x04260005 05 Side airbag, front left
0x04260006 06 Side airbag, front right
0x04260007 07 Side airbag, rear left
0x04260008 08 Side airbag, rear right
0x04260009 09 Head airbag(ITS),front left
0x0426000A 0A Head airbag(ITS),front right
0x0426000B 0B Battery, positive terminal isolator 1
0x0426000C 0C Airbag, front passenger, stage 2
0x0426000D 0D Airbag, driver, stage 2
0x0426000E 0E Head airbag, rear left
0x0426000F 0F Head airbag, rear right
0x04260011 11 Power supply
0x04260012 12 Fault lamp(AWL)
0x04260013 13 Indicator lamp(HWL)
0x04260014 14 Seat belt buckle, driver
0x04260016 16 Sensor for side airbag, left
0x04260017 17 Sensor for side airbag, right
0x04260018 18 External rollover sensor
0x0426001A 1A Seat occupancy recognition 1(SBE 1)
0x0426001B 1B Crash telegram memory
0x0426001C 1C Coupling in firing circuit, airbag, driver
0x0426001D 1D Coupling in firing circuit, belt tensioner, driver
0x0426001E 1E Coupling in firing circuit, belt tensioner, passenger
0x0426001F 1F Coupling in firing circuit, airbag, driver
0x04260020 20 Coupling in firing circuit, side airbag, front left
0x04260021 21 Coupling in firing circuit, side airbag, front right
0x04260022 22 Coupling in firing circuit, side airbag, rear left
0x04260023 23 Coupling in firing circuit, side airbag, rear right
0x04260024 24 Coupling in firing circuit, head airbag(ITS),front left
0x04260025 25 Coupling in firing circuit, head airbag(ITS),front right
0x04260026 26 Coupling in firing circuit, battery pos.-term. disconnection 1
0x04260027 27 Coupling in firing circuit, airbag, passenger, stage 2
0x04260028 28 Coupling in firing circuit, airbag, driver, stage 2
0x04260029 29 Coupling in firing circuit, head airbag, rear left
0x0426002A 2A Coupling in firing circuit, head airbag, rear right
0x0426002B 2B Coupling in firing circuit, battery pos.-term. disconnection 2
0x0426002C 2C Checksum, coding data
0x0426002D 2D Sensors for side airbag, front
0x042600F0 F0 Internal control unit fault

0x04270001 01 Airbag, driver, stage1
0x04270002 02 Belt tensioner, driver
0x04270003 03 Belt tensioner, front passenger
0x04270004 04 Airbag, passenger stage
0x04270005 05 Side airbag, front left
0x04270006 06 Side airbag, front right
0x04270007 07 Side airbag, rear left
0x04270008 08 Side airbag, rear right

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0x04270009 09 Head airbag(ITS), left  
 0x0427000A 10 Head airbag(ITS), right  
 0x0427000B 11 Battery, positive terminal isolation 1  
 0x0427000C 12 Airbag, front passenger stage 2  
 0x0427000D 13 Airbag, driver stage 2  
 0x0427000E 14 Head airbag, rear left  
 0x0427000F 15 Head airbag, rear right  
 0x04270010 16 Battery, positive terminal isolation 2  
 0x04270011 17 Belt tensioner, rear left  
 0x04270012 18 Belt tensioner, rear right  
 0x04270013 19 Belt tensioner, rear middle  
 0x04270014 20 Firing circuit ZK19  
 0x04270015 21 Airbag driver, stage 2  
 0x04270016 22 Firing circuit ZK7  
 0x04270030 48 Coupling in firing circuit, airbag driver, stage 1  
 0x04270031 49 Coupling in firing circuit, belt tensioner, driver  
 0x04270032 50 Coupling in firing circuit, belt tensioner, passenger  
 0x04270033 51 Coupling in firing circuit, airbag passenger, stage 1  
 0x04270034 52 Coupling in firing circuit, side airbag, front left  
 0x04270035 53 Coupling in firing circuit, side airbag, front right  
 0x04270036 54 Coupling in firing circuit, side airbag, rear left  
 0x04270037 55 Coupling in firing circuit, side airbag, rear right  
 0x04270038 56 Coupling in firing circuit, Head airbag(ITS), left  
 0x04270039 57 Coupling in firing circuit, Head airbag(ITS), right  
 0x0427003A 58 Coupling in firing circuit, Pos.-term, disconnection 1  
 0x0427003B 59 Coupling in firing circuit, airbag passenger, stage 2  
 0x0427003C 60 Coupling in firing circuit, airbag driver, stager 2  
 0x0427003D 61 Coupling in firing circuit, head airbag, rear left  
 0x0427003E 62 Coupling in firing circuit, head airbag, rear right  
 0x0427003F 63 Coupling in firing circuit, pos.-term, disconnection 2  
 0x04270040 64 Coupling in firing circuit, belt tensioner, rear left  
 0x04270041 65 Coupling in firing circuit, belt tensioner, rear right  
 0x04270042 66 Coupling in firing circuit, belt tensioner, rear middle  
 0x04270043 67 Coupling in firing circuit, ZK 19  
 0x04270044 68 Coupling in firing circuit, airbag driver, stage 2  
 0x04270045 69 Coupling in firing circuit, ZK 7  
 0x04270050 80 Power supply  
 0x04270051 81 Fault lamp  
 0x04270052 82 Information lamp  
 0x04270057 87 Coupling fault, sensor, side airbag, left.  
 0x04270060 96 Seat-belt lock, driver  
 0x04270062 98 Seat-belt lock, rear left  
 0x04270063 99 Seat-blet lock, rear right  
 0x04270064 100 Seat-belt lock, rear middle  
 0x04270070 112 Seat occupancy detector  
 0x04270071 113 Seat occupancy detector 2  
 0x04270075 117 External rollover sensor  
 0x04270080 128 Sensor for side airbag, front  
 0x04270081 129 Sensor for side airbag, left  
 0x04270082 130 Sensor for side airbag, right  
 0x04270083 131 Sensor for side airbag, left  
 0x04270084 132 sensor for side airbag, right  
 0x04270085 133 sensor for side airbag, right  
 0x04270086 134 sensor for side airbag, right  
 0x04270087 135 Coupling fault, sensor for side airbag, left  
 0x04270088 136 Coupling fault, sensor for side airbag, right  
 0x04270090 144 Coding incorrect  
 0x04270091 145 Crash-telegram memory  
 0x042700F0 240 internal control unit fault  
 0x04280001 01 Airbag, driver, stage 1  
 0x04280002 02 Belt tensioner, driver  
 0x04280003 03 Belt tensioner, front passenger  
 0x04280004 04 Airbag, passenger, stage 1

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0x04280005 05 Side airbag, front left  
 0x04280006 06 Side airbag, front right  
 0x04280007 07 Side airbag, rear left  
 0x04280008 08 Side airbag, rear right  
 0x04280009 09 Head airbag (ITS), left  
 0x0428000A 0A Head airbag (ITS), right  
 0x0428000B 0B Safety battery terminal 1  
 0x0428000C 0C Airbag, front passenger, stage 2  
 0x0428000D 0D Airbag, driver, stage 2  
 0x0428000E 0E Head airbag, rear left  
 0x0428000F 0F Head airbag, rear right  
 0x04280010 10 Safety battery terminal 2  
 0x04280030 30 Coupling in firing circuit, airbag, driver, stage 1  
 0x04280031 31 Coupling in firing circuit, belt tensioner, driver  
 0x04280032 32 Coupling in firing circuit, belt tensioner, passenger  
 0x04280033 33 Coupling in firing circuit, airbag passenger, stage 1  
 0x04280034 34 Coupling in firing circuit, side airbag, front left  
 0x04280035 35 Coupling in firing circuit, side airbag, front right  
 0x04280036 36 Coupling in firing circuit, side airbag, rear left  
 0x04280037 37 Coupling in firing circuit, side airbag, rear right  
 0x04280038 38 Coupling in firing circuit, head airbag(ITS), left  
 0x04280039 39 Coupling in firing circuit, head airbag(ITS), right  
 0x0428003A 3A Coupling in ignition circuit, safety battery terminal 1  
 0x0428003B 3B Coupling in firing circuit, airbag, passenger, stage 2  
 0x0428003C 3C Coupling in firing circuit, airbag, driver, stage 2  
 0x0428003D 3D Coupling in firing circuit, head airbag, rear left  
 0x0428003E 3E Coupling in firing circuit, head airbag, rear right  
 0x0428003F 3F Coupling in ignition circuit, safety battery terminal 2  
 0x04280050 50 Power supply  
 0x04280051 51 Fault lamp (AWL)  
 0x04280052 52 Passenger airbag OFF lamp (POL)  
 0x04280060 60 Seat-belt contact, driver  
 0x04280061 61 Seat-belt contact, passenger  
 0x04280067 67 Passenger airbag off switch (POS)  
 0x04280068 68 Passenger airbag off switch (POS) inverse  
 0x04280069 69 Passenger airbag off switch (POS)  
 0x04280070 70 Seat occupancy detector  
 0x04280071 71 Seat occupancy detector  
 0x04280072 72 Seat occupancy detector  
 0x04280080 80 Side sensor, door, left  
 0x04280081 81 Side sensor, door, left  
 0x04280082 82 Side sensor, door, right  
 0x04280083 83 Side sensor, door, right  
 0x04280084 84 Front sensor, left  
 0x04280085 85 Front sensor, left  
 0x04280086 86 Front sensor, right  
 0x04280087 87 Front sensor, right  
 0x04280088 88 Side sensor, B-pillar, X-direction, left  
 0x04280089 89 Side sensor, B-pillar, X-direction, left  
 0x0428008A 8A Side sensor, B-pillar, X-direction, right  
 0x0428008B 8B Side sensor, B-pillar, X-direction, right  
 0x0428008C 8C Side sensor, B-pillar, Y-direction, left  
 0x0428008D 8D Side sensor, B-pillar, Y-direction, left  
 0x0428008E 8E Side sensor, B-pillar, Y-direction, right  
 0x0428008F 8F Side sensor, B-pillar, Y-direction, right  
 0x04280090 90 Coding incorrect (CBD block)  
 0x04280091 91 Crash telegram memory  
 0x04280092 92 Crash telegram memory  
 0x04280093 93 ECU lock  
 0x04280094 94 Alert threshold  
 0x042800F0 F0 Internal control unit fault

0x04410001 1 Crash-sensor closed once

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0x04410002 2 Crash-sensor closed several times
0x04410005 5 Crash-sensor closed permanently
0x0441000D 13 Two firing circuits shorted
0x04410013 19 Left crash-sensor lead insulation
0x04410014 20 Right crash-sensor lead insulation
0x0441001B 27 One firing circuit short to positive
0x04410021 33 One firing circuit short to ground
0x0441002A 42 Resister too small, drivers airbag
0x0441002B 43 Resister too small, firing circuit II
0x0441002C 44 Resister too small, firing circuit III
0x0441002D 45 Resister too large, drivers airbag
0x0441002E 46 Resister too large, firing circuit II
0x0441002F 47 Resister too large, firing circuit III
0x04410031 49 warning lamp faulty
0x04410032 50 Diagnostic unit faulty
0x04410034 52 crash evidence set
//IHKA
0x05210001 001 Pressure regulator,EDS 2
0x05210002 002 Solenoid,P/N lock
0x05210003 003 Solenoid valve 5
0x05210004 004 Solenoid valve,converter lockup clutch
0x05210005 005 Pressure regulator,EDS 1
0x05210008 008 Selector-lever position L2
0x05210009 009 Selector-lever position L4
0x0521000C 012 Program-selector switch
0x05210010 016 Rotational-speed sensor,turbocharger
0x05210012 018 Kickdown switch
0x05210013 019 ASC monitoring
0x05210016 022 ATF-sump temperature sensor
0x0521001A 026 Batt.+ supply (perm.)
0x0521001D 029 Pressure regulator,EDS 3
0x0521001E 030 Solenoid valve 1
0x0521001F 031 Solenoid valve 4
0x05210020 032 Solenoid valve 3
0x05210021 033 Solenoid valve 2
0x05210024 036 Selector-lever position L1
0x05210026 038 wheel speed,front left
0x05210027 039 wheel speed,front right
0x05210028 040 wheel speed,rear left
0x05210029 041 wheel speed,rear right
0x0521002A 042 Rotat.-sp.signal n-ab(output)
0x05210033 051 Pressure regulator,EDS 5
0x05210036 054 Batt.+ supply
0x05210064 100 Speed monitoring
0x05210065 101 Speed monitoring
0x05210066 102 Speed monitoring
0x05210067 103 Internal SG fault 1
0x05210068 104 Gearbox relay in the EGS
0x05210069 105 Engine overrevving interlock
0x0521006A 106 Stall-speed monitoring
0x0521006B 107 wheel speeds
0x0521006C 108 No programming
0x0521006D 109 Internal SG fault 2
0x0521006E 110 Internal SG fault 3
0x05210096 150 CAN bus monitoring
0x05210097 151 CAN status,fault
0x05210098 152 CAN engine intervention
0x05210099 153 CAN DME load signal
0x0521009A 154 CAN throttle-valve position
0x0521009B 155 CAN DME engine temperature
0x0521009C 156 CAN timeout 1(ignition ON)
0x0521009D 157 CAN timeout 2(operating)
0x0521009E 158 CAN throttle-valve and load signals

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0x05220000 0 Ventilation flap motor, left  
 0x05220001 1 Ventilation flap motor, right  
 0x05220002 2 Air circulation flap motor  
 0x05220003 3 Defroster flap motor  
 0x05220004 4 Footwell flap motor, left  
 0x05220005 5 Footwell flap motor, right  
 0x05220006 6 Stratification flap motor, left  
 0x05220007 7 Stratification flap motor, right  
 0x05220008 8 Rear compartment flap motor  
 0x0522000A 10 Fresh air flap motor  
 0x0522000C 12 Inner temperature sensor  
 0x0522000D 13 Evaporator sensor  
 0x0522000E 14 Left heat exchanger sensor  
 0x0522000F 15 Right heat exchanger sensor  
 0x05220014 20 Rear stratification potentiometer  
 0x05220015 21 Front stratification potentiometer  
 0x05220016 22 Right ventilation temperature sensor  
 0x05220017 23 Left Ventilation temperature sensor  
 0x05220029 41 Relay auxiliary fan  
 0x0522002A 42 Relay windshield defogger  
 0x0522002B 43 Relay rear window defogger  
 0x0522002C 44 AC compressor magnetic clutch  
 0x0522002D 45 Auxiliary water pump  
 0x0522002E 46 Water valve left  
 0x0522002F 47 Water valve left  
 0x05220030 48 Park heating locking valve  
 0x05220040 64 AUC Sensor  
 0x05220042 66 Blower control voltage  
 0x05220046 70 Unknown error location  
 0x05230000 0 Ventilation flap motor, left  
 0x05230001 1 Ventilation flap motor, right  
 0x05230002 2 Air circulation flap motor  
 0x05230003 3 Defroster flap motor  
 0x05230004 4 Footwell flap motor, left  
 0x05230005 5 Footweel flap motor, right  
 0x05230006 6 Stratification flap motor ,left  
 0x05230007 7 Stratification flap motor ,right  
 0x05230008 8 Rear compartment flap motor  
 0x0523000A 10 Fresh air flap motor  
 0x0523000C 12 Inner temperature sensor  
 0x0523000D 13 Evaporator sensor  
 0x0523000E 14 Left heat exchanger sensor  
 0x0523000F 15 Right heat exchanger sensor  
 0x05230011 17 Pressure sensor  
 0x05230013 19 Right solar sensor  
 0x05230014 20 Rear stratification potentiometer  
 0x05230015 21 Front stratification potentiometer  
 0x05230016 22 Right ventilation temperature sensor  
 0x05230017 23 Left ventilation temperature sensor  
 0x0523001B 27 Left solar sensor  
 0x05230020 32 Additional heater  
 0x05230021 33 Park heating, low voltage  
 0x05230022 34 Park heating, break down  
 0x05230029 41 relay auxiliary fan  
 0x0523002A 42 relay windshield defogger  
 0x0523002B 43 relay rear window defogger  
 0x0523002C 44 AC compressor magnetic clutch  
 0x0523002D 45 Auxiliary water pump  
 0x0523002E 46 Water valve left  
 0x0523002F 47 Water valve right  
 0x05230030 48 Park heating locking valve  
 0x05230040 64 AUC sensor  
 0x05230042 66 blower control voltage



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0x05230046 70 unknown error location  
 0x05240001 001 Pressure regulator,EDS 2  
 0x05240002 002 Solenoid,P/N lock  
 0x05240003 003 Solenoid valve 5  
 0x05240004 004 Solenoid valve,converter lockup clutch  
 0x05240005 005 Pressure regulator,EDS 1  
 0x05240008 008 Selector-lever position L2  
 0x05240009 009 Selector-lever position L4  
 0x0524000C 012 Program-selector switch  
 0x05240010 016 Rotational-speed sensor,turbocharger  
 0x05240012 018 Kickdown switch  
 0x05240013 019 ASC monitoring  
 0x05240016 022 ATF-sump temperature sensor  
 0x0524001A 026 Batt.+ supply (perm.)  
 0x0524001D 029 Pressure regulator,EDS 3  
 0x0524001E 030 Solenoid valve 1  
 0x0524001F 031 Solenoid valve 4  
 0x05240020 032 Solenoid valve 3  
 0x05240021 033 Solenoid valve 2  
 0x05240024 036 Selector-lever position L1  
 0x05240026 038 wheel speed,front left  
 0x05240027 039 wheel speed,front right  
 0x05240028 040 wheel speed,rear left  
 0x05240029 041 wheel speed,rear right  
 0x0524002A 042 Rotat.-sp.signal n-ab(output)  
 0x05240033 051 Pressure regulator,EDS 5  
 0x05240036 054 Batt.+ supply  
 0x05240064 100 Speed monitoring  
 0x05240065 101 Speed monitoring  
 0x05240066 102 Speed monitoring  
 0x05240067 103 Internal SG fault 1  
 0x05240068 104 Gearbox relay in the EGS  
 0x05240069 105 Engine overrevving interlock  
 0x0524006A 106 Stall-speed monitoring  
 0x0524006B 107 wheel speeds  
 0x0524006C 108 No programming  
 0x0524006D 109 Internal SG fault 2  
 0x0524006E 110 Internal SG fault 3  
 0x05240096 150 CAN bus monitoring  
 0x05240097 151 CAN status,fault  
 0x05240098 152 CAN engine intervention  
 0x05240099 153 CAN DME load signal  
 0x0524009A 154 CAN throttle-valve position  
 0x0524009B 155 CAN DME engine temperature  
 0x0524009C 156 CAN timeout 1(ignition ON)  
 0x0524009D 157 CAN timeout 2(operating)  
 0x0524009E 158 CAN throttle-valve and load signals  
 0x05250001 1 evaporator sensor  
 0x05250002 2 AUC sensor  
 0x05250003 3 Brightness  
 0x05250004 4 Inner temperature sensor  
 0x05250005 5 Clamp 30  
 0x05250006 6 Outside temperature  
 0x05250007 7 Heat exchanger sensor, left  
 0x05250008 8 Heat exchanger sensor, right  
 0x0525000A 10 water valve, left  
 0x0525000B 11 water valve, right  
 0x0525000C 12 DME-KO  
 0x0525000D 13 Rear window defogger relay  
 0x0525000E 14 Sensor blower  
 0x0525000F 15 DME-AC  
 0x05250010 16 Fresh air flap motor  
 0x05250011 17 Footwell flap motor

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0x05250012 18 Air circulation flap motor  
 0x05250013 19 Ventilation flap motor  
 0x05250014 20 Defrost flap motor  
 0x05250015 21 Vehicle speed signal  
 0x05250016 22 Engine speed signal  
 0x05250017 23 Clamp 58g  
 0x05250018 24 Push button array  
 0x05250019 25 Blower control voltage  
 0x0525001A 26 Controlling LED  
 0x0525001B 27 Controlling LCD  
 0x0525001C 28 Setting value Y, left  
 0x0525001D 29 Setting value Y, right  
 0x0525001E 30 Heat exchanger rated temperature, left  
 0x0525001F 31 Heat exchanger rated temperature, right  
 0x05260000 0 Ventilation flap motor  
 0x05260001 1 air circulation flap motor  
 0x05260002 2 Footwell flap motor  
 0x05260003 3 Defroster flap motor  
 0x05260004 4 Rear compartment flap motor  
 0x05260005 5 Fresh air flap motor  
 0x05260006 6 Latent heat storage system, temperature sensor  
 0x05260007 7 Heat exchanger sensor, left  
 0x05260008 8 Heat exchanger sensor, right  
 0x05260009 9 Evaporator sensor  
 0x0526000A 10 AUC sensor  
 0x0526000B 11 Clamp 30  
 0x0526000D 13 Inner temperature sensor  
 0x0526000E 14 AUC heating  
 0x0526000F 15 Relay, auxiliary fan  
 0x05260010 16 Relay, washer jet heating  
 0x05260011 17 Relay, rear window defogger  
 0x05260012 18 AC compressor magnetic clutch  
 0x05260013 19 DME-KO  
 0x05260014 20 DME-AC  
 0x05260015 21 Auxiliary water pump  
 0x05260016 22 Water valve, left  
 0x05260017 23 Water valve, right  
 0x05260018 24 Park heating locking valve, latent heat storage system cut-off valve  
 0x05260019 25 Park heating wake up line  
 0x0526001A 26 Blower control voltage  
 0x0526001B 27 Setting value Y, left  
 0x0526001C 28 Setting value Y, right  
 0x0526001D 29 Heat exchanger rated temperature, left  
 0x0526001E 30 Heat exchanger rated temperature, right  
 0x0526001F 31 Outside temperature  
 0x05260020 32 vehicle speed  
 0x05260021 33 Coolant temperature  
 0x05260022 34 Engine speed  
 0x05260023 35 Clamp 58g  
 0x05260024 36 LCD back light  
 0x05260025 37 Latent heat storage system, shut-off valve  
 0x05260026 38 Engine runs  
 0x05260027 39 Park ventilation on/off  
 0x05260028 40 Unknown error location  
 0x05260029 41 AUC sensor  
 0x0526002A 42 Sensor blower  
 0x0526002F 47 Unknown error location  
 0x05260030 48 Unknown error location  
 0x05260031 49 Unknown error location  
 0x05260032 50 Unknown error location  
 0x05270000 0 Ventilation flap motor  
 0x05270001 1 air circulation flap motor  
 0x05270002 2 Footwell flap motor

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0x05270003 3 Defroster flap motor  
 0x05270004 4 Rear compartment flap motor  
 0x05270005 5 Fresh air flap motor  
 0x05270006 6 Latent heat storage system, temperature sensor  
 0x05270007 7 Heat exchanger sensor, left  
 0x05270008 8 Heat exchanger sensor, right  
 0x05270009 9 Evaporator sensor  
 0x0527000A 10 AUC sensor  
 0x0527000B 11 Clamp 30  
 0x0527000D 13 Inner temperature sensor  
 0x0527000E 14 AUC heating  
 0x0527000F 15 Relay, auxiliary fan  
 0x05270010 16 Relay, washer jet heating  
 0x05270011 17 Relay, rear window defogger  
 0x05270012 18 AC compressor magnetic clutch  
 0x05270013 19 DME-KO  
 0x05270014 20 DME-AC  
 0x05270015 21 Auxiliary water pump  
 0x05270016 22 Water valve, left  
 0x05270017 23 Water valve, right  
 0x05270018 24 Park heating locking valve, latent heat storage system cut-off valve  
 0x05270019 25 Park heating wake up line  
 0x0527001A 26 Blower control voltage  
 0x0527001B 27 Setting value Y, left  
 0x0527001C 28 Setting value Y, right  
 0x0527001D 29 Heat exchanger rated temperature, left  
 0x0527001E 30 Heat exchanger rated temperature, right  
 0x0527001F 31 Outside temperature  
 0x05270020 32 Vehicle speed  
 0x05270021 33 Coolant temperature  
 0x05270022 34 Engine speed  
 0x05270023 35 Clamp 58g  
 0x05270024 36 LCD back light  
 0x05270025 37 Latent heat storage system, shut-off valve  
 0x05270026 38 Engine runs  
 0x05270027 39 Park ventilation on/off  
 0x05270028 40 Unknown error location  
 0x0527002A 42 Sensor blower  
 0x0527002B 43 Supply voltage, rear compartment potentiometer  
 0x0527002D 45 Rear Compartment potentiometer  
 0x0527002E 46 Pressure sensor  
 0x0527002F 47 Unknown error location  
 0x05270030 48 Unknown error location  
 0x05270031 49 Unknown error location  
 0x05270032 50 Unknown error location  
 0x05280000 0 Ventilation flap motor  
 0x05280001 1 Dynamic pressure flap motor  
 0x05280002 2 Footwell flap motor  
 0x05280003 3 Defroster flap motor  
 0x05280004 4 Rear compartment flap motor  
 0x05280005 5 Fresh air flap motor  
 0x05280006 6 Latent heat storage system, temperature sensor  
 0x05280007 7 Heat exchanger sensor, left  
 0x05280008 8 Heat exchanger sensor, right  
 0x05280009 9 Evaporator sensor  
 0x0528000A 10 AUC sensor  
 0x0528000B 11 Clamp 30  
 0x0528000D 13 Inner temperature sensor  
 0x0528000E 14 AUC heating  
 0x0528000F 15 Relay, auxiliary fan  
 0x05280010 16 Relay, washer jet heating  
 0x05280011 17 Relay, rear window defogger  
 0x05280012 18 AC compressor magnetic clutch

# Bmw Code Sheet.txt

0x05280015 21 Auxiliary water pump  
 0x05280016 22 Water valve, left  
 0x05280017 23 Water valve, right  
 0x05280018 24 Park heating locking valve, latent heat storage system cut-off valve  
 0x05280019 25 Park heating wake up line  
 0x0528001A 26 Blower control voltage  
 0x0528001B 27 Setting value Y, left  
 0x0528001C 28 Setting value Y, right  
 0x0528001D 29 Heat exchanger rated temperature, left  
 0x0528001E 30 Heat exchanger rated temperature, right  
 0x0528001F 31 Outside temperature  
 0x05280020 32 Vehicle speed  
 0x05280021 33 Coolant temperature  
 0x05280022 34 Engine speed  
 0x05280023 35 Clamp 58g  
 0x05280024 36 LCD back light  
 0x05280025 37 Latent heat storage system, shut-off valve  
 0x05280026 38 Engine runs  
 0x05280027 39 Park ventilation on/off  
 0x05280028 40 Unknown error location  
 0x05280029 41 Additional heater  
 0x0528002A 42 Sensor blower  
 0x0528002B 43 Supply voltage, rear compartment potentiometer  
 0x0528002D 45 Rear Compartment potentiometer  
 0x0528002E 46 Pressure sensor  
 0x0528002F 47 Unknown error location  
 0x05280030 48 Unknown error location  
 0x05280031 49 Unknown error location  
 0x05280032 50 Unknown error location  
 0x05290001 1 Fresh air flap motor  
 0x05290002 2 Inner temperature sensor  
 0x05290003 3 Heat exchanger sensor  
 0x05290004 4 Evaporator sensor  
 0x05290005 5 Pressure sensor  
 0x05290006 6 latent heat storage system, temperature sensor  
 0x05290007 7 Clamp 30  
 0x05290008 8 Blower potentiometer  
 0x05290009 9 Temperature control  
 0x0529000A 10 Relay, auxiliary fan  
 0x0529000B 11 Relay, washer jet heating  
 0x0529000C 12 Relay, rear window defogger  
 0x0529000D 13 AC compressor magnetic clutch  
 0x0529000E 14 Auxiliary water pump  
 0x0529000F 15 Water valve  
 0x05290010 16 Park heating locking valve  
 0x05290011 17 Park heating wake up line  
 0x05290012 18 Latent heat storage system, shut-off valve  
 0x05290013 19 Additional heater  
 0x05290014 20 Blower control voltage  
 0x05290015 21 Supply voltage sensor  
 0x05290016 22 Setting value Y  
 0x05290017 23 Heat exchanger rated temperature  
 0x05290018 24 DME-KO  
 0x05290019 25 DME-AC  
 0x0529001A 26 Outside temperature  
 0x0529001B 27 Vehicle speed  
 0x0529001C 28 Coolant temperature  
 0x0529001D 29 Engine speed  
 0x0529001E 30 Clamp 58g  
 0x05290020 32 Engine runs  
 0x05290021 33 Park ventilation on/off  
 0x05290022 34 Park heating on/off  
 0x052A0001 1 Fresh air flap motor

# Bmw Code Sheet.txt

0x052A0002 2 Inner temperature sensor  
 0x052A0003 3 Heat exchanger sensor  
 0x052A0004 4 Evaporator sensor  
 0x052A0005 5 Pressure sensor  
 0x052A0006 6 latent heat storage system, temperature sensor  
 0x052A0007 7 Clamp 30  
 0x052A0008 8 Blower potentiometer  
 0x052A0009 9 Temperature control  
 0x052A000A 10 Relay, auxiliary fan  
 0x052A000B 11 Relay, washer jet heating  
 0x052A000C 12 Relay, rear window defogger  
 0x052A000D 13 AC compressor magnetic clutch  
 0x052A000E 14 Auxiliary water pump  
 0x052A000F 15 water valve  
 0x052A0010 16 Park heating locking valve  
 0x052A0011 17 Park heating wake up line  
 0x052A0012 18 Latent heat storage system, shut-off valve  
 0x052A0013 19 Additional heater  
 0x052A0014 20 Blower control voltage  
 0x052A0015 21 Supply voltage sensor  
 0x052A0016 22 Setting value Y  
 0x052A0017 23 Heat exchanger rated temperature  
 0x052A0018 24 DME-KO  
 0x052A0019 25 DME-AC  
 0x052A001A 26 Outside temperature  
 0x052A001B 27 Vehicle speed  
 0x052A001C 28 Coolant temperature  
 0x052A001D 29 Engine speed  
 0x052A001E 30 Clamp 58g  
 0x052A0020 32 Engine runs  
 0x052A0021 33 Park ventilation on/off  
 0x052A0022 34 Park heating on/off  
 0x052B0000 00 Ventilation-flap motor  
 0x052B0001 01 Dynamic-Pressure-flap motor  
 0x052B0002 02 Footwell flap motor  
 0x052B0003 03 Defrosting-flap motor  
 0x052B0004 04 Rear-compartment-flap motor  
 0x052B0005 05 Fresh-air/recirculated-air-flap motor  
 0x052B0007 07 Blower control voltage  
 0x052B0008 08 inter-temperature sensor in control panel  
 0x052B0009 09 Phototransistor in control panel  
 0x052B000A 0A AUC sensor  
 0x052B000B 0B Heat-exchanger sensor, right  
 0x052B000E 0E Rear-compartment potentiometer  
 0x052B000F 0F Rear-compartment blower  
 0x052B0010 10 Terminal 30  
 0x052B0011 11 Solar sensor, right  
 0x052B0012 12 Evaporator sensor  
 0x052B0013 13 Heat-exchanger sensor, left  
 0x052B0014 14 Solar sensor, left  
 0x052B0015 15 Pressure sensor  
 0x052B0016 16 Supply, rear-compartment potentiometer  
 0x052B0017 17 AUC heating  
 0x052B0018 18 Relay supplementary fan  
 0x052B0019 19 Relay, spray-nozzle heating  
 0x052B001A 1A Relay, heated rear window  
 0x052B001B 1B Magnetic coupling, A/C compressor  
 0x052B001E 1E Auxiliary-water pump  
 0x052B001F 1F water valve, left  
 0x052B0020 20 water valve, right  
 0x052B0023 23 Blower control voltage  
 0x052B0024 24 Manipulated variable Y, left  
 0x052B0025 25 Manipulated variable Y, right

# Bmw Code Sheet.txt

0x052B0026 26 Specified heat-exchanger temperature, left  
 0x052B0027 27 Specified heat-exchanger temperature, right  
 0x052B0029 29 Vehicle speed  
 0x052B002A 2A Coolant temperature  
 0x052B002B 2B Engine speed  
 0x052B002C 2C Terminal 58g  
 0x052B002D 2D LDC backlighting  
 0x052B002F 2F Engine running  
 0x052B0030 30 Independent ventilation  
 0x052B0031 31 Independent heating  
 0x052B0032 32 Auxiliary heater  
 0x052B0033 33 inside-sensor fan  
 0x052B0034 34 Transport mode active  
 0x052C0000 00 Footwell-flap motor  
 0x052C0001 01 Defrosting-flap motor  
 0x052C0002 02 Recirculated-air-flap motor  
 0x052C0003 03 Ventilation-flap motor  
 0x052C0004 04 Temperature-mixing-flap motor  
 0x052C0005 05 Fresh-air-flap motor  
 0x052C0006 06 Pressure sensor  
 0x052C0007 07 Evaporator sensor  
 0x052C0008 08 Terminal 30  
 0x052C0009 09 Supply voltage, sensor  
 0x052C000A 10 Program selsct, switch, potentiometer  
 0x052C000B 11 Potentiometer, air distribution  
 0x052C000C 12 Specified-value actuator  
 0x052C001D 13 Relay, heated rear window  
 0x052C001F 15 Relay, blower max.  
 0x052C0010 16 Auxiliary-water pump  
 0x052C0011 17 Independent heating, non-return valve  
 0x052D0000 00 Fresh-air/recalculated-air-flap motor, left  
 0x052D0001 01 Fresh-air/recalculated-air-flap motor, right  
 0x052D0002 02 Air-distribution-flap motor  
 0x052D0003 03 Heat-exchanger sensor  
 0x052D0004 04 Evaporator sensor  
 0x052D0005 05 Pressure sensor  
 0x052D0006 06 Air distribution, potentiometer  
 0x052D000B 11 Specified-value actuator  
 0x052D000C 12 Blower control voltage  
 0x052D0011 17 Heated rear window  
 0x052D0012 18 water valve  
 0x052D001E 30 Switch, air distribution  
 0x052D00FF FF Transport mode active  
 0x052E0000 00 Ventilation-flap motor  
 0x052E0001 01 Dynamic-Pressure-flap motor  
 0x052E0002 02 Footwell flap motor  
 0x052E0003 03 Defrosting-flap motor  
 0x052E0004 04 Rear-compartment-flap motor  
 0x052E0005 05 Fresh-air/recalculated-air-flap motor  
 0x052E0007 07 Blower control voltage  
 0x052E0008 08 inter-temperature sensor in control panel  
 0x052E0009 09 Phototransistor in control panel  
 0x052E000A 0A AUC sensor  
 0x052E000B 0B Heat-exchanger sensor, right  
 0x052E000E 0E Rear-compartment potentiometer  
 0x052E000F 0F Rear-compartment blower  
 0x052E0010 10 Terminal 30  
 0x052E0011 11 Solar sensor, right  
 0x052E0012 12 Evaporator sensor  
 0x052E0013 13 Heat-exchanger sensor, left  
 0x052E0014 14 Solar sensor, left  
 0x052E0015 15 Pressure sensor  
 0x052E0016 16 Supply, rear-compartment potentiometer

# Bmw Code Sheet.txt

0x052E0017 17 AUC heating  
 0x052E0018 18 Relay supplementary fan  
 0x052E0019 19 Relay, spray-nozzle heating  
 0x052E001A 1A Relay, heated rear window  
 0x052E001B 1B Magnetic clutching, A/C compressor  
 0x052E001E 1E Auxiliary-water pump  
 0x052E001F 1F Water valve, left  
 0x052E0020 20 Water valve, right  
 0x052E0023 23 Blower control voltage  
 0x052E0024 24 Manipulated variable Y, left  
 0x052E0025 25 Manipulated variable Y, right  
 0x052E0026 26 Specified heat-exchanger temperature, left  
 0x052E0027 27 Specified heat-exchanger temperature, right  
 0x052E0029 29 Vehicle speed  
 0x052E002A 2A Coolant temperature  
 0x052E002B 2B Engine speed  
 0x052E002C 2C Terminal 58g  
 0x052E002D 2D LCD backlighting  
 0x052E002F 2F Engine running  
 0x052E0030 30 Independent ventilation  
 0x052E0031 31 Independent heating  
 0x052E0032 32 Auxiliary heater  
 0x052E0033 33 inside-sensor fan  
 0x052E0034 34 Transport mode active  
 0x052F0000 00 Footwell-flap motor  
 0x052F0001 01 Defrosting-flap motor  
 0x052F0002 02 Recalculated-air-flap motor  
 0x052F0003 03 Ventilation-flap motor  
 0x052F0004 04 Temperature-mixing-flap motor  
 0x052F0005 05 Fresh-air-flap motor  
 0x052F0006 06 Pressure sensor  
 0x052F0007 07 Evaporator sensor  
 0x052F0008 08 Terminal 30  
 0x052F0009 09 Supply voltage, sensor  
 0x052F000A 10 Program select, switch, potentiometer  
 0x052F000B 11 Potentiometer, air distribution  
 0x052F000C 12 Specified-value actuator  
 0x052F000D 13 Relay, heated rear window  
 0x052F000F 15 Relay, blower max.  
 0x052F0010 16 Auxiliary-water pump  
 0x052F0011 17 Independent heating, non-return valve  
 0x05300001 01 Solar sensor  
 0x05300002 02 Inside-temperature sensor  
 0x05300003 03 Heat-exchanger sensor  
 0x05300004 04 Position, air-distribution flap  
 0x05300005 05 Position, temperature mixing flap  
 0x05300006 06 Blower  
 0x05300007 07 Blower  
 0x05300008 08 Fan, inside-temperature sensor  
 0x05300009 09 Motor, air-distribution flap  
 0x0530000A 0A Motor, temperature mixing flap  
 0x05310002 02 Inside-temperature sensor (Footwell)  
 0x05310003 03 Heat-exchanger sensor  
 0x05310004 04 Evaporator sensor  
 0x05310005 05 Pressure sensor  
 0x05310007 07 Terminal 30  
 0x05310008 08 Blower potentiometer  
 0x05310009 09 Setpoint potentiometer  
 0x0531000A 0A Relay, auxiliary fan  
 0x0531000B 0B Relay, spray-nozzle heating  
 0x0531000C 0C Relay, heated rear window  
 0x0531000D 0D Compressor clutch  
 0x0531000F 0F Water valve

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0x05310010 10 Ind. htg. non-return valve, lha chang'r valve  
 0x05310011 11 Independent heating, activation wire  
 0x05310013 13 Auxiliary heater  
 0x05310014 14 Blower control voltage  
 0x05310015 15 Supply voltage, sensor  
 0x05310023 23 Transport mode active  
 0x05320001 01 Defrosting-flap motor  
 0x05320002 02 Footwell flap motor  
 0x05320003 03 Fresh air/recirculated-air flap motor, left  
 0x05320004 04 Fresh air/recirculated-air flap motor, right  
 0x05320006 06 Supply, AUC sensor/pressure sensor  
 0x0532000B 0B Evaporator sensor  
 0x0532000D 0D Heat-exchanger sensor  
 0x05320012 12 Interior temperature  
 0x05320015 15 Relay, heated rear window  
 0x05320016 16 Relay, auxiliary heater  
 0x05320017 17 Auxiliary water pump  
 0x05320018 18 Water valve  
 0x05320019 19 Blower control voltage  
 0x0532001A 1A Inside-sensor fan  
 0x0532001B 1B Engine speed  
 0x0532001C 1C AUC sensor  
 0x0532001D 1D Pressure sensor  
 0x0532001E 1E AUC heating  
 0x05320021 21 Solar sensor  
 0x05330000 00 Ventilation-flap motor  
 0x05330001 01 Defroster flap motor  
 0x05330002 02 Footwell flap motor  
 0x05330003 03 Fresh air/recirculated-air flap motor, left  
 0x05330004 04 Fresh air/recirculated-air flap motor, right  
 0x05330005 05 Incorrect IHKR Air conditioner  
 0x05330006 06 Pressure sensor, AUC supply  
 0x05330017 17 Relay, heated rear window  
 0x05330019 19 Auxiliary water pump  
 0x0533001A 1A Water valve  
 0x0533001B 1B Blower control voltage  
 0x0533001C 1C Inter-temperature sensor  
 0x0533001E 1E AUC sensor  
 0x0533001F 1F Pressure sensor  
 0x05330020 20 AUC heating  
 0x05330021 21 Solar sensor (Short circuit to positive)  
 0x05330022 22 Info: specified heat-exchanger temperature  
 0x05330023 23 Info: K bus: outside temperature (Short circuit to positive; Short circuit to negative)  
 0x05330024 24 Info: K bus: speed  
 0x05330025 25 Info: K bus: Coolant temperature (Short circuit to positive)  
 0x05330026 26 Info: K bus: engine speed  
 0x05330027 27 Info: K bus: terminal 58G (Short circuit positive; Short circuit to negative)  
 0x05330028 28 Info: K bus: engine running  
 0x05330029 29 Info: K bus: dimming (Short circuit to positive)  
 0x0533002A 2A Info: Controlled variable, higher-level controller  
 0x0533002B 2B Info: Keypad feedback LEDs (Short circuit positive; Short circuit to negative)  
 0x0533002C 2C Info: display: segment activation  
 0x0533002D 2D Info: key actuation (Short circuit to positive)  
 0x0533002E 2E Info: display backing lighting  
 0x0533002F 2F Info: PWM button lighting (Short circuit positive; Short circuit to negative)  
 0x053300FF FF Energy-saving mode active(Short circuit positive; Short circuit to negative)  
 0x05340000 00 Ventilation-flap motor  
 0x05340001 01 Dynamic-Pressure-flap motor



# Bmw Code Sheet.txt

0x05340002 02 Footwell flap motor  
 0x05340003 03 Defrosting-flap motor  
 0x05340004 04 Rear-compartment-flap motor  
 0x05340005 05 Fresh-air/recirculated-air-flap motor  
 0x05340007 07 Blower control voltage  
 0x05340008 08 inter-temperature sensor in control panel  
 0x05340009 09 Phototransistor in control panel  
 0x0534000A 0A AUC sensor  
 0x0534000B 0B Heat-exchanger sensor, right  
 0x0534000E 0E Rear-compartment potentiometer  
 0x0534000F 0F Rear-compartment blower  
 0x05340010 10 Terminal 30  
 0x05340011 11 Solar sensor, right  
 0x05340012 12 Evaporator sensor  
 0x05340013 13 Heat-exchanger sensor, left  
 0x05340014 14 Solar sensor, left  
 0x05340015 15 Pressure sensor  
 0x05340016 16 Supply, rear-compartment potentiometer  
 0x05340017 17 AUC heating  
 0x05340018 18 Relay supplementary fan  
 0x05340019 19 Relay, spray-nozzle heating  
 0x0534001A 1A Relay, heated rear window  
 0x0534001B 1B Magnetic clutching, A/C compressor  
 0x0534001E 1E Auxiliary-water pump  
 0x0534001F 1F Water valve, left  
 0x05340020 20 Water valve, right  
 0x05340023 23 Blower control voltage  
 0x05340024 24 Manipulated variable Y, left  
 0x05340025 25 Manipulated variable Y, right  
 0x05340026 26 Specified heat-exchanger temperature, left  
 0x05340027 27 Specified heat-exchanger temperature, right  
 0x05340029 29 Vehicle speed  
 0x0534002A 2A Coolant temperature  
 0x0534002B 2B Engine speed  
 0x0534002C 2C Terminal 58g  
 0x0534002D 2D LCD backlighting  
 0x0534002F 2F Engine running  
 0x05340030 30 Independent ventilation  
 0x05340031 31 Independent heating  
 0x05340032 32 Auxiliary heater  
 0x05340033 33 inside-sensor fan  
 0x05340034 34 Transport mode active  
 0x05350000 00 Ventilation-flap motor  
 0x05350001 01 Defrosting-flap motor  
 0x05350002 02 Footwell flap motor  
 0x05350003 03 Fresh-air/recirculated-air flap motor, left  
 0x05350004 04 Fresh-air/recirculated-air flap motor, right  
 0x05350005 05 Incorrect IHKR air conditioner  
 0x05350006 06 Pressure sensor, AUC supply  
 0x05350017 17 Relay, rear window defroster  
 0x05350018 18 Auxiliary heater, relay  
 0x05350019 19 Auxiliary water pump  
 0x0535001A 1A Water valve  
 0x0535001B 1B Blower control voltage  
 0x0535001C 1C Interior temperature sensor  
 0x0535001D 1D Communication with auxiliary heater  
 0x0535001E 1E AUC sensor  
 0x0535001F 1F Pressure sensor  
 0x05350020 20 AUC heating  
 0x05350021 21 Solar sensor  
 0x05350022 22 Info: specified heat-exchanger temperature  
 0x05350023 23 Info: K bus: outside temperature  
 0x05350024 24 Info: K bus: speed

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0x05350025 25 Info: K bus: coolant temperature  
 0x05350026 26 Info: K bus: engine speed  
 0x05350027 27 Info: K bus: terminal 58G  
 0x05350028 28 Info: K bus: engine running  
 0x05350029 29 Info: K bus: dimming  
 0x0535002A 2A Info: controlled variable, higher-level controller  
 0x0535002B 2B Info: keypad feedback LEDs  
 0x0535002C 2C Info: display: segment activation  
 0x0535002D 2D Info: key actuation  
 0x0535002E 2E Info: display backlighting  
 0x0535002F 2F Info: PWM button lighting  
 0x05360002 02 Compressor clutch  
 0x05360006 06 Supply, pressure sensor AUC  
 0x05360008 08 Pressure sensor  
 0x0536000E 0E Blower control voltage  
 0x0536000F 0F AUC sensor  
 0x05360011 11 Potentiometer, fan  
 0x05360012 12 Potentiometer, temperature  
 0x05360016 16 Relay 1,heated rear window  
 0x05360017 17 Relay 2,heated rear window  
 0x05360018 18 Auxiliary-water pump  
 0x0536001A 1A Water valve  
 0x0536001F 1F Motor,defrosting flap  
 0x05360020 20 Motor,ventilation flap  
 0x05360021 21 Motor,footwell flap  
 0x05360022 22 Motor,fresh-air/recirculated-air flap  
 0x05360023 23 Motor,temperature mixing flap  
 0x05360026 26 Evaporator temperature sensor  
 0x05360027 27 Mixing-air temperature sensor  
 0x05360033 33 K bus,outside temperature  
 0x05360034 34 K bus,vehicle speed  
 0x05360035 35 K bus,engine speed  
 0x05360036 36 K bus,coolant temperature  
 0x05360050 50 Incorrect A/C box fitted  
 0x05360051 51 LHD/RHD implausible coding  
 0x053600FF FF Transport mode active

0x05410000 0 Blower potentiometer  
 0x05410002 2 Stratification Potentiometer  
 0x05410003 3 Heat exchanger sensor, right  
 0x05410004 4 Heat exchanger sensor, left  
 0x05410005 5 Evaporator sensor  
 0x05410006 6 Inner temperature sensor  
 0x05410007 7 Outside temperature sensor  
 0x05410008 8 Temperature control, right  
 0x05410009 9 Temperature control, left  
 0x0541000C 12 Park heating/park ventilation  
 0x05410012 18 Starter (clamp 50)  
 0x05410014 20 AUC  
 0x05410019 25 Stratification flap motor  
 0x0541001A 26 Air circulation flap motor  
 0x0541001B 27 Fresh air flap motor  
 0x0541001C 28 Water valve, right  
 0x0541001D 29 Water valve, left  
 0x05410020 32 Sensor blower  
 0x05410023 35 DME/EML  
 0x05410024 36 Rear window defogger  
 0x05410025 37 Magnetic clutch  
 0x05410027 29 Auxiliary water pump  
 0x05420000 0 Blower potentiometer  
 0x05420002 2 Stratification potentiometer  
 0x05420003 3 Heat exchanger sensor, right  
 0x05420004 4 Heat exchanger sensor, left

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0x05420005 5 Evaporator sensor  
 0x05420006 6 Inner temperature sensor  
 0x05420007 7 Out temperature sensor  
 0x05420008 8 Temperature control, right  
 0x05420009 9 Temperature control, left  
 0x0542000D 13 Park heating/park ventilation  
 0x05420013 19 Starter (clamp 50)  
 0x05420015 21 AUC  
 0x05420019 25 Stratification flap motor  
 0x0542001A 26 Air Circulation flap motor  
 0x0542001B 27 Fresh air flap motor  
 0x0542001C 28 Water Valve, right  
 0x0542001D 29 Water valve, Left  
 0x05420020 32 Sensor blower  
 0x05420023 35 DME/EPC  
 0x05420024 36 Rear window defogger  
 0x05420025 37 Magnetic clutch  
 0x05619C48 9C48 Fresh air/recirculated air flap motor, left  
 0x05619C49 9C49 Fresh air/recirculated air flap motor, right  
 0x05619C4A 9C4A Defrosting flap motor  
 0x05619C4B 9C4B Ventilation-flap motor, left  
 0x05619C4C 9C4C Ventilation-flap motor, right  
 0x05619C4D 9C4D Cold-air-flap motor  
 0x05619C4E 9C4E Footwell-flap motor, left  
 0x05619C4F 9C4F Footwell-flap motor, right  
 0x05619C50 9C50 Rear compartment stratification flap motor  
 0x05619C53 9C53 Electric auxiliary heater  
 0x05619C54 9C54 AUC sensor  
 0x05619C55 9C55 Fogging sensor  
 0x05619C57 9C57 Blower power stage  
 0x05619C58 9C58 Temperature control knob, left  
 0x05619C59 9C59 Temperature control knob, right  
 0x05619C5A 9C5A Fan control wheel  
 0x05619C5B 9C5B Interior-temperature sensor  
 0x05619C5C 9C5C Evaporator temperature sensor  
 0x05619C5D 9C5D Refrigerant-pressure-sensor supply  
 0x05619C5E 9C5E Refrigerant-pressure sensor  
 0x05619C60 9C60 Heat exchanger for heating system, sensor, right  
 0x05619C65 9C65 Current consumption, component supply  
 0x05619C66 9C66 Internal control-module fault  
 0x05619C67 9C67 Heat exchanger for heating system, sensor, left  
 0x05619C68 9C68 Ventilation temperature sensor  
 0x05619C69 9C69 Rear compartment stratification controller  
 0x05619C6A 9C6A Solar sensor, left  
 0x05619C6B 9C6B Solar sensor, right  
 0x05619C6C 9C6C AUC sensor supply monitoring  
 0x05619C6D 9C6D Solar sensor, supply monitoring  
 0x05619C6E 9C6E Rear compartment controller, supply monitoring  
 0x05619C6F 9C6F Fogging sensor, supply monitoring  
 0x05619C77 9C77 Auxiliary-water pump  
 0x05619C78 9C78 Washer nozzle heating  
 0x05619C79 9C79 Water valve, left  
 0x05619C7A 9C7A Water valve, right  
 0x05619C7B 9C7B Interior temperature sensor fan  
 0x05619C7C 9C7C Refrigerant compressor check valve  
 0x05619C7E 9C7E Rear-window defroster control  
 0x05619C7F 9C7F Coding data area  
 0x05619CA7 9CA7 Transport mode active  
 0x05629C48 9C48 Mixing-flap motor, left  
 0x05629C49 9C49 Mixing-flap motor, right  
 0x05629C4A 9C4A Fresh-air/recirculated-air-flap motor  
 0x05629C4B 9C4B Defrosting flap motor  
 0x05629C4C 9C4C Footwell flap motor

# Bmw Code Sheet.txt

0x05629C4E 9C4E Front stratification-flap motor  
 0x05629C50 9C50 Rear compartment stratification flap motor  
 0x05629C52 9C52 Ventilation flap motor  
 0x05629C53 9C53 Electric auxiliary heater  
 0x05629C56 9C56 Footwell temperature sensor  
 0x05629C58 9C58 Interior temperature sensor  
 0x05629C5F 9C5F Ventilation temperature sensor  
 0x05629C61 9C61 Supply, switch center, center console 5V  
 0x05629C62 9C62 Evaporator temperature sensor  
 0x05629C6C 9C6C Supply, switch center, center console 12V  
 0x05629C6E 9C6E Solar sensor  
 0x05629C7B 9C7B Interior temperature sensor fan  
 0x05629C90 9C90 Integrated Automatic Heating/Air Conditioning (IHKA)  
 0x05629CA7 9CA7 Transport mode active  
 0x05639C4A 9C4A Fresh-air/recirculated-air-flap motor  
 0x05639C54 9C54 New addressing, flap motors  
 0x05639C56 9C56 Ventilation temperature sensor  
 0x05639C6C 9C6C Supply, switch centre, centre console 12V  
 0x05639C90 9C90 Integrated heating/air-conditioning regulation (IHKR)  
 0x05649C48 9C48 Fresh air/recirculated air flap motor, left  
 0x05649C49 9C49 Fresh air/recirculated air flap motor, right  
 0x05649C4A 9C4A Defrosting flap motor  
 0x05649C4B 9C4B Ventilation-flap motor, left  
 0x05649C4C 9C4C Ventilation-flap motor, right  
 0x05649C4D 9C4D Cold-air-flap motor  
 0x05649C4E 9C4E Footwell-flap motor, left  
 0x05649C4F 9C4F Footwell-flap motor, right  
 0x05649C50 9C50 Rear compartment stratification flap motor  
 0x05649C53 9C53 Electric auxiliary heater  
 0x05649C54 9C54 AUC sensor  
 0x05649C55 9C55 Fogging sensor  
 0x05649C57 9C57 Blower power stage  
 0x05649C58 9C58 Temperature control knob, left  
 0x05649C59 9C59 Temperature control knob, right  
 0x05649C5A 9C5A Fan control wheel  
 0x05649C5B 9C5B Interior-temperature sensor  
 0x05649C5C 9C5C Evaporator temperature sensor  
 0x05649C5D 9C5D Refrigerant-pressure-sensor supply  
 0x05649C5E 9C5E Refrigerant-pressure sensor  
 0x05649C60 9C60 Heat exchanger for heating system, sensor, right  
 0x05649C65 9C65 Current consumption, component supply  
 0x05649C66 9C66 Internal control-module fault  
 0x05649C67 9C67 Heat exchanger for heating system, sensor, left  
 0x05649C68 9C68 Ventilation temperature sensor  
 0x05649C69 9C69 Rear compartment stratification controller  
 0x05649C6A 9C6A Solar sensor, left  
 0x05649C6B 9C6B Solar sensor, right  
 0x05649C6C 9C6C AUC sensor supply monitoring  
 0x05649C6D 9C6D Solar sensor, supply monitoring  
 0x05649C6E 9C6E Rear compartment controller, supply monitoring  
 0x05649C6F 9C6F Fogging sensor, supply monitoring  
 0x05649C77 9C77 Auxiliary-water pump  
 0x05649C78 9C78 washer nozzle heating  
 0x05649C79 9C79 water valve, left  
 0x05649C7A 9C7A water valve, right  
 0x05649C7B 9C7B Interior temperature sensor fan  
 0x05649C7C 9C7C Refrigerant compressor check valve  
 0x05649C7E 9C7E Rear-window defroster control  
 0x05649C7F 9C7F Coding data area  
 0x05649CA7 9CA7 Transport mode active  
 0x05659C48 9C48 Hot-air-flap motor, left  
 0x05659C49 9C49 Hot-air-flap motor, right  
 0x05659C4A 9C4A Recirculated-air-flap motor

# Bmw Code Sheet.txt

0x05659C4B 9C4B Deforsting flap motor  
 0x05659C4C 9C4C Footwell-flap motor, left  
 0x05659C4D 9C4D Footwell-flap motor, right  
 0x05659C4E 9C4E Cold-air-flap motor, left  
 0x05659C4F 9C4F Cold-air-flap motor, right  
 0x05659C50 9C50 Rear-compartment ventilation-flap motor, left  
 0x05659C51 9C51 Rear-compartment ventilation-flap motor, right  
 0x05659C52 9C52 No signal or value  
 0x05659C55 9C55 Fresh-air-flap motor  
 0x05659C56 9C56 Recirculated-air-flap motor in rapid mode  
 0x05659C57 9C57 Blower output stage  
 0x05659C58 9C58 Inside-temperature sensor  
 0x05659C59 9C59 Current consumption, compressor control  
 0x05659C5A 9C5A Current consumption, auxiliary-water pump  
 0x05659C5B 9C5B Refrigerant-pressure-sensor supply  
 0x05659C5C 9C5C Automatic recirculated-air control (AUC) supply  
 0x05659C5D 9C5D Signal or value below threshold  
 0x05659C5F 9C5F Ventilation-temperature sensor, left  
 0x05659C60 9C60 Ventilation-temperature sensor, right  
 0x05659C61 9C61 Solar-sensor supply monitoring  
 0x05659C62 9C62 Evaporator-temperature sensor  
 0x05659C63 9C63 Refrigerant-pressure sensor  
 0x05659C64 9C64 Automatic recirculated-air control (AUC) sensor  
 0x05659C65 9C65 Heat-exchanger sensor, left  
 0x05659C66 9C66 Heat-exchanger sensor, right  
 0x05659C67 9C67 Temperature selector, left  
 0x05659C68 9C68 Temperature selector, right  
 0x05659C69 9C69 Air volume (high left)  
 0x05659C6A 9C6A Air volume, right  
 0x05659C6B 9C6B Automatic recirculated-air control (AUC) monitoring  
 0x05659C6D 9C6D Rear roller blind, monitoring  
 0x05659C6E 9C6E Solar sensor, left  
 0x05659C6F 9C6F Solar sensor, right  
 0x05659C70 9C70 Signal or value above threshold  
 0x05659C71 9C71 Rear-compartment-potentiometer supply  
 0x05659C72 9C72 Rear-compartment stratification, left  
 0x05659C73 9C73 Rear-compartment stratification, right  
 0x05659C74 9C74 Rear-compartment air volume, left  
 0x05659C75 9C75 Rear-compartment air volume, right  
 0x05659C76 9C76 Auxiliary-water pump  
 0x05659C77 9C77 Refrigerant compressor  
 0x05659C78 9C78 Wiper-console heater  
 0x05659C79 9C79 Water value, left  
 0x05659C7A 9C7A Water value, right  
 0x05659C7B 9C7B inside-sensor fan  
 0x05659C7D 9C7D Rear roller blind  
 0x05659C82 9C82 Independent-heating deactivation (insufficient fuel)  
 0x05659C83 9C83 Internal fault (checksum)  
 0x05659C84 9C84 Instrument cluster, communication fault (distance travelled)  
 0x05659C85 9C85 Car Access System(CAS), communication fault  
 0x05659C86 9C86 Heated rear window  
 0x05659C87 9C87 Electric fan  
 0x05659C88 9C88 Instrument cluster, communication fault  
 0x05659C90 9C90 Engine control unit, communication fault  
 0x05659C92 9C92 Instrument cluster, communication fault  
 0x05659C93 9C93 Dynamic Stability Control (DSC), communication fault  
 0x05659C94 9C94 Engine control unit, communication fault (coolant temperature)  
 0x05659C95 9C95 Engine control unit, communication fault (engine speed)  
 0x05659C96 9C96 Dimmer seting, communication fault  
 0x05659C97 9C97 Power module, communication fault  
 0x05659C98 9C98 Independent heating, communication fault  
 0x05659CA7 9CA7 Transport mode active

# Bmw Code Sheet.txt

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//IKE
0x0621003F 63 Measure works driver
0x06210044 68 oil pressure
0x06210083 131 Speed A
0x06210087 135 K bus
0x06210088 136 I bus
0x0621008B 139 Chime 3
0x0621008C 140 Clamp R
0x0621008D 141 ATS signal: telegram error or no telegram
0x0621008F 143 Voltage too high (>16V)
0x06210090 144 Clamp 15
0x062100BE 190 Light Modules EERPOM error
0x062100BF 191 COMBI EERPOM cooling, incorrect/incomplete
0x062100C1 193 TWEG+ signal, input pulse generator wheel
0x062100C3 195 Signal TD, engine speed signal
0x062100C7 199 Lever-type sensor 1
0x062100CE 206 Outside temperature
0x062100CF 207 SII reset
0x062100D3 211 Coolant temperature
0x062100D7 215 Lever-type sensor 2
0x062100F4 244 CAN bus error: 244
0x062100FB 251 CAN bus error: 251
0x06220011 7 TOG
0x06220083 131 Speed A
0x06220087 135 K bus
0x0622008C 140 Clamp R
0x0622008F 143 Voltage too high (>16V)
0x062200BE 190 Light module EERPOM error
0x062200BF 191 COMBI EERPOM coding, Incorrect/incomplete
0x062200C1 193 TWEG+ signal, input pulse generator wheel
0x062200C7 199 left lever-type sensor
0x062200CE 206 Outside temperature
0x062200CF 207 SII side
0x062200D7 215 Right lever-type sensor
0x062200F0 240 CAN bus off
0x062200F4 244 No CAN ID
0x062200F5 245 No CAN ID, ASC 1
0x062200F6 246 No CAN ID, DME 1
0x062200F7 247 No CAN ID, DME 2
0x062200F8 248 No CAN ID, DME 4
0x062200FB 251 No CAN ID, EGS 1
0x0623003E 62 62 Measure works driver
0x0623003F 63 63 Latch-up measure works driver
0x06230083 131 131 Speed A
0x0623008C 140 140 Clamp R
0x0623008F 143 143 Voltage too high (>16V)
0x062300C1 193 193 TWEG+ signal, input pulse generator wheel
0x062300C3 195 195 Signal TD, engine speed signal
0x062300C7 199 199 Lever-type sensor 1
0x062300CE 206 206 Outside temperature
0x062300CF 207 207 SII reset
0x062300D3 211 211 Coolant temperature
0x062300F0 240 240 CAN bus off
0x062300F4 244 244 No CAN ID
0x062300F5 245 245 NO CAN ID, ASC 1
0x062300F6 246 246 No CAN ID, DME 1
0x062300F7 247 247 No CAN ID, DME 2
0x062300F8 248 248 No CAN ID, DME 4
0x062300FB 251 251 No CAN ID, EGS 1
0x062300FC 252 252 No CAN ID, MST 1
0x06250011 28 Acoustic transmitter disconnected (gong tone 1/2/3)
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# Bmw Code Sheet.txt

0x0625003E 25 Fault when activating indicator instruments  
 0x0625003F 19 Excess current affecting instrument  
 0x06250044 15 Oil pressure switch  
 0x06250083 22 Roadspeed signal (speedo-A)  
 0x06250084 29 Gong, sound, volume (GAL)  
 0x06250086 30 Gong sound (T6)  
 0x06250087 24 Body bus (K-bus)  
 0x06250088 23 Instrumentation bus (I-bus)  
 0x0625008B 18 Gong tone (T3)  
 0x0625008C 13 Voltage supply terminal R faulty  
 0x0625008D 11 EGS signal disturbed or transmission limp-home program  
 0x0625008F 10 Excess voltage in the voltage supply  
 0x06250090 12 Voltage supply terminal 15 faulty  
 0x06250091 17 Gong tone (T2)  
 0x06250092 16 Gong tone (T1)  
 0x062500BC 32 Brake-fluid level  
 0x062500BD 31 Electronic brake-force distribution (EBV)  
 0x062500BE 20 Fault entry for internal fault in light module  
 0x062500BF 21 Internal fault in the  
 0x062500C1 3 Travel signal from ABS/ASC/DSC control module  
 0x062500C3 4 Speed signal tD from engine control module  
 0x062500C6 27 Output PIN 6 "Code EWS" Plug X10114 (blue)  
 0x062500C7 8 Tank sensor 1 (fuel pump side)  
 0x062500CD 1 Consumption signal from engine contr. module  
 0x062500CE 7 Outside temperature sensor  
 0x062500CF 14 Service Interval display (SIA) Reset  
 0x062500D3 5 Coolant temperature sensor  
 0x062500D7 9 Tank sensor 2 (without fuel pump)  
 0x062500F0 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500F4 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500F5 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500F6 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500F8 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500F9 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500FA 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500FB 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500FC 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062500FE 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x06260011 28 Acoustic transmitter disconnected (gong tone 1/2/3)  
 0x0626003E 25 Fault when activating indicator instruments  
 0x0626003F 19 Excess current affecting instrument  
 0x06260044 15 Oil pressure switch  
 0x06260083 22 Roadspeed signal (speedo-A)  
 0x06260084 29 Gong, sound, volume (GAL)  
 0x06260086 30 Gong sound (T6)  
 0x06260087 24 Body bus (K-bus)  
 0x06260088 23 Instrumentation bus (I-bus)  
 0x0626008B 18 Gong tone (T3)  
 0x0626008C 13 Voltage supply terminal R faulty  
 0x0626008D 11 EGS signal disturbed or transmission limp-home program  
 0x0626008F 10 Excess voltage in the voltage supply  
 0x06260090 12 Voltage supply terminal 15 faulty  
 0x06260091 17 Gong tone (T2)  
 0x06260092 16 Gong tone (T1)  
 0x062600BC 32 Brake-fluid level  
 0x062600BD 31 Electronic brake-force distribution (EBV)  
 0x062600BE 20 Fault entry for internal fault in light module  
 0x062600BF 21 Internal fault in the  
 0x062600C1 3 Travel signal from ABS/ASC/DSC control module  
 0x062600C3 4 Speed signal tD from engine control module  
 0x062600C6 27 Output PIN 6 "Code EWS" Plug X10114 (blue)  
 0x062600C7 8 Tank sensor 1 (fuel pump side)  
 0x062600CD 1 Consumption signal from engine contr. module

# Bmw Code Sheet.txt

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0x062600CE 7 Outside temperature sensor
0x062600Cf 14 Service Interval display (SIA) Reset
0x062600D3 5 Coolant temperature sensor
0x062600D7 9 Tank sensor 2 (without fuel pump)
0x062600F0 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600F4 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600F5 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600F6 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600F8 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600F9 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600FA 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600FB 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600FC 6 Data connection to drive and running-gear control modules (CAN bus)
0x062600FE 6 Data connection to drive and running-gear control modules (CAN bus)
0x06270011 28 Acoustic transmitter disconnected (gong tone 1/2/3)
0x0627003E 25 Fault when activating indicator instruments
0x0627003F 19 Excess current affecting instrument
0x06270044 15 Oil pressure switch
0x06270083 22 Roadspped signal (speedo-A)
0x06270084 29 Gong, sound, volume (GAL)
0x06270086 30 Gong sound (T6)
0x06270087 24 Body bus (K-bus)
0x06270088 23 Instrumentation bus (I-bus)
0x0627008B 18 Gong tone (T3)
0x0627008C 13 Voltage supply terminal R faulty
0x0627008D 11 EGS signal disturbed or transmission limp-home program
0x0627008F 10 Excess voltage in the voltage supply
0x06270090 12 voltage supply terminal 15 faulty
0x06270091 17 Gong tone (T2)
0x06270092 16 Gong tone (T1)
0x062700BC 32 Brake-fluid level
0x062700BD 31 Electronic brake-force distribution (EBV)
0x062700BE 20 Fault entry for internal fault in light module
0x062700BF 21 Internal fault in the
0x062700C1 3 Travel signal from ABS/ASC/DSC control module
0x062700C3 4 Speed signal tD from engine control module
0x062700C6 27 Output PIN 6 "Code EWS" Plug X10114 (blue)
0x062700C7 8 Tank sensor 1 (fuel pump side)
0x062700CD 1 Consumption signal from engine contr. module
0x062700CE 7 Outside temperature sensor
0x062700Cf 14 Service Interval display (SIA) Reset
0x062700D3 5 Coolant temperature sensor
0x062700D7 9 Tank sensor 2 (without fuel pump)
0x062700F0 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700F4 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700F5 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700F6 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700F8 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700F9 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700FA 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700FB 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700FC 6 Data connection to drive and running-gear control modules (CAN bus)
0x062700FE 6 Data connection to drive and running-gear control modules (CAN bus)
0x06280011 28 Acoustic transmitter disconnected(gong tone 1/2/3)
0x0628003E 25 Fault during activation of pointer instruments
0x0628003F 19 Over current occurred in instrument circuit
0x06280044 15 Oil-pressure switch
0x06280083 22 Road-speed signal (Speedo O)
0x06280084 29 Gongsoundvolume(GAL)
0x06280086 30 Gong sound(T6)
0x06280087 24 Body bus (K bus)
0x06280088 23 Instrument bus (I bus)
0x0628008B 18 Gong tone (T3)

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Bmw Code Sheet.txt

0x0628008C 13 Power supply at terminal R faulty  
 0x0628008D 11 EGS signal line disturbed  
 0x0628008F 10 Over voltage in power supply  
 0x06280090 12 Voltage supply terminal 15 faulty  
 0x06280091 17 Gong tone (T2)  
 0x06280092 16 Gong tone (T1)  
 0x062800BC 32 Brake-fluid level  
 0x062800BD 31 Electronic brake-force distribution(EBV)  
 0x062800BE 20 Fault entry about internal fault in Lights Module  
 0x062800BF 21 Internal fault in instrument-cluster electronics (IKE)  
 0x062800C1 3 Mileage signal from ABS/ASC/DSC control unit  
 0x062800C3 4 Speed signal tD from engine control module  
 0x062800C6 27 Output PIN 6 'CODE EWS' Plug X10114 (blue)  
 0x062800C7 8 Fuel-level sensor 1 (fuel-pump end)  
 0x062800CD 1 Consumption signal from engine contr. module  
 0x062800CE 7 Outside-temperature sensor  
 0x062800CF 14 Service interval display (SIA) reset  
 0x062800D3 5 Coolant-temperature sensor  
 0x062800D5 6 Oil-temperature sensor  
 0x062800D7 9 Fuel-level sensor 2 (without fuel pump)  
 0x062800DA 26 Undefined fault  
 0x062800F4 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800F5 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800F6 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800F7 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800F8 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800F9 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800FA 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800FB 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800FC 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062800FD 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x06290011 28 Acoustic transmitter disconnected(gong tone 1/2/3)  
 0x0629003E 25 Fault during activation of pointer instruments  
 0x0629003F 19 Over current occurred in instrument circuit  
 0x06290044 15 Oil-pressure switch  
 0x06290083 22 Road-speed signal (Speedo O)  
 0x06290084 29 Gongsoundvolume(GAL)  
 0x06290086 30 Gong sound(T6)  
 0x06290087 24 Body bus (K bus)  
 0x06290088 23 Instrument bus (I bus)  
 0x0629008B 18 Gong tone (T3)  
 0x0629008C 13 Power supply at terminal R faulty  
 0x0629008D 11 EGS signal line disturbed  
 0x0629008F 10 Over voltage in power supply  
 0x06290090 12 Voltage supply terminal 15 faulty  
 0x06290091 17 Gong tone (T2)  
 0x06290092 16 Gong tone (T1)  
 0x062900BC 32 Brake-fluid level  
 0x062900BD 31 Electronic brake-force distribution(EBV)  
 0x062900BE 20 Fault entry about internal fault in Lights Module  
 0x062900BF 21 Internal fault in instrument-cluster electronics (IKE)  
 0x062900C1 3 Mileage signal from ABS/ASC/DSC control unit  
 0x062900C3 4 Speed signal tD from engine control module  
 0x062900C6 27 Output PIN 6 'CODE EWS' Plug X10114 (blue)  
 0x062900C7 8 Fuel-level sensor 1 (fuel-pump end)  
 0x062900CD 1 Consumption signal from engine contr. module  
 0x062900CE 7 Outside-temperature sensor  
 0x062900CF 14 Service interval display (SIA) reset  
 0x062900D3 5 Coolant-temperature sensor  
 0x062900D5 6 Oil-temperature sensor  
 0x062900D7 9 Fuel-level sensor 2 (without fuel pump)  
 0x062900DA 26 Undefined fault  
 0x062900F4 6 Data connection to drive and running-gear control modules (CAN bus)

# Bmw Code Sheet.txt

0x062900F5 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062900F6 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062900F7 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062900F8 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062900F9 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062900FA 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062900FB 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062900FC 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062900FD 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A0011 28 Acoustic transmitter disconnected(gong tone 1/2/3)  
 0x062A003E 25 Fault during activation of pointer instruments  
 0x062A003F 19 Over current occurred in instrument circuit  
 0x062A0044 15 Oil-pressure switch  
 0x062A0083 22 Road-speed signal (Speedo O)  
 0x062A0084 29 Gongsoundvolume(GAL)  
 0x062A0086 30 Gong sound(T6)  
 0x062A0087 24 Body bus (K bus)  
 0x062A0088 23 Instrument bus (I bus)  
 0x062A008B 18 Gong tone (T3)  
 0x062A008C 13 Power supply at terminal R faulty  
 0x062A008D 11 EGS signal line disturbed  
 0x062A008F 10 Over voltage in power supply  
 0x062A0090 12 Voltage supply terminal 15 faulty  
 0x062A0091 17 Gong tone (T2)  
 0x062A0092 16 Gong tone (T1)  
 0x062A00BC 32 Brake-fluid level  
 0x062A00BD 31 Electronic brake-force distribution(EBV)  
 0x062A00BE 20 Fault entry about internal fault in Lights Module  
 0x062A00BF 21 Internal fault in instrument-cluster electronics (IKE)  
 0x062A00C1 3 Mileage signal from ABS/ASC/DSC control unit  
 0x062A00C3 4 Speed signal tD from engine control module  
 0x062A00C6 27 Output PIN 6 'CODE EWS' Plug X10114 (blue)  
 0x062A00C7 8 Fuel-level sensor 1 (fuel-pump end)  
 0x062A00CD 1 Consumption signal from engine contr. module  
 0x062A00CE 7 Outside-temperature sensor  
 0x062A00CF 14 Service interval display (SIA) reset  
 0x062A00D3 5 Coolant-temperature sensor  
 0x062A00D5 6 Oil-temperature sensor  
 0x062A00D7 9 Fuel-level sensor 2 (without fuel pump)  
 0x062A00DA 26 Undefined fault  
 0x062A00F4 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00F5 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00F6 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00F7 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00F8 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00F9 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00FA 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00FB 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00FC 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062A00FD 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B003F 19 Excess current affecting instrument circuit  
 0x062B0083 22 Roadspeed signal (speedo-A)  
 0x062B0084 29 Gong, sound, volume (GAL)  
 0x062B0087 24 Body bus (K-bus)  
 0x062B008B 18 Gong tone (T3)  
 0x062B008C 13 Voltage supply terminal R faulty  
 0x062B008D 11 EGS signal disturbed or transmission limp-home program  
 0x062B008F 10 Excess voltage in the voltage supply  
 0x062B0090 12 Vpltage supply terminal 15 faulty  
 0x062B00BC 32 Brake-fluid level  
 0x062B00BD 31 Electronic brake-force distribution (EBV)  
 0x062B00BE 20 Fault entry for internal fault in light module  
 0x062B00BF 21 Internal fault in the instrument cluster

# Bmw Code Sheet.txt

0x062B00C1 3 Travel signal from ABS/ASC/DSC control  
 0x062B00C3 4 Engine speed signal tD from engine control  
 0x062B00C7 8 Tank sensor 1 (fuel pump side)  
 0x062B00CD 1 Fuel consumption signal ti-1 from engine control module  
 0x062B00CE 7 Outside temperature sensor  
 0x062B00CF 14 Service Internal diaplay (SIA) Reset  
 0x062B00D3 5 Coolant temperature sensor  
 0x062B00D7 9 Tank sensor 2 (without fuel pump)  
 0x062B00F0 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00F4 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00F5 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00F6 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00F7 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00F8 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00F9 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00FA 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00FB 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062B00FC 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062C0011 11 Thermal oil-level sensor  
 0x062C003E 3E Fault when activating indicator instruments  
 0x062C003F 3F Overcurrent in instrument circuit  
 0x062C0083 83 Speedo 0  
 0x062C0087 87 K bus  
 0x062C008C 8C Terminal R  
 0x062C008F 8F Overvoltage  
 0x062C00BC BC Brake-fluid level  
 0x062C00BF BF Internal fault, instrument cluster  
 0x062C00C1 C1 Travel signal  
 0x062C00C7 C7 Tank lever-type sensor 1  
 0x062C00CE CE Outside-temperature sensor  
 0x062C00CF CF Service interval Display reset  
 0x062C00D3 D3 Coolant temperature sensor  
 0x062C00D7 D7 Tank lever-type sensor 2  
 0x062C00F0 F0 CAN bus off  
 0x062C00F4 F4 CAN indentification  
 0x062C00F5 F5 No CAN indentification (ASC)  
 0x062C00F6 F6 No CAN indentification (DME)  
 0x062C00F7 F7 No CAN indentification (DME)  
 0x062C00F8 F8 CAN indentification (DME)  
 0x062C00F9 F9 No CAN indentification (ASC)  
 0x062C00FB FB No CAN indentification (EGS)  
 0x062D0011 11 Thermal oil-level sensor  
 0x062D003E 3E Fault when activating indicator instruments  
 0x062D003F 3F Overcurrent in instrument circuit  
 0x062D0083 83 Speedo 0  
 0x062D0087 87 K bus  
 0x062D008C 8C Terminal R  
 0x062D008F 8F Overvoltage  
 0x062D00BC BC Brake-fluid level  
 0x062D00BF BF Internal fault, instrument cluster  
 0x062D00C1 C1 Travel signal  
 0x062D00C7 C7 Tank lever-type sensor 1  
 0x062D00CE CE Outside-temperature sensor  
 0x062D00CF CF Service interval Display reset  
 0x062D00D3 D3 Coolant temperature sensor  
 0x062D00D7 D7 Tank lever-type sensor 2  
 0x062D00F0 F0 CAN bus off  
 0x062D00F4 F4 No CAN indentification  
 0x062D00F5 F5 No CAN indentification (ASC)  
 0x062D00F6 F6 No CAN indentification (DME)  
 0x062D00F7 F7 No CAN indentification (DME)  
 0x062D00F8 F8 No CAN indentification (DME)  
 0x062D00F9 F9 No CAN indentification (ASC)

# Bmw Code Sheet.txt

0x062D00FB FB No CAN indentification (EGS)  
 0x062E0011 11 Thermal oil-level sensor  
 0x062E003E 3E Fault when activating indicator instruments  
 0x062E003F 3F Overcurrent in instrument circuit  
 0x062E0083 83 Speedo o  
 0x062E0087 87 K bus  
 0x062E008C 8C Terminal R  
 0x062E008F 8F Overvoltage  
 0x062E00BC BC Brake-fluid level  
 0x062E00BF BF Internal fault, instrument cluster  
 0x062E00C1 C1 Travel signal  
 0x062E00C7 C7 Tank lever-type sensor 1  
 0x062E00CE CE Outside-temperature sensor  
 0x062E00CF CF Service interval Display reset  
 0x062E00D3 D3 Coolant temperature sensor  
 0x062E00D7 D7 Tank lever-type sensor 2  
 0x062E00F0 F0 CAN bus off  
 0x062E00F4 F4 No CAN indentification  
 0x062E00F5 F5 No CAN indentification (ASC)  
 0x062E00F6 F6 No CAN indentification (DME)  
 0x062E00F7 F7 No CAN indentification (DME)  
 0x062E00F8 F8 No CAN indentification (DME)  
 0x062E00F9 F9 No CAN indentification (ASC)  
 0x062E00FB FB No CAN indentification (EGS)  
 0x062F003F 19 Excess current affecting instrument circuit  
 0x062F0083 22 Roadspeed (Speedo-A)  
 0x062F0084 29 Gong, sound, volume (GAL)  
 0x062F0087 24 Body bus (K-Bus)  
 0x062F008B 18 Gong tone (T3)  
 0x062F008C 13 Voltage supply terminal R faulty  
 0x062F008D 11 EGS signal disturbed or transmission limp-home program  
 0x062F008F 10 Excess voltage in the voltage supply  
 0x062F0090 12 Voltage supply terminal 15 faulty  
 0x062F00BC 32 Brake-fluid level  
 0x062F00BD 31 Electronic brake-force distribution (EBV)  
 0x062F00BE 20 Fault entry for internal fault in light module  
 0x062F00BF 21 Internal fault in the instrument cluster  
 0x062F00C1 3 Travel signal from ABS/ASC/DSC control module  
 0x062F00C3 4 Engine speed signal tD from engine control module  
 0x062F00C7 8 Tank sensor 1 (fuel pump side)  
 0x062F00CD 1 Fuel consumption signal ti-1 from engine control module  
 0x062F00CE 7 Outside temperature sensor  
 0x062F00CF 14 Service Interval display (SIA) Reset  
 0x062F00D3 5 Coolant temperature sensor  
 0x062F00D7 9 Tank sensor 2 (without fuel pump)  
 0x062F00F0 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00F4 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00F5 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00F6 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00F7 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00F8 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00F9 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00FA 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00FB 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x062F00FC 6 Data connection to drive and running-gear control modules (CAN bus)  
 0x0630003E 8 Excess current in circuit of instruments  
 0x0630003F 9 Instrument circuit thermally overloaded  
 0x06300083 5 Speedo A signal  
 0x0630008B 4 Gong sound (T3)  
 0x0630008C 6 Voltage supply, terminal R, faulty  
 0x0630008F 1 overvoltage in voltage supply  
 0x063000C0 10 Travel signal (Tw)  
 0x063000C3 11 Speed signal (Td) from engine control module

# Bmw Code Sheet.txt

0x063000C7 2 Tank-sensor voltage not plausible  
 0x063000CF 7 Service interval indicator (SIA)  
 0x063000D3 3 Coolant temperature  
 0x063000F0 12 CAN bus, open circuit 'BUS off'  
 0x063000F4 13 CAN bus, messages not sent  
 0x063000F5 14 CAN bus, ASC 1 message not sent  
 0x063000F6 15 CAN bus, DME 1 message not sent  
 0x063000F7 16 CAN bus, DME 2 message not sent  
 0x063000F8 17 CAN bus, DME 4 message not sent  
 0x063000FB 18 CAN bus, transmission message 1 not sent  
 0x06310001 1 Consumption signal from engine control module  
 0x06310003 3 Travel signal from ABS/ASC/DSC control  
 0x06310004 4 Engine speed signal tD from engine control module  
 0x06310005 5 Coolant temperature sensor  
 0x06310007 7 Outside temperature sensor  
 0x06310008 8 Tank sensor 1 (fuel pump side)  
 0x06310009 9 Tank sensor 2 (without fuel pump)  
 0x0631000A 10 Excess voltage in the voltage supply  
 0x0631000B 11 EGS signal line disturbed  
 0x0631000D 13 Voltage supply terminal R faulty  
 0x0631000E 14 Service interval display (SIA) reset  
 0x06310012 18 Gong tone (T3)  
 0x06310013 19 Over current occurred in instrument circuit  
 0x06310014 20 Fault entry about internal fault in lights module  
 0x06310015 21 Internal fault in instrument - cluster electronics (IKE)  
 0x06310016 22 Road speed signal(speedo 0)  
 0x06310017 23 Instrument bus (I BUS)  
 0x06310018 24 Body bus (K BUS)  
 0x0631003E 25 Fault during activation of pointer instruments  
 0x0631003F 19 Over current occurred in instrument circuit  
 0x06310044 15 Oil-pressure switch  
 0x06310087 24 Body bus(K-Bus)  
 0x06310088 23 Instrumentation bus(I-bus)  
 0x0631008B 18 Gong tone (T3)  
 0x0631008C 13 Power supply at terminal R faulty  
 0x0631008D 11 EGS signal line disturbed  
 0x06310090 12 voltage supply terminal 15 faulty  
 0x06310091 17 Gong tone(T2)  
 0x06310092 16 Gong tone(T1)  
 0x063100BE 20 Fault entry about internal fault in Lights Module  
 0x063100BF 21 Internal fault in instrument-cluster electronics(IKE)  
 0x063100C1 3 Mileage signal from ABS/ASC/DSC control unit  
 0x063100C3 4 Speed signal tD From engine control module  
 0x063100C6 27 Output PIN 6 'Code EWS' Plug X10114 (blue)  
 0x063100C7 8 Tank sensor 1 (fuel pump side)  
 0x063100CD 1 Consumption signal from engine contr. module  
 0x063100CE 7 Outside-temperature sensor  
 0x063100CF 14 Service interval display (SIA) reset  
 0x063100D3 5 Coolant-temperature sensor  
 0x063100D5 6 Oil-temperature sensor  
 0x06320011 11 Thermal oil-level sensor  
 0x06320083 83 Speedo 0  
 0x06320087 87 K bus  
 0x0632008C 8C Terminal R  
 0x0632008F 8F Overvoltage  
 0x063200BE BE Data-filing difference to central light module  
 0x063200BF BF Internal fault, instrument cluster  
 0x063200C1 C1 Travel signal  
 0x063200C7 C7 Tank lever-type sensor 1  
 0x063200CE CE Outside-temperature sensor  
 0x063200CF CF Service Interval Display reset  
 0x063200D7 D7 Tank lever-type sensor 2  
 0x063200F0 F0 CAN bus off

# Bmw Code Sheet.txt

0x063200F4 F4 No CAN identification  
 0x063200F5 F5 No CAN identification (ASC)  
 0x063200F6 F6 No CAN identification (DME)  
 0x063200F7 F7 No CAN identification (DME)  
 0x063200F8 F8 No CAN identification (DME)  
 0x063200FB FB No CAN identification (EGS)  
 0x063200FF FF Unknown fault location  
 0x06330087 87 K bus  
 0x0633008C 8C Terminal R  
 0x0633008F 8F Overvoltage  
 0x063300BE BE Data-filing difference to lights switching center  
 0x063300BF BF Internal fault, instrument cluster  
 0x063300C1 C1 Distance signal  
 0x063300C7 C7 Tank lever-type sensor, left  
 0x063300CE CE Outside-temperature sensor  
 0x063300D7 D7 Tank lever-type sensor, right  
 0x063300F0 F0 CAN bus communication fault  
 0x063300F4 F4 No CAN identification  
 0x063300F5 F5 No CAN identification (ASC)  
 0x063300F6 F6 No CAN identification (DME)  
 0x063300F7 F7 No CAN identification (DME)  
 0x063300F8 F8 No CAN identification (DME)  
 0x063300FB FB No CAN identification (EGS)  
 0x063300FC FC No CAN identification (SMG)

//EML

0x07010017 23 Control for DK servomotor cylinder 1..6  
 0x07010039 57 Control unit or throttle valve, cyl 1..6 or cyl 7..12  
 0x0701005A 90 DK or PWG switch cyl 1..6  
 0x07010066 102 DK potentiometer cylinder 7..12  
 0x07010071 113 Control for DK servomotor, cylinders 7..12  
 0x0701008E 142 PWG potentiometer  
 0x07010099 153 EML system fault  
 0x070100A5 165 DK or PWG switch cyl 7..12  
 0x070100B2 178 Connection from EML SG to ASC SG disturbed  
 0x070100C3 195 FGR Control button  
 0x07020017 23 Control for DK servomotor cylinder 1..6  
 0x07020039 57 Control unit or throttl valve, cyl 1..6 or cyl 7..12  
 0x0702005A 90 DK or PWG switch cylinder 1..6  
 0x07020066 102 DK potentiometer cylinder 7..12  
 0x07020071 113 Control for DK servomotor, cylinders 7..12  
 0x0702008E 142 PWG potentiometer  
 0x07020099 153 EML system fault  
 0x070200A5 165 DK or PWG switch cyl 7..12  
 0x070200B2 178 Connection from EML SG to ASC SG disturbed  
 0x070200C3 195 FGR control button  
 0x07030017 23 EML system fault  
 0x0703002A 43 Control for DK servomtor  
 0x0703003C 60 ti injection signal  
 0x0703004D 77 Pedal-travel-sensor switch  
 0x0703005A 90 Pedal-travel-sensor switch  
 0x07030066 102 Throttle-valve potentiometer  
 0x07030081 129 Throttle-valve switch  
 0x0703008E 142 Engine temp. tmot  
 0x07030099 153 Engine-speed signal TD  
 0x070300A8 165 Speed signal  
 0x070300B2 178 FGR control button  
 0x070300C3 195 Connection, EML SG to ASC SG disturbed  
 0x070300D4 212 EML Control unit A/D converter  
 0x070300E8 232 Pedal Stop wrongly adjusted

0x07210001 1 Throttle valve 1 potentiometer 1, voltage too low (OBD II codeP1543)  
 0x07210002 2 Throttle valve 1 potentiometer 1, voltage too high (OBD IcoedP1544)

# Bmw Code Sheet.txt

0x07210003 3 Throttle valve 1 potentiometer 2, voltage too low (OBD II code P1543)  
 0x07210004 4 Throttle valve 1 potentiometer 2, voltage too high (OBD II code P1544)  
 0x07210005 5 Throttle valve 2 potentiometer 1, voltage too low (OBD II code P1590)  
 0x07210006 6 Throttle valve 2 potentiometer 1, voltage too high (OBD II code P1591)  
 0x07210007 7 Throttle valve 2 potentiometer 2, voltage too low (OBD II code P1590)  
 0x07210008 8 Throttle valve 2 potentiometer 2, voltage too high (OBD II code P1591)  
 0x07210009 9 Potentiometer supply voltage 1 of throttle valve 1/2 deviates (OBD II code P0601)  
 0x0721000A 10 Potentiometer supply voltage 2 of throttle valve 1/2 deviates (OBD II code P0601)  
 0x0721000B 11 Difference in potentiometer 1/2 voltage of throttle valve 1 too low (OBD II code P1545)  
 0x0721000C 12 Difference in potentiometer 1/2 voltage of throttle valve 1 too high (OBD II code P1545)  
 0x0721000D 13 Difference in potentiometer 1/2 voltage of throttle valve 2 too low (OBD II code P1591)  
 0x0721000E 14 Difference in potentiometer 1/2 voltage of throttle valve 2 too high (OBD II code P1592)  
 0x07210014 20 IC fault, pedal-travel sensor 1  
 0x07210015 21 IC fault, pedal-travel sensor 2  
 0x07210016 22 IC fault, pedal-travel sensor 3  
 0x07210017 23 IC fault, pedal-travel sensor 1  
 0x07210018 24 IC fault, pedal-travel sensor 2  
 0x07210019 25 IC fault, pedal-travel sensor 3  
 0x0721001A 26 Pedal-travel sensor 1 signal faulty  
 0x0721001B 27 Pedal-travel sensor 2 signal faulty  
 0x0721001C 28 Pedal-travel sensor 3 signal faulty  
 0x0721001D 29 Pedal-travel sensor 1 signal faulty  
 0x0721001E 30 Pedal-travel sensor 2 signal faulty  
 0x0721001F 31 Pedal-travel sensor 3 signal faulty  
 0x07210020 32 Fault, mesa, amplitude, pedal-travel sensor 1  
 0x07210021 33 Fault, mesa, amplitude, pedal-travel sensor 2  
 0x07210022 34 Fault, mesa, amplitude, pedal-travel sensor 3  
 0x07210023 35 Fault, mesa, amplitude, pedal-travel sensor 1  
 0x07210024 36 Fault, mesa, amplitude, pedal-travel sensor 2  
 0x07210025 37 Fault, mesa, amplitude, pedal-travel sensor 3  
 0x07210026 38 Faulty signal, pedal-travel sensors 1/2  
 0x07210027 39 Faulty signal, pedal-travel sensors 1/3  
 0x07210028 40 Faulty signal, pedal-travel sensors 2/3  
 0x07210029 41 Faulty signal, pedal-travel sensors 1/2  
 0x0721002A 42 Faulty signal, pedal-travel sensors 1/3  
 0x0721002B 43 Faulty signal, pedal-travel sensors 2/3  
 0x0721002C 44 Pedal-travel sensor, difference too large in sensor 1/2  
 0x0721002D 45 Pedal-travel sensor, difference too large in sensor 1/3  
 0x0721002E 46 Pedal-travel sensor, difference too large in sensor 2/3  
 0x0721002F 47 Pedal-travel sensor, difference too large in sensor 1/2  
 0x07210030 48 Pedal-travel sensor, difference too large in sensor 1/3  
 0x07210031 49 Pedal-travel sensor, difference too large in sensor 2/3  
 0x07210032 50 Pedal-travel sensor, basic adaptation  
 0x07210033 51 Pedal-travel sensor, basic adaptation  
 0x07210034 52 Assignment pedal-travel sensor 3 faulty  
 0x07210035 53 Assignment pedal-travel sensor 3 faulty  
 0x07210036 54 Pedal-travel sensors  
 0x07210037 55 Pedal-travel sensors  
 0x07210038 56 Pedal-travel sensors  
 0x07210039 57 Pedal-travel sensors  
 0x0721003A 58 Pedal-travel sensors  
 0x0721003B 59 Pedal-travel sensors  
 0x0721003C 60 Pedal-travel sensors  
 0x0721003D 61 Pedal-travel sensors  
 0x0721003E 62 Pedal-travel sensors  
 0x0721003F 63 Pedal-travel sensors  
 0x07210040 64 Pedal-travel sensors

# Bmw Code Sheet.txt

0x07210041 65 Pedal-travel sensors  
 0x07210042 66 Pedal-travel sensors  
 0x07210043 67 Pedal-travel sensors  
 0x07210044 68 Pedal-travel sensors  
 0x07210045 69 Pedal-travel sensors  
 0x07210050 80 CAN fault when sending EML 1 message  
 0x07210051 81 CAN: error receiving control-unit messages  
 0x07210052 82 CAN: error reception DME I or II messages, or incorrect CAN version (OBD II code P0600)  
 0x07210053 83 CAN not work properly (OBD II code P0600)  
 0x07210056 86 Throttle valve 2, potentiometer 2, voltage abnormal (OBD II code P1592)  
 0x07210057 87 Throttle valve 2 potentiometer 1, voltage abnormal (OBD II code P1592)  
 0x07210058 88 Throttle valve 1 potentiometer 1, voltage abnormal (OBD II code P1545)  
 0x07210059 89 Throttle valve 1 potentiometer 2, voltage abnormal (OBD II code P1545)  
 0x0721005A 90 Control-unit fault (OBD II code P0601)  
 0x0721005B 91 Control-unit fault (OBD II code P0601)  
 0x0721005C 92 Control-unit fault (OBD II code P0601)  
 0x0721005D 93 Control-unit fault (OBD II code P0601)  
 0x07210064 100 Control-module faults  
 0x07210065 101 Control-module faults  
 0x07210066 102 Control-module faults  
 0x07210067 103 Control-module faults  
 0x07210068 104 Control-module faults  
 0x07210069 105 Control-module faults  
 0x0721006A 106 Control-module faults  
 0x0721006B 107 Control-module faults  
 0x0721006C 108 Control-module faults  
 0x0721006D 109 Control-module faults  
 0x0721006E 110 Control-module faults  
 0x07210070 112 Cruise Control (FGR) faulty  
 0x07210071 113 Road-speed signal faulty  
 0x07210072 114 Kickdown-switch faulty  
 0x07210073 115 Brake-light switch faulty  
 0x07210074 116 Brake-test switch faulty  
 0x07210075 117 External safety path to right DME control unit  
 0x07210076 118 External safety path to left DME control unit  
 0x07210077 119 CAN: idle speed from right DME control unit  
 0x07210078 120 CAN: idle speed from left DME control unit  
 0x07210079 121 CAN: safety path from right DME control unit  
 0x0721007A 122 CAN: safety path from left DME control unit  
 0x0721007B 123 CAN: emergency shutoff from right DME module  
 0x0721007C 124 CAN: emergency shutoff from left DME module  
 0x0721007D 125 Idle-controller changeover or idle-controller subset. val. (OBD II code Po600)  
 0x0721007E 126 CAN: message ram DSC control unit faulty  
 0x07210080 128 Throttle valve 1 potentiometer 1 offset test failed (OBD II code P1545)  
 0x07210081 129 Throttle valve 2 potentiometer 1 offset failed (OBD II code P1592)  
 0x07210082 130 Throttle valve 1 potentiometer 1 jump test failed (OBD II code P1580)  
 0x07210083 131 Throttle valve 2 Potentiometer 1 jump test failed (OBD II code P1581)  
 0x07210084 132 Throttle valve 1 spring test failed (OBD II code P1580)  
 0x07210085 133 Throttle valve 2 spring test failed (OBD II code P1581)  
 0x07210086 134 Control-unit faulty (OBD II code P0601)  
 0x07210087 135 Control-unit faulty (OBD II code P0601)  
 0x07210088 136 Throttle valve 2 potentiometer 2 offset test failed (OBD II coed P1592)  
 0x07210089 137 Throttle valve 1 potentiometer 2 offset test failed (OBD II coed P1545)  
 0x0721008A 138 Throttle valve 2 potentiometer 2 jump test failed (OBD II coed P1581)  
 0x0721008B 139 Throttle valve 1 potentiometer 2 jump test failed (OBD II coed P1580)  
 0x0721008C 140 Throttle valve 2 spring test failed (OBD II coed P1581)  
 0x0721008D 141 Throttle valve 1 Spring test failed (OBD II coed P1580)



# Bmw Code Sheet.txt

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0x0721008E 142 Control-unit faulty (OBD II code P0601)
0x0721008F 143 Control-unit faulty (OBD II code P0601)
0x07210090 144 ECU incorrectly coded
0x07210091 145 ECU incorrectly coded
0x07210098 152 Throttle valve 1 stepping-motor output stage (OBD II code P1558)
0x07210099 153 Throttle valve 1 stepping-motor output stage (OBD II code P1558)
0x0721009A 154 Throttle valve 2 stepping-motor output stage (OBD II code P1558)
0x0721009B 155 Throttle valve 2 stepping-motor output stage (OBD II code P1558)
0x0721009C 156 Throttle valve 2 stepping-motor output stage (OBD II code P1558)
0x0721009D 157 Throttle valve 2 stepping-motor output stage (OBD II code P1558)
0x0721009E 158 Throttle valve 1 stepping-motor output stage (OBD II code P1558)
0x0721009F 159 Throttle valve 1 stepping-motor output stage (OBD II code P1558)
//SM
0x082100C0 192 Servomotor, seat sled: transmission error
0x082100C1 193 Servomotor, seat sled: overloading of the output stage
0x082100C2 194 Servomotor, seat sled: blocking during forward movement
0x082100C4 196 Servomotor, seat height: transmission error
0x082100C5 197 Servomotor, seat height: overloading of the output stage
0x082100C6 198 Servomotor, seat height: blocking during upward movement
0x082100C7 199 Servomotor, seat height: blocking during downward movement
0x082100C8 200 Servomotor, seat angle: transmissions error
0x082100C9 201 Servomotor, seat angle: overloading of the output stage
0x082100CA 202 Servomotor, seat angle: blocking during upward movement
0x082100CB 203 Servomotor, seat angle: blocking during backward movement
0x082100CC 204 Servomotor, backrest: transmission error
0x082100CD 205 Servomotor, backrest: overloading of the output stage
0x082100CE 206 Servomotor, backrest: blocking during forward movement
0x082100CF 207 Servomotor, backrest: blocking during backward movement
0x082100D0 208 Servomotor, head restraint: transmission error
0x082100D1 209 Servomotor, head restraint: overloading of the output stage
0x082100D2 210 Servomotor, head restraint: blocking during upward movement
0x082100D3 211 Servomotor, head restraint: blocking during downward movement
0x082100D4 212 Servomotor, thigh support: transmission error
0x082100D5 213 Servomotor, thigh support: overloading of the output stage
0x082100D6 214 Servomotor, thigh support: blocking during forward movement
0x082100D7 215 Servomotor, thigh support: blocking during backward movement
0x082100D8 216 Servomotor, backrest head: transmission error
0x082100D9 217 Servomotor, backrest head: overloading of the output stage
0x082100DA 218 Servomotor, backrest head: blocking during forward movement
0x082100DB 219 Servomotor, backrest head: blocking during backward movement
0x082100DC 220 Servomotor, steering column (height): transmission error
0x082100DD 221 Servomotor, steering column (height): overloading of the output stage
0x082100DE 222 Servomotor, steering column (height): blocking during upward movement
0x082100DF 223 Servomotor, steering column (height): blocking during downward
movement
0x082100E0 224 Servomotor, steering column (extension): transmission error
0x082100E1 225 Servomotor, steering column (extension): overloading of the output
stage
0x082100E2 226 Servomotor, steering column (extension): blocking during forward
movement
0x082100E3 227 Servomotor, steering column (extension): blocking during backward
movement

//EWS
0x09210001 1 Key 1 not identified
0x09210002 2 Key 2 not identified
0x09210003 3 Key 3 not identified
0x09210004 4 Key 4 not identified
0x09210005 5 Key 5 not identified
0x09210006 6 Key 6 not identified
0x09210007 7 Key 7 not identified
0x09210008 8 Key 8 not identified

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0x09210009 9 Key 9 not identified  
 0x0921000A 10 Key 10 not identified  
  
 0x09220000 00 key no.1,faulty identification  
 0x09220001 01 key no.1,incorrect password  
 0x09220002 02 key no.1,incorrect random code  
 0x0922000E 0E Internal control-unit fault  
 0x09220010 10 key no.2,faulty identification  
 0x09220011 11 key no.2,incorrect password  
 0x09220012 12 key no.2,incorrect random code  
 0x0922001E 1E Internal control-unit fault  
 0x0922001F 1F Internal control-module fault  
 0x09220020 20 Key no.3,faulty identification  
 0x09220021 21 Key no.3,incorrect password  
 0x09220022 22 Key no.3,incorrect random code  
 0x0922002F 2F Internal control-module fault  
 0x09220030 30 Key no.4,faulty identification  
 0x09220031 31 Key no.4,incorrect password  
 0x09220032 32 Key no.4,incorrect random code  
 0x0922003F 3F Internal control-module fault  
 0x09220040 40 Key no.5,faulty identification  
 0x09220041 41 Key no.5,incorrect password  
 0x09220042 42 Key no.5,incorrect random code  
 0x09220050 50 Key no.6,faulty identification  
 0x09220051 51 Key no.6,incorrect password  
 0x09220052 52 Key no.6,incorrect random code  
 0x09220060 60 Key no.7,faulty identification  
 0x09220061 61 Key no.7,incorrect password  
 0x09220062 62 Key no.7,incorrect random code  
 0x09220070 70 Key no.8,faulty identification  
 0x09220071 71 Key no.8,incorrect password  
 0x09220072 72 Key no.8,incorrect random code  
 0x0922007F 7F Internal control-module fault  
 0x09220080 80 Key no.9,faulty identification  
 0x09220081 81 Key no.9,incorrect password  
 0x09220082 82 Key no.9,incorrect random code  
 0x09220090 90 Key no.10,faulty identification  
 0x09220091 91 Key no.10,incorrect password  
 0x09220092 92 Key no.10,incorrect random code  
 0x09230000 00 Key no. 1, faulty identification  
 0x09230001 01 Key no. 1, incorrect password  
 0x09230002 02 Key no. 1, incorrect random code  
 0x0923000E 0E Internal control-module fault  
 0x09230010 10 Key no. 2, faulty identification  
 0x09230011 11 Key no. 2, incorrect password  
 0x09230012 12 Key no. 2, incorrect random code  
 0x0923001E 1E Internal control-module fault  
 0x0923001F 1F Internal control-module fault  
 0x09230020 20 Key no. 3, faulty identification  
 0x09230021 21 Key no. 3, incorrect password  
 0x09230022 22 Key no. 3, incorrect random code  
 0x0923002F 2F Internal control-module fault  
 0x09230030 30 Key no. 4, faulty identification  
 0x09230031 31 Key no. 4, incorrect password  
 0x09230032 32 Key no. 4, incorrect random code  
 0x0923003F 3F Internal control-module fault  
 0x09230040 40 Key no. 5, faulty identification  
 0x09230041 41 Key no. 5, incorrect password  
 0x09230042 42 Key no. 5, incorrect random code  
 0x09230050 50 Key no. 6, faulty identification  
 0x09230051 51 Key no. 6, incorrect password  
 0x09230052 52 Key no. 6, incorrect random code  
 0x09230060 60 Key no. 7, faulty identification

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0x09230061 61 Key no. 7, incorrect password  
 0x09230062 62 Key no. 7, incorrect random code  
 0x09230070 70 Key no. 8, faulty identification  
 0x09230071 71 Key no. 8, incorrect password  
 0x09230072 72 Key no. 8, incorrect random code  
 0x0923007F 7F Internal control-module fault  
 0x09230080 80 Key no. 9, faulty identification  
 0x09230081 81 Key no. 9, incorrect password  
 0x09230082 82 Key no. 9, incorrect random code  
 0x09230090 90 Key no. 10, faulty identification  
 0x09230091 91 Key no. 10, incorrect password  
 0x09230092 92 Key no. 10, incorrect random code  
 //ZKE  
 0x0A210001 1 Fuse or lead for load circuit 1  
 0x0A210002 2 Fuse or lead for load circuit 2  
 0x0A210003 3 Horn for anti-theft alarm system - fuse  
 0x0A210004 4 Terminal R  
 0x0A210008 8 General module not coded  
 0x0A210009 9 General module not coded  
 0x0A21000A 10 Coding incorrect  
 0x0A21000B 11 Coding incorrect  
 0x0A210030 48 Potentiometer for interval time  
 0x0A210031 49 Wiper motor is blocked or return contact is faulty  
 0x0A210033 51 Pump for windscreen washer system - short circuit  
 0x0A210034 52 Motor for contact-pressure control  
 0x0A210035 53 Motor for contact-pressure control-short circuit  
 0x0A210036 54 Cam-operated switch for contact-pressure control  
 0x0A210037 55 Relay for intensive windscreen cleaning  
 0x0A210038 56 Relay for headlight cleaning  
 0x0A210039 57 Relay for intensive windscreen cleaning and headlight cleaning sticks  
 0x0A210040 64 Interior lights  
 0x0A210041 65 Interior lighting, short circuit  
 0x0A210044 68 Door-lock heater  
 0x0A210045 69 Door-lock heater, short circuit  
 0x0A210048 72 Relay for wiper motor, short circuit to positive  
 0x0A210049 73 Relay for wiper motor, open circuit  
 0x0A21004A 74 Changeover relay, stage 1/2, for wiper motor, short circuit to positive  
 0x0A21004B 75 Changeover relay, stage 1/2, for wiper motor, open circuit  
 0x0A210050 80 Relay for central-locking drives, rear, unlocking, sticks  
 0x0A210051 81 Relay for central-locking drives, rear, unlocking, does not pick up  
 0x0A210052 82 Relay for central-locking drives, rear, locking, sticks  
 0x0A210053 83 Relay for central-locking drives, rear, locking, does not pick up  
 0x0A210054 84 Relay for central-locking drives, rear, double locking, sticks  
 0x0A210055 85 Relay for central-locking drives, rear, double locking, does not pick up  
 0x0A210056 86 Relay for tailgate drive sticks  
 0x0A210057 87 Relay for tailgate drive does not pick up  
 0x0A210058 88 Crash detection  
 0x0A21005D 93 Central-locking drive, driver's door  
 0x0A21005E 94 Central-locking drive, passenger's door  
 0x0A210060 96 Relay for PW motor, driver's door, sticks  
 0x0A210061 97 Relay for PW motor, driver's door, does not pick up  
 0x0A210062 98 Relay for PW motor, driver's door, sticks  
 0x0A210063 99 Relay for PW motor, driver's door, does not pick up  
 0x0A210064 100 Relay for PW motor, passenger's door, sticks  
 0x0A210065 101 Relay for PW motor, passenger's door, does not pick up  
 0x0A210066 102 Relay for PW motor, passenger's door, sticks  
 0x0A210067 103 Relay for PW motor, passenger's door, does not pick up  
 0x0A210068 104 Relay for PW motor, driver's side rear, sticks  
 0x0A210069 105 Relay for PW motor, driver's side rear, does not pick up  
 0x0A21006A 106 Relay for PW motor, driver's side rear, sticks  
 0x0A21006B 107 Relay for PW motor, driver's side rear, does not pick up

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0x0A21006C 108 Relay for PW motor, passenger's side rear, sticks  
 0x0A21006D 109 Relay for PW motor, passenger's side rear, does not pick up  
 0x0A21006E 110 Relay for PW motor, passenger's side rear, sticks  
 0x0A21006F 111 Relay for PW motor, passenger's side rear, does not pick up  
 0x0A210070 112 Power-window switch block  
 0x0A21007F 127 Slide/tilt sunroof module  
 0x0A210080 128 Servotronic servo valve, open circuit  
 0x0A210081 129 Servotronic servo valve, short circuit  
 0x0A210082 130 Speedo signal interrupted  
 0x0A210083 131 Speedo signal incorrect  
 0x0A210092 146 Tilt sensor of anti-theft alarm system  
 0x0A210093 147 LED for anti-theft alarm system, short circuit to positive  
 0x0A210094 148 LED for anti-theft alarm system, open circuit  
 0x0A210095 149 Passenger-compartment sensor  
 0x0A210096 150 Passenger-compartment sensor, rear  
 0x0A2100A1 161 Mirror heater, driver's door, short circuit  
 0x0A2100A3 163 Mirror heater, passenger's door, short circuit  
 0x0A2100B1 177 Motor, mirror retraction, driver's door, short circuit  
 0x0A2100B3 179 Motor, mirror retraction, passenger's door, short circuit  
 0x0A2100B4 185 Transport mode active  
 0x0A2100C0 192 Servomotor, seat sled, driver: transmission error  
 0x0A2100C1 193 Servomotor, seat sled, driver: overloading of the output stage  
 0x0A2100C2 194 Servomotor, seat sled, driver: blocking during forward movement  
 0x0A2100C4 196 Servomotor, seat height, driver: transmission error  
 0x0A2100C5 197 Servomotor, seat height, driver: overloading of the output stage  
 0x0A2100C6 198 Servomotor, seat height, driver: blocking during upward movement  
 0x0A2100C7 199 Servomotor, seat height, driver: blocking during downward movement  
 0x0A2100C8 200 Servomotor, seat angle, driver: transmission error  
 0x0A2100C9 201 Servomotor, seat angle, driver: overloading of the output stage  
 0x0A2100CA 202 Servomotor, seat angle, driver: blocking during upward movement  
 0x0A2100CB 203 Servomotor, seat angle, driver: blocking during backward movement  
 0x0A2100CC 204 Servomotor, backrest, driver: transmission error  
 0x0A2100CD 205 Servomotor, backrest, driver: overloading of the output stage  
 0x0A2100CE 206 Servomotor, backrest, driver: blocking during forward movement  
 0x0A2100CF 207 Servomotor, backrest, driver: blocking during backward movement  
 0x0A2100D0 208 Servomotor, head restraint, driver: transmission error  
 0x0A2100D1 209 Servomotor, head restraint, driver: overloading of the output stage  
 0x0A2100D2 210 Servomotor, head restraint, driver: blocking during upward movement  
 0x0A2100D3 211 Servomotor, head restraint, driver: blocking during downward movement  
 0x0A2100D4 212 Servomotor, thigh support, driver: transmission error  
 0x0A2100D5 213 Servomotor, thigh support, driver: overloading of the output stage  
 0x0A2100D6 214 Servomotor, thigh support, driver: blocking during forward movement  
 0x0A2100D7 215 Servomotor, thigh support, driver: blocking during backward movement  
 0x0A2100D8 216 Servomotor, backrest head, driver: transmission error  
 0x0A2100D9 217 Servomotor, backrest head, driver: overloading of the output stage  
 0x0A2100DA 218 Servomotor, backrest head, driver: blocking during forward movement  
 0x0A2100DB 219 Servomotor, backrest head, driver: blocking during backward movement  
 0x0A2100DC 220 Servomotor, steering column (height): transmission error  
 0x0A2100DD 221 Servomotor, steering column (height): overloading of the output stage  
 0x0A2100DE 222 Servomotor, steering column (height): blocking during upward movement  
 0x0A2100DF 223 Servomotor, steering column (height): blocking during downward movement  
 0x0A2100E0 224 Servomotor, steering column (extension): transmission error  
 0x0A2100E1 225 Servomotor, steering column (extension): overloading of the output stage  
 0x0A2100E2 226 Servomotor, steering column (extension): blocking during forward movement  
 0x0A2100E3 227 Servomotor, steering column (extension): blocking during backward movement  
 0x0A2100E4 192 Servomotor, seat sled, passenger: transmission error  
 0x0A2100E5 193 Servomotor, seat sled, passenger: overloading of the output stage  
 0x0A2100E6 194 Servomotor, seat sled, passenger: blocking during forward movement  
 0x0A2100E8 196 Servomotor, seat height, passenger: transmission error

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0x0A2100E9 197 Servomotor, seat height, passenger: overloading of the output stage  
 0x0A2100EA 198 Servomotor, seat height, passenger: blocking during upward movement  
 0x0A2100EB 199 Servomotor, seat height, passenger: blocking during downward movement  
 0x0A2100EC 200 Servomotor, seat angle, passenger: transmission error  
 0x0A2100ED 201 Servomotor, seat angle, passenger: overloading of the output stage  
 0x0A2100EE 202 Servomotor, seat angle, passenger: blocking during upward movement  
 0x0A2100EF 203 Servomotor, seat angle, passenger: blocking during backward movement  
 0x0A2100F0 204 Servomotor, backrest, passenger: transmission error  
 0x0A2100F1 205 Servomotor, backrest, passenger: overloading of the output stage  
 0x0A2100F2 206 Servomotor, backrest, passenger: blocking during forward movement  
 0x0A2100F3 207 Servomotor, backrest, passenger: blocking during backward movement  
 0x0A2100F4 208 Servomotor, head restraint, passenger: transmission error  
 0x0A2100F5 209 Servomotor, head restraint, passenger: overloading of the output stage  
 0x0A2100F6 210 Servomotor, head restraint, passenger: blocking during upward movement  
 0x0A2100F7 211 Servomotor, head restraint, passenger: blocking during downward movement  
 0x0A2100F8 212 Servomotor, thigh support, passenger: transmission error  
 0x0A2100F9 213 Servomotor, thigh support, passenger: overloading of the output stage  
 0x0A2100FA 214 Servomotor, thigh support, passenger: blocking during forward movement  
 0x0A2100FB 215 Servomotor, thigh support, passenger: blocking during backward movement  
 0x0A2100FC 216 Servomotor, backrest head, passenger: transmission error  
 0x0A2100FD 217 Servomotor, backrest head, passenger: overloading of the output stage  
 0x0A2100FE 218 Servomotor, backrest head, passenger: blocking during forward movement  
 0x0A2100FF 219 Servomotor, backrest head, passenger: blocking during backward movement  
 0x0A220000 00 General module V: internal fault voltage  
 0x0A220001 01 Interior light, washer pump: fuse  
 0x0A220002 02 Central locking: fuse  
 0x0A220003 03 Central locking: input  
 0x0A220004 04 Transport mode active  
 0x0A220006 06 Burglar-alarm system: signal STDWA  
 0x0A220007 07 Burglar-alarm system: signal STDWA  
 0x0A220008 08 Power windows: fuse  
 0x0A220009 09 Power windows: motor or relay, driver door  
 0x0A22000A 0A Power windows: motor or relay, passenger door  
 0x0A22000B 0B Power windows: motor or relay, driver, rear  
 0x0A22000C 0C Power windows: motor or relay passenger, rear  
 0x0A22000D 0D Power windows: anti-trapp. machine. driver's door  
 0x0A22000E 0E Power windows: anti-trapp. machine. passenger door  
 0x0A22000F 0F Power windows: anti-trapp. machine. driver, rear  
 0x0A220010 10 Power windows: anti-trapp. machine. passenger, rear  
 0x0A220020 20 General module V: internal fault processor  
 0x0A220021 21 General module V: internal fault processor  
 0x0A220022 22 General module V: internal fault clock generate.  
 0x0A220023 23 General module V: internal fault EEPROM  
 0x0A220024 24 Relay for central locking, locking  
 0x0A220025 25 Relay for central locking, unlocking  
 0x0A220026 26 Relay for central locking, double locking  
 0x0A220028 28 Relay for central locking, locking  
 0x0A220029 29 Relay for central locking, unlocking  
 0x0A22002A 2A Relay for central locking, double locking  
 0x0A22002B 2B Relay for locking driver's door  
 0x0A22002C 2C Relay for power window, driver's door  
 0x0A22002D 2D Relay for power window, passenger's door  
 0x0A22002E 2E Relay for power window, driver's side, rear  
 0x0A22002F 2F Relay for power window, passenger's side, rear  
 0x0A220030 30 K bus: data transmission disturbed  
 0x0A220031 31 Wiper potentiometer

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0x0A220032 32 wiper potentiometer  
 0x0A220033 33 wipers: interlock active  
 0x0A220036 36 wipers: relay or wire for wiper on  
 0x0A220037 37 wipers: relay or wire for stage 2  
 0x0A220038 38 windscreen washer pump  
 0x0A22003B 3B interior light  
 0x0A22003D 3D Boot-lid unlocking: mechanism  
 0x0A220041 41 Burglar alarm system: pitch sensor  
 0x0A220042 42 Burglar-al. system: pass.- comport. sensor  
 0x0A220043 43 Burglar-al. syst pass.-comports  
 0x0A220044 44 General module V not coded  
 0x0A220045 45 Central locking: switch ,driver's door  
 0x0A220046 46 Central locking: switch, passenger door  
 0x0A220080 80 DWA alarm memory: terminal R  
 0x0A220081 81 DWA alarm memory: door contact, driver's door  
 0x0A220082 82 DWA alarm memory: door contact, pass'gr door  
 0x0A220085 85 DWA alarm memory: rear lid  
 0x0A220087 87 DWA alarm memory: glove compartment  
 0x0A220088 88 DWA alarm memory: engine bonnet  
 0x0A220089 89 DWA alarm memory: pitch sensor  
 0x0A22008A 8A DWA alarm memory: passenger-comp. sensor, front  
 0x0A22008B 8B DWA alarm memory: pass.-comp. sensor, rear  
 0x0A22008D 8D DWA alarm memory: lock contact, driver's door  
 0x0A22008E 8E DWA alarm memory: lock contact, pass'gr door  
 0x0A220091 91 Info memory: crash was triggered  
 0x0A230001 1 Fuse or lead for load circuit 1  
 0x0A230002 2 Fuse or lead for load circuit 2  
 0x0A230004 4 Terminal R  
 0x0A230008 8 General module not coded  
 0x0A230009 9 General module not coded  
 0x0A23000A 10 Coding incorrect  
 0x0A23000B 11 Coding incorrect  
 0x0A230030 48 Potentiometer for interval time  
 0x0A230033 51 Pump for windscreen washer system - short circuit  
 0x0A230040 64 Interior lights  
 0x0A230041 65 Interior lighting, short circuit  
 0x0A230048 72 Relay for wiper motor - short circuit to positive  
 0x0A230049 73 Relay for wiper motor - open circuit  
 0x0A23004A 74 Relay for wiper motor, stage 2 - short circuit to positive  
 0x0A23004B 75 Relay for wiper motor, stage 2 - open circuit  
 0x0A230050 80 Relay for central-locking drives, rear , unlocking sticks  
 0x0A230051 81 Relay for central-locking drives, rear , unlocking, does not pick up  
 0x0A230052 82 Relay for central-locking drives, rear , locking sticks  
 0x0A230053 83 Relay for central-locking drives, rear , locking, does not pick up  
 0x0A230054 84 Relay for central-locking drives, rear , double locking sticks  
 0x0A230055 85 Relay for central-locking drives, rear , double locking, does not pick up  
 0x0A230056 86 Relay for central-locking drives, top, sticks  
 0x0A230057 87 Relay for central-locking drives, top, does not pick up  
 0x0A230058 88 Crash detection  
 0x0A230059 89 Central-locking drive, driver's door, open circuit  
 0x0A23005A 90 Central-locking drive, passenger's door, open circuit  
 0x0A23005B 91 Central-locking drive, driver's door, short circuit  
 0x0A23005C 92 Central-locking drive, passenger's door, short circuit  
 0x0A230060 96 Relay for PW motor, driver's door, sticks  
 0x0A230061 97 Relay for PW motor, driver's door, does not pick up  
 0x0A230062 98 Relay for PW motor, driver's door, sticks  
 0x0A230063 99 Relay for PW motor, driver's door, does not pick up  
 0x0A230064 10 Relay for PW motor, passenger's door, sticks  
 0x0A230065 10 Relay for PW motor, passenger's door, does not pick up  
 0x0A230066 10 Relay for PW motor, passenger's door, sticks  
 0x0A230067 10 Relay for PW motor, passenger's door, does not pick up  
 0x0A230068 104 Relay for PW motor, driver's side rear, sticks

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0x0A230069 105 Relay for PW motor, driver's side rear, does not pick up  
 0x0A23006A 106 Relay for PW motor, driver's side rear, sticks  
 0x0A23006B 107 Relay for PW motor, driver's side rear, does not pick up  
 0x0A23006C 108 Relay for PW motor, passenger's side rear, sticks  
 0x0A23006D 109 Relay for PW motor, passenger's side rear, does not pick up  
 0x0A23006E 110 Relay for PW motor, passenger's side rear, sticks  
 0x0A23006F 111 Relay for PW motor, passenger's side rear, does not pick up  
 0x0A23007F 127 Slide/tilt sunroof module  
 0x0A230080 128 Servotronic servo valve, open circuit  
 0x0A230081 129 Servotronic servo valve, open circuit  
 0x0A230082 130 Speedo signal interrupted  
 0x0A230092 146 Tilt sensor for anti-theft alarm system  
 0x0A230093 147 LED for anti-theft alarm system, short circuit to positive  
 0x0A230094 148 LED for anti-theft alarm system, open circuit  
 0x0A230095 149 Passenger-compartment sensor  
 0x0A2300A1 161 Mirror heater, driver's door, short circuit  
 0x0A2300A3 163 Mirror heater, passenger's door, short circuit  
 0x0A2300B1 177 Motor, mirror retraction, driver's door, short circuit  
 0x0A2300B3 179 Motor, mirror retraction, passenger's door, short circuit  
 0x0A2300B9 185 Transport mode active  
 0x0A250001 01 Fuse for IB and TSH  
 0x0A250002 02 Fuse for ZV  
 0x0A250003 03 Fuse for front FHS  
 0x0A250004 04 Terminal R  
 0x0A250005 05 Terminal 15  
 0x0A250006 06 Ground for ZV FHS  
 0x0A250008 14 Crash sensor  
 0x0A250009 15 Lock contact  
 0x0A25000A 16 Pin contact, driver's door  
 0x0A25000B 17 Pin contact, driver's door - open circuit  
 0x0A25000C 18 Pin contact, passenger's door  
 0x0A25000D 19 Pin contact, passenger door - open circuit  
 0x0A25000E 20 Pin contact, trunk lid  
 0x0A25000F 21 Pin contact, trunk lid - open circuit  
 0x0A250011 25 Pulse generator for front power windows short-circuited  
 0x0A250012 36 FH drive, rear, (driver's side) not functioning  
 0x0A250013 37 Wire to rear FH driver (driver's side) is short-circuited to ground  
 0x0A250014 38 Relay for rear FH drive (driver's side) sticks  
 0x0A250015 39 FH drive, rear, (passenger's side) not functioning  
 0x0A250016 40 Wire to rear FH drive (passenger's side) is short-circuited to ground  
 0x0A250017 41 Relay for rear FH drive (passenger's side) sticks  
 0x0A250018 42 Wire to relay module - driver's side FH, rear  
 0x0A250019 43 Wire to relay module - driver's side FH, rear, short circuit to B+  
 0x0A25001A 44 Wire to relay module - passenger's side FH, rear  
 0x0A25001B 45 Wire to relay module - passenger's side FH, rear short circuit to B+  
 0x0A25001C 46 Wire to relay module - driver's side FH, rear  
 0x0A25001D 47 Wire to relay module - driver's side FH, rear, short circuit to B+  
 0x0A25001E 48 Wire to relay module - passenger's side FH, rear  
 0x0A25001F 49 Wire to relay module - passenger's side FH, rear, short circuit to B+  
 0x0A250022 54 Wire to convertible-top module - short circuit to ground  
 0x0A250023 55 Wire to crash-alarm sensor is short-circuit to B+  
 0x0A250024 56 LED for DWA or wire is short-circuit to B+  
 0x0A250025 57 LED for DWA or wire is short-circuit to ground or open-circuited  
 0x0A250026 58 DWA relay or the wire is short-circuited to B+  
 0x0A250027 59 Pitch sensor or interior sensor or short circuit in wire  
 0x0A250028 7 Module not need  
 0x0A250029 8 Internal fault  
 0x0A25002A 9 Interior lights. short circuit or overload  
 0x0A25002B 10 Electrical-load cutoff wire or lamp  
 0x0A25002C 11 Electrical-load cutoff - short circuit or overload  
 0x0A25002D 12 Door-lock heater  
 0x0A25002E 13 Door-lock heater - short circuit  
 0x0A250030 22 Relay for ZV unlocking does not pick up

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0x0A250031 62 Relay for ZV unlocking sticks  
 0x0A250032 23 Relay for ZV locking does not pick up  
 0x0A250033 63 Relay for ZV locking sticks  
 0x0A250034 24 Relay for ZV double-locking does not pick up  
 0x0A250035 64 Relay for ZV double-locking sticks  
 0x0A250036 26 Relay for driver's door FH does not pick up  
 0x0A250037 27 Relay for driver's door FH sticks  
 0x0A250038 28 Relay for driver's door FH does not pick up  
 0x0A250039 29 Relay for driver's door FH sticks  
 0x0A25003A 30 Relay for passenger's door FH does not stick up  
 0x0A25003B 31 Relay for passenger's door FH sticks  
 0x0A25003C 32 Relay for passenger's door FH does not pick up  
 0x0A25003D 33 Relay for passenger's door FH sticks  
 0x0A25003E 34 Thermoswitch in the driver's door FH motor has responded  
 0x0A25003F 35 Thermoswitch in the passenger-door FH motor has responded  
 0x0A250042 50 FH drive, driver's side, rear, stiff  
 0x0A250043 51 FH drive, passenger's side, rear, stiff  
 0x0A250044 60 Fuse for pitch sensor  
 0x0A250045 61 Fuses for passenger-compartment sensor  
 0x0A260000 00 General module 5: Internal fault, voltage  
 0x0A260001 01 Fuse for interior lights, washer pump  
 0x0A260002 02 Fuse for central locking  
 0x0A260003 03 Central locking, crash input  
 0x0A260004 04 Transport mode active  
 0x0A260006 06 Anti-theft alarm system, STDWA signal  
 0x0A260007 07 Anti-theft alarm system, STDWA signal  
 0x0A260008 08 Fuse for power window unit  
 0x0A260009 09 Motor or relay for power window unit, front, driver's side  
 0x0A26000A 0A Motor or relay for power window unit, front, passenger's side  
 0x0A26000B 0B Motor or relay for power window unit, rear, driver's side  
 0x0A26000C 0C Motor or relay for power window unit, rear, passenger's side  
 0x0A26000D 0D Anti-trap protection for power window unit, front, driver's side  
 0x0A26000E 0E Anti-trap protection for power window unit, front, passenger's side  
 0x0A26000F 0F Anti-trap protection for power window unit, rear, driver's side  
 0x0A260010 10 Anti-trap protection for power window unit, rear, passenger's side  
 0x0A260020 20 General module 5: Internal fault, processor  
 0x0A260021 21 General module 5: Internal fault, processor  
 0x0A260022 22 General module 5: Internal fault, clock generator  
 0x0A260023 23 General module 5: Internal fault, EEPROM  
 0x0A260024 24 Relay for central locking, locking  
 0x0A260025 25 Relay for central locking, unlocking  
 0x0A260026 26 Relay for central locking, double locking  
 0x0A260027 27 Relay for central locking driver's door  
 0x0A260028 28 Relay for central locking, locking  
 0x0A260029 29 Relay for central locking, unlocking  
 0x0A26002A 2A Relay for central locking, double locking  
 0x0A26002B 2B Relay for central locking driver's door  
 0x0A26002C 2C Relay for power window unit, front, driver's side  
 0x0A26002D 2D Relay for power window unit, front, passenger's side  
 0x0A26002E 2E Relay for power window unit, rear, driver's side  
 0x0A26002F 2F Relay for power window unit, rear, passenger's side  
 0x0A260030 30 K bus: data transmission disturbed  
 0x0A260031 31 Wiper potentiometer  
 0x0A260032 32 Wiper potentiometer  
 0x0A260033 33 Wipers: interlock active  
 0x0A260036 36 Relay or wire for wiper on  
 0x0A260037 37 Relay or wire for wiper stage 2  
 0x0A260038 38 Windscreen washer pump  
 0x0A26003A 3A Relay pump or wire for headlight washers  
 0x0A26003B 3B Interior lights, short circuit  
 0x0A26003C 3C Load/consumer shutdown, output VA2: short circuit to ground  
 0x0A26003D 3D Drive for rear-lid unlocking  
 0x0A26003F 3F Relay for rear-window unlocking



# Bmw Code Sheet.txt

0x0A260041 41 Tilt sensor for anti-theft alarm system  
 0x0A260042 42 Anti-theft alarm system, interior movement detector  
 0x0A260043 43 Anti-theft alarm system, interior movement detector, rear  
 0x0A260044 44 General module 5 not coded  
 0x0A260045 45 Central locking, switch, driver's door  
 0x0A260046 46 Central locking, switch, passenger's door  
 0x0A260048 48 Interior lights, open circuit  
 0x0A260049 49 Load/consumer shutdown, output VA2: short circuit to positive  
 0x0A26004A 4A Load/consumer shutdown: short circuit to ground  
 0x0A26004B 4B General module 5: Internal fault, processor  
 0x0A26004C 4C Passenger mirror: Internal fault  
 0x0A26004D 4D Mirror heater, front passenger mirror: open circuit  
 0x0A26004E 4E Mirror heater, front passenger mirror: short circuit  
 0x0A26004F 4F Potentiometer, front passenger mirror, horizontal  
 0x0A260050 50 Potentiometer, front passenger mirror, vertical  
 0x0A260051 51 Motor, front passenger mirror, horizontal: open circuit  
 0x0A260052 52 Motor, front passenger mirror, horizontal: short circuit  
 0x0A260053 53 Motor, front passenger mirror, vertical: open circuit  
 0x0A260054 54 Motor, front passenger mirror, vertical: short circuit  
 0x0A260055 55 Motor, pivoting front passenger mirror: open circuit  
 0x0A260056 56 Motor, pivoting front passenger mirror: short circuit  
 0x0A26005B 5B Driver's mirror: internal fault  
 0x0A26005C 5C Mirror heater, driver's mirror: open circuit  
 0x0A26005D 5D Mirror heater, driver's mirror: short circuit  
 0x0A26005E 5E Potentiometer, driver's mirror, horizontal  
 0x0A26005F 5F Potentiometer, driver's mirror, vertical  
 0x0A260060 60 Motor, driver's mirror, horizontal: open circuit  
 0x0A260061 61 Motor, driver's mirror, horizontal: short circuit  
 0x0A260062 62 Motor, driver's mirror, vertical: open circuit  
 0x0A260063 63 Motor, driver's mirror, vertical: short circuit  
 0x0A260064 64 Motor, pivoting driver's mirror: open circuit  
 0x0A260065 65 Motor, pivoting driver's mirror: short circuit  
 0x0A26006A 6A LIN bus: no response, switch block  
 0x0A26006B 6B LIN bus: no response, passenger mirror  
 0x0A26006C 6C LIN bus: no response, driver's mirror  
 0x0A26006D 6D Power-window switch, front left, in switch block: signal invalid  
 0x0A26006E 6E Power-window switch, front right, in switch block: signal invalid  
 0x0A26006F 6F Power-window switch, rear left, in switch block: signal invalid  
 0x0A260070 70 Power-window switch, rear right, in switch block: signal invalid  
 0x0A260071 71 Mirror adjustment switch, horizontal, in switch block: signal invalid  
 0x0A260072 72 Mirror adjustment switch, vertical, in switch block: signal invalid  
 0x0A260080 80 DWA alarm memory,terminal R  
 0x0A260081 81 DWA alarm memory,door contact, drive's door  
 0x0A260082 82 DWA alarm memory,door contact, passenger's door  
 0x0A260083 83 DWA alarm memory,door contact,rear,drive's side  
 0x0A260084 84 DWA alarm memory,door contact,rear,passenger's side  
 0x0A260085 85 DWA alarm memory,rear-lid  
 0x0A260086 86 DWA alarm memory,rear-window  
 0x0A260087 87 Anti-theft alarm memory,tyre pressure control  
 0x0A260088 88 DWA alarm memory,engine-bonnet  
 0x0A260089 89 DWA alarm memory,pitch sensor  
 0x0A26008A 8A DWA alarm memory,passenger-comp.sensor,front  
 0x0A26008B 8B Anti-theft alarm memory,glovebox(Convertible)/interior movement detector,rear(Touring)  
 0x0A26008D 8D DWA alarm memory,lock contact,drive's door  
 0x0A26008E 8E DWA alarm memory,lock contact,passanger's door  
 0x0A260091 91 Info memory:crash was triggered  
  
 0x0A270000 00 General module 5: Internal fault, voltage  
 0x0A270001 01 Fuse for interior lights, washer pump  
 0x0A270002 02 Fuse for central locking  
 0x0A270003 03 Central locking, crash input  
 0x0A270006 06 Anti-theft alarm system, STDWA signal

Bmw Code Sheet.txt

0x0A270007 07 Anti-theft alarm system, STDWA signal  
 0x0A270008 08 Fuse for power window unit  
 0x0A270009 09 Motor or relay for power window unit, front, driver's side  
 0x0A27000A 0A Motor or relay for power window unit, front, passenger's side  
 0x0A27000B 0B Motor or relay for power window unit, rear, driver's side  
 0x0A27000C 0C Motor or relay for power window unit, rear, passenger's side  
 0x0A27000D 0D Anti-trap protection for power window unit, front, driver's side  
 0x0A27000E 0E Anti-trap protection for power window unit, front, passenger's side  
 0x0A27000F 0F Anti-trap protection for power window unit, rear, driver's side  
 0x0A270010 10 Anti-trap protection for power window unit, rear, passenger's side  
 0x0A270020 20 General module 5: Internal fault, processor  
 0x0A270021 21 General module 5: Internal fault, processor  
 0x0A270022 22 General module 5: Internal fault, clock generator  
 0x0A270023 23 General module 5: Internal fault, EEPROM  
 0x0A270024 24 Relay for central locking, locking  
 0x0A270025 25 Relay for central locking, unlocking  
 0x0A270026 26 Relay for central locking, double locking  
 0x0A270027 27 Relay for central locking driver's door  
 0x0A270028 28 Relay for central locking, locking  
 0x0A270029 29 Relay for central locking, unlocking  
 0x0A27002A 2A Relay for central locking, double locking  
 0x0A27002B 2B Relay for central locking driver's door  
 0x0A27002C 2C Relay for power window unit, front, driver's side  
 0x0A27002D 2D Relay for power window unit, front, passenger's side  
 0x0A27002E 2E Relay for power window unit, rear, driver's side  
 0x0A27002F 2F Relay for power window unit, rear, passenger's side  
 0x0A270030 30 K bus: data transmission disturbed  
 0x0A270031 31 Wiper potentiometer  
 0x0A270032 32 Wiper potentiometer  
 0x0A270033 33 Wipers: interlock active  
 0x0A270036 36 Relay or wire for wiper on  
 0x0A270037 37 Relay or wire for wiper stage 2  
 0x0A270038 38 Windscreen washer pump  
 0x0A27003A 3A Relay pump or wire for headlight washers  
 0x0A27003B 3B Interior lights, short circuit  
 0x0A27003C 3C Load/consumer shutdown, output VA2: short circuit to ground  
 0x0A27003D 3D Drive for rear-lid unlocking  
 0x0A27003F 3F Relay for rear-window unlocking  
 0x0A270041 41 Tilt sensor for anti-theft alarm system  
 0x0A270042 42 Anti-theft alarm system, interior movement detector  
 0x0A270043 43 Anti-theft alarm system, interior movement detector, rear  
 0x0A270044 44 General module 5 not coded  
 0x0A270045 45 Central locking, switch, driver's door  
 0x0A270046 46 Central locking, switch, passenger's door  
 0x0A270047 47 General module 5: Internal fault, processor  
 0x0A270048 48 Interior lights, open circuit  
 0x0A270049 49 Load/consumer shutdown, output VA2: short circuit to positive  
 0x0A27004A 4A Load/consumer shutdown: short circuit to ground  
 0x0A27004B 4B General module 5: Internal fault, processor  
 0x0A27004C 4C Passenger mirror: Internal fault  
 0x0A27004D 4D Mirror heater, front passenger mirror: open circuit  
 0x0A27004E 4E Mirror heater, front passenger mirror: short circuit  
 0x0A27004F 4F Potentiometer, front passenger mirror, horizontal  
 0x0A270050 50 Potentiometer, front passenger mirror, vertical  
 0x0A270051 51 Motor, front passenger mirror, horizontal: open circuit  
 0x0A270052 52 Motor, front passenger mirror, horizontal: short circuit  
 0x0A270053 53 Motor, front passenger mirror, vertical: open circuit  
 0x0A270054 54 Motor, front passenger mirror, vertical: short circuit  
 0x0A270055 55 Motor, pivoting front passenger mirror: open circuit  
 0x0A270056 56 Motor, pivoting front passenger mirror: short circuit  
 0x0A27005B 5B Driver's mirror: internal fault  
 0x0A27005C 5C Mirror heater, driver's mirror: open circuit  
 0x0A27005D 5D Mirror heater, driver's mirror: short circuit

# Bmw Code Sheet.txt

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0x0A27005E 5E Potentiometer, driver's mirror, horizontal
0x0A27005F 5F Potentiometer, driver's mirror, vertical
0x0A270060 60 Motor, driver's mirror, horizontal: open circuit
0x0A270061 61 Motor, driver's mirror, horizontal: short circuit
0x0A270062 62 Motor, driver's mirror, vertical: open circuit
0x0A270063 63 Motor, driver's mirror, vertical: short circuit
0x0A270064 64 Motor, pivoting driver's mirror: open circuit
0x0A270065 65 Motor, pivoting driver's mirror: short circuit
0x0A27006A 6A LIN bus: no response, switch block
0x0A27006B 6B LIN bus: no response, passenger mirror
0x0A27006C 6C LIN bus: no response, driver's mirror
0x0A27006D 6D Power-window switch, front left, in switch block: signal invalid
0x0A27006E 6E Power-window switch, front right, in switch block: signal invalid
0x0A27006F 6F Power-window switch, rear left, in switch block: signal invalid
0x0A270070 70 Power-window switch, rear right, in switch block: signal invalid
0x0A270071 71 Mirror adjustment switch, horizontal, in switch block: signal invalid
0x0A270072 72 Mirror adjustment switch, vertical, in switch block: signal invalid
0x0A270073 73 Spray-nozzle heater, left: short circuit to ground
0x0A270074 74 Spray-nozzle heater, left: open circuit
0x0A270075 75 Spray-nozzle heater, right: short circuit to ground
0x0A270076 76 Spray-nozzle heater, right: open circuit
0x0A270080 80 Anti-theft alarm memory, terminal R
0x0A270081 81 Anti-theft alarm memory, door contact, front, drive's side
0x0A270082 82 Anti-theft alarm memory, door contact, front, passenger's side
0x0A270083 83 Anti-theft alarm memory, door contact, rear, drive's side
0x0A270084 84 Anti-theft alarm memory, door contact, rear, passenger, rear
0x0A270085 85 Anti-theft alarm memory, rear-lid contact
0x0A270086 86 Anti-theft alarm memory, rear-window contact
0x0A270087 87 Anti-theft alarm memory, tyre pressure control
0x0A270088 88 Anti-theft alarm memory, engine-bonnet/hood contact
0x0A270089 89 Anti-theft alarm memory, tilt sensor
0x0A27008A 8A Anti-theft alarm memory, interior movement detector, front
0x0A27008B 8B Anti-theft alarm memory, glovebox(Convertible)/interior movement
detector, rear(Touring)
0x0A27008D 8D Anti-theft alarm memory, lock contact, drive's door
0x0A27008E 8E Anti-theft alarm memory, lock contact, passenger's door
0x0A27008F 8F Anti-theft alarm memory, panic mode active
0x0A270090 90 Battery voltage: open circuit
0x0A270091 91 Crash input active
0x0A270092 92 Central locking: repeat interlock
0x0A270093 93 Unlocking rear lid: repeat interlock
0x0A270094 94 Unlocking rear window: repeat interlock
0x0A270095 95 Power window: repeat interlock
0x0A270097 97 Mirror pivoting: repeat interlock

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//GR

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0x0B210001 1 Faults in control unit
0x0B210002 1 Faults in control unit
0x0B210003 7 Encoding data fault
0x0B210005 1 Faults in control unit
0x0B210006 1 Faults in control unit
0x0B210007 1 Faults in control unit
0x0B210010 2 Status of actuator clutch
0x0B210011 3 Actuator deactivation time
0x0B210012 4 Actuator position
0x0B210013 6 Supply voltage of feedback potentiometer
0x0B210021 5 Data line of ,ulti-function steering wheel
0x0B210030 1 Faults in control unit
0x0B220001 1 Faults in control unit
0x0B220002 1 Faults in control unit
0x0B220003 7 Encoding data fault
0x0B220004 1 Faults in control unit
0x0B220005 1 Faults in control unit

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# Bmw Code Sheet.txt

0x0B220006 1 Faults in control unit  
 0x0B220007 1 Faults in control unit  
 0x0B220010 2 Status of actuator clutch  
 0x0B220011 3 Actuator deactivation time  
 0x0B220012 4 Actuator position  
 0x0B220013 6 Supply voltage of feedback potentiometer  
 0x0B220021 5 Data line of ,ulti-function steering wheel  
 0x0B220030 1 Faults in control unit  
 0x0B230001 01 Control-module fault  
 0x0B230002 02 Control-module fault  
 0x0B230003 03 Control-module fault, coding data  
 0x0B230004 04 Control-module fault, coding data  
 0x0B230005 05 Control-module fault, coding  
 0x0B230006 06 Control-module fault, hardware/software  
 0x0B230010 10 Short circuit, actuator clutch  
 0x0B230011 11 Actuator, deactivation time  
 0x0B230012 12 Actuator position  
 0x0B230013 13 Check back-potentiometer voltage  
 0x0B230021 21 Data line, multifunction steering wheel  
 //PDC  
 0x0C210010 10 Converter, rear left  
 0x0C210011 11 Converter, rear right  
 0x0C210012 12 Converter, rear center left  
 0x0C210013 13 Converter, rear center right  
 0x0C210014 14 Transducer, front left  
 0x0C210015 15 Transducer, front right  
 0x0C210016 16 Transducer, front middle left  
 0x0C210017 17 Transducer, front middle right  
 0x0C210018 18 Voltage, Converters in general  
 0x0C210020 20 Acoustic generator, rear, off  
 0x0C210021 21 Acoustic generator, rear, on  
 0x0C210022 22 Acoustic generator, front off  
 0x0C210023 23 Acoustic generator, front on  
 0x0C210024 24 Function indicator off  
 0x0C210025 25 Function indicator on  
 0x0C210026 26 Position sensor  
 0x0C210027 27 Button  
 0x0C210028 28 Control unit  
 0x0C619E2B 9E2B Ultrasonic sensor, rear left  
 0x0C619E2E 9E2E Ultrasonic sensor, rear centre right  
 0x0C619E33 9E33 wire, ultrasonic sensor, rear left  
 0x0C619E34 9E34 wire, ultrasonic sensor, rear right  
 0x0C619E35 9E35 wire, ultrasonic sensor, rear centre left  
 0x0C619E36 9E36 wire, ultrasonic sensor, rear centre right  
 0x0C619E37 9E37 wire, ultrasonic sensor, front left  
 0x0C619E38 9E38 wire, ultrasonic sensor, front right  
 0x0C619E39 9E39 wire, ultrasonic sensor, front centre left  
 0x0C619E3A 9E3A wire, ultrasonic sensor, front centre right  
 0x0C619E3B 9E3B Supply, ultrasonic sensors  
 0x0C619E28 9E28 Control unit, internal fault  
 0x0C619E29 9E29 Function display  
 0x0C619E2A 9E2A Park Distance Control button  
 0x0C619E2B 9E2B Transducer, rear left  
 0x0C619E2C 9E2C Transducer, rear right  
 0x0C619E2D 9E2D Transducer, rear centre left  
 0x0C619E2E 9E2E Transducer, rear centre right  
 0x0C619E2F 9E2F Transducer, front left  
 0x0C619E30 9E30 Transducer, front right  
 0x0C619E31 9E31 Transducer, front centre left  
 0x0C619E32 9E32 Transducer, front centre right  
 0x0C619E33 9E33 Transducer lines, rear left  
 0x0C619E34 9E34 Transducer lines, rear right  
 0x0C619E35 9E35 Transducer lines, rear centre left

# Bmw Code Sheet.txt

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0x0C619E36 9E36 Transducer lines, rear centre right
0x0C619E37 9E37 Transducer lines, front left
0x0C619E38 9E38 Transducer lines, front right
0x0C619E39 9E39 Transducer lines, front centre left
0x0C619E3A 9E3A Transducer lines, front centre right
0x0C619E3B 9E3B Transducer supply

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## //SZM

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0x0D210000 00 Terminal 30
0x0D210001 01 Seat heating, left, short or open circuit
0x0D210002 02 Seat heating, right, short or open circuit
0x0D210003 03 Temp. sensor, seat heating, left, short to grnd.
0x0D210004 04 Temp. sens., seat heating, right, short to grnd.
0x0D210005 05 Temp. sensor, seat heating, left, open circuit
0x0D210006 06 Temp. sensor, seat heating, right, open circuit
0x0D210007 07 Seat heating, seat cushion, left, open circuit
0x0D210008 08 Seat heating, seat cushion, right, open circuit
0x0D210009 09 Roller sun blind, motor, short or open circuit
0x0D21000A 0A Wire active seat, left
0x0D21000B 0B Wire active seat, right
0x0D21000C 0C Active seat, left, fault in switching centre
0x0D21000D 0D Active seat, right, fault in switching centre
0x0D21000E 0E K bus
0x0D220001 01 Terminal 30
0x0D220002 02 Seat heating, left, short or open circuit
0x0D220003 03 Seat heating, right, short or open circuit
0x0D220004 04 Temp. sensor, seat heating, left, open circuit
0x0D220005 05 Temp. sensor, seat heating, left, short to grnd.
0x0D220006 06 Temp. sensor, seat heating, right, open circuit
0x0D220007 07 Temp. sensor, seat heating, right, short to grnd.
0x0D220008 08 Seat heating, seat cushion, left, open circuit
0x0D220009 09 Seat heating, seat cushion, right, open circuit
0x0D22000A 0A Roller sun blind, motor, open circuit
0x0D22000B 0B Roller sun blind, motor, short circuit

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## //BIT

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0x0E210001 01 Internal control-unit fault
0x0E210002 02 Internal Control-unit fault
0x0E210003 03 Line TEL_ON1 short circuit to ground
0x0E210004 04 Line TEL_ON2 short circuit to ground
0x0E210005 05 Line TEL_ON3 short circuit to ground
0x0E210006 06 Line TEL_ON4 short circuit to ground
0x0E210007 07 DSP signal, short circuit to ground
0x0E210008 08 DSP signal, short circuit to positive
0x0E210009 09 MUTE signal, short circuit to positive
0x0E21000A 0A Currently not present
0x0E210010 10 I-bus fault
0x0E210012 12 GSM level not OK
0x0E220001 01 Wire,compensator,short circuit to ground
0x0E220002 02 Wire,compensator,short circuit to positive
0x0E220003 03 Terminal 15,short circuit to ground
0x0E220004 04 Terminal 15,short circuit to positive
0x0E220005 05 Charging lead,short circuit to ground
0x0E220006 06 Charging lead,short circuit to positive
0x0E220007 07 Activation wire DSP,short circuit to ground
0x0E220008 08 Activation wire DSP,short circuit to positive
0x0E220009 09 Radio muting,short circuit to ground
0x0E22000A 0A Radio muting,short circuit to positive

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## //LSZ

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0x0F21000A 0A Control-unit fault
0x0F21000B 0B Control-unit fault
0x0F21000C 0C Control-unit fault
0x0F21000D 0D Control-unit fault

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# Bmw Code Sheet.txt

0x0F21000E 0E Control-unit fault  
 0x0F21000F 0F Control-unit fault  
 0x0F210010 10 Control-unit fault  
 0x0F210014 14 wire, brake-light switch, open circuit  
 0x0F210015 15 Break-light switch, short circ. to negative  
 0x0F210016 16 Turn-signal switch, short circ. to negative  
 0x0F210017 17 Main beam/headl. flasher, short circ. to neg.  
 0x0F210018 18 Connection to AHM is disturbed  
 0x0F21001E 1E Control-mod. fault w/headlight-range adjust.  
 0x0F21001F 1F Activ'n, motor for headlight-range adjust.  
 0x0F210020 20 Activ'n, motor for headlight-range adjust. 2  
 0x0F210021 21 Front load sensor, open circuit  
 0x0F210022 22 Front load sensor, short circuit to negative  
 0x0F210023 23 Rear load sensor, open circuit  
 0x0F210024 24 Rear load sensor, short circuit to negative  
 0x0F210028 28 Terminal R missing  
 0x0F210029 29 Terminal 15 missing  
 0x0F210032 32 Break light, centre, faulty  
 0x0F210033 33 Sidelight, front right, faulty  
 0x0F210034 34 Break light, left, faulty  
 0x0F210035 35 Break light, right, faulty  
 0x0F210036 36 Turn indicator, front left, faulty  
 0x0F210037 37 Turn indicator, front right, faulty  
 0x0F210038 38 Sidelight, front left, faulty  
 0x0F210039 39 Main beam, left faulty  
 0x0F21003A 3A Main beam, right, faulty  
 0x0F21003B 3B Sidelight, rear left, faulty  
 0x0F21003C 3C Number-plate light faulty  
 0x0F21003D 3D Sidelight, rear right, faulty  
 0x0F21003E 3E Rear fog light faulty  
 0x0F21003F 3F Turn indicator, rear left, faulty  
 0x0F210040 40 Turn indicator, rear right, faulty  
 0x0F210041 41 Dipped beam, right, faulty  
 0x0F210042 42 Dipped beam, left, faulty  
 0x0F210043 43 Supplementary turn indicator, left, faulty  
 0x0F210044 44 Supplementary turn indicator, right, faulty  
 0x0F21004A 4A Trailer, left turn-signal flasher faulty  
 0x0F21004B 4B Trailer, right turn-signal flasher faulty  
 0x0F210050 50 Activ'n headl.-range adj. driver, sporad. fault  
 0x0F22000A 0A Control-unit fault  
 0x0F22000B 0B Control-unit fault  
 0x0F22000C 0C Control-unit fault  
 0x0F22000D 0D Control-unit fault  
 0x0F22000F 0F Control-unit fault  
 0x0F220010 10 Term. 30 A faulty  
 0x0F220011 11 Term. 30 A faulty  
 0x0F220012 12 Control-unit fault  
 0x0F220013 13 Control-unit fault  
 0x0F220014 14 wire, break-light switch, open circuit  
 0x0F220015 15 wire, break-light switch, short circuit  
 0x0F220016 16 Wire/switch, turn indic., sh. circ. to earth  
 0x0F220017 17 Wire/switch, main b./headl.fl., sh. circ. to earth  
 0x0F220018 18 Connection to AHM is disturbed  
 0x0F220019 19 High-beam switch-inputs contradictory  
 0x0F22001E 1E Control-unit fault in HVAC section  
 0x0F22001F 1F Coils, stepping motors, faulty  
 0x0F220021 21 Headl.v.a.c., front load sensor, open circ.  
 0x0F220022 22 Headl.v.a.c., front load sens., sh. circ. to earth  
 0x0F220023 23 Headl.v.a.c., rear load sensor, open circ.  
 0x0F220024 24 Headl.v.a.c., rear load sens., sh. circ. to earth  
 0x0F220028 28 Terminal R missing  
 0x0F220029 29 Terminal 15 missing  
 0x0F22002A 2A HVAC potentiometer faulty

# Bmw Code Sheet.txt

0x0F22002B 2B Dimmer potentiometer faulty  
 0x0F220032 32 Break light, centre, faulty  
 0x0F220033 33 Sidelight, front right, faulty  
 0x0F220034 34 Break light, left, faulty  
 0x0F220035 35 Break light, right, faulty  
 0x0F220036 36 Turn indicator, front left, faulty  
 0x0F220037 37 Turn indicator, front right, faulty  
 0x0F220038 38 Sidelight, front left, faulty  
 0x0F220039 29 Main beam, left, faulty  
 0x0F22003A 3A Main beam, right, faulty  
 0x0F22003B 3B Sidelight, rear left, faulty  
 0x0F22003C 3C Number-plate light faulty  
 0x0F22003D 3D Sidelight, rear right, faulty  
 0x0F22003E 3E Rear fog lights faulty  
 0x0F22003F 3F Turn indicator, rear left, faulty  
 0x0F220040 40 Turn indicator, rear right, faulty  
 0x0F220041 41 Dipped beam, right, faulty  
 0x0F220042 42 Dipped beam, left, faulty  
 0x0F220043 43 Supplementary turn indicator, left, faulty  
 0x0F220044 44 Supplementary turn indicator, right, faulty  
 0x0F220045 45 Side light 2, rear right, faulty  
 0x0F220046 46 Side light 3, rear left, faulty  
 0x0F220047 47 Side light 3, rear right, faulty  
 0x0F22004A 4A Trailer, left turn-signal flasher faulty  
 0x0F22004B 4B Trailer, right turn-signal flasher faulty  
 0x0F220050 50 Sporadic fault on activ. of headl.v.a.c driver  
 0x0F220051 51 Transport mode active  
 0x0F230078 120 Left low beam faulty  
 0x0F230079 121 Right low beam faulty  
 0x0F23007A 122 Front left parking light faulty  
 0x0F23007B 123 Front right parking light faulty  
 0x0F23007C 124 Front left turn-signal flasher faulty  
 0x0F23007D 125 Front right turn-signal flasher faulty  
 0x0F23007E 126 Right fog lamp faulty  
 0x0F23007F 127 Left fog lamp faulty  
 0x0F230080 128 Left high beam faulty  
 0x0F230081 129 Right high beam faulty  
 0x0F23008C 140 Left tail light faulty  
 0x0F23008D 141 Right reversing light faulty  
 0x0F23008E 142 Inside left reversing light faulty  
 0x0F23008F 143 Inside right reversing light faulty  
 0x0F230090 144 Rear left turn-signal falsher faulty  
 0x0F230091 145 Rear right turn-signal falsher faulty  
 0x0F230092 146 Left brake light faulty  
 0x0F230093 147 Right brake light faulty  
 0x0F230094 148 Left rear fog light faulty  
 0x0F230095 149 Right rear fog light faulty  
 0x0F230096 150 Left reversing light faulty  
 0x0F230097 151 Right reversing light faulty  
 0x0F230098 152 Middle brake light faulty  
 0x0F230099 153 Number-plate lamp faulty  
 0x0F24000A 0A Control-unit fault  
 0x0F24000B 0B Control-unit fault  
 0x0F24000C 0C Control-unit fault  
 0x0F24000D 0D Control-unit fault  
 0x0F24000F 0F Control-unit fault  
 0x0F240010 10 Term. 30 A faulty  
 0x0F240011 11 Term. 30 A faulty  
 0x0F240012 12 Control-unit fault  
 0x0F240013 13 Control-unit fault  
 0x0F240014 14 wire, break-light switch, open circuit  
 0x0F240015 15 wire, break-light switch, short circuit to earth  
 0x0F240016 16 wire/switch, turn indic., sh. circ. to earth

# Bmw Code Sheet.txt

0x0F240017 17 wire/switch, main b./headl.fl., sh. circ. to earth  
 0x0F240018 18 Connection to AHM is disturbed  
 0x0F240019 19 High-beam switch-inputs contradictory  
 0x0F24001E 1E Control-unit fault in HVAC section  
 0x0F24001F 1F Coils, stepping motors, faulty  
 0x0F240021 21 Headl.v.a.c., front load sensor, open circ.  
 0x0F240022 22 Headl.v.a.c., front load sens., sh. circ. to earth  
 0x0F240023 23 Headl.v.a.c., rear load sensor, open circ.  
 0x0F240024 24 Headl.v.a.c., rear load sens., sh. circ. to earth  
 0x0F240028 28 Terminal R missing  
 0x0F240029 29 Terminal 15 missing  
 0x0F24002A 2A HVAC potentiometer faulty  
 0x0F24002B 2B Dimmer potentiometer faulty  
 0x0F240032 32 Break light, centre, faulty  
 0x0F240033 33 Sidelight, front right, faulty  
 0x0F240034 34 Break light, left, faulty  
 0x0F240035 35 Break light, right, faulty  
 0x0F240036 36 Turn indicator, front left, faulty  
 0x0F240037 37 Turn indicator, front right, faulty  
 0x0F240038 38 Sidelight, front left, faulty  
 0x0F240039 39 Main beam, left, faulty  
 0x0F24003A 3A Main beam, right, faulty  
 0x0F24003B 3B Sidelight, rear left, faulty  
 0x0F24003C 3C Number-plate light faulty  
 0x0F24003D 3D Sidelight, rear right, faulty  
 0x0F24003E 3E Rear fog lights faulty  
 0x0F24003F 3F Turn indicator, rear left, faulty  
 0x0F240040 40 Turn indicator, rear right, faulty  
 0x0F240041 41 Dipped beam, right, faulty  
 0x0F240042 42 Dipped beam, left, faulty  
 0x0F240043 43 Supplementary turn indicator, left, faulty  
 0x0F240044 44 Supplementary turn indicator, right, faulty  
 0x0F240045 45 Side light 2, rear right, faulty  
 0x0F240046 46 Side light 3, rear left, faulty  
 0x0F240047 47 Side light 3, rear right, faulty  
 0x0F24004A 4A Trailer, left turn-signal flasher faulty  
 0x0F24004B 4B Trailer, right turn-signal flasher faulty  
 0x0F240050 50 Sporadic fault on activ. of headl.v.a.c driver  
 0x0F240051 51 Transport mode active

//LEW

0x10210001 01 Supply (terminal 30)  
 0x10210002 02 Sensor current outside tolerance  
 0x10210003 03 Slider fault (normal operation)  
 0x10210004 04 Slider fault (adjustment operation)  
 0x10210005 05 Internal fault (EEPROM)  
 0x10210006 06 Internal fault (A/D converter)  
 0x10210007 07 Internal fault (ROM)  
 0x10210008 08 Internal fault (RAM)  
 0x1021000A 0A CAN version incorrect  
 0x1021000B 0B Sensor/vehicle allocation incorrect or not available  
 0x1021000C 0C CAN BUS OFF  
 0x1021000D 0D Steering speed implausible  
 0x1021000E 0E Steering angle implausible  
 0x1021000F 0F Internal fault (stack)

//RAD

0x11210001 01 Fault in the CD-changer interface  
 0x11210002 02 Fault in aerial power supply  
 0x11220000 00 Transport mode active  
 0x11220001 01 Fault in the CD-changer interface  
 0x11220002 02 Fault in aerial power supply

//EHC



# Bmw Code Sheet.txt

```

0x12210001 01 Ride-level sensor, left
0x12210002 02 Ride-level sensor, right
0x12210003 03 Compressor relay
0x12210004 04 Valve, left
0x12210005 05 Valve, right
0x12210006 06 Drain valve
0x12210007 07 Control unit
0x12210008 08 Control-time fault 'lifting'
0x12210009 09 Control-time fault 'Lowering'
0x1221000A 0A Control-time fault 'One - sided'
0x12220001 01 Height sensor, left
0x12220002 02 Height sensor, right
0x12220003 03 Compressor relay
0x12220004 04 Valve, left
0x12220005 05 Valve, right
0x12220006 06 Drain valve
0x12220007 07 Control unit
0x12220008 08 Control-time fault 'Raising'
0x12220009 09 Control-time fault 'Lowering'
0x1222000A 10 Control-time fault 'One - sided'
0x12615F8E 5F8E Ride-level sensor, rear left
0x12615F8F 5F8F Ride-level sensor, rear right
0x12615F90 5F90 Supply, air suspension
0x12615F92 5F92 Supply, ride-level sensor, rear left
0x12615F93 5F93 Supply, ride-level sensor, rear right
0x12615F94 5F94 Solenoid valve, rear left
0x12615F95 5F95 Solenoid valve, rear right
0x12615F96 5F96 Drain valve
0x12615F97 5F97 Compressor relay
0x12615F98 5F98 Control-time fault, lifting, rear left
0x12615F99 5F99 Control-time fault, lifting, rear right
0x12615F9A 5F9A Control-time fault, lifting
0x12615F9B 5F9B Control-time fault, lowering
0x12615F9C 5F9C Sensor activity, ride-level sensor, rear left
0x12615F9D 5F9D Sensor activity, ride-level sensor, rear right
0x12615FB0 5FB0 Control unit, internal fault
0x12615FB1 5FB1 Control-unit fault (EEPROM memory)
0x12615FB2 5FB2 Control-unit fault (flash memory)
0x12615FB3 5FB3 Checksum error, RAM error
0x12615FB4 5FB4 Energy-saving mode active
//BM
0x13210001 01 Control unit reset
0x13210002 02 PL line: short circuit to batt. +
0x13210003 03 PL line: short circuit to earth
0x13210004 04 PL line: open circuit
0x13210005 05 Overtemperature, monitor
0x13210006 06 Acknowledgement from radio not received
0x13210007 07 Fault, audio output, left +
0x13210008 08 Fault, audio output, left -
0x13210009 09 Fault, audio output, right +
0x1321000A 10 Fault, audio output, right -
0x1321000B 11 I-bus fault
0x1321000C 12 Forced switch-off, independent heating LED

//AIC
0x14210001 01 Internal hardware fault
0x14210002 02 No adaptation to windscreen possible
0x14210003 03 Supply voltage or temperature
0x14210004 04 Internal hardware fault
0x14210006 06 Reset contact not detected
0x14220001 10 Light sensor
0x14220002 20 Sensor not coded
0x14220003 30 Light sensor

```

# Bmw Code Sheet.txt

```
0x14220004 40 Optical initialisation
0x14220005 50 Optical initialisation
0x14220006 60 Optical initialisation
0x14220007 70 Optical initialisation
0x14220008 80 Control unit
0x14220009 90 Control unit
0x1422000A A0 Control unit
0x1422000B B0 Control unit
0x1422000C C0 Control unit
0x1422000D D0 Control unit
0x1422000E E0 Control unit
0x1422000F F0 Control unit
```

## //NAV

```
0x15210001 01 Navigation computer
0x15210002 02 Wheel sensor
0x15210003 03 Inputs,peripherals
0x15210004 04 GPS receiver does not respond to initialization of NavMk3
0x15210005 05 Temperature too high
0x15210006 06 Application software
0x15210007 07 Display
0x15210008 08 Audio
0x15210009 09 CD fault
0x1561D7D0 D7D0 Ring-break diagnosis has been carried out
0x1561D7D2 D7D2 Deactivation, high temperature
```

## //VID

```
0x17210003 03 Transport mode active
0x17210029 29 Transport mode active
```

## //MID

```
0x19210005 5 Transport mode active
```

## //SHD

```
0x1A210001 1 Relays
0x1A210002 2 Incremental sensor
0x1A210003 3 Control switch
0x1A210004 4 Control-module fault
0x1A220008 08 Internal control-unit fault
0x1A220009 09 Internal control-unit fault
0x1A22000A 0A Internal control-unit fault
0x1A22000B 0B Internal control-unit fault
0x1A22000D 0D Internal control-unit fault
0x1A22000E 0E Transport mode active
0x1A220085 85 Internal control-unit fault
0x1A220088 88 Control switch
0x1A22008A 8A Switch backlighting
0x1A22008D 8D Coding
0x1A220090 90 Roof unit, slide/tilt sunroof
0x1A220091 91 Drive, slide/tilt sunroof
0x1A220092 92 Normalization, slide/tilt sunroof
0x1A2200A0 A0 Roof unit, sliding visor
0x1A2200A1 A1 Drive, sliding visor
0x1A2200A2 A2 Normalization, sliding visor
0x1A810001 01 Relay in module does not pick up
0x1A810002 02 Relay in module does not pick up
0x1A810003 03 Relay in module does not pick up
0x1A810004 04 Relay in module does not pick up
0x1A810005 05 Relay in module sticks
0x1A810006 06 Relay in module sticks
0x1A810007 07 Relay in module sticks
0x1A810008 08 Relay in module sticks
0x1A810009 09 Rear position sensor faulty or polarity of motor reversed
0x1A81000A 0A Front position sensor faulty or polarity of motor reversed
0x1A81000B 11 Rear position sensor or rear motor faulty
```

# Bmw Code Sheet.txt

0x1A81000C 12 Front position sensor or front motor faulty  
 0x1A81000D 13 Power supply faulty  
 0x1A81000E 14 One motor faulty or wires are short-circuited to earth  
 0x1A81000F 15 SHD switch or wires faulty  
 0x1A810010 16 Internal fault

## //SMF

0x1B210000 00 Hall sensor, backrest angle: short circuit to negative  
 0x1B210001 01 Hall sensor, backrest angle: open circuit  
 0x1B210002 02 Hall sensor, backrest angle: short circuit to positive  
 0x1B210003 03 Hall sensor, seat height: short circuit to negative  
 0x1B210004 04 Hall sensor, seat height: open circuit  
 0x1B210005 05 Hall sensor, seat height: short circuit to positive  
 0x1B210006 06 Hall sensor, seat angle: short circuit to ground  
 0x1B210007 07 Hall sensor, seat angle: open circuit  
 0x1B210008 08 Hall sensor, seat angle: short circuit to positive  
 0x1B210009 09 Hall sensor, seat sled: short circuit to negative  
 0x1B21000A 0A Hall sensor, seat sled: open circuit  
 0x1B21000B 0B Hall sensor, seat sled: short circuit to positive  
 0x1B21000C 0C Supply voltage, Hall sensors: short circuit to positive  
 0x1B21000D 0D Control-module fault: motor bridge faulty  
 0x1B220000 00 Hall sensor, backrest angle: short circuit to ground  
 0x1B220001 01 Hall sensor, backrest angle: open circuit  
 0x1B220002 02 Hall sensor, backrest angle: short circuit to positive  
 0x1B220003 03 Hall sensor, seat height: short circuit to ground  
 0x1B220004 04 Hall sensor, seat height: open circuit  
 0x1B220005 05 Hall sensor, seat height: short circuit to positive  
 0x1B220006 06 Hall sensor, seat angle: short circuit to ground  
 0x1B220007 07 Hall sensor, seat angle: open circuit  
 0x1B220008 08 Hall sensor, seat angle: short circuit to positive  
 0x1B220009 09 Hall sensor, seat carriage: short circuit to ground  
 0x1B22000A 0A Hall sensor, seat carriage: open circuit  
 0x1B22000B 0B Hall sensor, seat carriage: short circuit to positive  
 0x1B22000C 0C Hall sensor, head restraint: short circuit to positive  
 0x1B22000D 0D Hall sensor, head restraint: open circuit  
 0x1B22000E 0E Hall sensor, head restraint: short circuit to positive  
 0x1B22000F 0F Hall sensor, backrest lock: short circuit to ground  
 0x1B220010 10 Hall sensor, backrest lock: open circuit  
 0x1B220011 11 Hall sensor, backrest lock: short circuit to positive  
 0x1B220012 12 Hall sensor ST2 not connected: short circuit to ground  
 0x1B220013 13 Control-unit fault: motor bridge faulty  
 0x1B220014 14 Seat control switch: short circuit to positive  
 0x1B220015 15 Seat control switch: short circuit to ground

## //SPMBT

0x1C210004 04 Mirror-adjustment switch,open circuit  
 0x1C210005 05 Mirror heater,open circuit  
 0x1C210006 06 Mirror heater,short circuit  
 0x1C210007 07 Mirror motor,potentiometer,vertical  
 0x1C210008 08 Mirror motor,potentiometer,horizontal  
 0x1C210009 09 Mirror motor,vertical,open circuit  
 0x1C21000A 0A Mirror motor,vertical,short circuit  
 0x1C21000B 0B Mirror motor,horizontal,open circuit  
 0x1C21000C 0C Mirror motor,horizontal,short circuit  
 0x1C21000D 0D Mirror motor,folding-in,open circuit  
 0x1C21000E 0E Mirror motor,folding-in,short circuit

## //SMPFT

0x1D210004 04 Mirror-adjustment switch,open circuit  
 0x1D210005 05 Mirror heater,open circuit  
 0x1D210006 06 Mirror heater,short circuit  
 0x1D210007 07 Mirror motor,potentiometer,vertical  
 0x1D210008 08 Mirror motor,potentiometer,horizontal

# Bmw Code Sheet.txt

```
0x1D210009 09 Mirror motor,vertical,open circuit
0x1D21000A 0A Mirror motor,vertical,short circuit
0x1D21000B 0B Mirror motor,horizontal,open circuit
0x1D21000C 0C Mirror motor,horizontal,short circuit
0x1D21000D 0D Mirror motor,folding-in,open circuit
0x1D21000E 0E Mirror motor,folding-in,short circuit
```

## //VTG

```
0x1E415208 5208 Supply, servomotor
0x1E4152D0 52D0 Lead, servomotor (signal name: DIR)
0x1E4152D1 52D1 Incremental transducer in servomotor, supply
0x1E4152D2 52D2 Lead, servomotor (signal name: IMP)
0x1E4152D4 52D4 Incremental transducer
0x1E415398 5398 Control unit, internal (flash)
0x1E415399 5399 Control unit, internal (EEPROM)
0x1E41539A 539A Control unit, internal (watchdog)
0x1E41539B 539B Control unit, internal (RAM)
0x1E41539D 539D Control unit, internal
0x1E41539E 539E Transfer case malfunction
0x1E4153A0 53A0 Coding incorrect
0x1E4153FB 53FB Supply, control unit: reset due to undervoltage
0x1E4153FC 53FC Supply, control unit: terminal 30
0x1E4153FE 53FE Control unit, internal (unexpected reset)
0x1E4153FF 53FF Supply, control unit: terminal 15
0x1E415460 5460 Motor current measurement faulty
0x1E415461 5461 Activation, servomotor, faulty
0x1E415462 5462 Servomotor or coupling force too high
0x1E415463 5463 Mechanism faulty
0x1E4154C4 54C4 Calibration faulty
0x1E4154C5 54C5 Offset, motor current measurement
0x1E4154C6 54C6 Oil wear
0x1E4154C7 54C7 Incremental-transducer model implausible
0x1E4154C8 54C8 Classification resistor
0x1E4155C0 55C0 Limp-home controller, abort
0x1E6155C3 55C3 AWD limp-home control activated. No DSC specified nominal torque.
```

## //CID

```
0x1F41A469 A469 Control-module fault
0x1F41A46A A46A Temperature deactivation
0x1F41A46B A46B Control-module fault
0x1F41A46C A46C Transport mode active
0x1F61A468 A468 External open circuit (LVDS data line)
0x1F61A469 A469 Internal control-module fault
0x1F61A46A A46A Cutout due to overtemperature (no fault)
0x1F61A46B A46B Internal control-module fault
0x1F61A46C A46C Transport mode active
```

## //EPS

```
0x2041D6FE D6FE Day/night switch signal
0x2041FFFF FFFF Unknown fault location
0x2041610C 610C Comparison,rotor angle<->steering angle
0x2041610D 610D CAN bus
0x2041610E 610E Temperature EPS
0x2041610F 610F EEPROM,no risk
0x20416110 6110 Sensor supply
0x20416111 6111 ROM checksum
0x20416112 6112 Ignition
0x20416113 6113 Intelligent watchdog
0x20416114 6114 compare
0x20416115 6115 RAM
0x20416116 6116 Relays
0x20416117 6117 Internal voltage
0x20416118 6118 Control,servomotor
0x20416119 6119 Speed,servomotor
```

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0x2041611A 611A Phase voltage,servomotor  
 0x2041611B 611B Steering angle  
 0x2041611C 611C Steering torque  
 0x2041611D 611D Power supply  
 0x2041611E 611E vehicle speed  
 0x2041611F 611F Program  
 0x20416120 6120 Sport button display  
 0x20416121 6121 vehicle engine speed  
 0x20416122 6122 EEPROM,high risk  
 0x20416123 6123 Module,engine control  
 0x20416124 6124 Power reduction due to overtemperature  
 0x20416125 6125 Steering angle correction  
 0x20416126 6126 Power reduction due to overloading  
 0x20416127 6127 Steering angle  
 0x20416128 6128 Vehicle speed  
 0x20416129 6129 vehicle engine speed  
 0x2041612A 612A Mileage/km reading  
 0x2041612B 612B Sport button signal  
 0x2041612C 612C Day/night switch signal  
 0x2041612D 612D Steering angle correction  
 0x2041612E 612E Comparison,rotor angle<->steering angle  
 //SBSL  
 0x21419828 9828 Processor:reset  
 0x21419829 9829 Control-unit fault  
 0x2141982A 982A Control-unit fault  
 0x2141982B 982B Incorrect chassis number  
 0x2141982C 982C System time fault  
 0x2141983E 983E Control-unit fault  
 0x21419840 9840 Coding-data error  
 0x21419841 9841 Coding-data error  
 0x21419842 9842 Self-test:too few messages  
 0x21419843 9843 Self-test:data error in message  
 0x21419844 9844 Self-test:transmission error  
 0x21419845 9845 Implausible crash severity  
 0x21419846 9846 Control-unit fault  
 0x21419847 9847 Short circuit,firing circuit,front airbag,left,stage 1(E85),or active head restraint,front left(E6x),to ground  
 0x21419848 9848 Short circuit,firing circuit,front airbag,left,stage 1(E85),or active head restraint,front left(E6x),to positive  
 0x21419849 9849 Resistance,firing circuit,front airbag,left,stage 1(E85),or active head restraint,front left(E6x),to low  
 0x2141984A 984A Resistance,firing circuit,front airbag,left,stage 1(E85),or active head restraint,front left(E6x),to high  
 0x2141984B 984B Resistance,firing circuit,front airbag,left,stage 1(E85),or active head restraint,front left(E6x),to measured  
 0x2141984C 984C Open circuit,firing circuit,front airbag,left,stage 1(E85),or active head restraint,front left(E6x)  
 0x2141984D 984D Control-unit fault  
 0x2141984E 984E Control-unit fault  
 0x2141984F 984F Coding,firing circuit,front airbag,left,stage 1(E85),or active head restraint,front left(E6x),at variance  
 0x21419850 9850 Control-unit fault  
 0x21419851 9851 Control-unit fault  
 0x21419852 9852 Short circuit,firing circuit,front airbag,left,stage 2(E85),or active head restraint,front right(E6x),to ground  
 0x21419853 9853 Short circuit,firing circuit,front airbag,left,stage 2(E85),or active head restraint,front right(E6x),to positive  
 0x21419855 9854 Resistance,firing circuit,front airbag,left,stage 2(E85),or active head restraint,front right(E6x),too low  
 0x21419855 9855 Resistance,firing circuit,front airbag,left,stage 2(E85),or active head restraint,front right(E6x),too high  
 0x21419856 9856 Resistance,firing circuit,front airbag,left,stage 2(E85),or active head restraint,front right(E6x),not measured

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0x21419857 9857 Open circuit,firing circuit,front airbag,left,stage 2(E85),or active head restraint,front right(E6x)  
 0x21419858 9858 Control-unit fault  
 0x21419859 9859 Control-unit fault  
 0x2141985A 985A Coding ,firing circuit,front airbag,left,stage 2(E85),or active head restraint,front right(E6x),at variance  
 0x2141985B 985B Control-unit fault  
 0x2141985C 985C Control-unit fault  
 0x2141985D 985D Short circuit,firing circuit,belt tensioner,front left,to ground  
 0x2141985E 985E Short circuit,firing circuit,belt tensioner,front left,to positive  
 0x2141985F 985F Resistance,firing circuit,belt tensioner,front left,too low  
 0x21419860 9860 Resistance,firing circuit,belt tensioner,front left,too high  
 0x21419861 9861 Resistance,firing circuit,belt tensioner,front left,not measured  
 0x21419862 9862 Open circuit,firing circuit,belt tensioner,front left  
 0x21419863 9863 Control-unit fault  
 0x21419864 9864 Control-unit fault  
 0x21419865 9865 Coding,firing circuit,belt tensioner,front left,at variance  
 0x21419866 9866 Control-unit fault  
 0x21419867 9867 Control-unit fault  
 0x21419868 9868 Short circuit,firing circuit,thorax airbag,rear left(E85,E60,E61),or knee airbag,front left(E63,E64),to ground  
 0x21419869 9869 Short circuit,firing circuit,thorax airbag,rear left(E85,E60,E61),or knee airbag,front left(E63,E64),to positive  
 0x2141986A 986A Resistance,firing circuit,thorax airbag,rear left(E85,E60,E61),or knee airbag,front left(E63,E64),too low  
 0x2141986B 986B Resistance,firing circuit,thorax airbag,rear left(E85,E60,E61),or knee airbag,front left(E63,E64),too high  
 0x2141986C 986C Resistance,firing circuit,thorax airbag,rear left(E85,E60,E61),or knee airbag,front left(E63,E64),not measured  
 0x2141986D 986D Open circuit,firing circuit,thorax airbag,rear left(E85,E60,E61),or knee airbag,front left(E63,E64)  
 0x2141986E 986E Control-unit fault  
 0x2141986F 986F Control-unit fault  
 0x21419870 9870 Coding,firing circuit,thorax airbag,rear left(E85,E60,E61),or knee airbag,front left(E63,E64) at variance  
 0x21419871 9871 Control-unit fault  
 0x21419872 9872 Control-unit fault  
 0x21419873 9873 Short circuit,firing circuit,belt tensioner,rear left,to ground  
 0x21419874 9874 Short circuit,firing circuit,belt tensioner,rear left,to positive  
 0x21419875 9875 Resistance,firing circuit,belt tensioner,rear left,too low  
 0x21419876 9876 Resistance,firing circuit,belt tensioner,rear left,too high  
 0x21419877 9877 Resistance,firing circuit,belt tensioner,rear left,not measured  
 0x21419878 9878 Open circuit,firing circuit,belt tensioner,rear left  
 0x21419879 9879 Control-unit fault  
 0x2141987A 987A Control-unit fault  
 0x2141987B 987B Coding,firing circuit,belt tensioner,rear left,at variance  
 0x2141987C 987C Control-unit fault  
 0x2141987D 987D Control-unit fault  
 0x2141987E 987E Short circuit,firing circuit,knee airbag,front left(E85),or head airbag,left(E6x),to ground  
 0x2141987F 987F Short circuit,firing circuit,knee airbag,front left(E85),or head airbag,left(E6x),to positive  
 0x21419880 9880 Resistance,firing circuit,knee airbag,front left(E85),or head airbag,left(E6x),too low  
 0x21419881 9881 Resistance,firing circuit,knee airbag,front left(E85),or head airbag,left(E6x),too high  
 0x21419882 9882 Resistance,firing circuit,knee airbag,front left(E85),or head airbag,left(E6x),not measured  
 0x21419883 9883 Open circuit,firing circuit,knee airbag,front left(E85),or head airbag,left(E6x)  
 0x21419884 9884 Control-unit fault  
 0x21419885 9885 Control-unit fault  
 0x21419886 9886 Coding,firing circuit,knee airbag,front left(E85),or head

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airbag,left(E6x),at variance

0x21419887 9887 Control-unit fault  
 0x21419888 9888 Control-unit fault  
 0x21419889 9889 Control-unit fault  
 0x2141988A 988A Control-unit fault  
 0x2141988B 988B Control-unit fault  
 0x2141988C 988C Control-unit fault  
 0x2141988D 988D Control-unit fault  
 0x2141988E 988E Control-unit fault  
 0x2141988F 988F Seat-belt buckle:short circuit  
 0x21419890 9890 Seat-belt buckle:implausible ,measured value  
 0x21419891 9891 Seat-belt buckle:open circuit  
 0x21419892 9892 Control unit fault(E6x) or software error(E85)  
 0x21419893 9893 Seat-occupancy detector,passenger:open circuit  
 0x21419894 9894 Seat-occupancy detector,passenger:short circuit  
 0x21419895 9895 Seat-occupancy detector,passenger:communication fault  
 0x21419896 9896 Control-unit fault  
 0x21419897 9897 Control-unit fault  
 0x21419898 9898 Firing attempt taken place  
 0x21419899 9899 Control-unit fault  
 0x2141989E 989E Voltage supply not in permitted range  
 //SBSL MODE5  
 0x2161982C 982C System time fault  
 0x21619842 9842 Self-Test: too few messages

//SBSR

0x224198A8 98A8 Processor:reset  
 0x224198A9 98A9 Control-unit fault  
 0x224198AA 98AA Control-unit fault  
 0x224198AB 98AB Incorrect chassis number  
 0x224198AC 98AC System time fault  
 0x224198AE 98AE Control-unit fault  
 0x224198C0 98C0 Coding-data error  
 0x224198C1 98C1 Coding-data error  
 0x224198C2 98C2 Self-test:too few messages  
 0x224198C3 98C3 Self-test:data error in message  
 0x224198C4 98C4 Self-test:transmission error  
 0x224198C5 98C5 Implausible crash severity  
 0x224198C6 98C6 Control-unit fault  
 0x224198C7 98C7 Short circuit,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 1,to ground  
 0x224198C8 98C8 Short circuit,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 1,to positive  
 0x224198C9 98C9 Resistance,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 1,too low  
 0x224198CA 98CA Resistance,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 1,too high  
 0x224198CB 98CB Resistance,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 1,not measured  
 0x224198CC 98CC Open circuit,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 1  
 0x224198CD 98CD Control-unit fault  
 0x224198CE 98CE Control-unit fault  
 0x224198CF 98CF Coding,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 1,at variance  
 0x224198D0 98D0 Control-unit fault  
 0x224198D1 98D1 Control-unit fault  
 0x224198D2 98D2 Short circuit,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 2,to ground  
 0x224198D3 98D3 Short circuit,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 2,to positive  
 0x224198D4 98D4 Resistance,firing circuit,front airbag,right(E85),or passenger  
 airbag(E6x),stage 2,too low

# Bmw Code Sheet.txt

0x224198D5 98D5 Resistance, firing circuit, front airbag, right(E85), or passenger airbag(E6x), stage 2, too high  
 0x224198D6 98D6 Resistance, firing circuit, front airbag, right(E85), or passenger airbag(E6x), stage 2, not measured  
 0x224198D7 98D7 Open circuit, firing circuit, front airbag, right(E85), or passenger airbag(E6x), stage 2  
 0x224198D8 98D8 Control-unit fault  
 0x224198D9 98D9 Control-unit fault  
 0x224198DA 98DA Coding, firing circuit, front airbag, right(E85), or passenger airbag(E6x), stage 2, at variance  
 0x224198DB 98DB Control-unit fault  
 0x224198DC 98DC Control-unit fault  
 0x224198DD 98DD Short circuit, firing circuit, belt tensioner, front right, to ground  
 0x224198DE 98DE Short circuit, firing circuit, belt tensioner, front right, to positive  
 0x224198DF 98DF Resistance, firing circuit, belt tensioner, front right, too low  
 0x224198E0 98E0 Resistance, firing circuit, belt tensioner, front right, too high  
 0x224198E1 98E1 Resistance, firing circuit, belt tensioner, front right, not measured  
 0x224198E2 98E2 Open circuit, firing circuit, belt tensioner, front right  
 0x224198E3 98E3 Control-unit fault  
 0x224198E4 98E4 Control-unit fault  
 0x224198E5 98E5 Coding, firing circuit, belt tensioner, front right, at variance  
 0x224198E6 98E6 Control-unit fault  
 0x224198E7 98E7 Control-unit fault  
 0x224198E8 98E8 Short circuit, firing circuit, thorax airbag, rear right(E85, E60, E61), or knee airbag, front right(E63, E64), to ground  
 0x224198E9 98E9 Short circuit, firing circuit, thorax airbag, rear right(E85, E60, E61), or knee airbag, front right(E63, E64), to positive  
 0x224198EA 98EA Resistance, firing circuit, thorax airbag, rear right(E85, E60, E61), or knee airbag, front right(E63, E64), too low  
 0x224198EB 98EB Resistance, firing circuit, thorax airbag, rear right(E85, E60, E61), or knee airbag, front right(E63, E64), too high  
 0x224198EC 98EC Resistance, firing circuit, thorax airbag, rear right(E85, E60, E61), or knee airbag, front right(E63, E64), not measured  
 0x224198ED 98ED Open circuit, firing circuit, thorax airbag, rear right(E85, E60, E61), or knee airbag, front right(E63, E64)  
 0x224198EE 98EE Control-unit fault  
 0x224198EF 98EF Control-unit fault  
 0x224198F0 98F0 Coding, firing circuit, thorax airbag, rear right(E85, E60, E61), or knee airbag, front right(E63, E64) at variance  
 0x224198F1 98F1 Control-unit fault  
 0x224198F2 98F2 Control-unit fault  
 0x224198F3 98F3 Short circuit, firing circuit, safety battery terminal(E85), or belt tensioner, rear right(E6x), to ground  
 0x224198F4 98F4 Short circuit, firing circuit, safety battery terminal(E85), or belt tensioner, rear right(E6x), to positive  
 0x224198F5 98F5 Resistance, firing circuit, safety battery terminal(E85), or belt tensioner, rear right(E6x), too low  
 0x224198F6 98F6 Resistance, firing circuit, safety battery terminal(E85), or belt tensioner, rear right(E6x), too high  
 0x224198F7 98F7 Resistance, firing circuit, safety battery terminal(E85), or belt tensioner, rear right(E6x), not measured  
 0x224198F8 98F8 Open circuit, firing circuit, safety battery terminal(E85), or belt tensioner, rear right(E6x)  
 0x224198F9 98F9 Control-unit fault  
 0x224198FA 98FA Control-unit fault  
 0x224198FB 98FB Coding, firing circuit, safety battery terminal(E85), or belt tensioner, rear right(E6x) , at variance  
 0x224198FC 98FC Control-unit fault  
 0x224198FD 98FD Control-unit fault  
 0x224198FE 98FE Short circuit, firing circuit, knee airbag, front right(E85), or head airbag, right(E6x), too ground  
 0x224198FF 98FF Short circuit, firing circuit, knee airbag, front right(E85), or head airbag, right(E6x), too positive



# Bmw Code Sheet.txt

0x22419900 9900 Resistance, firing circuit, knee airbag, front right(E85), or head airbag, right(E6x), too low  
 0x22419901 9901 Resistance, firing circuit, knee airbag, front right(E85), or head airbag, right(E6x), too high  
 0x22419902 9902 Resistance, firing circuit, knee airbag, front right(E85), or head airbag, right(E6x), not measured  
 0x22419903 9903 Open circuit, firing circuit, knee airbag, front right(E85), or head airbag, right(E6x)  
 0x22419904 9904 Control-unit fault  
 0x22419905 9905 Control-unit fault  
 0x22419906 9906 Coding, firing circuit, knee airbag, front right(E85), or head airbag, right(E6x), at variance  
 0x22419907 9907 Control-unit fault  
 0x22419908 9908 Control-unit fault  
 0x22419909 9909 Control-unit fault  
 0x2241990A 990A Control-unit fault  
 0x2241990B 990B Control-unit fault  
 0x2241990C 990C Control-unit fault  
 0x2241990D 990D Control-unit fault  
 0x2241990E 990E Control-unit fault  
 0x2241990F 990F Seat-belt buckle: short circuit  
 0x22419910 9910 Seat-belt buckle: implausible measured value  
 0x22419911 9911 Seat-belt buckle: open circuit  
 0x22419912 9912 Control unit fault(E6x) or software error(E85)  
 0x22419913 9913 Seat-occupancy detector, passenger: open circuit  
 0x22419914 9914 Seat-occupancy detector, passenger: short circuit  
 0x22419915 9915 Seat-occupancy detector, passenger: communication fault  
 0x22419916 9916 Control-unit fault  
 0x22419917 9917 Control-unit fault  
 0x22419918 9918 Firing attempt taken place  
 0x22419919 9919 Control-unit fault  
 0x2241991A 991A Battery lead(shield): open circuit  
 0x2241991B 991B Battery lead(shield): short circuit to ground  
 0x2241991C 991C Battery lead(shield): short circuit to positive  
 0x2241991D 991D Battery lead(shield): implausible measured value  
 0x2241991E 991E Voltage supply not in permitted range  
 0x226198AC System time fault  
 0x226198C2 Self-test: too few messages  
 0x226198D5 Resistance, firing circuit, safety battery terminal, too high

//CVM

0x23210001 01 Coding-data record invalid, not coded  
 0x23210002 02 Coding implausible  
 0x23210003 03 Control-unit fault, internal memory  
 0x23210004 04 Control-unit fault, internal memory  
 0x23210005 05 Control-unit fault, coding data  
 0x23210006 06 Control-unit fault, internal memory  
 0x23210007 07 Control-unit fault  
 0x23210008 08 Control-unit fault  
 0x23210009 09 Control-unit fault  
 0x2321000A 0A K bus faulty  
 0x23210010 10 voltage supply to switch in car faulty  
 0x23210011 11 Voltage supply to switch on convertible top faulty  
 0x23210012 12 Open control button permanently active  
 0x23210013 13 Close control button permanently active  
 0x23210014 14 Temperature-sensor input, permanently to ground  
 0x23210015 15 Temperature sensor open-circuited  
 0x23210016 16 Position switch for main pillar, open circuit  
 0x23210017 17 Position switch for main pillar, short circuit to ground  
 0x23210018 18 Position switch for tension bar, open circuit  
 0x23210019 19 Position switch for tension bar, short circuit to ground  
 0x2321001A 1A Switch, convertible-top comp. lid, voltage > 2.5V  
 0x2321001B 1B Switch, convertible-top comp. lid, voltage undefined

# BMW Code Sheet.txt

0x2321001C 1C Switch, convertible-top comp. lid, short to ground or open circuit  
 0x2321001D 1D Switch, cowl locked, voltage > 2.5V  
 0x2321001E 1E Switch, cowl locked, voltage undefined  
 0x2321001F 1F Switch, cowl locked, short to ground or open circuit  
 0x23210020 20 Switch, cowl unlocked, voltage > 2.5V  
 0x23210021 21 Switch, cowl unlocked, voltage undefined  
 0x23210022 22 Switch, cowl unlocked, short to ground or open circuit  
 0x23210023 23 Switch, convertible-top comp. lid, right, locked, voltage > 2.5V  
 0x23210024 24 Switch, convertible-top comp. lid, right, locked, voltage undefined  
 0x23210025 25 Switch, convertible-top comp. lid, right, locked, short to ground or open circuit  
 0x23210026 26 Switch, convertible-top comp. lid, left, locked, voltage > 2.5V  
 0x23210027 27 Switch, convertible-top comp. lid, left, locked, voltage undefined  
 0x23210028 28 Switch, convertible-top comp. lid, left, locked, short to ground or open circuit  
 0x23210029 29 Switch, convertible-top locked, voltage > 2.5V  
 0x2321002A 2A Switch, convertible-top locked, voltage undefined  
 0x2321002B 2B Switch, convertible-top locked, short to ground or open circuit  
 0x2321002C 2C VSW 9, voltage > 5V  
 0x2321002D 2D VSW 9, voltage undefined  
 0x2321002E 2E VSW 9, short circuit to ground  
 0x2321002F 2F Switch, hard top, voltage > 2.5V  
 0x23210030 30 Switch, hard top, voltage undefined  
 0x23210031 31 Switch, hard top, short to ground or open circuit  
 0x23210040 40 Drive, cowl, motor current too high during unlocking  
 0x23210041 41 Drive, cowl, motor current too high during unlocking  
 0x23210042 42 Drive, cowl, short circuit to +ve  
 0x23210043 43 Drive, cowl, fault during unlocking  
 0x23210044 44 Drive, cowl, fault during unlocking  
 0x23210045 45 Valve, retract clamping bracket, open circuit  
 0x23210046 46 Valve, retract clamping bracket, short circuit to ground  
 0x23210047 47 Valve, retract clamping bracket, short circuit to +ve  
 0x23210048 48 Valve, extend clamping bracket, open circuit  
 0x23210049 49 Valve, extend clamping bracket, short circuit to ground  
 0x2321004A 4A Valve, extend clamping bracket, short circuit to +ve  
 0x2321004B 4B Short between valve, retract clamping bracket, and valve, main pillar  
 0x2321004C 4C Valve, main pillar, open circuit  
 0x2321004D 4D Valve, main pillar, short circuit to ground  
 0x2321004E 4E Valve, main pillar, short circuit to ground  
 0x23210050 50 Valve, emergency release, open circuit  
 0x23210051 51 Valve, emergency release, short circuit to ground  
 0x23210052 52 Valve, emergency release, short circuit to positive  
 0x23210053 53 Relay, convertible top drive, open circuit  
 0x23210054 54 Relay, convertible top drive, short circuit to ground  
 0x23210055 55 Relay, convertible top drive, short circuit to positive  
 0x23210056 56 Short circuit between output, relay, convertible top drive, and valve, emergency release  
 0x23210057 57 Valve, convertible-top comp. lid, open circuit  
 0x23210058 58 Valve, convertible-top comp. lid, short circuit to ground  
 0x23210059 59 Valve, convertible-top comp. lid, short circuit to +ve  
 0x23210060 60 Convertible-top compartment lid is not raised  
 0x23210061 61 Convertible-top compartment lid is not opened  
 0x23210062 62 Convertible-top compartment lid is not closed  
 0x23210063 63 Main pillar does not pull clamping bracket from convertible-top compartment  
 0x23210064 64 Main pillar does not force clamping bracket into convertible-top compartment  
 0x23210065 65 Clamping bracket is not fully raised  
 0x23210066 66 Clamping bracket does not locate engagement area  
 0x23210067 67 Cowl does not move upwards  
 0x23210068 68 Cowl does not move downwards  
 0x23220001 01 Control unit not coded  
 0x23220002 02 Coding data incorrect

# Bmw Code Sheet.txt

0x23220003 03 Control unit  
 0x23220005 05 Coding data incorrect  
 0x23220006 06 Control unit  
 0x23220007 07 Control unit  
 0x23220008 08 Control unit  
 0x23220009 09 Control unit  
 0x23220011 11 Supply,convertible-top switch(Hall sensors)  
 0x23220012 12 Control button,short circuit when opening  
 0x23220013 13 Control button,short circuit when closing  
 0x2322001A 1A Switch,convertible top closed,short circuit to positive  
 0x2322001B 1B Switch,convertible top closed,undefined voltage range  
 0x2322001C 1C Switch,convertible top closed, short circuit to ground  
 0x2322001D 1D Switch,cowl panel locked,short circuit to positive  
 0x2322001E 1E Switch,cowl panel locked, undefined voltage range  
 0x2322001F 1F Switch,cowl panel locked,short circuit to ground  
 0x23220020 20 Switch,cowl panel unlocked,short circuit to positive  
 0x23220021 21 Switch,cowl panel unlocked, undefined voltage range  
 0x23220022 22 Switch,cowl panel unlocked,short circuit to ground  
 0x23220023 23 Switch,convertible top stowed,short circuit to positive  
 0x23220024 24 Switch,convertible top stowed,undefined voltage range  
 0x23220025 25 Switch,convertible top stowed, short circuit to ground  
 0x23220040 40 Drive,cowl panel,current too high when opening safety catch  
 0x23220041 41 Drive,cowl panel,current too high when closing safety catch  
 0x23220042 42 Drive,cowl panel,short circuit to positive  
 0x23220043 43 Drive,cowl panel,open circuit  
 0x23220044 44 Drive,cowl panel,open circuit  
 0x23220063 63 Time exceeded,close convertible top  
 0x23220064 64 Time exceeded,open convertible top  
 0x23220067 67 Time exceeded,unlocked convertible top  
 0x23220068 68 Time exceeded,lock convertible top  
 0x23220069 69 Circuit,pump,open convertible top  
 0x2322006A 6A Circuit,pump,open convertible top,short circuit to ground  
 0x2322006B 6B Circuit,pump,open convertible top,short circuit to positive  
 0x2322006C 6C Circuit,pump,close convertible top,open circuit  
 0x2322006D 6D Circuit,pump,close convertible top,short circuit to ground  
 0x2322006E 6E Circuit,pump,close convertible top,short circuit to positive

//SIM

0x244193A8 93A8 Processor: reset  
 0x244193A9 93A9 Control-unit fault  
 0x244193AA 93AA Control-unit fault  
 0x244193AB 93AB Incorrect chassis number  
 0x244193AC 93AC System time fault  
 0x244193AD 93AD No message (1) from satellite,door,front left  
 0x244193AF 93AF No message (3) from satellite,door,front right  
 0x244193B1 93B1 No message (5) from satellite,B-pillar, left  
 0x244193B3 93B3 No message (7) from satellite,B-pillar, right  
 0x244193B7 93B7 No message (B) from satellite,B-pillar, left  
 0x244193B8 93B8 No message (C) from satellite,B-pillar, right  
 0x244193BA 93BA No message (11) from satellite,B-pillar, right  
 0x244193BB 93BB No message (12) from satellite,B-pillar, left  
 0x244193BC 93BC No message (20) from satellite,B-pillar, left  
 0x244193BD 93BD No message (21) from satellite,B-pillar, right  
 0x244193C0 93C0 Coding-data error  
 0x244193C1 93C1 Coding-data error  
 0x244193C2 93C2 Self-test:too few messages  
 0x244193C3 93C3 Self-test:data error in message  
 0x244193C4 93C4 Self-test:transmission error  
 0x244193C5 93C5 Implausible crash severity  
 0x244193C6 93C6 Control-unit fault  
 0x244193C7 93C7 Deactivation:satellite,B-pillar,left  
 0x244193C8 93C8 Deactivation:satellite,B-pillar,right  
 0x244193C9 93C9 Deactivation:satellite,door,front left  
 0x244193CA 93CA Deactivation:satellite,door,front right

# Bmw Code Sheet.txt

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0x244193D9 93D9 Control-unit fault
0x244193DB 93DB Control-unit fault
0x244193DC 93DC Control-unit fault
0x244193DD 93DD Control-unit fault
0x244193DE 93DE Firing attempt taken place
0x244193DF 93DF Control-unit fault
0x244193E0 93E0 Control-unit fault
0x244193E1 93E1 Control-unit fault
0x244193E2 93E2 Key-operated switch,passenger airbag:short circuit
0x244193E3 93E3 Key-operated switch,passenger airbag:implausible measured value
0x244193E4 93E4 Key-operated switch,passenger airbag:open circuit
0x244193E5 93E5 Indicator lamp,airbag deactivation:short circuit to ground
0x244193E6 93E6 Signal lamp,airbag deactivation:open circuit
0x244193E7 93E7 Undervoltage
0x244193E8 93E8 Control-unit fault
0x244193E9 93E9 Terminal 30:overvoltage
0x244193EA 93EA Indicator lamp,airbag deactivation:short circuit to positive
0x244193EB 93EB Control-unit fault
0x244193EC 93EC Control-unit fault
0x244193ED 93ED Control-unit fault
0x244193EE 93EE Control-unit fault
0x244193EF 93EF Communication fault to satellite,passenger airbag
0x244193F0 93F0 Fault during activation and deactivation of passenger airbag
0x244193F1 93F1 Driver's airbag coded out instead of passenger airbag
0x244193F2 93F2 Key-operated switch,passenger airbag:status change during driving
0x244193F3 93F3 Key switch,passenger airbag:coding data fault
0x244193F4 93F4 Control-unit fault
0x244193F5 93F5 Coding-data error
0x244193FF 93FF Front sensor,left:wrong component
0x24419400 9400 Front sensor,right:wrong component
0x24419401 9401 Control-unit fault
0x24419402 9402 Front sensor,left
0x24419403 9403 Front sensor,right

```

## //SMB

```

0x25210009 09 Hall sensor, seat carriage, short circuit to ground
0x2521000A 0A Hall sensor, seat carriage, open circuit
0x2521000B 0B Hall sensor, seat carriage, short circuit to positive
0x2521000C 0C Supply voltage, Hall sensors, short circuit to +ve
0x2521000D 0D Control-module fault, motor bridge faulty

```

## //URS

```

0x26210001 1 Internal hardware fault
0x26210002 2 Malfunction warning lamp
0x26210003 3 Undervoltage
0x26210004 4 Short circuit between actuators 1 and 2
0x26210005 5 Actuator 1 (left)
0x26210006 6 Actuator 2 (right)
0x26210007 7 Number of triggerings greater than 200
0x26210008 8 Sensor for overturning (level gauge 1)
0x26210009 9 Sensor for overturning (level gauge 1)
0x2621000A 10 Sensor for overturning (level gauge 1)
0x2621000B 11 Sensor for overturning (level gauge 2)
0x2621000C 12 Sensor for overturning (level gauge 2)
0x2621000D 13 Sensor for overturning (level gauge 2)
0x2621000E 14 Sensor for overturning (g sensor)

```

## //RDC

```

0x27210000 00 Control module
0x27210001 01 Control module
0x27210002 02 Control module
0x27210003 03 Control module
0x27210004 04 Control unit

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# Bmw Code Sheet.txt

0x27210005 05 Control module  
 0x27210006 06 Control module  
 0x27210007 07 Control module  
 0x27210008 08 Control module  
 0x27210009 09 Control module  
 0x2721000B 11 Control module  
 0x2721000C 12 Control module  
 0x2721000D 13 Control module  
 0x27210010 16 Control module  
 0x27210011 17 Control module  
 0x27210012 18 Control module  
 0x27210013 19 Control module  
 0x27210014 20 Control module  
 0x27210019 25 DWA output faulty  
 0x2721001A 26 RDC pushbutton  
 0x2721001B 27 RDC pushbutton  
 0x2721001C 28 RDC pushbutton  
 0x27210029 41 K-bus fault  
 0x2721002C 44 Battery, front left  
 0x2721002D 45 Sensor fault, front left  
 0x2721002E 46 Signal path, front left, not OK  
 0x2721002F 47 Battery, front right  
 0x27210030 48 Sensor fault, front right  
 0x27210031 49 Signal path, front right, not OK  
 0x27210032 50 Battery, rear left  
 0x27210033 51 Sensor fault, rear left  
 0x27210034 52 Signal path, rear left not OK  
 0x27210035 53 Battery, rear right  
 0x27210038 54 Sensor fault, rear right  
 0x27210037 55 Signal path, rear right, not OK  
 0x2721003B 59 Battery Less than 2.7 volts  
 0x2721003C 60 Sensor fault (pressure > 6.3 bar)  
 0x2721003D 61 Transmission channel faulty  
 0x27210068 10 Aerial, front left  
 0x27210069 10 Aerial, front right  
 0x2721006A 10 Aerial, rear left  
 0x2721006B 10 Aerial, rear right  
 0x27210073 11 wheel allocation not possible  
 0x27210080 12 Terminal 30  
 0x27210081 12 Terminal 15/K bus  
 0x27210082 13 Terminal 15/K bus  
 0x27220001 01 Control unit fault(ROM error)  
 0x27220002 02 Control unit fault(RAM error)  
 0x27220003 03 Control unit fault(EEPROM error)  
 0x27220004 04 Control unit fault(system error)  
 0x27220005 05 Control unit fault(system error)  
 0x27220006 06 RPA button,short circuit to ground(plausibility)  
 0x27220007 07 Speed pulses FL  
 0x27220008 08 Speed pulses FR  
 0x27220009 09 Speed pulses RL  
 0x2722000A 0A Speed pulses RR  
 0x2722000B 0B K bus(60s no reception with KL15)  
 0x2722000C 0C Control unit fault(EEPROM error)  
 0x2761604C 604C Terminal fault  
 0x2761604D 604D Fault, control unit  
 0x2761604E 604E Fault, RDC system  
 0x2761604F 604F Fault, transmission channel FL  
 0x27616050 6050 Fault, transmission channel FR  
 0x27616051 6051 Fault, transmission channel RL  
 0x27616052 6052 Fault, transmission channel RR  
 0x27616053 6053 Fault, transmission channel SW  
 0x27616054 6054 Fault, wheel sensor FL  
 0x27616055 6055 Fault, wheel sensor FR

# Bmw Code Sheet.txt

0x27616056 6056 Fault, wheel sensor RL  
 0x27616057 6057 Fault, wheel sensor RR  
 0x27616058 6058 Fault, wheel sensor SW  
 0x27616059 6059 Fault, wheel sensor undefined

//VNC

0x29210005 01 Valve 1 (retarded adjustment)  
 0x29210006 02 CAN BUS  
 0x2921000D 06 Sensor 1 (outlet shaft)  
 0x2921000F 08 Checksum  
 0x29210011 09 Valve 2 (advanced adjustment)  
 0x29210013 14 Sensor 2 (inlet shaft)

//DWA

0x2B619CE8 9CE8 Control-unit fault  
 0x2B619CE9 9CE9 Control-unit fault  
 0x2B619CEA 9CEA Control-unit fault  
 0x2B619CEB 9CEB Control-unit fault / Transport mode active  
 0x2B619CEC 9CEC Ultrasonic sensor  
 0x2B619CF9 9CF9 DWA-LED  
 0x2B619D00 9D00 Communication fault with siren / DWA BUS  
 0x2B619D01 9D01 Microwave sensor, incorrect version  
 0x2B619D0C 9D0C DWA-data bus  
 0x2B619D12 9D12 Internal battery discharged  
 0x2B619D14 9D14 Circuit, protective device, faulty  
 0x2B619D15 9D15 Wakeup circuit faulty  
 0x2B619D16 9D16 Circuit, warning signal, faulty  
 0x2B619D17 9D17 Maximum operating temperature reached  
 0x2B619D18 9D18 Coding-data error  
 0x2B619D19 9D19 Coding-data error  
 0x2B619D1A 9D1A Coding-data error  
 0x2B619D1B 9D1B Coding-data error  
 0x2B619D1C 9D1C Min. operating temperature reached  
 0x2B619D1D 9D1D Coding-data error  
 0x2B619D1F 9D1F Tilt sensor faulty

//GAS

0x2E810001 01 Failure of all four wheel speeds  
 0x2E810002 02 wheel-speed signal, front left  
 0x2E810003 03 wheel-speed signal, front right  
 0x2E810004 04 wheel-speed signal, rear left  
 0x2E810005 05 wheel-speed signal, rear right  
 0x2E810006 06 Brake signal faulty  
 0x2E810007 07 Fault, throttle-valve signal  
 0x2E810008 08 Fault, engine speed  
 0x2E81000A 10 Fault in hydraulics self-test while driving  
 0x2E81000B 11 Fault, safety relay  
 0x2E810010 16 Control-unit fault  
 0x2E810011 17 Coding data absent  
 0x2E810013 19 No pressure reduction during hydraulics self-test while driving  
 0x2E810014 20 Electrical fault, pressure build-up valve  
 0x2E810015 21 Electrical fault, pressure-reduction valve  
 0x2E810016 22 Electrical fault, central-differential lock

//CAS

0x3161A0A8 A0A8 Control module fault  
 0x3161A0A9 A0A9 Control module fault  
 0x3161A0AA A0AA Control module fault  
 0x3161A0AB A0AB Programming error  
 0x3161A0AC A0AC Control module fault  
 0x3161A0AD A0AD Processor  
 0x3161A0AE A0AE Transport mode active  
 0x3161A0AF A0AF Control-module fault  
 0x3161A0B0 A0B0 Input, brake lights, implausible  
 0x3161A0B1 A0B1 Input, selector lever/clutch switch, implausible

# Bmw Code Sheet.txt

0x3161A0B3 A0B3 Starter motor, terminal 50  
 0x3161A0B4 A0B4 Engine starting, starter motor operation  
 0x3161A0B4 A0B4 Engine start,starter operation  
 0x3161A0B5 A0B5 Fault, road speed signal  
 0x3161A0B6 A0B6 Selector-lever interlock  
 0x3161A0B8 A0B8 Hall sensor, key engaged  
 0x3161A0B9 A0B9 Hall sensor, key eject  
 0x3161A0BA A0BA Hall sensor, start/stop button  
 0x3161A0BB A0BB Hall sensor, start/stop button  
 0x3161A0BC A0BC Identification sensor, solenoid  
 0x3161A0BD A0BD Output, wakeup line PT-CAN  
 0x3161A0BE A0BE Terminal 15 output 1  
 0x3161A0BF A0BF Terminal 15 output 2  
 0x3161A0C0 A0C0 Terminal 15 output 3  
 0x3161A0C1 A0C1 Output, terminal 50  
 0x3161A0C2 A0C2 Output, terminal 50 RS  
 0x3161A0C3 A0C3 Output, wakeup line ACC  
 0x3161A0C4 A0C4 Terminal 15 output 4  
 0x3161A0C6 A0C6 Terminal R  
 0x3161A0C7 A0C7 Terminal R  
 0x3161A0C8 A0C8 Lock cylinder, driver's door  
 0x3161A0CC A0CC Continuous signal, remote control  
 0x3161A0CF A0CF Outside door handle  
 0x3161A0F0 A0F0 Transponder coil  
 0x3161A0F1 A0F1 Key number invalid  
 0x3161A0F2 A0F2 Incorrect duplicate key  
 0x3161A100 A100 Immobilizer random code  
 0x3161A110 A110 Roadspeed signal implausible  
 0x3161A111 A111 Control-module fault  
 0x3161A112 A112 ELV fault  
 0x3161A113 A113 ELV fault  
 0x3161A114 A114 Line fault, el.steering lock  
 0x3161A115 A115 Line fault, el.steering lock  
 0x3161A116 A116 Critical status, el.steering lock  
 0x3161A117 A117 Programming error, CAS  
 0x3161A118 A118 Roadspeed signal implausible  
 0x3161A119 A119 Power supply el.steering lock  
 0x3161A11A A11A ELV fault  
 0x3161A120 A120 Terminal 30g short circuit  
 0x3161A121 A121 Short circuit, LED START - STOP button  
 0x3161A124 A124 Terminal Control  
 0x3162A0A8 A0A8 Control module fault  
 0x3162A0A9 A0A9 Control module fault  
 0x3162A0AA A0AA Control module fault  
 0x3162A0AB A0AB Programming error  
 0x3162A0AC A0AC Control module fault  
 0x3162A0AD A0AD Control module fault  
 0x3162A0AE A0AE Transport mode active  
 0x3162A0AF A0AF Control-module fault  
 0x3162A0B1 A0B1 Input, selector lever/clutch switch, implausible  
 0x3162A0B4 A0B4 Engine starting, starter motor operation  
 0x3162A0B5 A0B5 wheel speed sensor  
 0x3162A0B9 A0B9 Hall sensor, key eject  
 0x3162A0BA A0BA Hall sensor, start/stop button  
 0x3162A0BB A0BB Hall sensor, start/stop button  
 0x3162A0BC A0BC Ignition lock, solenoid  
 0x3162A0BD A0BD Output, wakeup line PT-CAN  
 0x3162A0BE A0BE Terminal 15 output 1  
 0x3162A0BF A0BF Terminal 15 output 2  
 0x3162A0C0 A0C0 Terminal 15 output 3  
 0x3162A0C1 A0C1 Output, terminal 50, short-circuit  
 0x3162A0C2 A0C2 Output, terminal 50  
 0x3162A0C3 A0C3 Output, wakeup line ACC

# Bmw Code Sheet.txt

0x3162A0C4 A0C4 Terminal 15 output 4  
 0x3162A0C8 A0C8 Lock cylinder, driver's door  
 0x3162A0CC A0CC Continuous signal, open window  
 0x3162A0CF A0CF Outside door handle  
 0x3162A0F0 A0F0 Transponder coil  
 0x3162A0F1 A0F1 Immobilizer key data  
 0x3162A0F2 A0F2 Incorrect duplicate key  
 0x3162A100 A100 Immobilizer random code  
 0x3162A110 A110 Control-module fault  
 0x3162A111 A111 Control-module fault  
 0x3162A112 A112 ELV fault  
 0x3162A113 A113 ELV fault  
 0x3162A114 A114 ELV fault  
 0x3162A115 A115 ELV fault  
 0x3162A116 A116 ELV fault  
 0x3162A117 A117 ELV fault  
 0x3162A119 A119 ELV fault  
 0x3162A11A A11A ELV fault  
 0x3162A11B A11B ELV fault  
 0x3162A120 A120 Terminal 30g short circuit  
 0x3162A121 A121 Fault LED START - STOP button  
 0x3162A122 A122 Short circuit Hall sensors  
 0x3162D905 D905 Spare  
 0x3162D906 D906 Spare  
 0x3162D940 D940 Spare  
 0x3162D941 D941 Spare  
 0x3162D942 D942 Spare  
 0x3163A0A8 A0A8 Control-unit fault  
 0x3163A0AA A0AA Control-unit fault  
 0x3163A0AB A0AB Programming error  
 0x3163A0AC A0AC Control-unit fault  
 0x3163A0AD A0AD Control-unit fault  
 0x3163A0B0 A0B0 Input, brake lights, implausible  
 0x3163A0B1 A0B1 Input, selector lever, implausible  
 0x3163A0B2 A0B2 Supply, terminal 30E  
 0x3163A0B3 A0B3 Starter motor, terminal 50  
 0x3163A0B4 A0B4 Engine starting, starter-motor operation  
 0x3163A0B5 A0B5 wheel-speed sensor  
 0x3163A0B8 A0B8 Hall sensor, key engaged  
 0x3163A0B9 A0B9 Hall sensor, key eject  
 0x3163A0BA A0BA Hall sensor, start/stop button  
 0x3163A0BB A0BB Hall sensor, start/stop button  
 0x3163A0BC A0BC Ignition lock, solenoid  
 0x3163A0BD A0BD Output, wakeup line PT-CAN  
 0x3163A0BE A0BE Terminal 15 output 1  
 0x3163A0BF A0BF Terminal 15 output 2  
 0x3163A0C0 A0C0 Terminal 15 output 3  
 0x3163A0C1 A0C1 Output, terminal 50, short circuit  
 0x3163A0C2 A0C2 Output, terminal 50  
 0x3163A0C3 A0C3 Output, wakeup line ACC  
 0x3163A0C4 A0C4 Terminal 15 output 4  
 0x3163A0C8 A0C8 Lock cylinder, driver's door  
 0x3163A0CC A0CC Continuous signal, open window  
 0x3163A0CF A0CF Outside door handle  
 0x3163A0E0 A0E0 Signal or value above threshold  
 0x3163A0E7 A0E7 Signal or value above threshold  
 0x3163A0F0 A0F0 Transponder coil  
 0x3163A0F1 A0F1 Immobiliser key data  
 0x3163A0F2 A0F2 Incorrect duplicate key  
 0x3163A0F3 A0F3 Immobiliser key data  
 0x3163A100 A100 Immobiliser random code



# Bmw Code Sheet.txt

//cim

0x38615D2C 5D2C KL30  
 0x38615D2D 5D2D ECU internal  
 0x38615D2F 5D2F MLSSL+  
 0x38615D30 5D30 MLSSL-  
 0x38615D31 5D31 MLSEN+  
 0x38615D32 5D32 MLSEN-  
 0x38615D35 5D35 Hall sensor, longitudinal  
 0x38615D36 5D36 Hall sensor, inclination  
 0x38615D38 5D38 Position data, steering column  
 0x38615D39 5D39 EEPROM fault

//EDC

0x3A615FCC 5FCC Signal, acceleration, front left, too low  
 0x3A615FCD 5FCD Signal, acceleration, front left, too high  
 0x3A615FCE 5FCE Signal, acceleration, front left, implausible  
 0x3A615FD0 5FD0 Signal, acceleration, front right, too low  
 0x3A615FD1 5FD1 Signal, acceleration, front right, too high  
 0x3A615FD2 5FD2 Signal, acceleration, front right, implausible  
 0x3A615FD4 5FD4 Signal, acceleration, rear right, too low  
 0x3A615FD5 5FD5 Signal, acceleration, rear right, too high  
 0x3A615FD6 5FD6 Signal, acceleration, rear right, implausible  
 0x3A615FD8 5FD8 Signal, acceleration, implausible  
 0x3A615FE1 5FE1 Steering angle, correction value exceeded  
 0x3A615FE4 5FE4 Shock-absorber valves, front axle, over current  
 0x3A615FE5 5FE5 Shock-absorber valves, rear axle, over current  
 0x3A615FE6 5FE6 Shock-absorber valves, front axle  
 0x3A615FE7 5FE7 Shock-absorber valves, rear axle  
 0x3A615FE8 5FE8 Shock-absorber valves, front axle, short circuit  
 0x3A615FE9 5FE9 Shock-absorber valves, rear axle, short circuit  
 0x3A615FF0 5FF0 CAN message (vehicle speed) from DSC  
 0x3A615FF1 5FF1 wheel speed, front left  
 0x3A615FF2 5FF2 wheel speed, front right  
 0x3A615FF3 5FF3 CAN message (wheel speed, front left) from DSC  
 0x3A615FF4 5FF4 CAN message (wheel speed, front right) from DSC  
 0x3A615FF5 5FF5 CAN message (outside temperature) from instrument cluster  
 0x3A615FF6 5FF6 CAN message (mileage) from instrument cluster  
 0x3A615FF7 5FF7 CAN message (steering angle) from SZL  
 0x3A615FF8 5FF8 CAN message (vehicle speeds) from DSC  
 0x3A615FF9 5FF9 Coding-data error  
 0x3A615FFA 5FFA Supply voltage, acceleration sensor  
 0x3A615FFB 5FFB Terminal voltage, Electronic Damper Control  
 0x3A615FFC 5FFC Supply voltage, Electronic Damper control  
 0x3A615FFD 5FFD Wakeup line, Electronic Damper Control  
 0x3A615FFE 5FFE Voltage, terminal EDC

//EMF

//AHL

0x3E61A588 A588 Internal fault AHL  
 0x3E61A589 A589 Communication with stepper motor box 1 impaired  
 0x3E61A58A A58A Communication with stepper motor box 2 impaired  
 0x3E61A58B A58B Sensor,ride level,front,faulity  
 0x3E61A58C A58C Ride-level sensor,rear,faulity  
 0x3E61A58D A58D Brake-light switch faulity  
 0x3E61A58E A58E Energy,saving mode on  
 0x3E61A58F A58F Fault,WAKE-UP line  
 0x3E61A590 A590 SMC left faulity  
 0x3E61A591 A591 SMC right faulity

//KHI

//AMP

0x4061A1A9 A1A9 Overload, output stages  
 0x4061D6D0 D6D0 Ring-break diagnosis has been carried out  
 0x4061D6D2 D6D2 Deactivation, high temperature

# Bmw Code Sheet.txt

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0x4061D6D4 D6D4 Control module fault
0x4061D6D5 D6D5 Control module fault
0x4061D6D0 D6D0 Ring-break diagnosis has been carried out
0x4061D6D2 D6D2 Deactivation, high temperature
0x4061D6D4 D6D4 Control module fault
0x4061D6D5 D6D5 Control module fault

//SGFD
//SGFDGW
//CD
0x4461A048 A048 Fault memory test, control display, computer
//CCC-BO
0x4462A048 A048 Fault memory test, control display, computer
//M-ASK-BO
0x4463ABC9 ABC9 Drive faulty
0x4463ABCA ABCA aerial power supply
0x4463ABCB ABCB Connection, Top hi-fi
//RAD
0x4462A048 A048 Fault memory test, control display, computer
//RAD2-BO
0x4465ABC8 ABC8 Drive faulty
0x4465ABCC ABCC Short circuit at antenna power supply
0x4465ABCE ABCE Flash memory fault
0x4465ABCF ABCF Memory fault
0x4465ABD0 ABD0 Control-module fault
0x4465ABD1 ABD1 No connection to antenna
0x4465ABD2 ABD2 Incorrect antenna
0x4465ABD3 ABD3 Antenna-diversity fault

//CDGW
0x4561E192 E192 Deactivation, overtemperature
//M-ASK-GW
0x4562A168 A168 Hardware faulty
0x4562A169 A169 Hardware fault LCD
0x4562A16A A16A Checksum error, gateway table
0x4562A16B A16B Transport mode active
0x4562E192 E192 Deactivation, high temperature
//CCC-GW
0x4563A179 A179 Control-unit fault or over-/undervoltage
0x4563A168 A168 Control-unit fault
0x4563A169 A169 Control-unit fault
0x4563A16A A16A Control-unit fault or voltage supply
0x4563A16B A16B Control-unit fault
0x4563A16D A16D Temperature outside permitted range
0x4563A170 A170 RAD_ON Signal: setpoint/actual value does not correspond
0x4563A171 A171 Control-unit fault
0x4563A172 A172 Control-unit fault
0x4563A174 A174 Control-unit fault
0x4563A175 A175 Control-unit fault
0x4563A176 A176 Control-unit fault
0x4563A178 A178 Temperature too high
0x4563A17B A17B Battery voltage over 14V
0x4563A187 A187 Transport mode active
0x4563E192 E192 Deactivation, Overtemperature
0x4563A168 A168 Control-unit fault
0x4563A169 A169 Control-unit fault
0x4563A16A A16A Control-unit fault or voltage supply
0x4563A16B A16B Control-unit fault
0x4563A16D A16D Temperature outside permitted range
0x4563A170 A170 RAD_ON Signal: setpoint/actual value does not correspond
0x4563A171 A171 Control-unit fault
0x4563A172 A172 Control-unit fault
0x4563A174 A174 Control-unit fault

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# Bmw Code Sheet.txt

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0x4563A175 A175 Control-unit fault
0x4563A176 A176 Control-unit fault
0x4563A178 A178 Temperature too high
0x4563A179 A179 Control-unit fault
0x4563A17B A17B Battery voltage over 14V
0x4563A187 A187 Transport mode active
//RAD2-GW
0x4564E192 E192 Deactivation, overtemperature

//FD
0x4861A489 A489 Control-unit fault
//CDC
0x49619D28 9D28 Changer mechanism, load CD
0x49619D29 9D29 Changer mechanism, unload CD
0x49619D2B 9D2B Changer mechanism, magazine ejection
0x4961D810 D810 No code descriptions
0x4961D812 D812 Deactivation, high temperature
//CON
0x4A61A2C8 A2C8 Internal control-unit fault
0x4A61A2CB A2CB Internal control-unit fault
0x4A61A2CC A2CC Transport mode active
//FCON
0x4B61E307 E307 K-CAN Communication fault

//HKL
0x5061A2B3 A2B3 Angle-of-rotation sensor
//DVDC

//RSL
0x5B61A128 A128 Hardware, rain sensor
0x5B61A129 A129 No adaptation to windscreen
0x5B61A12A A12A Overtemperature
0x5B61A12B A12B Overvoltage/undervoltage
0x5B61A12D A12D Overvoltage/undervoltage
0x5B61A12E A12E Calibration error, light sensor
0x5B61A128 A128 Hardware, rain sensor
0x5B61A129 A129 No adaptation to windshield
0x5B61A12A A12A High temperature
0x5B61A12B A12B Overvoltage / undervoltage
0x5B61A12D A12D Hardware, light sensor
0x5B61A12E A12E Calibration error, light sensor

0x5B62A148 A148 Control module fault
0x5B62A149 A149 Input term. 15 waking
0x5B62A14A A14A Battery switch
0x5B62A14B A14B Eccentric contact
0x5B62A14C A14C Battery temperature sensor
0x5B62A14D A14D Driver Term. 30
0x5B62A14E A14E Driver, rear window defroster
0x5B62A14F A14F Driver, interior lighting
0x5B62A150 A150 Driver Term. 15
0x5B62A151 A151 Driver Term. R
0x5B62A152 A152 Driver, electrical load, roof
0x5B62A153 A153 Driver, electrical load, body
0x5B62A154 A154 Fuel filler flap motor
0x5B62A155 A155 Trunk motor
0x5B62A156 A156 Trunk contact
0x5B62A157 A157 SCA motor
0x5B62A158 A158 Battery disconnection (closed-circuit current)
0x5B62A159 A159 Battery disconnection (Imax)
0x5B62A15A A15A Battery disconnection (short circuit)
0x5B62A15B A15B Driver, light module
0x5B62A15C A15C Transport mode active

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# Bmw Code Sheet.txt

0x5B62A15D A15D Battery, exhaustive discharge  
 0x5B62A15E A15E Light module  
 0x5B62A15F A15F Exhibition mode  
 0x5B62A160 A160 Multi-fuses

//SASL

0x5C619557 9557 Open circuit, firing circuit, knee airbag, front left  
 0x5C61952C 952C System time fault  
 0x5C619542 9542 Self-test: too few messages  
 0x5C61954C 954C Open circuit, firing circuit, head airbag, left

//SASR

0x5D6195D7 95D7 Open circuit, firing circuit, knee airbag, front right  
 0x5D6195AC 95AC System time fault

//SFZ

0x60619AAC 9AAC System time fault  
 0x60619AC2 9AC2 Self-test: too few messages  
 0x60619AA8 9AA8 Processor: reset  
 0x60619AA9 9AA9 Control-module fault  
 0x60619AAA 9AAA Control-module fault  
 0x60619AAB 9AAB Incorrect chassis number  
 0x60619AAC 9AAC System time fault  
 0x60619AAD 9AAD Spare  
 0x60619AAE 9AAE Spare  
 0x60619AAF 9AAF Spare  
 0x60619AB0 9AB0 Spare  
 0x60619AB1 9AB1 Spare  
 0x60619AB2 9AB2 Spare  
 0x60619AB3 9AB3 Spare  
 0x60619AB4 9AB4 Spare  
 0x60619AB5 9AB5 Spare  
 0x60619AB6 9AB6 Spare  
 0x60619AB7 9AB7 Spare  
 0x60619AB9 9AB9 Spare  
 0x60619ABA 9ABA Spare  
 0x60619ABB 9ABB Spare  
 0x60619ABC 9ABC Spare  
 0x60619ABD 9ABD Spare  
 0x60619ABE 9ABE Spare  
 0x60619AC1 9AC1 Control-module fault  
 0x60619AC2 9AC2 Self-test: too few message  
 0x60619AC3 9AC3 Self-test: data error in message  
 0x60619AC4 9AC4 Self-test: transmission error  
 0x60619AC5 9AC5 Implausible crash severity  
 0x60619AC6 9AC6 Control-module fault  
 0x60619AC7 9AC7 Control-module fault  
 0x60619AC8 9AC8 Control-module fault  
 0x60619AC9 9AC9 Control-module fault  
 0x60619ACA 9ACA Control-module fault  
 0x60619ACB 9ACB Control-module fault  
 0x60619ACC 9ACC Control-module fault  
 0x60619ACD 9ACD Control-module fault

//SSBF

0x616197AC 97AC System time fault  
 0x616197C2 97C2 Self-test: too few messages  
 0x616197CC 97CC Open circuit, firing circuit, passenger belt tensioner  
 0x616197D7 97D7 Open circuit, firing circuit, passenger active head restraint  
 0x616197DD 97DD Seatbelt-catch switch, front passenger: open circuit  
 0x616197DF 97DF Seat occupancy detector, passenger: communication fault  
 0x616197FF 97FF Communication fault, seat-occupancy detector, passenger  
 0x616197A8 97A8 Processor: reset  
 0x616197A9 97A9 Control-module fault  
 0x616197AA 97AA Control-module fault

# Bmw Code Sheet.txt

0x616197AB 97AB Incorrect chassis number  
 0x616197AC 97AC System time fault  
 0x616197AD 97AD Spare  
 0x616197AE 97AE Spare  
 0x616197AF 97AF Spare  
 0x616197B0 97B0 Spare  
 0x616197B2 97B2 Spare  
 0x616197B4 97B4 Spare  
 0x616197B5 97B5 Spare  
 0x616197B6 97B6 Spare  
 0x616197B8 97B8 Spare  
 0x616197BA 97BA Spare  
 0x616197BB 97BB Spare  
 0x616197BD 97BD Spare  
 0x616197BE 97BE Spare  
 0x616197C0 97C0 Coding/data error  
 0x616197C1 97C1 Control-module fault  
 0x616197C2 97C2 Self-test: too few message  
 0x616197C3 97C3 Self-test: data error in message  
 0x616197C4 97C4 Self-test: transmission error  
 0x616197C5 97C5 Implausible crash severity  
 0x616197C6 97C6 Control-module fault  
 0x616197C7 97C7 Short-circuit, firing circuit, passenger seat belt tensioner, to ground  
 0x616197C8 97C8 Short-circuit, firing circuit, passenger seat belt tensioner, to positive  
 0x616197C9 97C9 Resistance, firing circuit, seat belt tensioner, front passenger, too low  
 0x616197CA 97CA Resistance, firing circuit, seat belt tensioner, front passenger, too high  
 0x616197CB 97CB Resistance, firing circuit, seat belt tensioner, front passenger, can not be measured  
 0x616197CC 97CC Open circuit, firing circuitm passenger seat belt tensioner  
 0x616197CD 97CD Control-module fault  
 0x616197CE 97CE Control-module fault  
 0x616197CF 97CF Coding, firing circuit, seat belt tensioner, front passenger, at variance  
 0x616197D0 97D0 Control-module fault  
 0x616197D1 97D1 Control-module fault  
 0x616197D2 97D2 Short-circuit, firing circuit, passenger active head restraint, to ground  
 0x616197D3 97D3 Short-circuit, firing circuit, passenger active head restraint, to positive  
 0x616197D4 97D4 Resistance, firing circuit, active head restraint, front passenger, too low  
 0x616197D5 97D5 Resistance, firing circuit, active head restraint, front passenger, too high  
 0x616197D6 97D6 Resistance, firing circuit, active head restraint, front passenger, can not be measured  
 0x616197D7 97D7 Open circuit, firing circuit, passenger active head restraint  
 0x616197D8 97D8 Control-module fault  
 0x616197D9 97D9 Control-module fault  
 0x616198DA 98DA Coding, firing circuit, active head restraint, front passenger, at variance  
 0x616197DB 97DB Control-module fault  
 0x616197DC 97DC Seat-belt buckle switch, passenger, short circuit  
 0x616197DD 97DD Seat-belt buckle switch, passenger, open circuit  
 0x616197DE 97DE Control-module fault  
 0x616197FD 97FD Open circuit, seat occupancy detector, passenger  
 0x616197FE 97FE Short-circuit, seat occupancy detector, passenger  
 0x616197FF 97FF Communication fault, seat occupancy detector, passenger  
 0x616197E0 97E0 seat occupancy detector, passenger:faulity

# BMW Code Sheet.txt

//SSFA

0x62619763 9763 Open circuit, seat-occupancy detector, driver  
0x62619728 9728 Processor: reset  
0x62619729 9729 Control-module fault  
0x6261972A 972A Control-module fault  
0x6261972B 972B Incorrect chassis number  
0x6261972C 972C System time fault  
0x6261972D 972D Spare  
0x6261972E 972E Spare  
0x6261972F 972F Spare  
0x62619730 9730 Spare  
0x62619732 9732 Spare  
0x62619724 9724 Spare  
0x62619735 9735 Spare  
0x62619736 9736 Spare  
0x62619738 9738 Spare  
0x6261973A 973A Spare  
0x6261973B 973B Spare  
0x6261973C 973C Spare  
0x6261973E 973E Spare  
0x62619740 9740 Coding/data error  
0x62619741 9741 Control-module fault  
0x62619742 9742 Self-test: too few message  
0x62619743 9743 Self-test: data error in message  
0x62619744 9744 Self test: transmission error  
0x62619745 9745 Implausible crash severity  
0x62619747 9747 Control-module fault  
0x62619747 9747 Short-circuit, firing circuit, driver's seat belt tensioner, to ground  
0x62619748 9748 Short-circuit, firing circuit, driver's seat belt tensioner, to positive  
0x62619749 9749 Resistance, firing circuit, seat belt tensioner, driver, too low  
0x6261974A 974A Resistance, firing circuit, seat belt tensioner, driver, too high  
0x6261974B 974B Resistance, firing circuit, seat belt tensioner, driver, can not be measured  
0x6261974C 974C Open circuit, firing circuit, driver's seat belt tensioner  
0x6261974D 974D Control-module fault  
0x6261974E 974E Control-module fault  
0x6261974F 974F Coding, firing circuit, seat belt tensioner, driver, at variance  
0x62619750 9750 Control-module fault  
0x62619751 9751 Control-module fault  
0x62619752 9752 Short-circuit, firing circuit, driver's active head restraint, to ground  
0x62619753 9753 Short-circuit, firing circuit, driver's active head restraint, to positive  
0x62619754 9754 Resistance, firing circuit, active head restraint, driver, too low  
0x62619755 9755 Resistance, firing circuit, active head restraint, driver, too high  
0x62619756 9756 Resistance, firing circuit, active head restraint, can not be measured  
0x62619757 9757 Open circuit, firing circuit, driver's active head restraint  
0x62619758 9758 Control-module fault  
0x62619759 9759 Control-module fault  
0x6261975A 975A Coding, firing circuit, active head restraint, driver, at variance  
0x6261975B 975B Control-module fault  
0x6261975C 975C Seat-belt buckle switch, driver, short circuit  
0x6261975D 975D Seat-belt buckle switch, driver, open circuit  
0x6261975E 975E Control-module fault  
0x62619763 9763 Open circuit, seat occupancy detector, driver  
0x62619764 9764 Short-circuit, seat occupancy detector, driver  
0x62619765 9765 Communication fault, seat occupancy detector, driver  
0x62619766 9766 Control-module fault  
0x62619767 9767 Control-module fault  
0x62619768 9768 Firing attempt taken place

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0x62619769 9769 Control-module fault  
 0x6261976A 976A Control-module fault  
 0x6261976B 976B Control-module fault  
 0x6261976C 976C Control-module fault  
 0x6261976D 976D Control-module fault  
 0x6261976E 976E Control-module fault

//SSH

0x63619A2C 9A2C System time fault  
 0x63619A4C 9A4C Open circuit, firing circuit, thorax airbag, rear right  
 0x63619A57 9A57 Open circuit, firing circuit, belt tensioner, rear right  
 0x63619A62 9A62 Open circuit, firing circuit, belt tensioner, rear left  
 0x63619A6D 9A6D Open circuit, firing circuit, thorax airbag, rear left  
 0x63619A81 9A81 Communication fault, seat-occupancy detector, rear left  
 0x63619A84 9A84 Communication fault, seat-occupancy detector, rear right  
 0x63619A28 9A28 Processor:reset  
 0x63619A29 9A29 Control-unit fault  
 0x63619A2a 9A2a Control-unit fault  
 0x63619A2B 9A2B Incorrect chassis number  
 0x63619A2C 9A2C System time fault  
 0x63619A40 9A40 Coding-data error  
 0x63619A41 9A41 Control-unit fault  
 0x63619A42 9A42 Self-test:too few messages  
 0x63619A43 9A43 Self-test:data error in message  
 0x63619A44 9A44 Self-test:transmission error  
 0x63619A45 9A45 Implausible crash severity  
 0x63619A46 9A46 Control-unit fault  
 0x63619A47 9A47 Short circuit,firing circuit,thorax airbag,rear right,to ground  
 0x63619A48 9A48 Short circuit,firing circuit,thorax airbag,rear right,to positive  
 0x63619A49 9A49 Resistance,firing circuit,thorax airbag,rear right,too low  
 0x63619A4A 9A4A Resistance,firing circuit,thorax airbag,rear right,too high  
 0x63619A4B 9A4B Resistance,firing circuit,thorax airbag,rear right,cannot be measured  
 0x63619A4C 9A4C Open circuit,firing circuit,thorax airbag,rear right  
 0x63619A4D 9A4D Control-unit fault  
 0x63619A4E 9A4E Control-unit fault  
 0x63619A4F 9A4F Coding,firing circuit,thorax airbag,rear right,at variance  
 0x63619A50 9A50 Control-unit fault  
 0x63619A51 9A51 Control-unit fault  
 0x63619A52 9A52 Short circuit,firing circuit,belt tensioner,rear right,to ground  
 0x63619A53 9A53 Short circuit,firing circuit,belt tensioner,rear right,to positive  
 0x63619A54 9A54 Resistance,firing circuit,belt tensioner,rear right,too low  
 0x63619A55 9A55 Resistance,firing circuit,belt tensioner,rear right,too high  
 0x63619A56 9A56 Resistance,firing circuit,belt tensioner,rear right,cannot be measured  
 0x63619A57 9A57 Open circuit,firing circuit,belt tensioner,rear right  
 0x63619A58 9A58 Control-unit fault  
 0x63619A59 9A59 Control-unit fault  
 0x63619A5A 9A5A Coding,firing circuit,belt tensioner,rear right,at variance  
 0x63619A5B 9A5B Control-unit fault  
 0x63619A5C 9A5C Control-unit fault  
 0x63619A5D 9A5D Short circuit,firing circuit,belt tensioner,rear left,to ground  
 0x63619A5E 9A5E Short circuit,firing circuit,belt tensioner,rear left,to positive  
 0x63619A5F 9A5F Resistance,firing circuit,belt tensioner,rear left,too low  
 0x63619A60 9A60 Resistance,firing circuit,belt tensioner,rear left,too high  
 0x63619A61 9A61 Resistance,firing circuit,belt tensioner,rear left,cannot be measured  
 0x63619A62 9A62 Open circuit,firing circuit,belt tensioner,rear left  
 0x63619A63 9A63 Control-unit fault  
 0x63619A64 9A64 Control-unit fault  
 0x63619A65 9A65 Coding,firing circuit,belt tensioner,rear left,at variance  
 0x63619A66 9A66 Control-unit fault  
 0x63619A67 9A67 Control-unit fault

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0x63619A68 9A68 Short circuit,firing circuit,thorax airbag,rear left,to ground  
 0x63619A69 9A69 Short circuit,firing circuit,thorax airbag,rear left,to positive  
 0x63619A6A 9A6A Resistance,firing circuit,thorax airbag,rear left,too low  
 0x63619A6B 9A6B Resistance,firing circuit,thorax airbag,rear left,too high  
 0x63619A6C 9A6C Resistance,firing circuit,thorax airbag,rear left,cannot be measured  
 0x63619A6D 9A6D Open circuit,firing circuit,thorax airbag,rear left  
 0x63619A6E 9A6E Control-unit fault  
 0x63619A6F 9A6F Control-unit fault  
 0x63619A70 9A70 Coding,firing circuit,thorax airbag,rear left,at variance  
 0x63619A71 9A71 Control-unit fault  
 0x63619A72 9A72 Control-unit fault  
 0x63619A73 9A73 Overload,head-restraint adjustment,rear left  
 0x63619A74 9A74 Overload,head-restraint adjustment,rear right  
 0x63619A75 9A75 Open circuit,head-restraint adjustment,rear left  
 0x63619A76 9A76 Open circuit,head-restraint adjustment,rear right  
 0x63619A77 9A77 Belt-buckle switch,rear left:short circuit  
 0x63619A78 9A78 Belt-buckle switch,rear left:implausible measured value  
 0x63619A79 9A79 Belt-buckle switch,rear left:open circuit  
 0x63619A7A 9A7A Belt-buckle switch,rear right:short circuit  
 0x63619A7B 9A7B Belt-buckle switch,rear right:implausible measured value  
 0x63619A7C 9A7C Belt-buckle switch,rear right:open circuit  
 0x63619A7D 9A7D Communication fault,seat-occupancy detector,rear left  
 0x63619A7E 9A7E Communication fault,seat-occupancy detector,rear right  
 0x63619A7F 9A7F Open circuit,seat-occupancy detector,rear left  
 0x63619A80 9A80 Short circuit,seat-occupancy detector,rear left  
 0x63619A81 9A81 Communication fault,seat-occupancy detector,rear left  
 0x63619A82 9A82 Open circuit,seat-occupancy detector,rear right  
 0x63619A83 9A83 Short circuit,seat-occupancy detector,rear right  
 0x63619A84 9A84 Communication fault,seat-occupancy detector,rear right  
 0x63619A85 9A85 Control-unit fault  
 0x63619A86 9A86 Control-unit fault  
 0x63619A87 9A87 Firing attempt taken place  
 0x63619A88 9A88 Control-unit fault  
 //STVL  
 0x64619628 9628 Processor: reset  
 0x6461962C 962C System time fault  
 0x64619642 9642 Self-test: too few messages  
 0x6461964C 964C Open circuit, firing circuit, thorax airbag, front left  
 0x64619673 9673 Control-unit fault  
 0x64619629 9629 Control-unit fault  
 0x6461962A 962A Control-unit fault  
 0x6461962B 962B Incorrect chassis number  
 0x6461962C 962C System time fault  
 0x64619640 9640 Coding-data error  
 0x64619641 9641 Control-unit fault  
 0x64619642 9642 Self-test:too few messages  
 0x64619643 9643 Self-test:data error in message  
 0x64619644 9644 Self-test:transmission error  
 0x64619645 9645 Implausible crash severity  
 0x64619646 9646 Control-unit fault  
 0x64619647 9647 Short circuit,firing circuit,thorax airbag,front left,to ground  
 0x64619648 9648 Short circuit,thorax airbag,front left,to positive  
 0x64619649 9649 Resistance,firing circuit,thorax airbag,front left,too low  
 0x6461964A 964A Resistance,firing circuit,thorax airbag,front left,too high  
 0x6461964B 964B Resistance,firing circuit,thorax airbag,front left,cannot be measured  
 0x6461964C 964C Open circuit,firing circuit,thorax airbag,front left  
 0x6461964D 964D Control-unit fault  
 0x6461964E 964E Control-unit fault  
 0x6461964F 964F Coding,firing circuit,thorax airbag,front left,at variance  
 0x64619650 9650 Control-unit fault  
 0x6461965D 965D Control-unit fault  
 0x6461965E 965E Control-unit fault



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0x6461965F 965F Control-unit fault  
 0x64619660 9660 Firing attempt taken place  
 0x64619661 9661 Control-unit fault  
 0x64619662 9662 Pressure sensor  
 0x64619663 9663 Control-unit fault  
 0x64619664 9664 Control-unit fault  
 0x64619665 9665 Control-unit fault  
 0x64619666 9666 Control-unit fault  
 0x64619667 9667 Control-unit fault  
 0x64619672 9672 Control-unit fault  
 0x64619673 9673 Control-unit fault  
 0x64619674 9674 Control-unit fault  
 0x64619675 9675 Control-unit fault  
 0x64619676 9676 Control-unit fault  
 0x64619677 9677 Control-unit fault  
 0x64619678 9678 Control-unit fault  
 0x64619679 9679 Control-unit fault  
 0x6461967A 967A Control-unit fault  
 0x6461967B 967B Control-unit fault  
 0x6461967C 967C Voltage supply:limit value undershot  
 0x6461967D 967D Voltage supply:limit value exceeded  
 0x6461967E 967E Transport mode active  
 0x6461967F 967F Coding-data error  
 0x64619628 9628 Processor:reset  
 0x64619629 9629 Control-unit fault  
 0x6461962A 962A Control-unit fault  
 0x6461962B 962B Incorrect chassis number  
 0x6461962C 962C System time fault  
 0x64619640 9640 Coding-data error  
 0x64619641 9641 Control-unit fault  
 0x64619642 9642 Self-test:too few messages  
 0x64619643 9643 Self-test:data error in message  
 0x64619644 9644 Self-test:transmission error  
 0x64619645 9645 Implausible crash severity  
 0x64619646 9646 Control-unit fault  
 0x64619647 9647 Short circuit,firing circuit,thorax airbag,front left,to ground  
 0x64619648 9648 Short circuit,thorax airbag,front left,to positive  
 0x64619649 9649 Resistance,firing circuit,thorax airbag,front left,too low  
 0x6461964A 964A Resistance,firing circuit,thorax airbag,front left,too high  
 0x6461964B 964B Resistance,firing circuit,thorax airbag,front left,cannot be  
 measured  
 0x6461964C 964C Open circuit,firing circuit,thorax airbag,front left  
 0x6461964D 964D Control-unit fault  
 0x6461964E 964E Control-unit fault  
 0x6461964F 964F Coding,firing circuit,thorax airbag,front left,at variance  
 0x64619650 9650 Control-unit fault  
 0x6461965D 965D Control-unit fault  
 0x6461965E 965E Control-unit fault  
 0x6461965F 965F Control-unit fault  
 0x64619660 9660 Firing attempt taken place  
 0x64619661 9661 Control-unit fault  
 0x64619662 9662 Pressure sensor  
 0x64619663 9663 Control-unit fault  
 0x64619664 9664 Control-unit fault  
 0x64619665 9665 Control-unit fault  
 0x64619666 9666 Control-unit fault  
 0x64619667 9667 Control-unit fault  
 0x64619672 9672 Control-unit fault  
 0x64619673 9673 Control-unit fault  
 0x64619674 9674 Control-unit fault  
 0x64619675 9675 Control-unit fault  
 0x64619676 9676 Control-unit fault  
 0x64619677 9677 Control-unit fault

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0x64619678 9678 Control-unit fault  
 0x64619679 9679 Control-unit fault  
 0x6461967A 967A Control-unit fault  
 0x6461967B 967B Control-unit fault  
 0x6461967C 967C voltage supply:limit value undershot  
 0x6461967D 967D Voltage supply:limit value exceeded  
 0x6461967E 967E Transport mode active  
 0x6461967F 967F Coding-data error  
 0x64629628 9628 Processor:reset  
 0x64629629 9629 Control-unit fault  
 0x6462962A 962A Control-unit fault  
 0x6462962B 962B Incorrect chassis number  
 0x6462962C 962C System time fault  
 0x64629640 9640 Coding-data error  
 0x64629642 9642 Self-test:too few messages  
 0x64629643 9643 Self-test:data error in message  
 0x64629644 9644 Self-test:transmission error  
 0x64629645 9645 Implausible crash severity  
 0x64629647 9647 Short circuit,firing circuit,thorax airbag,driver,to ground  
 0x64629648 9648 Short circuit,firing circuit,thorax airbag,driver,to positive  
 0x64629649 9649 Resistance,firing circuit,thorax airbag,driver,too low  
 0x6462964A 964A Resistance,firing circuit,thorax airbag,driver,too high  
 0x6462964B 964B Resistance,firing circuit,thorax airbag,driver,cannot be measured  
 0x6462964C 964C Open circuit,firing circuit,thorax airbag,driver  
 0x6462964D 964D Control-unit fault  
 0x6462964E 964E Control-unit fault  
 0x6462964F 964F Coding,firing circuit,thorax airbag,driver,at variance  
 0x64629650 9650 Control-unit fault  
 0x6462965D 965D Control-unit fault  
 0x6462965E 965E Control-unit fault  
 0x6462965F 965F Control-unit fault  
 0x64629660 9660 Firing attempt taken place  
 0x64629661 9661 Control-unit fault  
 0x64629662 9662 Pressure sensor  
 0x64629663 9663 Control-unit fault  
 0x64629664 9664 Control-unit fault  
 0x64629665 9665 Control-unit fault  
 0x64629666 9666 Control-unit fault  
 0x64629667 9667 Control-unit fault  
 0x64629672 9672 Control-unit fault  
 0x64629673 9673 Control-unit fault  
 0x64629674 9674 Control-unit fault  
 0x64629675 9675 Control-unit fault  
 0x64629676 9676 Control-unit fault  
 0x64629677 9677 Transport mode active  
 0x64629678 9678 Control-unit fault  
 0x64629679 9679 Control-unit fault  
 0x6462967A 967A Control-unit fault  
 0x6462967B 967B Control-unit fault  
 0x6462967C 967C Control-unit fault  
 0x6462967D 967D voltage supply:limit value undershot  
 0x6462967E 967E voltage supply:limit value exceeded  
 0x6462967F 967F Terminal 30  
 0x64629B48 9B48 Ambient lighting faulty  
 0x64629B49 9B49 Mirror, potentiometer, vertical  
 0x64629B4A 9B4A Mirror position, potentiometer, horizontal  
 0x64629B4B 9B4B Mirror position, potentiometer, supply  
 0x64629B4C 9B4C Courtesy lighting  
 0x64629B4D 9B4D Switch block, supply  
 0x64629B4E 9B4E Power window, supply, Hall sensors  
 0x64629B4F 9B4F Switch block, data transfer  
 0x64629B52 9B52 Power window, Hall sensor  
 0x64629B53 9B53 Power-window relay

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0x64629B54 9B54 Power-window electronics  
 0x64629B55 9B55 Door mirror, motor, horizontal  
 0x64629B56 9B56 Door mirror, motor, vertical  
 0x64629B57 9B57 Drive, swivel door mirror  
 0x64629B58 9B58 Mirror, wiring fault  
 0x64629B59 9B59 Switch block, driver's door  
 0x64629B5A 9B5A Programming fault  
 0x64629B5B 9B5B Central-locking drive, locking  
 0x64629B5C 9B5C Central-locking drive, double  
 0x64629B5D 9B5D Central-locking drive, unlocking  
 0x64629B5E 9B5E Entrance lighting  
 0x64629628 9628 Processor:reset  
 0x64629629 9629 Control-unit fault  
 0x6462962A 962A Control-unit fault  
 0x6462962B 962B Incorrect chassis number  
 0x6462962C 962C System time fault  
 0x64629640 9640 Coding-data error  
 0x64629642 9642 Self-test:too few messages  
 0x64629643 9643 Self-test:data error in message  
 0x64629644 9644 Self-test:transmission error  
 0x64629645 9645 Implausible crash severity  
 0x64629647 9647 Short circuit,firing circuit,thorax airbag,driver,to ground  
 0x64629648 9648 Short circuit,firing circuit,thorax airbag,driver,to positive  
 0x64629649 9649 Resistance,firing circuit,thorax airbag,driver,too low  
 0x6462964A 964A Resistance,firing circuit,thorax airbag,driver,too high  
 0x6462964B 964B Resistance,firing circuit,thorax airbag,driver,cannot be measured  
 0x6462964C 964C Open circuit,firing circuit,thorax airbag,driver  
 0x6462964D 964D Control-unit fault  
 0x6462964E 964E Control-unit fault  
 0x6462964F 964F Coding,firing circuit,thorax airbag,driver,at variance  
 0x64629650 9650 Control-unit fault  
 0x6462965D 965D Control-unit fault  
 0x6462965E 965E Control-unit fault  
 0x6462965F 965F Control-unit fault  
 0x64629660 9660 Firing attempt taken place  
 0x64629661 9661 Control-unit fault  
 0x64629662 9662 Pressure sensor  
 0x64629663 9663 Control-unit fault  
 0x64629664 9664 Control-unit fault  
 0x64629665 9665 Control-unit fault  
 0x64629666 9666 Control-unit fault  
 0x64629667 9667 Control-unit fault  
 0x64629672 9672 Control-unit fault  
 0x64629673 9673 Control-unit fault  
 0x64629674 9674 Control-unit fault  
 0x64629675 9675 Control-unit fault  
 0x64629676 9676 Control-unit fault  
 0x64629677 9677 Transport mode active  
 0x64629678 9678 Control-unit fault  
 0x64629679 9679 Control-unit fault  
 0x6462967A 967A Control-unit fault  
 0x6462967B 967B Control-unit fault  
 0x6462967C 967C Control-unit fault  
 0x6462967D 967D Voltage supply:limit value undershot  
 0x6462967E 967E Voltage supply:limit value exceeded  
 0x6462967F 967F Terminal 30  
 0x64629B48 9B48 Ambient lighting faulty  
 0x64629B49 9B49 Mirror, potentiometer, vertical  
 0x64629B4A 9B4A Mirror position, potentiometer, horizontal  
 0x64629B4B 9B4B Mirror position, potentiometer, supply  
 0x64629B4C 9B4C Courtesy lighting  
 0x64629B4D 9B4D Switch block, supply  
 0x64629B4E 9B4E Power window, supply, Hall sensors

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0x64629B4F 9B4F Switch block, data transfer  
 0x64629B52 9B52 Power window, Hall sensor  
 0x64629B53 9B53 Power-window relay  
 0x64629B54 9B54 Power-window electronics  
 0x64629B55 9B55 Door mirror, motor, horizontal  
 0x64629B56 9B56 Door mirror, motor, vertical  
 0x64629B57 9B57 Drive, swivel door mirror  
 0x64629B58 9B58 Mirror, wiring fault  
 0x64629B59 9B59 Switch block, driver's door  
 0x64629B5A 9B5A Programming fault  
 0x64629B5B 9B5B Central-locking drive, locking  
 0x64629B5C 9B5C Central-locking drive, double  
 0x64629B5D 9B5D Central-locking drive, unlocking  
 0x64629B5E 9B5E Entrance lighting

//STVR

0x656196AC 96AC System time fault  
 0x656196C2 96C2 Self-test: too few messages  
 0x656196C9 96C9 Resistance, firing circuit, thorax airbag, front right, too low  
 0x656196CC 96CC Open circuit, firing circuit, thorax airbag, front right  
 0x656196FD 96FD Voltage supply: limit value exceeded  
 0x656196A8 96A8 Processor:reset  
 0x656196A9 96A9 Control-unit fault  
 0x656196AA 96AA Control-unit fault  
 0x656196AB 96AB Incorrect chassis number  
 0x656196AC 96AC System time fault  
 0x656196C0 96C0 Coding-data error  
 0x656196C1 96C1 Control-unit fault  
 0x656196C2 96C2 Self-test:too few messages  
 0x656196C3 96C3 Self-test:data error in message  
 0x656196C4 96C4 Self-test:transmission error  
 0x656196C5 96C5 Implausible crash severity  
 0x656196C6 96C6 Control-unit fault  
 0x656196C7 96C7 Short circuit,firing circuit,thorax airbag,front right,to ground  
 0x656196C8 96C8 Short circuit,thorax airbag,front right,to positive  
 0x656196C9 96C9 Resistance,firing circuit,thorax airbag,front right,too low  
 0x656196CA 96CA Resistance,firing circuit,thorax airbag,front right,too high  
 0x656196CB 96CB Resistance,firing circuit,thorax airbag,front right,cannot be measured  
 0x656196CC 96CC Open circuit,firing circuit,thorax airbag,front right  
 0x656196CD 96CD Control-unit fault  
 0x656196CE 96CE Control-unit fault  
 0x656196CF 96CF Coding,firing circuit,thorax airbag,front right,at variance  
 0x656196D0 96D0 Control-unit fault  
 0x656196DD 96DD Control-unit fault  
 0x656196DE 96DE Control-unit fault  
 0x656196DF 96DF Control-unit fault  
 0x656196E0 96E0 Firing attempt taken place  
 0x656196E1 96E1 Control-unit fault  
 0x656196E2 96E2 Pressure sensor  
 0x656196E3 96E3 Control-unit fault  
 0x656196E4 96E4 Control-unit fault  
 0x656196E5 96E5 Control-unit fault  
 0x656196E6 96E6 Control-unit fault  
 0x656196E7 96E7 Control-unit fault  
 0x656196F2 96F2 Control-unit fault  
 0x656196F3 96F3 Control-unit fault  
 0x656196F4 96F4 Control-unit fault  
 0x656196F5 96F5 Control-unit fault  
 0x656196F6 96F6 Control-unit fault  
 0x656196F7 96F7 Control-unit fault  
 0x656196F8 96F8 Control-unit fault  
 0x656196F9 96F9 Control-unit fault

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0x656196FA 96FA Control-unit fault  
 0x656196FB 96FB Control-unit fault  
 0x656196FC 96FC Voltage supply:limit value undershot  
 0x656196FD 96FD Voltage supply:limit value exceeded  
 0x656196FE 96FE Transport mode active  
 0x656196FF 96FF Coding-data error  
 0x656296A8 96A8 Processor:reset  
 0x656296A9 96A9 Control-unit fault  
 0x656296AA 96AA Control-unit fault  
 0x656296AB 96AB Incorrect chassis number  
 0x656296AC 96AC System time fault  
 0x656296C0 96C0 Coding-data error  
 0x656296C2 96C2 Self-test:too few messages  
 0x656296C3 96C3 Self-test:data error in message  
 0x656296C4 96C4 Self-test:transmission error  
 0x656296C5 96C5 Implausible crash severity  
 0x656296C6 96C6 Control-unit fault  
 0x656296C7 96C7 Short circuit,firing circuit,thorax airbag,passenger,to ground  
 0x656296C8 96C8 Short circuit,firing circuit,thorax airbag, passenger,to positive  
 0x656296C9 96C9 Resistance,firing circuit,thorax airbag, passenger,too low  
 0x656296CA 96CA Resistance,firing circuit,thorax airbag, passenger,too high  
 0x656296CB 96CB Resistance,firing circuit,thorax airbag, passenger,cannot be measured  
 0x656296CC 96CC Open circuit,firing circuit,thorax airbag, passenger  
 0x656296CD 96CD Control-unit fault  
 0x656296CE 96CE Control-unit fault  
 0x656296CF 96CF Coding,firing circuit,thorax airbag,passenger,at variance  
 0x656296D0 96D0 Control-unit fault  
 0x656296DD 96DD Control-unit fault  
 0x656296DE 96DE Control-unit fault  
 0x656296DF 96DF Control-unit fault  
 0x656296E0 96E0 Firing attempt taken place  
 0x656296E1 96E1 Control-unit fault  
 0x656296E2 96E2 Pressure sensor  
 0x656296E3 96E3 Control-unit fault  
 0x656296E4 96E4 Control-unit fault  
 0x656296E5 96E5 Control-unit fault  
 0x656296E6 96E6 Control-unit fault  
 0x656296E7 96E7 Control-unit fault  
 0x656296F2 96F2 Control-unit fault  
 0x656296F3 96F3 Control-unit fault  
 0x656296F4 96F4 Control-unit fault  
 0x656296F5 96F5 Control-unit fault  
 0x656296F6 96F6 Control-unit fault  
 0x656296F7 96F7 Transport mode active  
 0x656296F8 96F8 Control-unit fault  
 0x656296F9 96F9 Control-unit fault  
 0x656296FA 96FA Control-unit fault  
 0x656296FB 96FB Control-unit fault  
 0x656296FC 96FC Control-unit fault  
 0x656296FD 96FD Voltage supply:limit value undershot  
 0x656296FE 96FE voltage supply:limit value exceeded  
 0x656296FF 96FF Terminal 30  
 0x65629B88 9B88 Ambient lighting  
 0x65629B89 9B89 Mirror position, potentiometer, horizontal  
 0x65629B8A 9B8A Mirror position, potentiometer, vertical  
 0x65629B8B 9B8B Mirror position, potentiometer, supply  
 0x65629B8C 9B8C Courtesy lighting  
 0x65629B8E 9B8E Power window, supply, hall sensors  
 0x65629B8F 9B8F Switch block, data transfer disturbed  
 0x65629B92 9B92 Power window, Hall sensor  
 0x65629B93 9B93 Power-window relay  
 0x65629B94 9B94 Power-window electronics

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0x65629B95 9B95 Door mirror, horizontal  
 0x65629B96 9B96 Door mirror, vertical  
 0x65629B97 9B97 Drive, swivel door mirror  
 0x65629B98 9B98 Mirror, wiring fault  
 0x65629B9A 9B9A Programming fault  
 0x65629B9B 9B9B Central locking, locking  
 0x65629B9C 9B9C Central locking, double locking  
 0x65629B9D 9B9D Central locking, unlocking  
 0x65629B9E 9B9E Entrance lighting

## //SINE

0x67619D1F 9D1F Emergency siren  
 0x67619D11 9D11 DWA-data bus  
 0x67619D12 9D12 Internal battery  
 0x67619D13 9D13 Emergency siren  
 0x67619D14 9D14 Emergency siren  
 0x67619D15 9D15 Emergency siren  
 0x67619D16 9D16 Emergency siren  
 0x67619D1F 9D1F Emergency siren  
 0x67619D44 9D44 Alarm memory: voltage-supply tampering  
 0x67619D45 9D45 Alarm memory: overvoltage or DWA bus, short circuit to position  
 0x67619D46 9D46 Alarm memory: DWA bus, short circuit to ground  
 0x67619D47 9D47 Alarm memory: siren disconnected  
 0x67619D11 9D11 DWA-data bus  
 0x67619D12 9D12 Internal battery  
 0x67619D13 9D13 Emergency siren  
 0x67619D14 9D14 Emergency siren  
 0x67619D15 9D15 Emergency siren  
 0x67619D16 9D16 Emergency siren  
 0x67619D1F 9D1F Emergency siren  
 0x67619D44 9D44 Alarm memory: voltage-supply tampering  
 0x67619D45 9D45 Alarm memory: overvoltage or DWA bus, short circuit to positive  
 0x67619D46 9D46 Alarm memory: DWA bus, short circuit to ground  
 0x67619D47 9D47 Alarm memory: siren disconnected

## //SMFA

0x68619E48 9E48 No Hall pulses, longitudinal seat adjustment  
 0x68619E49 9E49 No Hall pulses, seat-height adjustment  
 0x68619E4A 9E4A No Hall pulses, seat-back width adjustment  
 0x68619E4B 9E4B No Hall pulses, seat-back inclination adjustment  
 0x68619E4C 9E4C No Hall pulses, seat-inclination adjustment  
 0x68619E4D 9E4D No Hall pulses, head-restraint adjustment  
 0x68619E4E 9E4E No Hall pulses, seat-back head adjustment  
 0x68619E4F 9E4F No Hall pulses, seat-cushion adjustment  
 0x68619E50 9E50 Motor, longitudinal seat adjustment  
 0x68619E51 9E51 Motor, seat height adjustment  
 0x68619E52 9E52 Motor, seat back width adjustment  
 0x68619E53 9E53 Motor, seat back inclination adjustment  
 0x68619E54 9E54 Motor, seat inclination adjustment  
 0x68619E55 9E55 Motor, head restraint adjustment  
 0x68619E56 9E56 Motor, seat back head adjustment  
 0x68619E57 9E57 Motor, seat cushion adjustment  
 0x68619E58 9E58 Temperature sensor, rapid heating area, cushion  
 0x68619E59 9E59 Temperature sensor, rapid heating area, seat back  
 0x68619E5A 9E5A Temperature sensor, residual heating area, cushion  
 0x68619E5B 9E5B Temperature sensor, residual heating area, seat back  
 0x68619E5C 9E5C Rapid heating area, cushion  
 0x68619E5D 9E5D Rapid heating area, seat back  
 0x68619E5E 9E5E Residual heating area, cushion  
 0x68619E5F 9E5F Residual heating area, seat back  
 0x68619E60 9E60 Heating driver failed  
 0x68619E61 9E61 Seat ventilation supply, cushion and seat back  
 0x68619E62 9E62 Seat ventilation control, cushion

# Bmw Code Sheet.txt

0x68619E63 9E63 Seat ventilation control, seat back  
 0x68619E64 9E64 Active seat, motor  
 0x68619E65 9E65 Active seat solenoid  
 0x68619E66 9E66 Active seat, pressure switch  
 0x68619E67 9E67 Lumbar valves  
 0x68619E68 9E68 Lumbar pump  
 0x68619E69 9E69 Internal fault, supply voltage U12s  
 0x68619E6A 9E6A Internal fault, supply voltage tm. 30s  
 0x68619E6B 9E6B Control-unit fault

## //SMFB

0x69619EA8 9EA8 No Hall pulses, longitudinal seat adjustment  
 0x69619EA9 9EA9 No Hall pulses, seat-height adjustment  
 0x69619EAA 9EAA No Hall pulses, seat-back width adjustment  
 0x69619EAB 9EAB No Hall pulses, seat-back inclination adjustment  
 0x69619EAC 9EAC No Hall pulses, seat-inclination adjustment  
 0x69619EAD 9EAD No Hall pulses, head-restraint adjustment  
 0x69619EAE 9EAE No Hall pulses, seat-back head adjustment  
 0x69619EAF 9EAF No Hall pulses, seat-cushion adjustment  
 0x69619EB0 9EB0 Motor, longitudinal seat adjustment  
 0x69619EB1 9EB1 Motor, seat height adjustment  
 0x69619EB2 9EB2 Motor, seat back width adjustment  
 0x69619EB3 9EB3 Motor, seat back inclination adjustment  
 0x69619EB4 9EB4 Motor, seat inclination adjustment  
 0x69619EB5 9EB5 Motor, head restraint adjustment  
 0x69619EB6 9EB6 Motor, seat back head adjustment  
 0x69619EB7 9EB7 Motor, seat cushion adjustment  
 0x69619EB8 9EB8 Temperature sensor, rapid heating area, cushion  
 0x69619EB9 9EB9 Temperature sesnor, rapid heating area, seat back  
 0x69619EBA 9EBA Temperature sesnor, residual heating area, cushion  
 0x69619EBB 9EBB Temperature sensor, residual heating area, seat back  
 0x69619EBC 9EBC Rapid heating area, cushion  
 0x69619EBD 9EBD Rapid heating area, seat back  
 0x69619EBE 9EBE Residual heating area, cushion  
 0x69619EBF 9EBF Residual heating area, seat back  
 0x69619EC0 9EC0 Heating driver failed  
 0x69619EC1 9EC1 Seat ventilation supply, cushion and seat back  
 0x69619EC2 9EC2 Seat ventilation control, cushion  
 0x69619EC3 9EC3 Seat ventilation control, seat back  
 0x69619EC4 9EC4 Active seat, motor  
 0x69619EC5 9EC5 Active seat, solenoid  
 0x69619EC6 9EC6 Active seat, pressure switch  
 0x69619EC7 9EC7 Lumbar valves  
 0x69619EC8 9EC8 Lumbar pump  
 0x69619EC9 9EC9 Internal fault supply voltage U12s  
 0x69619ECA 9ECA Internal fault supply voltage Term. 30s  
 0x69619ECB 9ECB Control-unit fault

## //SMFAH

0x6A619F08 9F08 No Hall pulses, longitudinal seat adjustment  
 0x6A619F0E 9F0E No Hall pulses, seat-back head adjustment  
 0x6A619F10 9F10 Motor, longitudinal seat adjustment  
 0x6A619F13 9F13 Motor, seat-back inclination adjustment  
 0x6A619F14 9F14 Motor, seat-inclination adjustment  
 0x6A619F15 9F15 Motor, head-restraint height adjustment  
 0x6A619F16 9F16 Motor, seat-back head adjustment  
 0x6A619F22 9F22 Seat ventilation, control, seat cushion  
 0x6A619F23 9F23 Seat ventilation, control, backrest  
 0x6A619F08 9F08 No Hall pulses, longitudinal seat adjustment  
 0x6A619F0B 9F0B No Hall pulses, seat-back inclination adjustment  
 0x6A619F0C 9F0C No Hall pulses, seat-inclination adjustment  
 0x6A619F0D 9F0D No Hall pulses, head-restraint height adjustment  
 0x6A619F0E 9F0E No Hall pulses, seat-back head adjustment  
 0x6A619F0F 9F0F No Hall pulses, seat-cushion adjustment

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0x6A619F10 9F10 Motor, longitudinal seat adjustment
0x6A619F13 9F13 Motor, seat-back inclination adjustment
0x6A619F14 9F14 Motor, seat-inclination adjustment
0x6A619F15 9F15 Motor, head-restraint height adjustment
0x6A619F16 9F16 Motor, seat-back head adjustment
0x6A619F17 9F17 Motor, seat-cushion adjustment
0x6A619F18 9F18 Temperature sensor, rapid heating field, seat cushion
0x6A619F19 9F19 Temperature sensor, rapid heating field, seat backrest
0x6A619F1A 9F1A Temperature sensor, residual heating field, seat cushion
0x6A619F1B 9F1B Temperature sensor, residual heating field, seat backrest
0x6A619F1C 9F1C Rapid heating field, seat cushion
0x6A619F1D 9F1D Rapid heating field, seat backrest
0x6A619F1E 9F1E Residual heating field, seat cushion
0x6A619F1F 9F1F Residual heating field, seat backrest
0x6A619F20 9F20 Heating driver failed
0x6A619F21 9F21 Seat-ventilation supply, cushion and seat back
0x6A619F22 9F22 Seat-ventilation, control, seat cushion
0x6A619F23 9F23 Seat ventilation, control, backrest
0x6A619F24 9F24 Active seat, motor
0x6A619F25 9F25 Active seat, solenoid
0x6A619F26 9F26 Active seat, pressure switch
0x6A619F27 9F27 Lumbar valves
0x6A619F28 9F28 Lumbar pump
0x6A619F29 9F29 Internal fault, supply voltage U12s
0x6A619F2A 9F2A Internal fault, supply voltage tm.30s
0x6A619F2B 9F2B Control-unit fault

//SMBFH
0x6B619F70 9F70 Motor, longitudinal seat adjustment
0x6B619F73 9F73 Motor, seat-back inclination adjustment
0x6B619F74 9F74 Motor, seat-inclination adjustment
0x6B619F75 9F75 Motor, head-restraint adjustment
0x6B619F82 9F82 Seat ventilation, control, seat cushion
0x6B619F83 9F83 Seat ventilation, control, backrest
0x6B619F85 9F85 Active seat, solenoid
//SHZH
//SVS
0x6D61D644 D644 Fault, self test SVS faulty
0x6D61D650 D650 Ring-break diagnosis has been carried out
0x6D61D652 D652 Deactivation, high temperature

//SZL
0x6E6194EE 94EE MFL button pad, left
0x6E6194EF 94EF MFL button pad, right
0x6E6194F9 94F9 Fanfare horn: woofer
0x6E619501 9501 Steering-angle sensor not adjusted
0x6E61951A 951A Undervoltage
0x6E61951D 951D Direction indicator/high-beam switch
0x6E61A849 A849 Steering-column switch, cruise control
0x6E6294AB 94AB Incorrect chassis number
0x6E6294C3 94C3 Self-test: too few messages
0x6E6294CA 94CA Resistance, firing circuit, driver's airbag, stage 1, too low
0x6E6294CD 94CD Open circuit, firing circuit, driver's airbag, stage 1
0x6E6294D3 94D3 Short circuit, firing circuit, driver's airbag, stage 2, to ground
0x6E6294D5 94D5 Resistance, firing circuit, driver's airbag, stage 2, too low
0x6E6294D8 94D8 Open circuit, firing circuit, driver's airbag, stage 2
0x6E6294E3 94E3 Terminal U_ISIS or U_SZL missing
0x6E6294E4 94E4 Steering-angle sensor, plausibility
0x6E6294E7 94E7 Steering-angle sensor, wiper contact
0x6E6294EA 94EA Communication between steering wheel module and steering column
module faulty
0x6E6294F9 94F9 Fault, fanfare horn
0x6E6294FD 94FD Steering-wheel electronics: fault in alarm path

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0x6E629500 9500 Firing attempt taken place  
 0x6E629501 9501 Steering-angle-sensor adjustment  
 0x6E629504 9504 Control-unit fault  
 0x6E629518 9518 Voltage supply: limit value undershot  
 0x6E62951A 951A voltage supply (LRE): limit value undershot  
 0x6E62951D 951D Coding-data error  
 0x6E6294A8 94A8 Processor: reset  
 0x6E6294A9 94A9 Control-module fault  
 0x6E6294AA 94AA Control-module fault  
 0x6E6294AB 94AB Incorrect chassis number  
 0x6E6294AC 94AC System time fault  
 0x6E6294AD 94AD Control-module fault  
 0x6E6294C1 94C1 Coding/data error  
 0x6E6294C2 94C2 Control-module fault  
 0x6E6294C3 94C3 Self-test: too few messages  
 0x6E6294C4 94C4 Self-test: data error in messages  
 0x6E6294C5 94C5 Self-test: transmission error  
 0x6E6294C6 94C6 Implausible crash severity  
 0x6E6294C7 94C7 Steering-wheel electronics  
 0x6E6294C8 94C8 Short-circuit, firing circuit, driver's airbag, stage 1, to ground  
 0x6E6294C9 94C9 Short-circuit, firing circuit, driver's airbag, stage 1, to ground  
 0x6E6294CA 94CA Resistance, firing circuit, driver's airbag, stage 1, too low  
 0x6E6294CB 94CB Resistance, firing circuit, driver's airbag, stage 1, too high  
 0x6E6294CC 94CC Resistance, firing circuit, driver's airbag, stage 1, cannot be measured  
 0x6E6294CD 94CD Open circuit, firing circuit, driver's airbag, stage 1  
 0x6E6294CE 94CE Steering-wheel electronics  
 0x6E6294CF 94CF Steering-wheel electronics  
 0x6E6294D0 94D0 Coding, firing circuit, driver's airbag, stage 1, at variance  
 0x6E6294D1 94D1 Steering-wheel electronics  
 0x6E6294D2 94D2 Steering-wheel electronics  
 0x6E6294D3 94D3 Short-circuit, firing circuit, driver's airbag, stage 2, to ground  
 0x6E6294D4 94D4 Short-circuit, firing circuit, driver's airbag, stage 2, to ground  
 0x6E6294D5 94D5 Resistance, firing circuit, driver's airbag, stage 2, too low  
 0x6E6294D6 94D6 Resistance, firing circuit, driver's airbag, stage 2, too high  
 0x6E6294D7 94D7 Resistance, firing circuit, driver's airbag, stage 2, cannot be measured  
 0x6E6294D8 94D8 Open circuit, firing circuit, driver's airbag, stage 2  
 0x6E6294D9 94D9 Steering-wheel electronics  
 0x6E6294DA 94DA Steering-wheel electronics  
 0x6E6294DB 94DB Coding, firing circuit, driver's airbag, stage 2, at variance  
 0x6E6294DC 94DC Steering-wheel electronics  
 0x6E6294DD 94DD Fault in alarm path  
 0x6E6294DE 94DE Transmission selector switch: bus fault  
 0x6E6294DF 94DF Transmission selector switch: bus fault and serial line fault  
 0x6E6294E0 94E0 Transmission selector switch: parking button, contact, faulty  
 0x6E6294E1 94E1 No terminal 30  
 0x6E6294E3 94E3 Terminal U\_ISIS or U\_SZL missing  
 0x6E6294E4 94E4 Steering-angle sensor plausibility  
 0x6E6294E5 94E5 Control-module fault  
 0x6E6294E6 94E6 Control-module fault  
 0x6E6294E7 94E7 Control-module fault  
 0x6E6294E9 94E9 Steering-angle sensor, internal  
 0x6E6294EA 94EA Communication between steering wheel module and steering column module faulty  
 0x6E6294EB 94EB Steering wheel electronics: version not compatible  
 0x6E6294EC 94EC Multifunction steering wheel, left: short/open circuit  
 0x6E6294ED 94ED Multifunction steering wheel, right: short/open circuit  
 0x6E6294EE 94EE Multifunction steering wheel, left: voltage value not defined  
 0x6E6294EF 94EF Multifunction steering wheel, right: voltage value not defined  
 0x6E6294F0 94F0 Steering wheel heating: heating mat, open circuit  
 0x6E6294F1 94F1 Steering wheel heating: heating mat, short-circuit to terminal 31  
 0x6E6294F2 94F2 Steering wheel heating: heating mat, short-circuit to terminal 30

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0x6E6294F3 94F3 Steering wheel heating: timeout control  
 0x6E6294F4 94F4 Steering wheel heating: temperature sensor faulty  
 0x6E6294F5 94F5 Steering column adjustment switch: short-circuit to ground  
 0x6E6294F6 94F6 Steering column adjustment switch: open/short-circuit to positive  
 0x6E6294F7 94F7 Steering column adjustment switch: voltage value not defined  
 0x6E6294F8 94F8 Fault, horn  
 0x6E6294F9 94F9 Fault, horn  
 0x6E6294FA 94FA Steering-column-switch evaluation faulty (E65, E66, E67, RR01) or programming fault (E60, E61, E63, E64)  
 0x6E6294FB 94FB Control-module fault  
 0x6E6294FC 94FC Steering wheel electronics: no triggering readiness  
 0x6E6294FD 94FD Steering wheel electronics: fault in alarm path  
 0x6E6294FE 94FE Control-module fault  
 0x6E6294FF 94FF Control-module fault  
 0x6E629500 9500 Firing attempt taken place  
 0x6E629501 9501 Steering-angle-sensor calibration  
 0x6E629502 9502 Control-module fault  
 0x6E629503 9503 Control-module fault  
 0x6E629506 9506 Steering-wheel electronics  
 0x6E629507 9507 Steering-wheel electronics  
 0x6E629508 9508 Steering-wheel electronics  
 0x6E629509 9509 Steering-wheel electronics  
 0x6E62950A 950A Steering-wheel electronics  
 0x6E62950B 950B Transport mode active  
 0x6E629518 9518 Voltage supply: limit value undershot  
 0x6E629519 9519 Voltage supply: limit value exceeded  
 0x6E62951A 951A Voltage supply (LRE): limit value undershot  
 0x6E62951B 951B Voltage supply (LRE): limit value exceeded  
 0x6E62951D 951D Coding-data fault  
 0x6E6394A8 94A8 Processor: reset  
 0x6E6394A9 94A9 Control-unit fault  
 0x6E6394AA 94AA Control-unit fault  
 0x6E6394AB 94AB Incorrect chassis number  
 0x6E6394AC 94AC System time fault  
 0x6E6394AD 94AD Analog/digital converter faulty  
 0x6E6394AE 94AE No message (1) from satellite, door, front left  
 0x6E63949F 949F Signal or value below threshold  
 0x6E6394B0 94B0 No message (3) from satellite, door, front right  
 0x6E6394B1 94B1 Signal or value below threshold  
 0x6E6394B2 94B2 No message (5) from satellite, B-pillar, left  
 0x6E6394B3 94B3 No message (6) from satellite, A-pillar, left  
 0x6E6394B4 94B4 No message (7) from satellite, B-pillar, right  
 0x6E6394B5 94B5 No message (8) from satellite, A-pillar, right  
 0x6E6394B6 94B6 No message (9) from satellite, vehicle centre  
 0x6E6394B7 94B7 No message (A) from safety information module  
 0x6E6394B8 94B8 No message (B) from satellite, A-pillar, left  
 0x6E6394B9 94B9 No message (C) from satellite, A-pillar, right  
 0x6E6394BA 94BA No message (D) from satellite, vehicle centre  
 0x6E6394BB 94BB signal or value  
 0x6E6394BD 94BD No message (20) from satellite, seat, driver  
 0x6E6394BE 94BE No message (21) from satellite, seat, passenger  
 0x6E6394BF 94BF No message (22) from satellite, rear seat  
 0x6E6394C0 94C0 No message (71) from safety Information Module  
 0x6E6394C1 94C1 Coding-data error  
 0x6E6394C2 94C2 Control-unit fault  
 0x6E6394C3 94C3 Self-test too few messages  
 0x6E6394C4 94C4 Self-test data error in message  
 0x6E6394C5 94C5 Self-test transmission error  
 0x6E6394C6 94C6 Implausible crash severity  
 0x6E6394C7 94C7 Firing transistor, firing circuit, driver's airbag, stage 1, faulty  
 0x6E6394C8 94C8 Short circuit, firing circuit, driver's airbag, stage 1, to ground  
 0x6E6394C9 94C9 Short circuit, firing circuit, driver's airbag, stage 1, to positive  
 0x6E6394CA 94CA Resistance, firing pellet, firing circuit, driver's airbag, stage 1,

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too low  
0x6E6394CB 94CB Resistance, firing pellet, firing circuit, driver's airbag, stage 1, too high  
0x6E6394CC 94CC Resistance, firing pellet, firing circuit, driver's airbag, stage 1, can not be measured  
0x6E6394CD 94CD Open circuit, firing circuit, driver's airbag, stage 1  
0x6E6394CE 94CE Voltage, firing circuit, driver's airbag, stage 1, not OK  
0x6E6394CF 94CF Firing capacitor, firing circuit, driver's airbag, stage 1, not OK  
0x6E6394D0 94D0 Coding/configuration, firing circuit, driver's airbag, stage 1, at variance  
0x6E6394D1 94D1 Open circuit, discharge circuit, firing circuit, driver's airbag, stage 1  
0x6E6394D2 94D2 Firing transistor, firing circuit, driver's airbag, stage 2. faulty  
0x6E6394D3 94D3 Short circuit, firing circuit, driver's airbag, stage 2, to ground  
0x6E6394D4 94D4 Short circuit, firing circuit, driver's airbag, stage 2, to position  
0x6E6394D5 94D5 Resistance, firing pellet, firing circuit, driver's airbag, stage 2, too low  
0x6E6394D6 94D6 Resistance, firing pellet, firing circuit, driver's airbag, stage 2, too high  
0x6E6394D7 94D7 Resistance, firing pellet, firing circuit, driver's airbag, stage 2, can not be measured  
0x6E6394D8 94D8 Open circuit, firing circuit, driver's airbag, stage 2  
0x6E6394D9 94D9 Voltage, firing circuit, driver's airbag, stage 2, not OK  
0x6E6394DA 94DA Firing capacitor, firing circuit, driver's airbag, stage 2, not OK  
0x6E6394DB 94DB Coding/configuration, firing circuit, driver's airbag, stage 2, at variance  
0x6E6394DC 94DC Open circuit, discharge circuit, firing circuit, driver's airbag, stage 2  
0x6E6394DD 94DD Fault in alarm path  
0x6E6394DE 94DE Transmission selector switch: bus fault  
0x6E6394DF 94DF Transmission selector switch: bus fault and serial-line fault  
0x6E6394E0 94E0 Transmission selector switch: parking button, contact, faulty  
0x6E6394E1 94E1 No terminal 30 at steering-column switch centre  
0x6E6393E2 93E2 Terminal 15 implausible  
0x6E6394E3 94E3 No terminal U\_Isis  
0x6E6394E4 94E4 Steering-angle sensor: mechanical connection faulty  
0x6E6394E5 94E5 Steering-angle sensor: internal fault  
0x6E6394E6 94E6 Steering-angle sensor: internal fault  
0x6E6394E7 94E7 Steering-angle sensor: internal fault  
0x6E6394E8 94E8 Steering-angle sensor: no speed signals  
0x6E6394E9 94E9 Steering angle implausible  
0x6E6394EA 94EA Communication steering-wheel electronics <-> steering-column electronics faulty  
0x6E6394EB 94EB Steering-wheel electronics: version not compatible  
0x6E6394EC 94EC Multifunction steering wheel, left, short/open circuit  
0x6E6394ED 94ED Multifunction steering wheel, right, short/open circuit  
0x6E6394EE 94EE Multifunction steering wheel, left, voltage value not defined  
0x6E6394EF 94EF Multifunction steering wheel, right, voltage value not defined  
0x6E6394F0 94F0 Steering-wheel heating: heating mat, open circuit  
0x6E6394F1 94F1 Steering-wheel heating: heating mat, short circuit to terminal 31  
0x6E6394F2 94F2 Steering-wheel heating: heating mat, short circuit to terminal 30  
0x6E6394F3 94F3 Steering-wheel heating: timeout control  
0x6E6394F4 94F4 Steering-wheel heating: temperature sensor faulty  
0x6E6394F5 94F5 Steering-column adjustment switch: short circuit to ground  
0x6E6394F6 94F6 Steering-column adjustment switch: open/short circuit to positive  
0x6E6394F7 94F7 Steering-column adjustment switch: voltage value not defined  
0x6E6394F8 94F8 Fault, fanfare horn  
0x6E6394F9 94F9 Fault, fanfare horn  
0x6E6394FA 94FA Steering-column-stalk evaluation faulty  
0x6E6394FB 94FB Steering-angle sensor: voltage supply, internal  
0x6E6394FC 94FC steering-wheel electronics: no triggering readiness  
0x6E6394FD 94FD Steering-wheel electronics: fault in alarm path  
0x6E6394FE 94FE Control-unit fault

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0x6E6394FF 94FF Control-unit fault  
 0x6E639500 9500 Firing attempt taken place  
 0x6E639501 9501 Steering-angle sensor not adjusted  
 0x6E639502 9502 Control-unit fault  
 0x6E639503 9503 Steering-angle sensor, reset time measurement incorrect  
 0x6E639504 9504 Active Front steering: serial line fault  
 0x6E639505 9505 Communication error CAN  
 0x6E639506 9506 Control-unit fault  
 0x6E639507 9507 Control-unit fault  
 0x6E639508 9508 Control-unit fault  
 0x6E639509 9509 Control-unit fault  
 0x6E63950A 950A Control-unit fault  
 0x6E6494A8 94A8 Processor: reset  
 0x6E6494A9 94A9 Control-module fault  
 0x6E6494AA 94AA Control-module fault  
 0x6E6494AB 94AB Incorrect chassis number  
 0x6E6494AC 94AC System time fault  
 0x6E6494AD 94AD Control-module fault  
 0x6E6494C1 94C1 Coding/data error  
 0x6E6494C2 94C2 Control-module fault  
 0x6E6494C3 94C3 Self-test: too few messages  
 0x6E6494C4 94C4 Self-test: data error in messages  
 0x6E6494C5 94C5 Self-test: transmission error  
 0x6E6494C6 94C6 Implausible crash severity  
 0x6E6494C7 94C7 Steering-wheel electronics  
 0x6E6494C8 94C8 Short-circuit, firing circuit, driver's airbag, stage 1, to ground  
 0x6E6494C9 94C9 Short-circuit, firing circuit, driver's airbag, stage 1, to ground  
 0x6E6494CA 94CA Resistance, firing circuit, driver's airbag, stage 1, too low  
 0x6E6494CB 94CB Resistance, firing circuit, driver's airbag, stage 1, too high  
 0x6E6494CC 94CC Resistance, firing circuit, driver's airbag, stage 1, cannot be measured  
 0x6E6494CD 94CD Open circuit, firing circuit, driver's airbag, stage 1  
 0x6E6494CE 94CE Steering-wheel electronics  
 0x6E6494CF 94CF Steering-wheel electronics  
 0x6E6494D0 94D0 Coding, firing circuit, driver's airbag, stage 1, at variance  
 0x6E6494D1 94D1 Steering-wheel electronics  
 0x6E6494D2 94D2 Steering-wheel electronics  
 0x6E6494D3 94D3 Short-circuit, firing circuit, driver's airbag, stage 2, to ground  
 0x6E6494D4 94D4 Short-circuit, firing circuit, driver's airbag, stage 2, to ground  
 0x6E6494D5 94D5 Resistance, firing circuit, driver's airbag, stage 2, too low  
 0x6E6494D6 94D6 Resistance, firing circuit, driver's airbag, stage 2, too high  
 0x6E6494D7 94D7 Resistance, firing circuit, driver's airbag, stage 2, cannot be measured  
 0x6E6494D8 94D8 Open circuit, firing circuit, driver's airbag, stage 2  
 0x6E6494D9 94D9 Steering-wheel electronics  
 0x6E6494DA 94DA Steering-wheel electronics  
 0x6E6494DB 94DB Coding, firing circuit, driver's airbag, stage 2, at variance  
 0x6E6494DC 94DC Steering-wheel electronics  
 0x6E6494DD 94DD Fault in alarm path  
 0x6E6494DE 94DE Transmission selector switch: bus fault  
 0x6E6494DF 94DF Transmission selector switch: bus fault and serial line fault  
 0x6E6494E0 94E0 Transmission selector switch: parking button, contact, faulty  
 0x6E6494E1 94E1 No terminal 30  
 0x6E6494E3 94E3 Terminal U\_ISIS or U\_SZL missing  
 0x6E6494E4 94E4 Steering-angle sensor plausibility  
 0x6E6494E5 94E5 Control-module fault  
 0x6E6494E6 94E6 Control-module fault  
 0x6E6494E7 94E7 Control-module fault  
 0x6E6494E9 94E9 Steering-angle sensor, internal  
 0x6E6494EA 94EA Communication between steering wheel module and steering column module faulty  
 0x6E6494EB 94EB Steering wheel electronics: version not compatible  
 0x6E6494EC 94EC Multifunction steering wheel, left: short/open circuit

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0x6E6494ED 94ED Multifunction steering wheel, right: short/open circuit  
 0x6E6494EE 94EE Multifunction steering wheel, left: voltage value not defined  
 0x6E6494EF 94EF Multifunction steering wheel, right: voltage value not defined  
 0x6E6494F0 94F0 Steering wheel heating: heating mat, open circuit  
 0x6E6494F1 94F1 Steering wheel heating: heating mat, short-circuit to terminal 31  
 0x6E6494F2 94F2 Steering wheel heating: heating mat, short-circuit to terminal 30  
 0x6E6494F3 94F3 Steering wheel heating: timeout control  
 0x6E6494F4 94F4 Steering wheel heating: temperature sensor faulty  
 0x6E6494F5 94F5 Steering column adjustment switch: short-circuit to ground  
 0x6E6494F6 94F6 Steering column adjustment switch: open/short-circuit to positive  
 0x6E6494F7 94F7 Steering column adjustment switch: voltage value not defined  
 0x6E6494F8 94F8 Fault, horn  
 0x6E6494F9 94F9 Fault, horn  
 0x6E6494FA 94FA Steering-column-switch evaluation faulty (E65, E66, E67, RR01) or programming fault (E60, E61, E63, E64)  
 0x6E6494FB 94FB Control-module fault  
 0x6E6494FC 94FC Steering wheel electronics: no triggering readiness  
 0x6E6494FD 94FD Steering wheel electronics: fault in alarm path  
 0x6E6494FE 94FE Control-module fault  
 0x6E6494FF 94FF Control-module fault  
 0x6E649500 9500 Firing attempt taken place  
 0x6E649501 9501 Steering-angle-sensor calibration  
 0x6E649502 9502 Control-module fault  
 0x6E649503 9503 Control-module fault  
 0x6E649506 9506 Steering-wheel electronics  
 0x6E649507 9507 Steering-wheel electronics  
 0x6E649508 9508 Steering-wheel electronics  
 0x6E649509 9509 Steering-wheel electronics  
 0x6E64950A 950A Steering-wheel electronics  
 0x6E64950B 950B Transport mode active  
 0x6E649518 9518 Voltage supply: limit value undershot  
 0x6E649519 9519 Voltage supply: limit value exceeded  
 0x6E64951A 951A Voltage supply (LRE): limit value undershot  
 0x6E64951B 951B Voltage supply (LRE): limit value exceeded  
 0x6E64951D 951D Coding-data fault  
 //TMBFT  
 0x72619B8A 9B8A Undervoltage  
 0x72619B97 9B97 Switch, Soft Close Automatic  
 0x72619BA4 9BA4 Power-window electronics  
 0x72619BA6 9BA6 Window Position invalid  
 0x72619BB5 9BB5 Mirror, potentiometer, vertical  
 0x7261DC44 DC44 K-CAN line fault  
 0x72619B88 9B88 Control module  
 0x72619B89 9B89 Switch block  
 0x72619B8A 9B8A Under-voltage  
 0x72619B8B 9B8B Transport mode active  
 0x72619B8E 9B8E Spare  
 0x72619B8F 9B8F Spare  
 0x72619B90 9B90 Central locking drive, unlocking  
 0x72619B91 9B91 Central locking drive, locking  
 0x72619B92 9B92 Central locking drive, double locking  
 0x72619B93 9B93 Motor, electric opening  
 0x72619B94 9B94 Motor, soft Close Automatic  
 0x72619B95 9B95 Switch, child lock  
 0x72619B96 9B96 Switch, central locking, unlocking  
 0x72619B97 9B97 Switch, Soft Close Automatic  
 0x72619B98 9B98 Switch, electric opening  
 0x72619B99 9B99 Electric opening  
 0x72619B9A 9B9A Footwell light  
 0x72619B9B 9B9B Door warning light  
 0x72619B9C 9B9C Comfort lighting  
 0x72619B9D 9B9D Far-field lighting  
 0x72619BA0 9BA0 Power window fault

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0x72619BA1 9BA1 Power window fault
0x72619BA2 9BA2 Power window sluggish
0x72619BA3 9BA3 Power window electronics
0x72619BA4 9BA4 Power window electronics
0x72619BA5 9BA5 Power window terminal voltage
0x72619BA6 9BA6 window position invalid
0x72619BA7 9BA7 Power window characteristic curve
0x72619BA9 9BA9 Power window electronics
0x72619BB0 9BB0 Motor, mirror adjustment, horizontal
0x72619BB1 9BB1 Motor, mirror adjustment, vertical
0x72619BB2 9BB2 Motor, mirror pivoting
0x72619BB3 9BB3 Mirror heating
0x72619BB5 9BB5 Mirror, potentiometer, vertical
0x72619BBA 9BBA Mirror, potentiometer, horizontal
//TMBFH
0x73619C0A 9C0A Under voltage
0x73619C25 9C25 Power-window terminal voltage
0x73619C24 9C24 Power-window electronics
0x7361DCC4 DCC4 K-CAN line fault
0x73619C08 9C08 Control unit
0x73619C09 9C09 Switch block
0x73619C0A 9C0A Under-voltage
0x73619C0B 9C0B Transport mode active
0x73619C0E 9C0E Spare
0x73619C0F 9C0F Spare
0x73619C10 9C10 Central locking drive, unlocking
0x73619C11 9C11 Central locking drive, locking
0x73619C12 9C12 Central locking drive, double locking
0x73619C13 9C13 Motor, electric opening
0x73619C14 9C14 Motor, Soft Close Automatic
0x73619C15 9C15 Switch, child lock
0x73619C16 9C16 Switch, central locking, unlocking
0x73619C17 9C17 Switch, Soft Close Automatic
0x73619C18 9C18 Switch, electric opening
0x73619C19 9C19 Electric opening
0x73619C1A 9C1A Footwell light
0x73619C1B 9C1B Door warning light
0x73619C1C 9C1C Comfort lighting
0x73619C1D 9C1D Far-field lighting
0x73619C20 9C20 Power window fault
0x73619C21 9C21 Power window fault
0x73619C22 9C22 Power windows sluggish
0x73619C23 9C23 Power window electronics
0x73619C24 9C24 Power window electronics
0x73619C25 9C25 Power window terminal voltage
0x73619C26 9C26 window position invalid
0x73619C27 9C27 Power window characteristic curve
0x73619C29 9C29 Power window electronics
0x73619C30 9C30 Mirror adjusting motor, horizontal
0x73619C31 9C31 Mirror adjusting motor, vertical
0x73619C32 9C32 Tilt-back motor, exterior rearview mirror
0x73619C33 9C33 Mirror heating
0x73619C35 9C35 Mirror position, potentiometer, vertical
0x73619C36 9C36 Mirror position, potentiometer, horizontal

//TMFAT
0x74619B4A 9B4A Undervoltage
0x74619B57 9B57 Switch, Soft Close Automatic
0x74619B64 9B64 Power-window electronics
0x74619B66 9B66 window position invalid
0x74619B75 9B75 Mirror, potentiometer, vertical
0x7461DC04 DC04 K-CAN line fault
0x74619B48 9B48 Control module

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0x74619B49 9B49 Switch block, driver's door  
 0x74619B4A 9B4A Undervoltage  
 0x74619B4B 9B4B Transport mode active  
 0x74619B4E 9B4E Spare  
 0x74619B4F 9B4F Spare  
 0x74619B50 9B50 Central-locking drive, unlocking  
 0x74619B51 9B51 Central locking drive, locking  
 0x74619B52 9B52 Central-locking drive, double locking  
 0x74619B53 9B53 Motor, electric opening  
 0x74619B54 9B54 Motor, Soft Close Automatic  
 0x74619B55 9B55 Switch, child lock  
 0x74619B56 9B56 Switch, unlocking, driver's door  
 0x74619B57 9B57 Switch, Soft Close Automatic  
 0x74619B58 9B58 Switch, electric opening  
 0x74619B59 9B59 Electric opening  
 0x74619B5A 9B5A Footwell light  
 0x74619B5B 9B5B Door warning light  
 0x74619B5C 9B5C Comfort lighting  
 0x74619B5D 9B5D Far-field lighting  
 0x74619B60 9B60 Power window fault  
 0x74619B61 9B61 Power window fault  
 0x74619B62 9B62 Power windows sluggish  
 0x74619B63 9B63 Power window electronics  
 0x74619B64 9B64 Power window electronics  
 0x74619B65 9B65 Power window terminal voltage  
 0x74619B66 9B66 window position invalid  
 0x74619B67 9B67 Power window characteristic curve  
 0x74619B69 9B69 Power window electronics  
 0x74619B70 9B70 Motor, mirror adjustment, horizontal  
 0x74619B71 9B71 Motor, mirror adjustment, vertical  
 0x74619B72 9B72 Motor, mirror pivoting  
 0x74619B73 9B73 Mirror heating  
 0x74619B75 9B75 Mirror, potentiometer, vertical  
 0x74619B76 9B76 Mirror, potentiometer, horizontal  
 //TMFAH  
 0x75619BCA 9BCA Undervoltage  
 0x7561DC84 DC84 K-CAN line fault  
 0x7561DC87 DC87 K-CAN communication fault  
 0x75619BD7 9BD7 Switch, Soft Close Automatic  
 0x75619BC8 9BC8 Control module  
 0x75619BC9 9BC9 Switch block  
 0x75619BCA 9BCA Under-voltage  
 0x75619BCB 9BCB Transport mode active  
 0x75619BCE 9BCE Spare  
 0x75619BCF 9BCF Spare  
 0x75619BD0 9BD0 Central-locking drive, unlocking  
 0x75619BD1 9BD1 Central-locking drive, locking  
 0x75619BD2 9BD2 Central-locking drive, double locking  
 0x75619BD3 9BD3 Motor, electric opening  
 0x75619BD4 9BD4 Motor, Soft Close Automatic  
 0x75619BD5 9BD5 Switch, child lock  
 0x75619BD6 9BD6 Switch, central locking, unlocking  
 0x75619BD7 9BD7 Switch, Soft Close Automatic  
 0x75619BD8 9BD8 Switch, electric opening  
 0x75619BD9 9BD9 Electric opening  
 0x75619BDA 9BDA Footwell light  
 0x75619BDB 9BDB Door warning light  
 0x75619BDC 9BDC Comfort lighting  
 0x75619BDD 9BDD Far-field lighting  
 0x75619BE0 9BE0 Power window fault  
 0x75619BE1 9BE1 Power window fault  
 0x75619BE2 9BE2 Power windows sluggish  
 0x75619BE3 9BE3 Power window electronics

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0x75619BE4 9BE4 Power window electronics  
 0x75619BE5 9BE5 Power window terminal voltage  
 0x75619BE6 9BE6 window position invalid  
 0x75619BE7 9BE7 Power window characteristic curve  
 0x75619BE9 9BE9 Power window electronics  
 0x75619BF0 9BF0 Mirror adjusting motor, horizontal  
 0x75619BF1 9BF1 Mirror adjusting motor, vertical  
 0x75619BF2 9BF2 Tilt-back motor, exterior rearview mirror  
 0x75619BF3 9BF3 Mirror heating  
 0x75619BF5 9BF5 Mirror position, potentiometer, vertical  
 0x75619BF6 9BF6 Mirror position, potentiometer, horizontal

//VM

0x7661A38D A38D Receiving System, aerial supply voltage: outside tolerance  
 0x7661A388 A388 RGB input Red  
 0x7661A389 A389 RGB input Green  
 0x7661A38A A38A RGB input Blue  
 0x7661A38B A38B RGB input Sync  
 0x7661A38D A38D Antenna supply voltage  
 0x7661A38E A38E Antenna supply current  
 0x7661A390 A390 FABAS 1 output signal  
 0x7661A391 A391 Short circuit to battery voltage  
 0x7661A392 A392 RGB Output1 Red  
 0x7661A393 A393 RGB Output1 Green Sync  
 0x7661A394 A394 RGB Output1 Red  
 0x7661A395 A395 RGB Output2 Red  
 0x7661A396 A396 RGB Output2 Green Sync  
 0x7661A397 A397 RGB Output2 Blue  
 0x7661DBD0 DBD0 Ring-break diagnosis has been carried out

//WIM

0x77619E08 9E08 wiper module  
 0x77619E09 9E09 wiper-module coding  
 0x77619E0B 9E0B washer pump  
 0x77619E0C 9E0C Pump,headlight cleaning  
 0x77619E0D 9E0D wet-arm heater  
 0x77619E0F 9E0F wiper sluggish  
 0x77619E10 9E10 wiper motor,Hall sensor  
 0x77619E11 9E11 wiper in assembly mode  
 0x77619E12 9E12 wiper motor,Hall sensor

//SBSL\_2 MODE8

0x7B619828 9828 Processor: reset  
 0x7B619829 9829 Control-module fault  
 0x7B61982A 982A Control-module fault  
 0x7B61982B 982B Incorrect chassis number  
 0x7B61982C 982C System time fault  
 0x7B61983E 983E Control-module fault  
 0x7B619840 9840 Coding/data error  
 0x7B619841 9841 Coding-data error  
 0x7B619842 9842 Self-test: too few messages  
 0x7B619843 9843 Self-test: data error in message  
 0x7B619844 9844 Self test: transmission error  
 0x7B619845 9845 Implausible crash severity  
 0x7B619846 9846 Control-module fault  
 0x7B619847 9847 Short circuit, firing circuit, front airbag, left, stage 1 (E85), or active head restraint, front left (E6x), to ground  
 0x7B619848 9848 Short circuit, firing circuit, front airbag, left, stage 1 (E85), or active head restraint, front left (E6x), to positive  
 0x7B619849 9849 Resistance, firing circuit, front airbag, left, stage 1 (E85), or active head restraint, front left (E6x), too low  
 0x7B61984A 984A Resistance, firing circuit, front airbag, left, stage 1 (E85), or active head restraint, front left (E6x), too high  
 0x7B61984B 984B Resistance, firing circuit, front airbag, left, stage 1 (E85), or active head restraint, front left (E6x), not measured



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0x7B61984C 984C Open circuit, firing circuit, front airbag, left, stage 1 (E85), or active head restraint, front left (E6x)  
0x7B61984D 984D Control-module fault  
0x7B61984E 984E Control-module fault  
0x7B61984F 984F Coding, firing circuit, front airbag, left, stage 1 (E85), or active head restraint, front left (E6x), at variance  
0x7B619850 9850 Control-module fault  
0x7B619851 9851 Control-module fault  
0x7B619852 9852 Short circuit, firing circuit, front airbag, left, stage 2 (E85), or active head restraint, front right (E6x), to ground  
0x7B619853 9853 Short circuit, firing circuit, front airbag, left, stage 2 (E85), or active head restraint, front right (E6x), to positive  
0x7B619854 9854 Resistance, firing circuit, front airbag, left, stage 2 (E85), or active head restraint, front right (E6x), too low  
0x7B619855 9855 Resistance, firing circuit, front airbag, left, stage 2 (E85), or active head restraint, front right (E6x), too high  
0x7B619856 9856 Resistance, firing circuit, front airbag, left, stage 2 (E85), or active head restraint, front right (E6x), not measured  
0x7B619857 9857 Open circuit, firing circuit, front airbag, left, stage 2 (E85), or active head restraint, front right (E6x)  
0x7B619858 9858 Control-module fault  
0x7B619859 9859 Control-module fault  
0x7B61985A 985A Coding, firing circuit, front airbag, left, stage 2 (E85), or active head restraint, front right (E6x), at variance  
0x7B61985B 985B Control-module fault  
0x7B61985C 985C Control-module fault  
0x7B61985D 985D Short circuit, firing circuit, seat belt tensioner, front left, to ground  
0x7B61985E 985E Short circuit, firing circuit, seat belt tensioner, front left, to positive  
0x7B61985F 985F Resistance, firing circuit, seat belt tensioner, front left, too low  
0x7B619860 9860 Resistance, firing circuit, seat belt tensioner, front left, too high  
0x7B619861 9861 Resistance, firing circuit, seat belt tensioner, front left, not measured  
0x7B619862 9862 Open circuit, firing circuit, seat belt tensioner, front left  
0x7B619863 9863 Control-module fault  
0x7B619864 9864 Control-module fault  
0x7B619865 9865 Coding, firing circuit, seat belt tensioner, front left, at variance  
0x7B619866 9866 Control-module fault  
0x7B619867 9867 Control-module fault  
0x7B619868 9868 Short circuit, firing circuit, thorax airbag, rear left (E85, E60, E61), or knee airbag, front left (E63, E64), to ground  
0x7B619869 9869 Short circuit, firing circuit, thorax airbag, rear left (E85, E60, E61), or knee airbag, front left (E63, E64), to positive  
0x7B61986A 986A Resistance, firing circuit, thorax airbag, rear left (E85, E60, E61), or knee airbag, front left (E63, E64), too low  
0x7B61986B 986B Resistance, firing circuit, thorax airbag, rear left (E85, E60, E61), or knee airbag, front left (E63, E64), too high  
0x7B61986C 986C Resistance, firing circuit, thorax airbag, rear left (E85, E60, E61), or knee airbag, front left (E63, E64), not measured  
0x7B61986D 986D Open circuit, firing circuit, thorax airbag, rear left (E85, E60, E61), or knee airbag, front left (E63, E64)  
0x7B61986E 986E Control-module fault  
0x7B61986F 986F Control-module fault  
0x7B619870 9870 Coding, firing circuit, thorax airbag, rear left (E85, E60, E61), or knee airbag, front left (E63, E64) at variance  
0x7B619871 9871 Control-module fault  
0x7B619872 9872 Control-module fault  
0x7B619873 9873 Short circuit, firing circuit, seat belt tensioner, rear left, to ground  
0x7B619874 9874 Short circuit, firing circuit, seat belt tensioner, rear left, to positive

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0x7B619875 9875 Resistance, firing circuit, seat belt tensioner, rear left, too low  
 0x7B619876 9876 Resistance, firing circuit, seat belt tensioner, rear left, too high  
 0x7B619877 9877 Resistance, firing circuit, seat belt tensioner, rear left, not measured  
 0x7B619878 9878 open circuit, firing circuit, seat belt tensioner, rear left  
 0x7B619879 9879 Control-module fault  
 0x7B61987A 987A Control-module fault  
 0x7B61987B 987B Coding, firing circuit, seat belt tensioner, rear left, at variance  
 0x7B61987C 987C Control-module fault  
 0x7B61987D 987D Control-module fault  
 0x7B61987E 987E Short circuit, firing circuit, knee airbag, front left (E85), or head airbag, left (E6x), to ground  
 0x7B61987F 987F Short circuit, firing circuit, knee airbag, front left (E85), or head airbag, left (E6x), to positive  
 0x7B619880 9880 Resistance, firing circuit, knee airbag, front left (E85), or head airbag, left (E6x), too low  
 0x7B619881 9881 Resistance, firing circuit, knee airbag, front left (E85), or head airbag, left (E6x), too high  
 0x7B619882 9882 Resistance, firing circuit, knee airbag, front left (E85), or head airbag, left (E6x), not measured  
 0x7B619883 9883 Open circuit, firing circuit, knee airbag, front left (E85), or head airbag, left (E6x)  
 0x7B619884 9884 Control-module fault  
 0x7B619885 9885 Control-module fault  
 0x7B619886 9886 Coding, firing circuit, knee airbag, front left (E85), or head airbag, left (E6x), at variance  
 0x7B619887 9887 Control-module fault  
 0x7B619888 9888 Control-module fault  
 0x7B619889 9889 Control-module fault  
 0x7B61988A 988A Control-module fault  
 0x7B61988B 988B Control-module fault  
 0x7B61988C 988C Control-module fault  
 0x7B61988D 988D Control-module fault  
 0x7B61988E 988E Control-module fault  
 0x7B61988F 988F Seat-belt buckle: short circuit  
 0x7B619890 9890 Seat-belt buckle: implausible measured value  
 0x7B619891 9891 Seat-belt buckle: open circuit  
 0x7B619892 9892 Control-module fault (E6x) or software fault (E85)  
 0x7B619893 9893 Seat-occupancy detector, passenger: open circuit  
 0x7B619894 9894 Seat-occupancy detector, passenger: short circuit  
 0x7B619895 9895 Seat-occupancy detector, passenger: communication fault  
 0x7B619896 9896 Control-module fault  
 0x7B619897 9897 Control-module fault  
 0x7B619898 9898 Firing attempt taken place  
 0x7B619899 9899 Control-module fault  
 0x7B61989E 989E voltage supply not in permitted range  
 //SBSR\_2  
 0x7C6198A8 98A8 Processor: reset  
 0x7C6198A9 98A9 Control-module fault  
 0x7C6198AA 98AA Control-module fault  
 0x7C6198AB 98AB Incorrect chassis number  
 0x7C6198AC 98AC System time fault  
 0x7C6198BE 98BE Control-module fault  
 0x7C6198C0 98C0 Coding/data error  
 0x7C6198C1 98C1 Coding-data error  
 0x7C6198C2 98C2 Self-test: too few messages  
 0x7C6198C3 98C3 Self-test: data error in message  
 0x7C6198C4 98C4 Self test: transmission error  
 0x7C6198C5 98C5 Implausible crash severity  
 0x7C6198C6 98C6 Control-module fault  
 0x7C6198C7 98C7 Short circuit, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 1, to ground  
 0x7C6198C8 98C8 short circuit, firing circuit, front airbag, right (E85), or

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passenger airbag (E6x), stage 1, to positive  
0x7C6198C9 98C9 Resistance, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 1, too low  
0x7C6198CA 98CA Resistance, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 1, too high  
0x7C6198CB 98CB Resistance, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 1, not measured  
0x7C6198CC 98CC Open circuit, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 1  
0x7C6198CD 98CD Control-module fault  
0x7C6198CE 98CE Control-module fault  
0x7C6198CF 98CF Coding, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 1, at variance  
0x7C6198D0 98D0 Control-module fault  
0x7C6198D1 98D1 Control-module fault  
0x7C6198D2 98D2 Short circuit, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 2, to ground  
0x7C6198D3 98D3 Short circuit, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 2, to ground  
0x7C6198D4 98D4 Resistance, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 2, too low  
0x7C6198D5 98D5 Resistance, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 2, too high  
0x7C6198D6 98D6 Resistance, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 2, not measured  
0x7C6198D7 98D7 Open circuit, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 2  
0x7C6198D8 98D8 Control-module fault  
0x7C6198D9 98D9 Control-module fault  
0x7C6198DA 98DA Coding, firing circuit, front airbag, right (E85), or passenger airbag (E6x), stage 2, at variance  
0x7C6198DB 98DB Control-module fault  
0x7C6198DC 98DC Control-module fault  
0x7C6198DD 98DD Short circuit, firing circuit, seat belt tensioner, front right, to ground  
0x7C6198DE 98DE Short circuit, firing circuit, seat belt tensioner, front right, to positive  
0x7C6198DF 98DF Resistance, firing circuit, seat belt tensioner, front right, too low  
0x7C6198E0 98E0 Resistance, firing circuit, seat belt tensioner, front right, too high  
0x7C6198E1 98E1 Resistance, firing circuit, seat belt tensioner, front right, not measured  
0x7C6198E2 98E2 Open circuit, firing circuit, seat belt tensioner, front right  
0x7C6198E3 98E3 Control-module fault  
0x7C6198E4 98E4 Control-module fault  
0x7C6198E5 98E5 Coding, firing circuit, seat belt tensioner, front right, at variance  
0x7C6198E6 98E6 Control-module fault  
0x7C6198E7 98E7 Control-module fault  
0x7C6198E8 98E8 Short circuit, firing circuit, thorax airbag, rear right (E85, E60, E61), or knee airbag, front right (E63, E64), to ground  
0x7C6198E9 98E9 Short circuit, firing circuit, thorax airbag, rear right (E85, E60, E61), or knee airbag, front right (E63, E64), to positive  
0x7C6198EA 98EA Resistance, firing circuit, thorax airbag, rear right (E85, E60, E61), or knee airbag, front right (E63, E64), too low  
0x7C6198EB 98EB Resistance, firing circuit, thorax airbag, rear right (E85, E60, E61), or knee airbag, front right (E63, E64), too high  
0x7C6198EC 98EC Resistance, firing circuit, thorax airbag, rear right (E85, E60, E61), or knee airbag, front right (E63, E64), not measured  
0x7C6198ED 98ED Open circuit, firing circuit, thorax airbag, rear right (E85, E60, E61), or knee airbag, front right (E63, E64)  
0x7C6198EE 98EE Control-module fault

# Bmw Code Sheet.txt

0x7C6198EF 98EF Control-module fault  
 0x7C6198F0 98F0 Coding, firing circuit, thorax airbag, rear right (E85, E60, E61), or knee airbag, front right (E63, E64) at variance  
 0x7C6198F1 98F1 Control-module fault  
 0x7C6198F2 98F2 Control-module fault  
 0x7C6198F3 98F3 Short circuit, firing circuit, safety battery terminal (E85), or seat belt tensioner, rear right (E6x), to ground  
 0x7C6198F4 98F4 Short circuit, firing circuit, safety battery terminal (E85), or seat belt tensioner, rear right (E6x), to positive  
 0x7C6198F5 98F5 Resistance, firing circuit, safety battery terminal (E85), or seat belt tensioner, rear right (E6x), too low  
 0x7C6198F6 98F6 Resistance, firing circuit, safety battery terminal (E85), or seat belt tensioner, rear right (E6x), too high  
 0x7C6198F7 98F7 Resistance, firing circuit, safety battery terminal (E85), or seat belt tensioner, rear right (E6x), not measured  
 0x7C6198F8 98F8 Open circuit, firing circuit, safety battery terminal (E85), or seat belt tensioner, rear right (E6x)  
 0x7C6198F9 98F9 Control-module fault  
 0x7C6198FA 98FA Control-module fault  
 0x7C6198FB 98FB Coding, firing circuit, safety battery terminal (E85), or seat belt tensioner, rear right (E6x), at measured  
 0x7C6198FC 98FC Control-module fault  
 0x7C6198FD 98FD Control-module fault  
 0x7C6198FE 98FE Short circuit, firing circuit, knee airbag, front right (E85), or head airbag, right (E6x), to ground  
 0x7C6198FF 98FF Short circuit, firing circuit, knee airbag, front right (E85), or head airbag, right (E6x), to positive  
 0x7C619900 9900 Resistance, firing circuit, knee airbag, front right (E85), or head airbag, right (E6x), too low  
 0x7C619901 9901 Resistance, firing circuit, knee airbag, front right (E85), or head airbag, right (E6x), too high  
 0x7C619902 9902 Resistance, firing circuit, knee airbag, front right (E85), or head airbag, right (E6x), not measured  
 0x7C619903 9903 Open circuit, firing circuit, knee airbag, front right (E85), or head airbag, right (E6x)  
 0x7C619904 9904 Control-module fault  
 0x7C619905 9905 Control-module fault  
 0x7C619906 9906 Coding, firing circuit, knee airbag, front right (E85), or head airbag, right (E6x), at variance  
 0x7C619907 9907 Control-module fault  
 0x7C619908 9908 Control-module fault  
 0x7C619909 9909 Control-module fault  
 0x7C61990A 990A Control-module fault  
 0x7C61990B 990B Control-module fault  
 0x7C61990C 990C Control-module fault  
 0x7C61990D 990D Control-module fault  
 0x7C61990E 990E Control-module fault  
 0x7C61990F 990F Seat-belt buckle: short circuit  
 0x7C619910 9910 Seat-belt buckle: implausible measured value  
 0x7C619911 9911 Seat-belt buckle: open circuit  
 0x7C619912 9912 Control-module fault (E6x) or software fault (E85)  
 0x7C619913 9913 Seat-occupancy detector, passenger: open circuit  
 0x7C619914 9914 Seat-occupancy detector, passenger: short circuit  
 0x7C619915 9915 Seat-occupancy detector, passenger: communication fault  
 0x7C619916 9916 Control-module fault  
 0x7C619917 9917 Control-module fault  
 0x7C619918 9918 Firing attempt taken place  
 0x7C619919 9919 Control-module fault  
 0x7C61991A 991A Battery lead (screen): open circuit  
 0x7C61991B 991B Battery lead (screen): short circuit to ground  
 0x7C61991C 991C Battery lead (screen): short circuit to positive  
 0x7C61991D 991D Battery lead (screen): implausible measured value  
 0x7C61991E 991E voltage supply not in permitted range

# Bmw Code Sheet.txt

```
//AL
0x8061612C 612C Control unit: hardware fault
0x80616134 6134 Motor actuating unit: fault, current
0x8061613A 613A Undervoltage < 7.5V
0x8061613C 613C Angle sum relation incorrect
0x8061613E 613E Lock: mechanical fault
0x8061613F 613F Steering-angle plausibility
0x80616140 6140 Redundancy comparison, driver steering angle, top
0x80616145 6145 No monitoring of angle sum relation
0x8061614A 614A Motor position angle not initialized
0x8061CE93 CE93 Message (steering-wheel angle top, 0C8)
0x8061612C 612C Control unit:hardware fault
0x8061612D 612D Fluid temperature,steering
0x8061612E 612E Control unit:comparison,vehicle identification numbers
0x8061612F 612F Control unit:coding data error
0x80616130 6130 Control unit:boot or flash error MPC
0x80616131 6131 Control unit:flash operation or error NEC
0x80616132 6132 Redundant driver steering angle(SZL)
0x80616133 6133 Motor actuating unit:fault,voltage
0x80616134 6134 Motor actuating unit:fault,current
0x80616136 6136 Sensor supply,engine position
0x80616137 6137 Engine position sensor
0x80616138 6138 Servomotor overtemperature
0x80616139 6139 Vehicle ref. speed or direction of travel uncertain or not available
0x8061613A 613A Undervoltage < 7.5 v
0x8061613B 613B DSC sensors
0x8061613C 613C Angle sum relation incorrect
0x8061613D 613D Lock:electrical fault
0x8061613E 613E Lock:mechanical fault
0x8061613F 613F Steering-angle plausibility
0x80616140 6140 Redundancy comparison,driver steering angle,top
0x80616141 6141 Engine-dynamics monitoring
0x80616142 6142 ECO value in SGM
0x80616143 6143 Servotronic value in SGM
0x80616144 6144 Interlock:self-locking monitoring
0x80616145 6145 No monitoring of angle sum relation
0x80616146 6146 Engine temperature sensor
0x80616147 6147 Cumulative steering angle sensor:fault,supply
0x80616149 6149 Combined position,speed monitoring
0x8061614A 614A Motor position angle not initialized
0x8061614B 614B Control unit:fault,operating system
0x8061CE93 CE93 Message(steering-wheel angle top,0C8)
//FRM
0x8361A409 A409 Undervoltage
//KBM
0x8362A409 A409 Undervoltage
0x8362A40B A40B Programming fault
0x8362A40D A40D Control-module fault
0x8362A410 A410 Interior lights
0x8362A411 A411 Load cutoff
0x8362A418 A418 Hall sensor, power-window motor, rear right
0x8362A419 A419 Hall sensor, power window, rear right
0x8362A41A A41A Voltage, power window, rear right
0x8362A41B A41B Electronics, power window, rear right
0x8362A41C A41C Relay, power window, rear right
0x8362A41D A41D Relay, power window, rear right
0x8362A41E A41E Power-window position, rear invalid
0x8362A41F A41F Power-window motor, rear right
0x8362A420 A420 Mechanism, power window, rear right
0x8362A421 A421 Outside temperature implausible
0x8362A422 A422 Electronics, power window, rear right
0x8362A423 A423 Anti-repeat circuit, power window, rear right
```

# Bmw Code Sheet.txt

0x8362A428 A428 Interlock, windshield wiper motor  
 0x8362A429 A429 Rain sensor  
 0x8362A42A A42A Interlock, rear window wiper  
 0x8362A430 A430 Soft Close Automatic, rear lid  
 0x8362A431 A431 Soft Close Automatic, rear lid  
 0x8362A432 A432 Drive unit, Soft Close Automatic, rear lid  
 0x8362A433 A433 Electronics, Soft Close Automatic, rear lid  
 0x8362A435 A435 Relay for central locking, unlocking  
 0x8362A436 A436 Relay for central locking, unlocking  
 0x8362A437 A437 Relay, central locking, locking  
 0x8362A438 A438 Relay, central locking, locking  
 0x8362A439 A439 Relay for central locking, double locking  
 0x8362A43A A43A Relay for central locking, double locking  
 0x8362A43B A43B Drive unit, rear lid unlocking  
 0x8362A43C A43C Drive unit, rear lid unlocking  
 0x8362A43D A43D Button, rear lid unlocking  
 0x8362A43E A43E Diagnosis lead, rear lid relay  
 0x8362A43F A43F Diagnosis lead, central locking relay  
 0x8362A440 A440 Diagnosis lead, rear lid relay  
 0x8362A441 A441 Diagnosis lead, central locking relay  
 0x8362A442 A442 Rear-window unlocking  
 0x8362A443 A443 Rear-window unlocking  
 0x8362A444 A444 Rear-window unlocking  
 0x8362A447 A447 Transport mode active  
 0x8362A448 A448 Hall sensor, power-window motor, rear left  
 0x8362A449 A449 Hall sensor, power-window motor, rear left  
 0x8362A44A A44A Voltage, power-window motor, rear left  
 0x8362A44B A44B Electronics, power-window motor, rear left  
 0x8362A44C A44C Relay, power-window motor, rear left  
 0x8362A44D A44D Relay, power-window motor, rear left  
 0x8362A44E A44E Window position, rear left, invalid  
 0x8362A44F A44F Power-window motor, rear left  
 0x8362A450 A450 Mechanism, power window, rear left  
 0x8362A451 A451 Outside temperature implausible  
 0x8362A452 A452 Electronics, power-window motor, rear left  
 0x8362A453 A453 Anti-repeat circuit, power-window motor, rear left  
 0x8362A455 A455 Mechanism, power window, rear left  
 0x8362A456 A456 Mechanism, power window, rear right  
 0x8362A457 A457 Drive unit, trunk space cover  
 0x8362A458 A458 Drive unit, trunk space cover

## //FZD

0x8561A088 A088 Control switch SHD  
 0x8561A08A A08A Switch lighting  
 0x8561A08D A08D Coding incorrect  
 0x8561A090 A090 SHD mechanical system  
 0x8561A092 A092 SHD initialization

## //RLS

0x8562A128 A128 Hardware fault, rain sensor  
 0x8562A129 A129 No adaptation to windshield  
 0x8562A12A A12A High temperature  
 0x8562A12B A12B Overvoltage / undervoltage  
 0x8562A12D A12D Hardware, light sensor  
 0x8562A12E A12E Calibration error, light sensor

## //CCCA

0x8861A04A A04A Safety violation  
 0x8861A04E A04E Yaw sensor, internal fault  
 0x8861A04F A04F No speedometer signal but GPS position change  
 0x8861A050 A050 Too many speedo pulses  
 0x8861A051 A051 GPS direction and direction of travel do not correspond  
 0x8861A053 A053 Control-unit fault  
 0x8861A054 A054 GPS aerial not connected

# Bmw Code Sheet.txt

0x8861A055 A055 Short circuit at GPS aerial connection  
 0x8861A056 A056 Control-unit fault  
 0x8861A057 A057 CCC time out equal to GPS time  
 0x8861A058 A058 Yaw-sensor fault during self-test  
 0x8861A059 A059 Yaw sensor issues incorrect signal  
 0x8861A05A A05A Yaw sensor, internal fault  
 0x8861A05B A05B General yaw-sensor fault  
 0x8861A05C A05C Yaw sensor, internal fault  
 0x8861A05D A05D Unknown speedo fault  
 0x8861A05F A05F Control-unit fault  
 0x8861A060 A060 Control-unit fault  
 0x8861A061 A061 Control-unit fault  
 0x8861A061 A061 Control-unit fault  
 0x8861A062 A062 No connection to HIP module  
 0x8861A063 A063 System fault  
 0x8861A6F1 A6F1 System fault  
 0x8861A6F2 A6F2 System fault  
 0x8861A04A A04A Safety violation  
 0x8861A04E A04E Yaw sensor, internal fault  
 0x8861A04F A04F No speedometer signal but GPS position change  
 0x8861A050 A050 Too many speedo pulses  
 0x8861A051 A051 GPS direction and direction of travel do not correspond  
 0x8861A053 A053 Control-unit fault  
 0x8861A054 A054 GPS aerial not connected  
 0x8861A055 A055 Short circuit at GPS aerial connection  
 0x8861A056 A056 Control-unit fault  
 0x8861A057 A057 CCC time out equal to GPS time  
 0x8861A058 A058 Yaw-sensor fault during self-test  
 0x8861A059 A059 Yaw sensor issues incorrect signal  
 0x8861A05A A05A Yaw sensor, internal fault  
 0x8861A05B A05B General yaw-sensor fault  
 0x8861A05C A05C Yaw sensor, internal fault  
 0x8861A05D A05D Unknown speedo fault  
 0x8861A05F A05F Control-unit fault  
 0x8861A060 A060 Control-unit fault  
 0x8861A061 A061 Control-unit fault  
 0x8861A061 A061 Control-unit fault  
 0x8861A062 A062 No connection to HIP module  
 0x8861A063 A063 System fault  
 0x8861A6F1 A6F1 System fault  
 0x8861A6F2 A6F2 System fault

## //CCCASK

0x8E61A18B A18B Control-unit fault  
 0x8E61A18C A18C Overcurrent, Minidisc player  
 0x8E61A18D A18D Overtemperature in Minidisc player  
 0x8E61A18E A18E MD hardware fault  
 0x8E61A18F A18F Loading mechanism of Minidisc player faulty  
 0x8E61A190 A190 Limit switch, loading mechanism of Minidisc player, faulty  
 0x8E61A191 A191 Control-unit fault  
 0x8E61A192 A192 Control-unit fault  
 0x8E61A193 A193 Connection fault between CCC-ASK and Minidisc player  
 0x8E61A194 A194 Control-unit fault  
 0x8E61A195 A195 Control-unit fault  
 0x8E61A196 A196 Control-unit fault  
 0x8E61A197 A197 Hardware fault in CCC  
 0x8E61A198 A198 No connection to minidisc player  
 0x8E61A199 A199 Control-unit fault  
 0x8E61A19B A19B Control-unit fault  
 0x8E61A19C A19C Microphone cable not connected or short circuit  
 0x8E61A19D A19D AUX not connected or short circuit  
 0x8E61A1A2 A1A2 Control-unit fault

# Bmw Code Sheet.txt

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0x8E61A1A3 A1A3 Control-unit fault
0x8E61A1A4 A1A4 Control-unit fault
0x8E61A1A5 A1A5 Control-unit fault
0x8E61A18B A18B Control-unit fault
0x8E61A18C A18C Overcurrent, Minidisc player
0x8E61A18D A18D Overtemperature in Minidisc player
0x8E61A18E A18E MD hardware fault
0x8E61A18F A18F Loading mechanism of Minidisc player faulty
0x8E61A190 A190 Limit switch, loading mechanism of Minidisc player, faulty
0x8E61A191 A191 Control-unit fault
0x8E61A192 A192 Control-unit fault
0x8E61A193 A193 Connection fault between CCC-ASK and Minidisc player
0x8E61A194 A194 Control-unit fault
0x8E61A195 A195 Control-unit fault
0x8E61A196 A196 Control-unit fault
0x8E61A197 A197 Hardware fault in CCC
0x8E61A198 A198 No connection to minidisc player
0x8E61A199 A199 Control-unit fault
0x8E61A19B A19B Control-unit fault
0x8E61A19C A19C Microphone cable not connected or short circuit
0x8E61A19D A19D AUX not connected or short circuit
0x8E61A1A2 A1A2 Control-unit fault
0x8E61A1A3 A1A3 Control-unit fault
0x8E61A1A4 A1A4 Control-unit fault
0x8E61A1A5 A1A5 Control-unit fault

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//FLA

//INSTR

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0xA661930E 930E Gear display P
0xA6619316 9316 Odometer memory
0xA6619319 9319 Fuel-level sensor, right
0xA661931A 931A Fuel-level sensor, left
0xA661931B 931B Outside temperature
0xA661931C 931C Display-heater short circuit
0xA661931D 931D System voltage

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//ANT

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0xBF61A508 A508 voltage supply, aerials

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//BZM

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0XC1619FC8 9FC8 Menu buttons,left
0XC1619FC9 9FC9 Turn rotary knob,left
0XC1619FCA 9FCA Heating/ventilation,left
0XC1619FCB 9FCB Push rotary knob,left
0XC1619FCC 9FCC Memory button,left
0XC1619FCD 9FCD Menu buttons,right
0XC1619FCE 9FCE Turn rotary knob,right
0XC1619FCF 9FCF Heating/ventilation,right
0XC1619FD0 9FD0 Push rotary knob,right
0XC1619FD1 9FD1 Memory button,right

```

//LM2

```

0xC5619CAB 9CAB One terminal 15 missing
0xC5619CB1 9CB1 Potentiometer, dimmer, faulty
0xC5619CB3 9CB3 Ride-height sensor, front, faulty
0xC5619CB4 9CB4 Ride-height sensor, rear ,faulty
0xC5619CB6 9CB6 HVAC coil chopping
0xC5629CAB 9CAB One terminal 15 missing
0xC5629CB1 9CB1 Potentiometer, dimmer, faulty
0xC5629CB3 9CB3 Ride-height sensor, front, faulty
0xC5629CB4 9CB4 Ride-height sensor, rear ,faulty
0xC5629CB6 9CB6 HVAC coil chopping
0xC5629CBC 9CBC Short circuit in a lamp circuit
0xC5629CBD 9CBD Battery exhaustive-protection: deactivation, side light
0xC5629CA8 9CA8 Control-module fault
0xC5629CA9 9CA9 Terminal 30A connection faulty

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# Bmw Code Sheet.txt

0xC5629CAA 9CAA Terminal 30B connection faulty  
 0xC5629CAB 9CAB One terminal 15 missing  
 0xC5629CAC 9CAC Brake-light switch faulty  
 0xC5629CAD 9CAD AHM communication disturbed  
 0xC5629CAE 9CAE Control-panel fault  
 0xC5629CAF 9CAF Light switch position 1 faulty  
 0xC5629CB0 9CB0 Light switch position 2 faulty  
 0xC5629CB1 9CB1 Dimmer potentiometer faulty  
 0xC5629CB2 9CB2 LWR potentiometer faulty  
 0xC5629CB3 9CB3 Sensor, ride level, front, faulty  
 0xC5629CB4 9CB4 Ride-level sensor, rear, faulty  
 0xC5629CB5 9CB5 Transport mode active  
 0xC5629CB6 9CB6 HVAC coil chopping  
 0xC5629CB7 9CB7 HVAC driver fault  
 0xC5629CB8 9CB8 Lamp dimming faulty  
 0xC5629CB9 9CB9 Short circuit at a lamp output  
 0xC5629CBA 9CBA Short circuit at a lamp output  
 0xC5629CBB 9CBB Short circuit at a lamp output  
 0xC5629CBC 9CBC Short circuit at a lamp output  
 0xC5629CBD 9CBD Exhaustive-discharge protection of battery:deactivation,side-market  
 light  
 0xC5629CBE 9CBE Exhaustive-discharge protection of battery:deactivation,parking  
 light  
 0xC5629CBF 9CBF Battery exhausted  
 0xC5629CC0 9CC0 Software status and coding index do not match  
 0xC5629CA8 9CA8 Control-module fault  
 0xC5629CA9 9CA9 Terminal 30A connection faulty  
 0xC5629CAA 9CAA Terminal 30B connection faulty  
 0xC5629CAB 9CAB One terminal 15 missing  
 0xC5629CAC 9CAC Brake-light switch faulty  
 0xC5629CAD 9CAD AHM communication disturbed  
 0xC5629CAE 9CAE Control-panel fault  
 0xC5629CAF 9CAF Light switch position 1 faulty  
 0xC5629CB0 9CB0 Light switch position 2 faulty  
 0xC5629CB1 9CB1 Dimmer potentiometer faulty  
 0xC5629CB2 9CB2 LWR potentiometer faulty  
 0xC5629CB3 9CB3 Sensor, ride level, front, faulty  
 0xC5629CB4 9CB4 Ride-level sensor, rear, faulty  
 0xC5629CB5 9CB5 Transport mode active  
 0xC5629CB6 9CB6 HVAC coil chopping  
 0xC5629CB7 9CB7 HVAC driver fault  
 0xC5639CAB 9CAB One terminal 15 missing  
 0xC5639CB1 9CB1 Potentiometer, dimmer, faulty  
 0xC5639CB3 9CB3 Ride-height sensor, front, faulty  
 0xC5639CB4 9CB4 Transport mode active  
 0xC5639CB6 9CB6 Short circuit in a lamp circuit  
 0xC5639CBC 9CBC Communication with SMC, left, disrupted  
 0xC5639CBD 9CBD Communication with SMC, right, disrupted  
 0xC5639CC3 9CC3 Battery exhausted  
 0xC5649CAB 9CAB One terminal 15 missing  
 0xC5649CB1 9CB1 Potentiometer, dimmer, faulty  
 0xC5649CB3 9CB3 Ride-height sensor, front, faulty  
 0xC5649CB4 9CB4 Transport mode active  
 0xC5649CB6 9CB6 Headlight vertical aim control coil break  
 0xC5649CBC 9CBC Communication with SMC, left, disrupted  
 0xC5649CBD 9CBD Communication with SMC, right, disrupted  
 0xC5649CC3 9CC3 LIN line fault (RLS)  
 0xC5659CA8 9CA8 Control-unit fault  
 0xC5659CA9 9CA9 Terminal 30A connection faulty  
 0xC5659CAB 9CAB Terminal 30B connection faulty  
 0xC5659CAB 9CAB One terminal 15 missing  
 0xC5659CAC 9CAC Brake-light switch faulty  
 0xC5659CAD 9CAD AHM communication disturbed

# Bmw Code Sheet.txt

```
0xC5659CAE 9CAE Control-panel fault
0xC5659CAF 9CAF Light-switch position 1 faulty
0xC5659CB0 9CB0 Light-switch position 2 faulty
0xC5659CB1 9CB1 Dimmer potentiometer faulty
0xC5659CB3 9CB3 Sensor, ride level, front, faulty
0xC5659CB4 9CB4 Ride-level sensor, rear, faulty
0xC5659CB5 9CB5 Transport mode active
0xC5659CB6 9CB6 HVAC coil chopping
0xC5659CB7 9CB7 HVAC driver fault
```

## //PM

```
0xCA61A148 A148 Control-unit fault
0xCA61A149 A149 Input te.15 waking
0xCA61A14A A14A Battery switch
0xCA61A152 A152 Driver, electrical load, roof
0xCA61A154 A154 Fuel-filler-flap motor
0xCA61A156 A156 Rear-lid contact
0xCA61A158 A158 Battery disconnection (closed-circuit current)
0xCA61A15D A15D Battery, exhaustive discharge
0xCA61A161 A161 Battery, disconnection (Closed-circuit current)
0xCA61A163 A163 No bus rest, in spite of disconnection 30U and 30G
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0xCA62A6A4 A6A4 Control-module fault
0xCA62A6A5 A6A5 Coding-data fault
0xCA62A6A6 A6A6 Coding-data fault
0xCA62A6A7 A6A7 Control-module fault
0xCA62A6A8 A6A8 Control-module fault
0xCA62A6A9 A6A9 Voltage supply, relay 1
0xCA62A6AA A6AA Voltage supply, relay 2
0xCA62A6AB A6AB Terminal 30
0xCA62A6AC A6AC Transport mode active
0xCA63A148 A148 Control module fault
0xCA63A149 A149 Input term. 15 waking
0xCA63A14A A14A Battery switch
0xCA63A14B A14B Eccentric contact
0xCA63A14C A14C Battery temperature sensor
0xCA63A14D A14D Driver Term. 30
0xCA63A14E A14E Driver, rear window defroster
0xCA63A14F A14F Driver, interior lighting
0xCA63A150 A150 Driver Term. 15
0xCA63A151 A151 Driver Term. R
0xCA63A152 A152 Driver, electrical load, roof
0xCA63A153 A153 Driver, electrical load, body
0xCA63A154 A154 Fuel filler flap motor
0xCA63A155 A155 Trunk motor
0xCA63A156 A156 Trunk contact
0xCA63A157 A157 SCA motor
0xCA63A158 A158 Battery disconnection (closed-circuit current)
0xCA63A159 A159 Battery disconnection (lmax)
0xCA63A15A A15A Battery disconnection (short circuit)
0xCA63A15B A15B Driver, light module
0xCA63A15C A15C Transport mode active
0xCA63A15D A15D Battery, exhaustive discharge
0xCA63A15E A15E Light module
0xCA63A15F A15F Exhibition mode
0xCA63A160 A160 Multi-fuses
```

## //SGM-SIM

```
0xCC6193A8 93A8 Processor: reset
0xCC6193C1 93C1 Control-unit fault
```

# Bmw Code Sheet.txt

0xCCC6193C2 93C2 Self-test: too few messages  
 0xCCC6193C9 93C9 Deactivation: satellite, A-pillar, left  
 0xCCC6193CA 93CA Deactivation: satellite, A-pillar, right  
 0xCCC6193CB 93CB Deactivation: satellite, vehicle centre  
 0xCCC6193CC 93CC Deactivation: satellite, door, front left  
 0xCCC6193CD 93CD Deactivation: satellite, seat, driver  
 0xCCC6193CF 93CF Deactivation: satellite, door, front right  
 0xCCC6193D0 93D0 Deactivation: satellite, seat, passenger  
 0xCCC6193D9 93D9 Control-unit fault  
 0xCCC6193DE 93DE Firing attempt taken place  
 0xCCC6193DF 93DF Under voltage  
 0xCCC6193A8 93A8 Processor: Reset  
 0xCCC6193A9 93A9 Control-module fault  
 0xCCC6193AA 93AA Control-module fault  
 0xCCC6193AB 93AB Incorrect chassis number  
 0xCCC6193AC 93AC System time fault  
 0xCCC6193C0 93C0 Coding/data error  
 0xCCC6193C1 93C1 Control-module fault  
 0xCCC6193C2 93C2 Self-test: too few messages  
 0xCCC6193C3 93C3 Self-test: data error in message  
 0xCCC6193C4 93C4 Self-test: transmission error  
 0xCCC6193C5 93C5 Implausible crash severity  
 0xCCC6193C6 93C6 Control-module fault  
 0xCCC6193C8 93C8 Deactivation: switch center, steering column  
 0xCCC6193C9 93C9 Deactivation: satellite, A-pillar, left  
 0xCCC6193CA 93CA Deactivation: satellite, A-pillar, right  
 0xCCC6193CB 93CB Deactivation: satellite, vehicle center  
 0xCCC6193CC 93CC Deactivation: satellite, door, front left  
 0xCCC6193CD 93CD Deactivation: satellite, driver's seat  
 0xCCC6193CE 93CE Deactivation: satellite, B-pillar, left  
 0xCCC6193CF 93CF Deactivation: satellite, door, front right  
 0xCCC6193D0 93D0 Deactivation: satellite, passenger's seat  
 0xCCC6193D1 93D1 Deactivation: satellite, B-pillar, right  
 0xCCC6193D2 93D2 Deactivation: satellite, seat, rear  
 0xCCC6193D9 93D9 Control-module fault  
 0xCCC6193DB 93DB Control-module fault  
 0xCCC6193DC 93DC Control-module fault  
 0xCCC6193DD 93DD Control-module fault  
 0xCCC6193DE 93DE Firing attempt taken place  
 0xCCC6193DF 93DF Undervoltage  
 0xCCC6193E0 93E0 Control-module fault  
 0xCCC619488 9488 Attack alarm occurred  
 0xCCC6293A8 93A8 Driver's airbag, stage 1  
 0xCCC6293AD 93AD Side airbag, passenger  
 0xCCC6293AE 93AE Side airbag, Driver, rear  
 0xCCC6293AF 93AF Side airbag, passenger, rear  
 0xCCC6293B4 93B4 Driver's airbag, stage 2  
 0xCCC6293B5 93B5 Seat-belt tensioner, driver, rear  
 0xCCC6293B8 93B8 Knee airbag, driver  
 0xCCC6293BC 93BC Belt-buckle contact, driver, rear  
 0xCCC6293BD 93BD Belt-buckle contact, passenger, rear  
 0xCCC6293BE 93BE Switch for front passenger airbag deactivation  
 0xCCC6293C1 93C1 Communication fault, seat-occupancy detector, passenger  
 0xCCC6293C2 93C2 Seat mat, seat-occupancy detector, passenger, faulty  
 0xCCC6293C9 93C9 Airbag front sensor, front passenger's side  
 0xCCC6293CA 93CA Airbag sensor, B-pillar, driver's side (X-direction)  
 0xCCC6293CB 93CB Airbag sensor, B-pillar, front passenger's side (X-direction)  
 0xCCC6293CC 93CC Airbag sensor, B-pillar, driver's side (Y-direction)  
 0xCCC6293CD 93CD Airbag sensor, B-pillar, front passenger's side (Y-directio)  
 0xCCC6293CF 93CF Airbag sensor, door, passenger, front  
 0xCCC6293D0 93D0 Under voltage  
 0xCCC6293D7 93D7 Internal control-unit fault  
 0xCCC6293D8 93D8 Seat occupancy detector, front passenger: system could not be

# BMW Code Sheet.txt

released

0xCCC6293D9 93D9 Airbag front sensor, driver's side: sensor type incorrect  
0xCCC6293DA 93DA Airbag front sensor, driver's side: sensor data implausible  
0xCCC6293DE 93DE Airbag sensor, B-pillar, driver's side (X-direction): sensor data implausible  
0xCCC6293DF 93DF Airbag sensor, B-pillar, passenger's side (X-direction): sensor type incorrect  
0xCCC6293E4 93E4 Airbag sensor, B-pillar, passenger's side (Y-direction): sensor data implausible  
0xCCC6293FC 93FC Battery lead, positive (monitoring of shielding)  
0xCCC6293A8 93A8 Driver's airbag, stage 1  
0xCCC6293A9 93A9 Belt tensioner, driver  
0xCCC6293AA 93AA Belt tensioner, passenger  
0xCCC6293AB 93AB Passenger airbag, stage 1  
0xCCC6293AC 93AC Side airbag, driver  
0xCCC6293AD 93AD Side airbag, passenger  
0xCCC6293AE 93AE Side airbag, rear, driver's side  
0xCCC6293AF 93AF Side airbag, rear, passenger's side  
0xCCC6293B0 93B0 Head airbag, driver  
0xCCC6293B1 93B1 Head airbag, front passenger  
0xCCC6293B2 93B2 Safety battery terminal  
0xCCC6293B3 93B3 Passenger airbag, stage 2  
0xCCC6293B4 93B4 Driver's airbag, stage 2  
0xCCC6293B5 93B5 Seat-belt tensioner, rear, driver's side  
0xCCC6293B6 93B6 Seat-belt tensioner, rear, passenger's side  
0xCCC6293B8 93B8 Knee airbag, driver  
0xCCC6293BA 93BA Seatbelt-catch contact, driver  
0xCCC6293BB 93BB Seatbelt-catch contact, passenger  
0xCCC6293BC 93BC Belt-buckle contact, rear, driver's side  
0xCCC6293BD 93BD Belt-buckle contact, rear, passenger's side  
0xCCC6293BE 93BE Switch for front passenger airbag deactivation  
0xCCC6293C1 93C1 Seat-occupancy detector, passenger  
0xCCC6293C2 93C2 Seat mat, seat-occupancy detector, passenger  
0xCCC6293C3 93C3 Seat-occupancy detector, passenger  
0xCCC6293C4 93C4 Seat occupancy detector, front passenger: Internal fault  
0xCCC6293C5 93C5 Seat-occupancy detector, passenger: not released  
0xCCC6293C6 93C6 Backrest lock for driver's seat  
0xCCC6293C7 93C7 Backrest lock for passenger's seat  
0xCCC6293C8 93C8 Airbag front sensor, driver's side  
0xCCC6293C9 93C9 Airbag front sensor, front passenger's side  
0xCCC6293CA 93CA Airbag sensor, B-pillar, driver's side (X-direction)  
0xCCC6293CB 93CB Airbag sensor, B-pillar, front passenger's side (X-direction)  
0xCCC6293CC 93CC Airbag sensor, B-pillar, driver's side (Y-direction)  
0xCCC6293CD 93CD Airbag sensor, B-pillar, front passenger's side (Y-direction)  
0xCCC6293CE 93CE Airbag sensor, door, front, driver's side  
0xCCC6293CF 93CF Airbag sensor, door, front, passenger's side  
0xCCC6293D0 93D0 Undervoltage  
0xCCC6293D1 93D1 Overvoltage  
0xCCC6293D2 93D2 Telltale lamp for front passenger airbag deactivation  
0xCCC6293D3 93D3 Coding data incorrect  
0xCCC6293D4 93D4 Crash telegram stored  
0xCCC6293D5 93D5 Three crash telegrams stored  
0xCCC6293D6 93D6 Coding data incorrect  
0xCCC6293D7 93D7 Internal control-unit fault  
0xCCC6293D8 93D8 Seat occupancy detector, front passenger: Internal fault  
0xCCC6293D9 93D9 Airbag front sensor, driver's side: sensor type incorrect  
0xCCC6293DA 93DA Airbag front sensor, driver's side: sensor data implausible  
0xCCC6293DB 93DB Airbag front sensor, passenger's side: sensor type incorrect  
0xCCC6293DC 93DC Airbag front sensor, passenger's side: sensor data implausible  
0xCCC6293DD 93DD Airbag sensor, B-pillar, driver's side (X-direction): sensor type incorrect  
0xCCC6293DE 93DE Airbag sensor, B-pillar, driver's side (X-direction): sensor data implausible

# Bmw Code Sheet.txt

0xCC6293DF 93DF Airbag sensor,B-pillar,passenger's side(X-direction): sensor type incorrect  
 0xCC6293E0 93E0 Airbag sensor,B-pillar,passenger's side(X-direction):sensor data implausible  
 0xCC6293E1 93E1 Airbag sensor,B-pillar,driver's side(Y-direction):sensor type incorrect  
 0xCC6293E2 93E2 Airbag sensor,B-pillar,driver' side(Y-direction):sensor data implausible  
 0xCC6293E3 93E3 Airbag sensor,B-pillar,passenger's side(Y-direction): sensor type incorrect  
 0xCC6293E4 93E4 Airbag sensor,B-pillar,passenger's side(Y-direction):sensor data implausible  
 0xCC6293E5 93E5 Airbag sensor,door,front,driver's side:sensor type incorrect  
 0xCC6293E6 93E6 Airbag sensor,door,front,driver's side:sensor data implausible  
 0xCC6293E7 93E7 Airbag sensor,door,front,passenger's side:sensor type incorrect  
 0xCC6293E8 93E8 Airbag sensor,door,front,passenger's side:sensor data implausible  
 0xCC6293EC 93EC Programming data faulty  
 0xCC6293F7 93F7 Knee airbag,front passenger  
 0xCC6293F8 93F8 Anchor-fitting tensioner,driver  
 0xCC6293F9 93F9 Active head restraint,driver  
 0xCC6293FA 93FA Active head restraint,front passenger  
 0xCC6293FC 93FC Battery lead,positive(monitored of shielding)  
 0xCC6293FD 93FD Battery lead,ground(monitored of shielding)  
 0xCC6293FE 93FE Rollover-protection controller:not fitted  
 0xCC6293FF 93FF Rollover-protection controller  
 0xCC629400 9400 Seat-occupancy detector,passenger:incorrect type  
 0xCC629401 9401 Rollover-protection controller:communication fault  
 0xCC629402 9402 Rollover-protection controller:internal fault  
 0xCC629403 9403 Rollover bar,left  
 0xCC629404 9404 Rollover bar,right  
 0xCC629405 9405 Rollover-protection controller:internal fault  
 0xCC629406 9406 Rollover-protection controller:undervoltage  
 0xCC629407 9407 Rollover-protection controller:internal fault  
 0xCC629408 9408 Undervoltage during self-test  
 0xCC629409 9409 Rollover-protection controller:reset  
 0xCC62940A 940A Overvoltage during self-test  
 0xCC62940B 940B Rollover-protection controller:sensor  
 0xCC62940C 940C Rollover-protection controller:sensor  
 0xCC6393A8 93A8 Processor: reset  
 0xCC6393AD 93AD System time fault  
 0xCC6393D7 93D7 Deactivation: Safety and Gateway Module  
 0xCC6393D8 93D8 Deactivation: switch centre, steering column switch cluster  
 0xCC6393D9 93D9 Deactivation: driver's door module (E60,E61,E63,E64) or steering column switch cluster(E65,E66,E67,RR01)  
 0xCC6393DA 93DA Deactivation: front passenger door module (E60,E61,E63,E64) or satellite, A-pillar, left (E65,E66,E67,RR01)  
 0xCC6393DE 93DE Deactivation: satellite, seat, driver  
 0xCC6393DF 93DF Deactivation: satellite, B-pillar, left  
 0xCC6393E4 93E4 Self-test: too few message  
 0xCC6393FB 93FB Control-unit fault  
 0xCC6393FC 93FC Under voltage  
 0xCC6393A8 93A8 Processor: reset  
 0xCC6393A9 93A9 Control-module fault  
 0xCC6393AA 93AA Control-module fault  
 0xCC6393AB 93AB Control-module fault  
 0xCC6393AC 93AC Incorrect chassis number  
 0xCC6393AD 93AD System time fault  
 0xCC6393D7 93D7 Deactivation: Safety and Gateway Module  
 0xCC6393D8 93D8 Deactivation: switch center, steering column switch cluster  
 0xCC6393D9 93D9 Deactivation: driver's door module (E60, E61, E63, E64) or steering column switch cluster (E65, E66, E67, RR01)  
 0xCC6393DA 93DA Deactivation: front passenger door module (E60, E61, E63, E64) or satellite, A-pillar, left (E65, E66, E67, RR01)

# Bmw Code Sheet.txt

0xCCC6393DB 93DB Deactivation: satellite, B-pillar, left (E60, E61, E63, E64) or satellite, A-pillar, right (E65, E66, E67, RR01)  
 0xCCC6393DC 93DC Deactivation: satellite, B-pillar, right (E60, E61, E63, E64) or satellite, vehicle center (E65, E66, E67, RR01)  
 0xCCC6393DD 93DD Deactivation: satellite, vehicle center (E60, E61, E63, E64) or satellite, door, front left (E65, E66, E67, RR01)  
 0xCCC6393DE 93DE Deactivation: satellite, driver's seat  
 0xCCC6393DF 93DF Deactivation: satellite, B-pillar, left  
 0xCCC6393E0 93E0 Deactivation: satellite, door, front right  
 0xCCC6393E1 93E1 Deactivation: satellite, passenger's seat  
 0xCCC6393E2 93E2 Deactivation: satellite, B-pillar, right  
 0xCCC6393E3 93E3 Deactivation: satellite, seat, rear  
 0xCCC6393E4 93E4 Self-test: too few messages  
 0xCCC6393E5 93E5 Self-test: data fault in message  
 0xCCC6393E6 93E6 Self-test: transmission fault  
 0xCCC6393E9 93E9 Coding-data fault  
 0xCCC6393EA 93EA Coding-data fault  
 0xCCC6393EB 93EB Control-module fault  
 0xCCC6393EC 93EC Control-module fault  
 0xCCC6393F5 93F5 Control-module fault  
 0xCCC6393F6 93F6 Control-module fault  
 0xCCC6393F7 93F7 Control-module fault  
 0xCCC6393F8 93F8 Control-module fault  
 0xCCC6393F9 93F9 Control-module fault  
 0xCCC6393FA 93FA Control-module fault  
 0xCCC6393FB 93FB Control-module fault  
 0xCCC6393FC 93FC Undervoltage  
 0xCCC639401 9401 Control-module fault  
 0xCCC639402 9402 Front sensor, left  
 0xCCC639403 9403 Front sensor, right  
 0xCCC639404 9404 Front sensor: wrong component  
 0xCCC639406 9406 Current request from Active Front Steering too high  
 0xCCC639407 9407 Servotronic converter  
 0xCCC639408 9408 ECO converter  
 0xCCC639409 9409 Overvoltage or under-voltage  
 0xCCC63940F 940F Electric fuel pump deactivated  
 0xCCC639410 9410 Coding-data fault  
 0xCCC639411 9411 Indicator lamp, airbag deactivation: short circuit to ground  
 0xCCC639412 9412 Indicator lamp, airbag deactivation: short circuit to positive  
 0xCCC639413 9413 Signal lamp, airbag deactivation: open circuit  
 0xCCC639415 9415 Rollover bar, left: short circuit to ground  
 0xCCC639416 9416 Rollover bar, left: open circuit  
 0xCCC639417 9417 Rollover bar, left: short circuit to positive  
 0xCCC639418 9418 Rollover bar, right: short circuit to ground  
 0xCCC639419 9419 Rollover bar, right: open circuit  
 0xCCC63941A 941A Rollover bar, right: short circuit to positive  
 0xCCC63941B 941B Rollover bar, left: resistance too high  
 0xCCC63941C 941C Rollover bar, right: resistance too high  
 0xCCC63941D 941D Rollover bar, left: resistance too low  
 0xCCC63941E 941E Rollover bar, right: resistance too low  
 0xCCC63941F 941F Control-module fault  
 0xCCC639420 9420 Control-module fault  
 0xCCC639421 9421 Control-module fault  
 0xCCC639422 9422 Control-module fault  
 0xCCC639423 9423 Control-module fault  
 0xCCC639424 9424 No message ( via serial cable) from satellite, vehicle center  
 0xCCC639425 9425 Serial cable to satellite, vehicle center  
 0xCCC639426 9426 Activation, rollover bar  
 0xCCC639427 9427 Implausible crash severity  
 0xCCC63942B 942B Implausible crash severity  
 0xCCC63942C 942C Fault, satellite, B-pillar  
 0xCCC63942D 942D Fault, satellite, vehicle center  
 0xCCC63942E 942E Attack alarm occurred

# Bmw Code Sheet.txt

0xCCC6393A8 93A8 Processor: reset  
 0xCCC6393A9 93A9 Control-module fault  
 0xCCC6393AA 93AA Control-module fault  
 0xCCC6393AB 93AB Control-module fault  
 0xCCC6393AC 93AC Incorrect chassis number  
 0xCCC6393AD 93AD System time fault  
 0xCCC6393D7 93D7 Deactivation: Safety and Gateway Module  
 0xCCC6393D8 93D8 Deactivation: switch center, steering column switch cluster  
 0xCCC6393D9 93D9 Deactivation: driver's door module (E60, E61, E63, E64) or steering column switch cluster (E65, E66, E67, RR01)  
 0xCCC6393DA 93DA Deactivation: front passenger door module (E60, E61, E63, E64) or satellite, A-pillar, left (E65, E66, E67, RR01)  
 0xCCC6393DB 93DB Deactivation: satellite, B-pillar, left (E60, E61, E63, E64) or satellite, A-pillar, right (E65, E66, E67, RR01)  
 0xCCC6393DC 93DC Deactivation: satellite, B-pillar, right (E60, E61, E63, E64) or satellite, vehicle center (E65, E66, E67, RR01)  
 0xCCC6393DD 93DD Deactivation: satellite, vehicle center (E60, E61, E63, E64) or satellite, door, front left (E65, E66, E67, RR01)  
 0xCCC6393DE 93DE Deactivation: satellite, driver's seat  
 0xCCC6393DF 93DF Deactivation: satellite, B-pillar, left  
 0xCCC6393E0 93E0 Deactivation: satellite, door, front right  
 0xCCC6393E1 93E1 Deactivation: satellite, passenger's seat  
 0xCCC6393E2 93E2 Deactivation: satellite, B-pillar, right  
 0xCCC6393E3 93E3 Deactivation: satellite, seat, rear  
 0xCCC6393E4 93E4 Self-test: too few messages  
 0xCCC6393E5 93E5 Self-test: data fault in message  
 0xCCC6393E6 93E6 Self-test: transmission fault  
 0xCCC6393E9 93E9 Coding-data fault  
 0xCCC6393EA 93EA Coding-data fault  
 0xCCC6393EB 93EB Control-module fault  
 0xCCC6393EC 93EC Control-module fault  
 0xCCC6393F5 93F5 Control-module fault  
 0xCCC6393F6 93F6 Control-module fault  
 0xCCC6393F7 93F7 Control-module fault  
 0xCCC6393F8 93F8 Control-module fault  
 0xCCC6393F9 93F9 Control-module fault  
 0xCCC6393FA 93FA Control-module fault  
 0xCCC6393FB 93FB Control-module fault  
 0xCCC6393FC 93FC Undervoltage  
 0xCCC639401 9401 Control-module fault  
 0xCCC639402 9402 Front sensor, left  
 0xCCC639403 9403 Front sensor, right  
 0xCCC639404 9404 Front sensor: wrong component  
 0xCCC639406 9406 Current request from Active Front Steering too high  
 0xCCC639407 9407 Servotronic converter  
 0xCCC639408 9408 ECO converter  
 0xCCC639409 9409 Overvoltage or under-voltage  
 0xCCC63940F 940F Electric fuel pump deactivated  
 0xCCC639410 9410 Coding-data fault  
 0xCCC639411 9411 Indicator lamp, airbag deactivation: short circuit to ground  
 0xCCC639412 9412 Indicator lamp, airbag deactivation: short circuit to positive  
 0xCCC639413 9413 Signal lamp, airbag deactivation: open circuit  
 0xCCC639415 9415 Rollover bar, left: short circuit to ground  
 0xCCC639416 9416 Rollover bar, left: open circuit  
 0xCCC639417 9417 Rollover bar, left: short circuit to positive  
 0xCCC639418 9418 Rollover bar, right: short circuit to ground  
 0xCCC639419 9419 Rollover bar, right: open circuit  
 0xCCC63941A 941A Rollover bar, right: short circuit to positive  
 0xCCC63941B 941B Rollover bar, left: resistance too high  
 0xCCC63941C 941C Rollover bar, right: resistance too high  
 0xCCC63941D 941D Rollover bar, left: resistance too low  
 0xCCC63941E 941E Rollover bar, right: resistance too low  
 0xCCC63941F 941F Control-module fault

# Bmw Code Sheet.txt

0xCC639420 9420 Control-module fault  
 0xCC639421 9421 Control-module fault  
 0xCC639422 9422 Control-module fault  
 0xCC639423 9423 Control-module fault  
 0xCC639424 9424 No message ( via serial cable) from satellite, vehicle center  
 0xCC639425 9425 Serial cable to satellite, vehicle center  
 0xCC639426 9426 Activation, rollover bar  
 0xCC639427 9427 Implausible crash severity  
 0xCC63942B 942B Implausible crash severity  
 0xCC63942C 942C Fault, satellite, B-pillar  
 0xCC63942D 942D Fault, satellite, vehicle center  
 0xCC6493A8 93A8 Airbag, driver, 1st stage  
 0xCC6493A9 93A9 Seat belt tensioner, driver  
 0xCC6493AA 93AA Seat belt tensioner, passenger  
 0xCC6493AB 93AB Airbag, front passenger, 1st stage  
 0xCC6493AC 93AC Side airbag, front left  
 0xCC6493AD 93AD Side airbag, front right  
 0xCC6493AE 93AE Side airbag, rear left  
 0xCC6493AF 93AF Side airbag, rear right  
 0xCC6493B0 93B0 Head airbag, left  
 0xCC6493B1 93B1 Head airbag, right  
 0xCC6493B2 93B2 Safety battery terminal  
 0xCC6493B3 93B3 Airbag,front passenger,2nd stage  
 0xCC6493B4 93B4 Airbag,driver,2nd stage  
 0xCC6493B5 93B5 Belt tensioner,rear left  
 0xCC6493B6 93B6 Belt tensioner,rear right  
 0xCC6493B8 93B8 Knee airbag,driver  
 0xCC6493B9 93B9 Knee airbag,front passenger  
 0xCC6493BA 93BA Seatbelt-catch contact,driver  
 0xCC6493BB 93BB Seatbelt-catch contact,passenger  
 0xCC6493BC 93BC Seatbelt-catch contact,rear left  
 0xCC6493BD 93BD Seatbelt-catch contact,rear right  
 0xCC6493BE 93BE Switch for front passenger airbag deactivation  
 0xCC6493BF 93BF Switch for front passenger airbag deactivation inverted  
 0xCC6493C0 93C0 Switch for front passenger airbag deactivation:implausible signal  
 0xCC6493C1 93C1 Seat occupancy detector  
 0xCC6493C2 93C2 Seat mat,Seat occupancy detector  
 0xCC6493C3 93C3 Seat-occupancy detector,passenger  
 0xCC6493C4 93C4 Seat occupancy detector,front passenger:data memory full  
 0xCC6493C5 93C5 Seat occupancy detector,front passenger:system not yet released  
 0xCC6493C6 93C6 Backrest lock for driver's seat  
 0xCC6493C7 93C7 Backrest lock for passenger's seat  
 0xCC6493C8 93C8 Airbag front sensor,left  
 0xCC6493C9 93C9 Airbag front sensor,right  
 0xCC6493CA 93CA Airbag sensor,B-pillar,left(X-direction)  
 0xCC6493CB 93CB Airbag sensor,B-pillar,right(X-direction)  
 0xCC6493CC 93CC Airbag sensor,B-pillar,left(Y-direction)  
 0xCC6493CD 93CD Airbag sensor,B-pillar,right(Y-direction)  
 0xCC6493CE 93CE Airbag sensor,door,front left  
 0xCC6493CF 93CF Airbag sensor,door,front right  
 0xCC6493D0 93D0 Supply voltage:undervoltage  
 0xCC6493D1 93D1 Supply voltage:overvoltage  
 0xCC6493D2 93D2 Telltale lamp for front passenger airbag deactivation  
 0xCC6493D3 93D3 Coding incorrect  
 0xCC6493D4 93D4 Crash-telegram memory:at least one crash telegram is stored  
 0xCC6493D5 93D5 Crash-telegram memory:three crash telegrams is stored  
 0xCC6493D6 93D6 Internal control-unit fault:control unit is not locked  
 0xCC6493D7 93D7 Internal control-unit fault  
 0xCC6493D8 93D8 Seat occupancy detector,front passenger:system could not be released  
 0xCC6493D9 93D9 Airbag front sensor,left:incorrect measuring range  
 0xCC6493DA 93DA Airbag front sensor,left:message implausible  
 0xCC6493DB 93DB Airbag front sensor,right:incorrect measuring range  
 0xCC6493DC 93DC Airbag front sensor,right:message implausible



# Bmw Code Sheet.txt

0xCC6493DD 93DD Airbag sensor,B-pillar,left(X-direction):incorrect measuring range  
 0xCC6493DE 93DE Airbag sensor,B-pillar,left(X-direction):message implausible  
 0xCC6493DF 93DF Airbag sensor,B-pillar,right(X-direction):incorrect measuring range  
 0xCC6493E0 93E0 Airbag sensor,B-pillar,right(X-direction):message implausible  
 0xCC6493E1 93E1 Airbag sensor,B-pillar,left(Y-direction):incorrect measuring range  
 0xCC6493E2 93E2 Airbag sensor,B-pillar,left(Y-direction):message implausible  
 0xCC6493E3 93E3 Airbag sensor,B-pillar,right(Y-direction):incorrect measuring range  
 0xCC6493E4 93E4 Airbag sensor,B-pillar,right(Y-direction):message implausible  
 0xCC6493E5 93E5 Airbag sensor,door,front left:incorrect measuring range  
 0xCC6493E6 93E6 Airbag sensor,door,front left:message implausible  
 0xCC6493E7 93E7 Airbag sensor,door,front right:incorrect measuring range  
 0xCC6493E8 93E8 Airbag sensor,door,front right:message implausible  
 0xCC6493E9 93E9 Airbag telltale lamp  
 0xCC6493EB 93EB Emergency call function  
 0xCC6493EC 93EC Internal control-unit fault:incorrect software version  
 0xCC6493ED 93ED Control unit/sensors:unknown fault  
 0xCC6493EE 93EE Airbag sensor,door,front left:pressure sensor outside measuring range  
 0xCC6493EF 93EF Airbag sensor,door,front left:absolute pressure sensor outside measuring range  
 0xCC6493F0 93F0 Airbag sensor,door,front left:difference of absolute pressure outside measuring range  
 0xCC6493F1 93F1 Airbag sensor,door,front right:pressure sensor outside measuring range  
 0xCC6493F2 93F2 Airbag sensor,door,front right:absolute pressure sensor outside measuring range  
 0xCC6493F3 93F3 Airbag sensor,door,front right:difference of absolute pressure outside measuring range  
 0xCC6493F4 93F4 Airbag sensor,door,front left:communication fault  
 0xCC6493F5 93F5 Airbag sensor,door,front right:communication fault  
 0xCC6493F6 93F6 Internal control-unit fault:triggering threshold reached

//SGM-ZGM

0xCD61932B 932B BYTEFLIGHT damping too high  
 0xCD61932C 932C Control-module fault  
 0xCD61932D 932D Control-module fault  
 0xCD61932E 932E Control-module fault  
 0xCD61932B 932B BYTEFLIGHT damping too high  
 0xCD61932C 932C Control-module fault  
 0xCD61932D 932D Control-module fault  
 0xCD61932E 932E Control-module fault

//JBE

0xCD629C5E Refrigerant pressure sensor  
 0xCD629C69 Rear stratification-flap potentiometer  
 0xCD62A6C8 Heated rear window relay  
 0xCD62A6C9 Windscreen wipers, blocking  
 0xCD62A6CA Switch-on relay for windscreen wipers  
 0xCD62A8CB Changeover relay for windscreen wipers  
 0xCD62A8CC Relay, windscreen washing system  
 0xCD62A6CD Rear-window wiper, blocking  
 0xCD62A6CE Relay, rear-window wiper  
 0xCD62A6CF AUC sensor  
 0xCD62A6D0 Control valve in A/C compressor  
 0xCD62A6D1 Auxiliary-water pump  
 0xCD62A6D2 Water valve  
 0xCD62A6D3 Windscreen washer pump  
 0xCD62A6D4 Central-locking relay, unlocking  
 0xCD62A6D5 Central-locking relay, locking  
 0xCD62A6D6 Central-locking relay, double locking  
 0xCD62A6D7 Central-locking relay, selective unlocking  
 0xCD62A6D8 Power-window relay (closing), passenger, rear  
 0xCD62A6D9 Power-window relay (opening), passenger, rear  
 0xCD62A6DA Power-window relay (closing), driver's side, rear

# Bmw Code Sheet.txt

0xCD62A6DB Power-window relay (opening), driver's side, rear  
 0xCD62A6DC Rear-window washer pump  
 0xCD62A6DD Roller sunblind/luggage compartment cover  
 0xCD62A6DE Mirror/spray-nozzle heating, left  
 0xCD62A6DF Mirror/spray-nozzle heating, right  
 0xCD62A6E0 Seat heating, driver's side  
 0xCD62A6E1 Seat heating, passenger's side  
 0xCD62A6E2 Central-locking drive, rear lid  
 0xCD62A6E3 Central-locking drive, rear window  
 0xCD62A6E4 Fuel level sensor 1  
 0xCD62A6E5 Fuel level sensor 2  
 0xCD62A6E6 Power-window switch, passenger's side, front  
 0xCD62A6E7 Transport mode active  
 0xCD62A728 Power-window switch, passenger, rear  
 0xCD62A729 Power-window switch, driver's side, rear  
 0xCD62A72A Power-window Hall sensor 1, driver's side, rear  
 0xCD62A72B Power-window Hall sensor 2, driver's side, rear  
 0xCD62A72C Power-window Hall sensor 1, passenger, rear  
 0xCD62A72D Power-window Hall sensor 2, passenger, rear  
 0xCD62A731 Supply, terminal 30g-f

//SM

0xEF210000 00 Hall sensor, backrest angle, short circuit to ground  
 0xEF210001 01 Hall sensor, backrest angle, open circuit  
 0xEF210002 02 Hall sensor, backrest angle, short circuit to positive  
 0xEF210003 03 Hall sensor, seat height, short circuit to ground  
 0xEF210004 04 Hall sensor, seat height, open circuit  
 0xEF210005 05 Hall sensor, seat height, short circuit to positive  
 0xEF210006 06 Hall sensor, seat angle, short circuit to ground  
 0xEF210007 07 Hall sensor, backrest angle, open circuit  
 0xEF210008 08 Hall sensor, seat angle, short circuit to positive  
 0xEF210009 09 Hall sensor, seat carriage, short circuit to ground  
 0xEF21000A 0A Hall sensor, seat carriage, open circuit  
 0xEF21000B 0B Hall sensor, seat carriage, short circuit to positive  
 0xEF21000F 0F Supply, Hall sensors, short circuit to ground or Hall sensor not connected  
 0xEF210010 10 Control-unit fault  
 0xEF210011 11 Steering column, radial, transmission fault  
 0xEF210012 12 Steering column, radial, short circuit  
 0xEF210013 13 Steering column, radial, block operation  
 0xEF210014 14 Steering column, radial, block operation  
 0xEF210015 15 Steering column, axial, transmission fault  
 0xEF210016 16 Steering column, axial, short circuit  
 0xEF210017 17 Steering column, axial, block operation  
 0xEF210018 18 Steering column, axial, block operation

//ZKE 2

0xF0210001 01 Fuse of load circuit faulty  
 0xF0210002 02 Pin contact in ZV drive, driver's door  
 0xF0210003 03 Pin contact in ZV drive, driver's door  
 0xF0210004 04 Pin contact in ZV drive, boot lid  
 0xF0210005 05 Pin contact in ZV drive, boot lid  
 0xF0210006 06 Relay for locking sticks  
 0xF0210007 07 Relay for double-locking sticks  
 0xF0210008 08 Relay for unlocking sticks  
 0xF0210009 09 Relay for locking does not pick up  
 0xF021000A 10 Relay for double-locking does not pick up  
 0xF021000B 11 Relay for unlocking does not pick up  
 0xF021000C 12 Short circuit in supply wire  
 0xF021000D 13 Door-lock heating faulty  
 0xF021000E 14 Short circuit in supply wire