

8.2 Error code



Information

Error code list extracted from ECU software version 21.16.30 and dataset revision 1.

The following error code table is indicative. Refer to the technical data sheet of your engine for the latest software version.

For further information, please contact your nearest authorized Kohler service representative.

Abbreviations:

- SPN - Suspect Parameter Number
- FMI - Failure mode identification

SPN	FMI	Designation
94	0	Fuel supply - Critical overpressure
94	1	Fuel supply - Critical underpressure
94	3	Fuel supply pressure sensor - Short circuit to battery
94	4	Fuel supply pressure sensor - Short circuit to ground or open circuit
94	31	Fuel supply pressure sensor - Supply voltage out of range
97	5	P2264-13 Water in fuel sensor - Open circuit
97	5	Water in fuel sensor - Open circuit
97	11	Water in fuel sensor - Out of range
97	3	Water in fuel sensor - Short circuit to battery
97	4	Water in fuel sensor - Short circuit to ground
97	31	Water in fuel sensor - Supply voltage out of range
97	11	Water in fuel sensor - Value out of range
97	0	Water in fuel sensor - Water in fuel detected
100	1	Engine oil - Critical underpressure
100	2	Engine oil - Plausibility error
100	17	Engine oil - Underpressure warning
100	2	Engine oil Pressure - Plausibility error
100	3	Oil pressure sensor - Short circuit to battery
100	4	Oil pressure sensor - Short circuit to ground or open circuit
100	31	Oil pressure sensor - Supply voltage out of range
101	0	Crankcase pressure - Critical overpressure
101	15	Crankcase pressure - Overpressure warning
101	31	Crankcase pressure - Supply voltage out of range
101	3	Crankcase pressure sensor - Short circuit to battery
101	4	Crankcase pressure sensor - Short circuit to ground or open circuit

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SPN	FMI	Designation
102	0	Intake manifold - Critical overpressure
102	1	Intake manifold - Critical underpressure
102	15	Intake manifold - Overpressure warning
102	17	Intake manifold - Underpressure warning
102	3	Intake manifold pressure sensor - Short circuit to battery
102	4	Intake manifold pressure sensor - Short circuit to ground or open circuit
102	31	Intake manifold pressure sensor - Supply voltage out of range
105	5	Intake air temperature sensor - Open circuit
105	3	Intake air temperature sensor - Short circuit to battery
105	4	Intake air temperature sensor - Short circuit to ground
105	31	Intake air temperature sensor - Supply voltage out of range
105	0	Intake manifold - Critical overtemperature
105	15	Intake manifold - Overtemperature warning
105	5	Intake manifold temperature sensor - Open circuit
105	3	Intake manifold temperature sensor - Short circuit to battery
105	4	Intake manifold temperature sensor - Short circuit to ground
105	31	Intake manifold temperature sensor - Supply voltage out of range
107	0	Air filter - Blocked / Clogged
107	11	Air filter - Blocked / Clogged
107	31	Air filter pressure switch - Supply voltage out of range
108	3	Ambient pressure sensor - Short circuit to battery
108	30	Ambient pressure sensor - Short circuit to ground or open circuit
108	31	Ambient pressure sensor - Supply voltage out of range
110	5	Coolant temperature sensor - Open circuit
110	3	Coolant temperature sensor - Short circuit to battery
110	4	Coolant temperature sensor - Short circuit to ground
110	31	Coolant temperature sensor - Supply voltage out of range
110	0	Engine coolant - Critical overtemperature
110	15	Engine coolant - Overtemperature warning
111	3	Coolant level sensor - Short circuit to battery
111	4	Coolant level sensor - Short circuit to ground or open circuit
111	31	Coolant level sensor - Supply voltage out of range
111	11	Coolant level sensor - Value out of range
111	1	Engine coolant - Level low
111	17	Engine coolant - Level low

SPN	FMI	Designation
157	0	Common rail - Critical overpressure
157	15	Common rail - Overpressure warning
157	3	Common rail pressure sensor - Short circuit to battery or open circuit
157	4	Common rail pressure sensor - Short circuit to ground
157	31	Common rail pressure sensor - Supply voltage out of range
171	5	Ambient temperature sensor - Open circuit
171	3	Ambient temperature sensor - Short circuit to battery
171	4	Ambient temperature sensor - Short circuit to ground
171	31	Ambient temperature sensor - Supply voltage out of range
174	0	Fuel supply - Critical overtemperature
174	15	Fuel supply - Overtemperature warning
174	5	Fuel temperature sensor - Open circuit
174	3	Fuel temperature sensor - Short circuit to battery
174	4	Fuel temperature sensor - Short circuit to ground
174	31	Fuel temperature sensor - Supply voltage out of range
175	0	Engine oil - Critical overtemperature
175	15	Engine oil - Overtemperature warning
175	5	Oil temperature sensor - Open circuit
175	3	Oil temperature sensor - Short circuit to battery
175	4	Oil temperature sensor - Short circuit to ground
175	4	Oil temperature sensor - Short circuit to ground or open circuit
175	31	Oil temperature sensor - Supply voltage out of range
190	2	Crankshaft position - Plausibility error
190	14	Crankshaft position sensor - Ground error
190	5	Crankshaft position sensor - Open circuit
190	3	Crankshaft position sensor - Short circuit to battery or open circuit
190	4	Crankshaft position sensor - Short circuit to ground
190	31	Crankshaft position sensor - Supply voltage out of range
190	0	Genset - Engine over speed
625	5	Engine Control Unit CAN 2 - Open circuit
625	11	Engine Control Unit CAN 2 - Short circuit
636	2	Camshaft position - Plausibility error
636	14	Camshaft position sensor - Ground error
636	5	Camshaft position sensor - Open circuit
636	3	Camshaft position sensor - Short circuit to battery

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SPN	FMI	Designation
636	3	Camshaft position sensor - Short circuit to battery or open circuit
636	4	Camshaft position sensor - Short circuit to ground
636	31	Camshaft position sensor - Supply voltage out of range
637	2	Crankshaft position - Plausibility error
637	14	Crankshaft position sensor - Ground error
637	5	Crankshaft position sensor - Open circuit
637	3	Crankshaft position sensor - Short circuit to battery
637	3	Crankshaft position sensor - Short circuit to battery or open circuit
637	4	Crankshaft position sensor - Short circuit to ground
637	31	Crankshaft position sensor - Supply voltage out of range
639	5	Engine Control Unit CAN 1 - Open circuit
639	11	Engine Control Unit CAN 1 - Short circuit
651	0	Injector 1 - Current Rise time too long
651	8	Injector 1 - No current rise time measured
651	5	Injector 1 - Open circuit
651	3	Injector 1 - Short circuit to battery
651	4	Injector 1 - Short circuit to ground
652	0	Injector 19 - Current Rise time too long
652	8	Injector 19 - No current rise time measured
652	5	Injector 19 - Open circuit
652	3	Injector 19 - Short circuit to battery
652	4	Injector 19 - Short circuit to ground
652	0	Injector 2 - Current Rise time too long
652	8	Injector 2 - No current rise time measured
652	5	Injector 2 - Open circuit
652	3	Injector 2 - Short circuit to battery
652	4	Injector 2 - Short circuit to ground
653	0	Injector 3 - Current Rise time too long
653	8	Injector 3 - No current rise time measured
653	5	Injector 3 - Open circuit
653	3	Injector 3 - Short circuit to battery
653	4	Injector 3 - Short circuit to ground
654	0	Injector 4 - Current Rise time too long
654	8	Injector 4 - No current rise time measured
654	5	Injector 4 - Open circuit
654	3	Injector 4 - Short circuit to battery

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654	4	Injector 4 - Short circuit to ground
655	0	Injector 5 - Current Rise time too long
655	8	Injector 5 - No current rise time measured
655	5	Injector 5 - Open circuit
655	3	Injector 5 - Short circuit to battery
655	4	Injector 5 - Short circuit to ground
656	0	Injector 6 - Current Rise time too long
656	8	Injector 6 - No current rise time measured
656	5	Injector 6 - Open circuit
656	3	Injector 6 - Short circuit to battery
656	4	Injector 6 - Short circuit to ground
657	0	Injector 7 - Current Rise time too long
657	8	Injector 7 - No current rise time measured
657	5	Injector 7 - Open circuit
657	3	Injector 7 - Short circuit to battery
657	4	Injector 7 - Short circuit to ground
658	0	Injector 8 - Current Rise time too long
658	8	Injector 8 - No current rise time measured
658	5	Injector 8 - Open circuit
658	3	Injector 8 - Short circuit to battery
658	4	Injector 8 - Short circuit to ground
659	0	Injector 9 - Current Rise time too long
659	8	Injector 9 - No current rise time measured
659	5	Injector 9 - Open circuit
659	5	Injector 9 - Open circuit
659	3	Injector 9 - Short circuit to battery
659	4	Injector 9 - Short circuit to ground
660	0	Injector 10 - Current Rise time too long
660	8	Injector 10 - No current rise time measured
660	5	Injector 10 - Open circuit
660	3	Injector 10 - Short circuit to battery
660	4	Injector 10 - Short circuit to ground
661	0	Injector 11 - Current Rise time too long
661	8	Injector 11 - No current rise time measured
661	5	Injector 11 - Open circuit
661	3	Injector 11 - Short circuit to battery
661	4	Injector 11 - Short circuit to ground
662	0	Injector 12 - Current Rise time too long

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SPN	FMI	Designation
662	8	Injector 12 - No current rise time measured
662	5	Injector 12 - Open circuit
662	3	Injector 12 - Short circuit to battery
662	4	Injector 12 - Short circuit to ground
663	0	Injector 13 - Current Rise time too long
663	8	Injector 13 - No current rise time measured
663	5	Injector 13 - Open circuit
663	3	Injector 13 - Short circuit to battery
663	4	Injector 13 - Short circuit to ground
664	0	Injector 14 - Current Rise time too long
664	8	Injector 14 - No current rise time measured
664	5	Injector 14 - Open circuit
664	3	Injector 14 - Short circuit to battery
664	4	Injector 14 - Short circuit to ground
665	0	Injector 15 - Current Rise time too long
665	8	Injector 15 - No current rise time measured
665	5	Injector 15 - Open circuit
665	3	Injector 15 - Short circuit to battery
665	4	Injector 15 - Short circuit to ground
666	0	Injector 16 - Current Rise time too long
666	8	Injector 16 - No current rise time measured
666	5	Injector 16 - Open circuit
666	3	Injector 16 - Short circuit to battery
666	4	Injector 16 - Short circuit to ground
667	0	Injector 17 - Current Rise time too long
667	8	Injector 17 - No current rise time measured
667	5	Injector 17 - Open circuit
667	3	Injector 17 - Short circuit to battery
667	4	Injector 17 - Short circuit to ground
668	0	Injector 18 - Current Rise time too long
668	8	Injector 18 - No current rise time measured
668	5	Injector 18 - Open circuit
668	3	Injector 18 - Short circuit to battery
668	4	Injector 18 - Short circuit to ground
669	8	Injector 18 - No current rise time measured
669	5	Injector 18 - Open circuit
669	3	Injector 18 - Short circuit to battery
669	4	Injector 18 - Short circuit to ground

SPN	FMI	Designation
669	0	Injector 19 - Current Rise time too long
669	8	Injector 19 - No current rise time measured
669	5	Injector 19 - Open circuit
669	3	Injector 19 - Short circuit to battery
669	4	Injector 19 - Short circuit to ground
670	0	Injector 20 - Current Rise time too long
670	8	Injector 20 - No current rise time measured
670	5	Injector 20 - Open circuit
670	3	Injector 20 - Short circuit to battery
670	4	Injector 20 - Short circuit to ground
677	6	Starter - Critical high output current
677	11	Starter - Electrical error
677	31	Starter - Locked due to overtemperature
677	5	Starter - Open circuit
677	3	Starter - Short circuit to battery
677	3	Starter - Short circuit to battery (high side)
677	3	Starter - Short circuit to battery (low side)
677	3	Starter - Short circuit to battery high side
677	4	Starter - Short circuit to ground
677	4	Starter - Short circuit to ground (high side)
677	4	Starter - Short circuit to ground (low side)
677	4	Starter - Short circuit to ground high side
729	6	Heating flange 1 - Critical high output current
729	11	Heating flange 1 - Electrical error
729	5	Heating flange 1 - Open circuit
729	3	Heating flange 1 - Short circuit to battery
729	3	Heating flange 1 - Short circuit to battery (high side)
729	3	Heating flange 1 - Short circuit to battery (low side)
729	3	Heating flange 1 - Short circuit to battery high side
729	4	Heating flange 1 - Short circuit to ground
729	4	Heating flange 1 - Short circuit to ground (high side)
729	4	Heating flange 1 - Short circuit to ground (low side)
729	4	Heating flange 1 - Short circuit to ground high side
730	6	Heating flange 2 - Critical high output current
730	11	Heating flange 2 - Electrical error
730	5	Heating flange 2 - Open circuit
730	3	Heating flange 2 - Short circuit to battery
730	3	Heating flange 2 - Short circuit to battery (high side)

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SPN	FMI	Designation
730	3	Heating flange 2 - Short circuit to battery (low side)
730	3	Heating flange 2 - Short circuit to battery high side
730	4	Heating flange 2 - Short circuit to ground
730	4	Heating flange 2 - Short circuit to ground (high side)
730	4	Heating flange 2 - Short circuit to ground (low side)
730	4	Heating flange 2 - Short circuit to ground high side
966	31	Customer Test Mode - Activated
1075	2	Common rail - Plausibility error
1076	6	Volume control valve - Critical high output current
1076	0	Volume control valve - Critical overcurrent
1076	1	Volume control valve - Critical undercurrent
1076	11	Volume control valve - Load is short circuited
1076	5	Volume control valve - Open circuit
1076	11	Volume control valve - Short circuit load
1076	3	Volume control valve - Short circuit to battery (high side)
1076	3	Volume control valve - Short circuit to battery high side
1076	4	Volume control valve - Short circuit to ground (high side)
1076	4	Volume control valve - Short circuit to ground high side
1136	0	ECU - Critical overtemperature
1136	15	ECU - Overtemperature warning
1136	31	ECU temperature sensor 1 - Supply voltage out of range
1137	9	Cylinder head temperature sensor 1 - Communication error
1137	0	Cylinder head temperature sensor 1 - Critical overtemperature
1137	12	Cylinder head temperature sensor 1 - Internal error
1137	14	Cylinder head temperature sensor 1 - Internal temperature error
1137	5	Cylinder head temperature sensor 1 - Open circuit
1137	15	Cylinder head temperature sensor 1 - Overtemperature warning
1137	11	Cylinder head temperature sensor 1 - Value out of range
1138	9	Cylinder head temperature sensor 2 - Communication error
1138	0	Cylinder head temperature sensor 2 - Critical overtemperature
1138	12	Cylinder head temperature sensor 2 - Internal error
1138	14	Cylinder head temperature sensor 2 - Internal temperature error
1138	5	Cylinder head temperature sensor 2 - Open circuit
1138	15	Cylinder head temperature sensor 2 - Overtemperature warning
1138	11	Cylinder head temperature sensor 2 - Value out of range
1139	9	Cylinder head temperature sensor 3 - Communication error
1139	0	Cylinder head temperature sensor 3 - Critical overtemperature

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1139	12	Cylinder head temperature sensor 3 - Internal error
1139	14	Cylinder head temperature sensor 3 - Internal temperature error
1139	5	Cylinder head temperature sensor 3 - Open circuit
1139	15	Cylinder head temperature sensor 3 - Overtemperature warning
1139	11	Cylinder head temperature sensor 3 - Value out of range
1140	9	Cylinder head temperature sensor 4 - Communication error
1140	0	Cylinder head temperature sensor 4 - Critical overtemperature
1140	12	Cylinder head temperature sensor 4 - Internal error
1140	14	Cylinder head temperature sensor 4 - Internal temperature error
1140	5	Cylinder head temperature sensor 4 - Open circuit
1140	15	Cylinder head temperature sensor 4 - Overtemperature warning
1140	11	Cylinder head temperature sensor 4 - Value out of range
1141	9	Cylinder head temperature sensor 5 - Communication error
1141	0	Cylinder head temperature sensor 5 - Critical overtemperature
1141	12	Cylinder head temperature sensor 5 - Internal error
1141	14	Cylinder head temperature sensor 5 - Internal temperature error
1141	5	Cylinder head temperature sensor 5 - Open circuit
1141	15	Cylinder head temperature sensor 5 - Overtemperature warning
1141	11	Cylinder head temperature sensor 5 - Value out of range
1142	9	Cylinder head temperature sensor 6 - Communication error
1142	0	Cylinder head temperature sensor 6 - Critical overtemperature
1142	12	Cylinder head temperature sensor 6 - Internal error
1142	14	Cylinder head temperature sensor 6 - Internal temperature error
1142	5	Cylinder head temperature sensor 6 - Open circuit
1142	15	Cylinder head temperature sensor 6 - Overtemperature warning
1142	11	Cylinder head temperature sensor 6 - Value out of range
1143	9	Cylinder head temperature sensor 7 - Communication error
1143	0	Cylinder head temperature sensor 7 - Critical overtemperature
1143	12	Cylinder head temperature sensor 7 - Internal error
1143	14	Cylinder head temperature sensor 7 - Internal temperature error
1143	5	Cylinder head temperature sensor 7 - Open circuit
1143	15	Cylinder head temperature sensor 7 - Overtemperature warning
1143	11	Cylinder head temperature sensor 7 - Value out of range
1144	9	Cylinder head temperature sensor 8 - Communication error
1144	0	Cylinder head temperature sensor 8 - Critical overtemperature

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1144	12	Cylinder head temperature sensor 8 - Internal error
1144	14	Cylinder head temperature sensor 8 - Internal temperature error
1144	5	Cylinder head temperature sensor 8 - Open circuit
1144	15	Cylinder head temperature sensor 8 - Overtemperature warning
1144	11	Cylinder head temperature sensor 8 - Value out of range
1145	9	Cylinder head temperature sensor 9 - Communication error
1145	0	Cylinder head temperature sensor 9 - Critical overtemperature
1145	12	Cylinder head temperature sensor 9 - Internal error
1145	14	Cylinder head temperature sensor 9 - Internal temperature error
1145	5	Cylinder head temperature sensor 9 - Open circuit
1145	15	Cylinder head temperature sensor 9 - Overtemperature warning
1145	11	Cylinder head temperature sensor 9 - Value out of range
1146	9	Cylinder head temperature sensor 10 - Communication error
1146	0	Cylinder head temperature sensor 10 - Critical overtemperature
1146	12	Cylinder head temperature sensor 10 - Internal error
1146	14	Cylinder head temperature sensor 10 - Internal temperature error
1146	5	Cylinder head temperature sensor 10 - Open circuit
1146	15	Cylinder head temperature sensor 10 - Overtemperature warning
1146	11	Cylinder head temperature sensor 10 - Value out of range
1147	9	Cylinder head temperature sensor 11 - Communication error
1147	0	Cylinder head temperature sensor 11 - Critical overtemperature
1147	12	Cylinder head temperature sensor 11 - Internal error
1147	14	Cylinder head temperature sensor 11 - Internal temperature error
1147	5	Cylinder head temperature sensor 11 - Open circuit
1147	15	Cylinder head temperature sensor 11 - Overtemperature warning
1147	11	Cylinder head temperature sensor 11 - Value out of range
1148	9	Cylinder head temperature sensor 12 - Communication error
1148	0	Cylinder head temperature sensor 12 - Critical overtemperature
1148	12	Cylinder head temperature sensor 12 - Internal error
1148	14	Cylinder head temperature sensor 12 - Internal temperature error
1148	5	Cylinder head temperature sensor 12 - Open circuit
1148	15	Cylinder head temperature sensor 12 - Overtemperature warning

SPN	FMI	Designation
1148	11	Cylinder head temperature sensor 12 - Value out of range
1149	9	Cylinder head temperature sensor 13 - Communication error
1149	0	Cylinder head temperature sensor 13 - Critical overtemperature
1149	12	Cylinder head temperature sensor 13 - Internal error
1149	14	Cylinder head temperature sensor 13 - Internal temperature error
1149	5	Cylinder head temperature sensor 13 - Open circuit
1149	15	Cylinder head temperature sensor 13 - Overtemperature warning
1149	11	Cylinder head temperature sensor 13 - Value out of range
1150	9	Cylinder head temperature sensor 14 - Communication error
1150	0	Cylinder head temperature sensor 14 - Critical overtemperature
1150	12	Cylinder head temperature sensor 14 - Internal error
1150	14	Cylinder head temperature sensor 14 - Internal temperature error
1150	5	Cylinder head temperature sensor 14 - Open circuit
1150	15	Cylinder head temperature sensor 14 - Overtemperature warning
1150	11	Cylinder head temperature sensor 14 - Value out of range
1151	9	Cylinder head temperature sensor 15 - Communication error
1151	0	Cylinder head temperature sensor 15 - Critical overtemperature
1151	12	Cylinder head temperature sensor 15 - Internal error
1151	14	Cylinder head temperature sensor 15 - Internal temperature error
1151	5	Cylinder head temperature sensor 15 - Open circuit
1151	15	Cylinder head temperature sensor 15 - Overtemperature warning
1151	11	Cylinder head temperature sensor 15 - Value out of range
1152	9	Cylinder head temperature sensor 16 - Communication error
1152	0	Cylinder head temperature sensor 16 - Critical overtemperature
1152	12	Cylinder head temperature sensor 16 - Internal error
1152	14	Cylinder head temperature sensor 16 - Internal temperature error
1152	5	Cylinder head temperature sensor 16 - Open circuit
1152	15	Cylinder head temperature sensor 16 - Overtemperature warning
1152	11	Cylinder head temperature sensor 16 - Value out of range
1153	9	Cylinder head temperature sensor 17 - Communication error
1153	0	Cylinder head temperature sensor 17 - Critical overtemperature
1153	12	Cylinder head temperature sensor 17 - Internal error

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SPN	FMI	Designation
1153	14	Cylinder head temperature sensor 17 - Internal temperature error
1153	5	Cylinder head temperature sensor 17 - Open circuit
1153	15	Cylinder head temperature sensor 17 - Overtemperature warning
1153	11	Cylinder head temperature sensor 17 - Value out of range
1154	9	Cylinder head temperature sensor 18 - Communication error
1154	0	Cylinder head temperature sensor 18 - Critical overtemperature
1154	12	Cylinder head temperature sensor 18 - Internal error
1154	14	Cylinder head temperature sensor 18 - Internal temperature error
1154	5	Cylinder head temperature sensor 18 - Open circuit
1154	15	Cylinder head temperature sensor 18 - Overtemperature warning
1154	11	Cylinder head temperature sensor 18 - Value out of range
1155	9	Cylinder head temperature sensor 19 - Communication error
1155	0	Cylinder head temperature sensor 19 - Critical overtemperature
1155	12	Cylinder head temperature sensor 19 - Internal error
1155	14	Cylinder head temperature sensor 19 - Internal temperature error
1155	5	Cylinder head temperature sensor 19 - Open circuit
1155	15	Cylinder head temperature sensor 19 - Overtemperature warning
1155	11	Cylinder head temperature sensor 19 - Value out of range
1156	9	Cylinder head temperature sensor 20 - Communication error
1156	0	Cylinder head temperature sensor 20 - Critical overtemperature
1156	12	Cylinder head temperature sensor 20 - Internal error
1156	14	Cylinder head temperature sensor 20 - Internal temperature error
1156	5	Cylinder head temperature sensor 20 - Open circuit
1156	15	Cylinder head temperature sensor 20 - Overtemperature warning
1156	11	Cylinder head temperature sensor 20 - Value out of range
1172	5	Intake air temperature sensor - Open circuit
1172	3	Intake air temperature sensor - Short circuit to battery
1172	4	Intake air temperature sensor - Short circuit to ground
1172	31	Intake air temperature sensor - Supply voltage out of range
1176	1	Boost pressure - Pressure too high
1176	0	Boost pressure - Pressure too low

SPN	FMI	Designation
1180	2	Exhaust boost temperature (CMR sensor) - Communication error
1180	2	Exhaust boost temperature 1 (CMR sensor) - Communication error
1180	0	Exhaust temperature before turbocharger 1 - Critical overtemperature
1180	15	Exhaust temperature before turbocharger 1 - Overtemperature warning
1180	2	Turbine inlet temperature sensor 1 - Communication error
1180	12	Turbine inlet temperature sensor 1 - Internal error
1180	14	Turbine inlet temperature sensor 1 - Internal temperature error
1180	5	Turbine inlet temperature sensor 1 - Open circuit
1180	11	Turbine inlet temperature sensor 1 - Value out of range
1181	2	Exhaust boost temperature 2 (CMR sensor) - Communication error
1181	0	Exhaust temperature before turbocharger 2 - Critical overtemperature
1181	15	Exhaust temperature before turbocharger 2 - Overtemperature warning
1181	2	Turbine inlet temperature sensor 2 - Communication error
1181	12	Turbine inlet temperature sensor 2 - Internal error
1181	14	Turbine inlet temperature sensor 2 - Internal temperature error
1181	5	Turbine inlet temperature sensor 2 - Open circuit
1181	11	Turbine inlet temperature sensor 2 - Value out of range
1212	0	Coolant temperature at intercooler - Critical overtemperature
1212	15	Coolant temperature at intercooler - Overtemperature warning
1212	5	Intercooler coolant temperature sensor - Open circuit
1212	3	Intercooler coolant temperature sensor - Short circuit to battery
1212	4	Intercooler coolant temperature sensor - Short circuit to ground
1212	31	Intercooler coolant temperature sensor - Supply voltage out of range
1231	5	Engine Control Unit CAN 2 - Open circuit
1231	11	Engine Control Unit CAN 2 - Short circuit
1239	2	Common rail - Leakage
1239	2	Common rail 1 - Leakage
1239	0	Common rail leakage 1 - Fuel leak
1239	11	Common rail leakage 1 - Out of range
1239	31	Common rail leakage 1 - Supply voltage out of range
1239	0	Common rail leakage sensor 1 - Fuel leak

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SPN	FMI	Designation
1239	31	Common rail leakage sensor 1 - Supply voltage out of range
1239	11	Common rail leakage sensor 1 - Value out of range
1240	2	Common rail 2 - Leakage
1240	0	Common rail leakage 2 - Fuel leak
1240	11	Common rail leakage 2 - Out of range
1240	31	Common rail leakage 2 - Supply voltage out of range
1240	0	Common rail leakage sensor 2 - Fuel leak
1240	31	Common rail leakage sensor 2 - Supply voltage out of range
1240	11	Common rail leakage sensor 2 - Value out of range
1349	0	Common rail 2 - Critical overpressure
1349	15	Common rail 2 - Overpressure warning
1349	3	Common rail pressure sensor 2 - Short circuit to battery or open circuit
1349	4	Common rail pressure sensor 2 - Short circuit to ground
1349	31	Common rail pressure sensor 2 - Supply voltage out of range
1636	0	Intake manifold - Critical overtemperature
1636	15	Intake manifold - Overtemperature warning
1636	5	Intake manifold temperature sensor - Open circuit
1636	3	Intake manifold temperature sensor - Short circuit to battery
1636	4	Intake manifold temperature sensor - Short circuit to ground
1636	31	Intake manifold temperature sensor - Supply voltage out of range
1668	5	Engine Control Unit CAN 4 - Open circuit
1668	11	Engine Control Unit CAN 4 - Short circuit
1675	11	Inducement system - Engine restart inhibited (empty DEF tank)
1761	17	DEF tank - Level low
1761	3	DEF tank (level sensor) - Open circuit
1761	4	DEF tank (level sensor) - Short circuit
1761	1	DEF tank (level sensor) - Value out of minimum range
1761	2	DEF tank module - Communication error
2430	11	Coolant level sensor - Out of range
2430	3	Coolant level sensor - Short circuit to battery
2430	4	Coolant level sensor - Short circuit to ground or open circuit
2430	31	Coolant level sensor - Supply voltage out of range
3031	15	DEF tank - Overtemperature warning
3031	3	DEF tank (temperature sensor) - Open circuit
3031	4	DEF tank (temperature sensor) - Short circuit
3031	0	DEF tank (temperature sensor) - Value out of maximum range

SPN	FMI	Designation
3031	1	DEF tank (temperature sensor) - Value out of minimum range
3222	7	NOx sensor (upstream SCR) - Heater performance error
3224	2	NOx sensor (upstream SCR) - Communication error
3224	31	NOx sensor (upstream SCR) - Installation error
3224	0	NOx sensor (upstream SCR) - Offset error
3224	5	NOx sensor (upstream SCR) - Open circuit
3224	3	NOx sensor (upstream SCR) - Short circuit
3225	2	NOx sensor (upstream SCR) - Sensor removed from exhaust line
3232	7	NOx sensor (downstream SCR) - Heater performance error
3234	2	NOx sensor (downstream SCR) - Communication error
3234	0	NOx sensor (downstream SCR) - Offset error
3234	5	NOx sensor (downstream SCR) - Open circuit
3234	3	NOx sensor (downstream SCR) - Short circuit
3234	31	NOx sensor (downstream SCR) 1 - Installation error
3235	2	NOx sensor (downstream SCR) - Sensor removed from exhaust line
3245	0	Exhaust temperature before turbocharger 1 - Critical over-temperature
3273	5	NOx sensor (downstream SCR) - Open circuit
3273	3	NOx sensor (downstream SCR) - Short circuit
3273	2	NOx sensor (downstream SCR) 2 - Communication error
3273	7	NOx sensor (downstream SCR) 2 - Heater performance error
3273	11	NOx sensor (downstream SCR) 2 - Invalid sensor status
3273	0	NOx sensor (downstream SCR) 2 - Offset error
3273	31	NOx sensor (downstream SCR) 2 - Sensor removed from exhaust line
3279	0	Exhaust temperature before turbocharger 2 - Critical over-temperature
3364	11	DEF tank (quality sensor) - Optical error
3364	0	DEF tank (quality sensor) - Value out of maximum range
3364	1	DEF tank (quality sensor) - Value out of minimum range
3470	2	Turbocharger compressor bypass - Control deviation error
3515	3	DEF tank (temperature sensor at suction position) - Open circuit
3515	15	DEF tank (temperature sensor at suction position) - Overtemperature warning
3515	4	DEF tank (temperature sensor at suction position) - Short circuit

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Error code

SPN	FMI	Designation
3515	0	DEF tank (temperature sensor at suction position) - Value out of maximum range
3515	1	DEF tank (temperature sensor at suction position) - Value out of minimum range
3516	17	DEF tank - Poor DEF quality
3597	1	Power supply - Critical undervoltage
3597	15	Power supply - Overvoltage warning
3597	17	Power supply - Undervoltage warning
3675	2	Turbocharger compressor bypass - Invalid reference position
3675	31	Turbocharger compressor bypass - Position sensor error
3676	3	Coolant level sensor 2 - Short circuit to battery
3676	4	Coolant level sensor 2 - Short circuit to ground or open circuit
3676	31	Coolant level sensor 2 - Supply voltage out of range
3676	11	Coolant level sensor 2 - Value out of range
3676	1	Engine coolant 2 - Level low
3938	2	Speed adjustment - Plausibility error
3938	3	Speed adjustment (current) - Short circuit to battery
3938	4	Speed adjustment (current) - Short circuit to ground or open circuit
3938	31	Speed adjustment (current) - Supply voltage out of range
3938	3	Speed adjustment (voltage) - Short circuit to battery
3938	30	Speed adjustment (voltage) - Short circuit to ground or open circuit
3938	4	Speed adjustment (voltage) - Short circuit to ground or open circuit
3938	31	Speed adjustment (voltage) - Supply voltage out of range
4076	14	Engine coolant 2 - Level low
4090	15	Engine - High NOx emission
4210	3	Prelubrication pump - Short circuit to battery
4210	4	Prelubrication pump - Short circuit to ground
4340	6	DEF line heater 1 - Critical high output current
4340	11	DEF line heater 1 - Electrical error
4340	5	DEF line heater 1 - Open circuit
4340	3	DEF line heater 1 - Short circuit to battery
4340	4	DEF line heater 1 - Short circuit to ground
4342	6	DEF line heater 2 - Critical high output current
4342	11	DEF line heater 2 - Electrical error
4342	5	DEF line heater 2 - Open circuit
4342	3	DEF line heater 2 - Short circuit to battery

SPN	FMI	Designation
4342	4	DEF line heater 2 - Short circuit to ground
4360	15	Exhaust gas temperature (upstream SCR) - Overtemperature warning
4360	5	Exhaust gas temperature sensor (upstream SCR) - Open circuit
4360	2	Exhaust gas temperature sensor (upstream SCR) - Plausibility error
4360	3	Exhaust gas temperature sensor (upstream SCR) - Short circuit to battery
4360	4	Exhaust gas temperature sensor (upstream SCR) - Short circuit to ground
4360	31	Exhaust gas temperature sensor (upstream SCR) - Supply voltage out of range
4364	1	SCR system - Very low conversion efficiency
4377	31	NH3 sensor 1 - Installation error
4380	11	NH3 sensor - Electrical error
4383	2	NH3 sensor - Heater performance error
4413	15	Exhaust gas temperature (upstream SCR) 2 - Overtemperature warning
4413	5	Exhaust gas temperature sensor (upstream SCR) 2 - Open circuit
4413	3	Exhaust gas temperature sensor (upstream SCR) 2 - Short circuit to battery
4413	4	Exhaust gas temperature sensor (upstream SCR) 2 - Short circuit to ground
4413	31	Exhaust gas temperature sensor (upstream SCR) 2 - Supply voltage out of range
4413	11	Exhaust gas temperature sensor (upstream SCR) 2 - Plausibility error
4419	1	SCR system 2 - Very low conversion efficiency
4443	31	NH3 sensor 2 - Installation error
4446	11	NH3 sensor 2 - Electrical error
4449	2	NH3 sensor 2 - Heater performance error
4811	0	Piston cooling pressure 1 - Critical overpressure
4811	1	Piston cooling pressure 1 - Critical underpressure
4811	15	Piston cooling pressure 1 - Overpressure warning
4811	17	Piston cooling pressure 1 - Underpressure warning
4811	3	Piston cooling pressure sensor 1 - Short circuit to battery
4811	4	Piston cooling pressure sensor 1 - Short circuit to ground or open circuit
4811	31	Piston cooling pressure sensor 1 - Supply voltage out of range
5368	0	Turbocharger compressor bypass - Overtemperature warning

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Error code

SPN	FMI	Designation
5386	6	Wastegate valve - Critical high output current
5386	11	Wastegate valve - Electrical error
5386	5	Wastegate valve - Open circuit
5386	3	Wastegate valve - Short circuit to battery (high side)
5386	3	Wastegate valve - Short circuit to battery high side
5386	4	Wastegate valve - Short circuit to ground (high side)
5386	4	Wastegate valve - Short circuit to ground high side
5420	13	Turbocharger compressor bypass - Calibration error
5420	2	Turbocharger compressor bypass - Communication error
5420	31	Turbocharger compressor bypass - Hardware error
5420	11	Turbocharger compressor bypass - No sensor position data available
5449	2	Turbocharger compressor bypass - Communication error detected by control module
5449	31	Turbocharger compressor bypass - Supply voltage out of range
5571	6	Pressure control valve - Critical high output current
5571	0	Pressure control valve - Critical overcurrent
5571	1	Pressure control valve - Critical undercurrent
5571	11	Pressure control valve - Electrical error
5571	5	Pressure control valve - Open circuit
5571	3	Pressure control valve - Short circuit to battery (high side)
5571	3	Pressure control valve - Short circuit to battery high side
5571	4	Pressure control valve - Short circuit to ground (high side)
5571	4	Pressure control valve - Short circuit to ground high side
5745	31	SCR system (DEF injection system) - Defrosting error (AdBlue)
5826	0	Inducement system - Locked in severe power or speed reduction (SCR system failure)
5826	15	Inducement system - Power or speed reduction (SCR system failure)
5826	16	Inducement system - Severe power or speed reduction (SCR system failure)
5826	11	Inducement system - Warning (SCR system failure)
6209	0	Coolant temperature at intercooler - Critical overtemperature
6209	15	Coolant temperature at intercooler - Overtemperature warning
6209	5	Intercooler coolant temperature sensor - Open circuit
6209	3	Intercooler coolant temperature sensor - Short circuit to battery
6209	4	Intercooler coolant temperature sensor - Short circuit to ground

SPN	FMI	Designation
6209	31	Intercooler coolant temperature sensor - Supply voltage out of range
6301	5	Water in fuel sensor 2 - Open circuit
6301	11	Water in fuel sensor 2 - Out of range
6301	3	Water in fuel sensor 2 - Short circuit to battery
6301	4	Water in fuel sensor 2 - Short circuit to ground
6301	31	Water in fuel sensor 2 - Supply voltage out of range
6301	11	Water in fuel sensor 2 - Value out of range
6301	0	Water in fuel sensor 2 - Water in fuel detected
6303	11	Coolant level sensor 2 - Out of range
6303	3	Coolant level sensor 2 - Short circuit to battery
6303	4	Coolant level sensor 2 - Short circuit to ground or open circuit
6303	31	Coolant level sensor 2 - Supply voltage out of range
6476	31	SCR system - Cooling interruption
6477	31	SCR system - Purge interruption
51644	31	Engine - Starter activated but no engine rotation detected
516101	31	Air filter pressure switch - Supply voltage out of range
516117	11	Common rail - PCV opened due to overpressure
516118	11	Common rail - Plausibility error of VCV current
516121	11	Common rail - Pressure remains above the set point
516122	11	Common rail - Pressure remains below the set point
516123	11	Common rail - Start pressure too low
516124	11	Common rail 2 - PCV opened due to overpressure
516125	11	Common rail 2 - Plausibility error of VCV current
516128	11	Common rail 2 - Pressure remains above the set point
516129	11	Common rail 2 - Pressure remains below the set point
516130	11	Common rail 2 - Start pressure too low
516131	11	Common rail pressure sensor - No signal variation
516133	11	Common rail pressure sensor 2 - No signal variation
516135	6	Machine-specific digital output 1 - Critical high output current
516135	11	Machine-specific digital output 1 - Electrical error
516135	5	Machine-specific digital output 1 - Open circuit
516135	3	Machine-specific digital output 1 - Short circuit to battery
516135	4	Machine-specific digital output 1 - Short circuit to ground
516140	31	ECU temperature sensor 2 - Supply voltage out of range
516141	31	ECU temperature sensor 3 - Supply voltage out of range
516148	5	Engine Control Unit CAN 4 - Open circuit
516148	11	Engine Control Unit CAN 4 - Short circuit

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Error code

SPN	FMI	Designation
516183	31	Cylinder head temperature sensor - Sensor position assignment error
516187	31	Ignition digital input - Supply voltage out of range
516191	17	Injector supply boost converter - Undervoltage warning
516195	2	Generator Set Controller - Communication error
516197	2	Master Slave Injection - Communication error
516197	2	Secondary injection control unit - Communication error
516198	11	NH3 sensor - Communication error
516199	15	NH3 sensor - High NH3 concentration
516200	11	NH3 sensor - Internal memory error
516201	11	NH3 sensor - Resistance error
516202	11	NH3 sensor - Module-sensor communication error
516203	2	NOx sensor (downstream SCR) - Invalid sensor status
516204	2	NOx sensor (upstream SCR) - Invalid sensor status
516205	11	NOx sensors - Installation error
516209	15	Pressure control valve - Current remains above the set point
516209	17	Pressure control valve - Current remains below the set point
516211	11	Pressure control valve - PWM signal - High limit reached
516212	11	Pressure control valve - PWM signal - Plausibility error
516215	6	Pressure control valve 2 - Critical high output current
516215	0	Pressure control valve 2 - Critical overcurrent
516215	1	Pressure control valve 2 - Critical undercurrent
516215	11	Pressure control valve 2 - Load is short circuited
516215	5	Pressure control valve 2 - Open circuit
516215	11	Pressure control valve 2 - Short circuit load
516215	3	Pressure control valve 2 - Short circuit to battery (high side)
516215	3	Pressure control valve 2 - Short circuit to battery high side
516215	4	Pressure control valve 2 - Short circuit to ground (high side)
516215	4	Pressure control valve 2 - Short circuit to ground high side
516216	11	Pressure control valve 2 - Current remains above the set point
516217	11	Pressure control valve 2 - Current remains below the set point
516220	11	Pressure control valve 2 - PWM signal - High limit reached
516221	11	Pressure control valve 2 - PWM signal - Plausibility error
516223	11	Monitoring System - Ecu internal safety error
516226	11	Monitoring System - Injector safety error
516231	11	SCR system - Defrosting error (DEF)
516233	0	SCR system - Feedback control reached max saturation
516233	1	SCR system - Feedback control reached min saturation

SPN	FMI	Designation
516247	31	Starter digital input - Supply voltage out of range
516251	0	Volume control valve - Current remains above the set point
516251	11	Volume control valve - Current remains above the set point
516251	1	Volume control valve - Current remains below the set point
516252	11	Volume control valve - Current remains below the set point
516253	0	Volume control valve - PWM signal - High limit reached
516253	11	Volume control valve - PWM signal - High limit reached
516253	8	Volume control valve - PWM signal - Plausibility error
516254	11	Volume control valve - PWM signal - Plausibility error
516255	6	Volume control valve 2 - Critical high output current
516255	0	Volume control valve 2 - Critical overcurrent
516255	1	Volume control valve 2 - Critical undercurrent
516255	11	Volume control valve 2 - Critical undercurrent
516255	31	Volume control valve 2 - Load is short circuited
516255	5	Volume control valve 2 - Open circuit
516255	11	Volume control valve 2 - Short circuit load
516255	3	Volume control valve 2 - Short circuit to battery (high side)
516255	3	Volume control valve 2 - Short circuit to battery high side
516255	4	Volume control valve 2 - Short circuit to ground (high side)
516255	4	Volume control valve 2 - Short circuit to ground high side
516256	0	Volume control valve 2 - Current remains above the set point
516256	11	Volume control valve 2 - Current remains above the set point
516256	1	Volume control valve 2 - Current remains below the set point
516257	11	Volume control valve 2 - Current remains below the set point
516258	0	Volume control valve 2 - PWM signal - High limit reached
516258	11	Volume control valve 2 - PWM signal - High limit reached
516258	31	Volume control valve 2 - PWM signal - Plausibility error
516259	11	Volume control valve 2 - PWM signal - Plausibility error
516264	31	Starter digital input 2 - Supply voltage out of range
516266	3	Wastegate valve - Short circuit to battery (low side)
516266	3	Wastegate valve - Short circuit to battery low side
516266	4	Wastegate valve - Short circuit to ground (low side)
516266	4	Wastegate valve - Short circuit to ground low side
516276	3	Starter - Short circuit to battery low side
516277	4	Starter - Short circuit to ground low side
516281	15	Aftertreatment Protection Power Reduction - Temperature too high
516284	17	Engine protection power reduction - Boost pressure too low

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Error code

SPN	FMI	Designation
516304	3	Heating flange 1 - Short circuit to battery low side
516305	4	Heating flange 1 - Short circuit to ground low side
516318	31	Wastegate valve - Load is short circuited
516318	31	Wastegate valve - Short circuit load
516328	3	Volume control valve - Short circuit to battery (low side)
516328	3	Volume control valve - Short circuit to battery low side
516328	4	Volume control valve - Short circuit to ground (low side)
516329	4	Volume control valve - Short circuit to ground low side
516330	11	Volume control valve - Electrical error
516331	3	Pressure control valve - Short circuit to battery (low side)
516331	3	Pressure control valve - Short circuit to battery low side
516331	4	Pressure control valve - Short circuit to ground (low side)
516331	4	Pressure control valve - Short circuit to ground low side
516336	11	Volume control valve 2 - Electrical error
516336	3	Volume control valve 2 - Short circuit to battery (low side)
516336	3	Volume control valve 2 - Short circuit to battery low side
516336	4	Volume control valve 2 - Short circuit to ground (low side)
516336	4	Volume control valve 2 - Short circuit to ground low side
516337	11	Pressure control valve 2 - Electrical error
516337	3	Pressure control valve 2 - Short circuit to battery (low side)
516337	3	Pressure control valve 2 - Short circuit to battery low side
516337	4	Pressure control valve 2 - Short circuit to ground (low side)
516337	4	Pressure control valve 2 - Short circuit to ground low side
516340	2	Wastegate valve control module - Communication error
516342	31	Starter - Locked due to overtemperature
516344	3	Heating flange 2 - Short circuit to battery low side
516345	4	Heating flange 2 - Short circuit to ground low side
516346	5	Heating flange status input 1 - Open circuit
516346	3	Heating flange status input 1 - Short circuit to battery
516346	3	Heating flange status input 1 - Short circuit to battery (high side)
516346	3	Heating flange status input 1 - Short circuit to battery (low side)
516346	3	Heating flange status input 1 - Short circuit to battery high side
516346	4	Heating flange status input 1 - Short circuit to ground
516346	4	Heating flange status input 1 - Short circuit to ground (high side)
516346	4	Heating flange status input 1 - Short circuit to ground (low side)

SPN	FMI	Designation
516346	4	Heating flange status input 1 - Short circuit to ground high side
516347	3	Heating flange status input 1 - Short circuit to battery low side
516347	4	Heating flange status input 1 - Short circuit to ground low side
516348	5	Heating flange status input 2 - Open circuit
516348	8	Heating flange status input 2 - Open circuit
516348	3	Heating flange status input 2 - Short circuit to battery
516348	3	Heating flange status input 2 - Short circuit to battery (high side)
516348	3	Heating flange status input 2 - Short circuit to battery (low side)
516348	3	Heating flange status input 2 - Short circuit to battery high side
516348	4	Heating flange status input 2 - Short circuit to ground
516348	4	Heating flange status input 2 - Short circuit to ground (high side)
516348	4	Heating flange status input 2 - Short circuit to ground (low side)
516348	4	Heating flange status input 2 - Short circuit to ground high side
516349	3	Heating flange status input 2 - Short circuit to battery low side
516349	4	Heating flange status input 2 - Short circuit to ground low side
516355	31	Engine control unit - Communication error with aftertreatment control module
516356	31	Engine control unit - Communication error to secondary injection control module
516356	31	Engine control unit - Communication error to slave injection control unit
516369	6	Starter 2 - Critical high output current
516369	11	Starter 2 - Electrical error
516369	31	Starter 2 - Locked due to overtemperature
516369	5	Starter 2 - Open circuit
516369	3	Starter 2 - Short circuit to battery
516369	3	Starter 2 - Short circuit to battery (high side)
516369	3	Starter 2 - Short circuit to battery (low side)
516369	3	Starter 2 - Short circuit to battery high side
516369	4	Starter 2 - Short circuit to ground
516369	4	Starter 2 - Short circuit to ground (high side)
516369	4	Starter 2 - Short circuit to ground (low side)
516369	4	Starter 2 - Short circuit to ground high side
516370	3	Starter 2 - Short circuit to battery low side
516371	4	Starter 2 - Short circuit to ground low side

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Error code

SPN	FMI	Designation
516401	31	Injector 1 - Voltage Based Small quantity injection correction failed
516402	31	Injector 2 - Voltage Based Small quantity injection correction failed
516403	31	Injector 3 - Voltage Based Small quantity injection correction failed
516404	31	Injector 4 - Voltage Based Small quantity injection correction failed
516405	31	Injector 5 - Voltage Based Small quantity injection correction failed
516406	31	Injector 6 - Voltage Based Small quantity injection correction failed
516407	31	Injector 7 - Voltage Based Small quantity injection correction failed
516408	31	Injector 8 - Voltage Based Small quantity injection correction failed
516409	31	Injector 9 - Voltage Based Small quantity injection correction failed
516410	31	Injector 10 - Voltage Based Small quantity injection correction failed
516411	31	Injector 11 - Voltage Based Small quantity injection correction failed
516412	31	Injector 12 - Voltage Based Small quantity injection correction failed
516413	31	Injector 13 - Voltage Based Small quantity injection correction failed
516414	31	Injector 14 - Voltage Based Small quantity injection correction failed
516415	31	Injector 15 - Voltage Based Small quantity injection correction failed
516416	31	Injector 16 - Voltage Based Small quantity injection correction failed
516417	31	Injector 17 - Voltage Based Small quantity injection correction failed
516418	31	Injector 18 - Voltage Based Small quantity injection correction failed
516419	31	Injector 19 - Voltage Based Small quantity injection correction failed
516420	31	Injector 20 - Voltage Based Small quantity injection correction failed
516422	11	Pressure control valve - Load is short circuited
516422	11	Pressure control valve - Short circuit load
516424	11	Starter digital input - Starter inhibition due to short circuit
516425	11	Starter digital input 2 - Starter inhibition due to short circuit

SPN	FMI	Designation
516428	31	Air pressure sensors - Plausibility error
516490	2	Aftertreatment control module - Communication error
516493	31	Secondary injection control unit - Error detected
516493	31	Slave injection control unit - Emission relevant error
516495	31	ECU - Runtime reached the maximum time without reset
516509	31	Injection data synchronization - Error during measurement of voltage-based small quantity injection correction
516511	31	Starters - Not connected in the output 1 to ECU
516511	31	Starters - Not connected in the output 1 to ECU
516512	31	Starters - Not connected in the output 2 to ECU
516513	31	NOx sensors - Drift error
516543	31	ECU - Data recorder was triggered
516543	31	ECU - Data recorder was triggered and locked on critical error (overspeed or crankcase over pressure)
516544	31	Engine - Starter activated but engine not started
516544	31	Engine - Starter activated but no engine rotation detected
516553	0	SCR system - Critical overload of accumulate carbon in catalyst
516553	15	SCR system - Overload warning of accumulate carbon in catalyst
516571	31	SCR system - DEF not defrosted after legal time elapsed
516581	3	SCR system (DEF injector1) - Short circuit to battery
516581	4	SCR system (DEF injector1) - Short circuit to ground
516582	3	SCR system (DEF injector2) - Short circuit to battery
516582	4	SCR system (DEF injector2) - Short circuit to ground
516583	3	SCR system (DEF injector3) - Short circuit to battery
516583	4	SCR system (DEF injector3) - Short circuit to ground
516584	3	SCR system (DEF injector4) - Short circuit to battery
516584	4	SCR system (DEF injector4) - Short circuit to ground
516585	3	SCR system (DEF injector5) - Short circuit to battery
516585	4	SCR system (DEF injector5) - Short circuit to ground
516586	3	SCR system (DEF injector6) - Short circuit to battery
516586	4	SCR system (DEF injector6) - Short circuit to ground
516587	3	SCR system (DEF injector7) - Short circuit to battery
516587	4	SCR system (DEF injector7) - Short circuit to ground
516588	3	SCR system (DEF injector8) - Short circuit to battery
516588	4	SCR system (DEF injector8) - Short circuit to ground
516589	15	SCR system (DEF pump inlet temperature) - Temperature too high

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Error code

SPN	FMI	Designation
516589	2	SCR system (DEF pump inlet temperature) - Temperature too low (not plausible)
516589	0	SCR system (DEF pump inlet temperature) - Value out of maximum range
516589	1	SCR system (DEF pump inlet temperature) - Value out of minimum range
516590	2	SCR system (DEF pump outlet pressure) - Plausibility error
516590	15	SCR system (DEF pump outlet pressure) - Pressure high
516590	17	SCR system (DEF pump outlet pressure) - Pressure low
516590	16	SCR system (DEF pump outlet pressure) - Pressure too high
516590	0	SCR system (DEF pump outlet pressure) - Value out of maximum range
516590	1	SCR system (DEF pump outlet pressure) - Value out of minimum range
516591	2	SCR system (Common rail urea pressure) - Plausibility error
516591	15	SCR system (Common rail urea pressure) - Pressure high
516591	17	SCR system (Common rail urea pressure) - Pressure low
516591	16	SCR system (Common rail urea pressure) - Pressure too high
516591	0	SCR system (Common rail urea pressure) - Value out of maximum range
516591	1	SCR system (Common rail urea pressure) - Value out of minimum range
516592	3	SCR system (Primary DCU Sensor supply) - Critical overvoltage
516592	4	SCR system (Primary DCU Sensor supply) - Critical undervoltage
516593	3	SCR system (Primary DCU Battery monitor) - Critical overvoltage
516593	4	SCR system (Primary DCU Battery monitor) - Critical undervoltage
516594	9	SCR system (Primary DCU) - Communication error with ECU
516595	9	SCR system (Primary DCU) - Communication error with Secondary DCU 1
516597	2	SCR system (Primary DCU) - Electrical error on CAN1
516598	2	SCR system (Primary DCU) - Electrical error on CAN2
516599	3	SCR system (Secondary 1 DCU Battery monitor) - Critical overvoltage
516599	4	SCR system (Secondary 1 DCU Battery monitor) - Critical undervoltage
516600	3	SCR system (Secondary 1 DCU Sensor supply) - Critical overvoltage
516600	4	SCR system (Secondary 1 DCU Sensor supply) - Critical undervoltage

SPN	FMI	Designation
516601	3	SCR system (Secondary 2 DCU Battery monitor) - Critical over-voltage
516601	4	SCR system (Secondary 2 DCU Battery monitor) - Critical under-voltage
516602	3	SCR system (Secondary 2 DCU Sensor supply) - Critical over-voltage
516602	4	SCR system (Secondary 2 DCU Sensor supply) - Critical under-voltage
516603	11	NH3 sensor 2 - Communication error
516604	11	NH3 sensor 2 - Resistance error
516605	11	NH3 sensor 2 - Module-sensor communication error
516606	11	NH3 sensor 2 - Internal memory error
516608	15	NH3 sensor 2 - High NH3 concentration
516655	1	SCR system 3 - Very low conversion efficiency
516656	1	SCR system 4 - Very low conversion efficiency
516658	0	SCR system 2 - Feedback control reached max saturation
516658	1	SCR system 2 - Feedback control reached min saturation
516659	0	SCR system 3 - Feedback control reached max saturation
516659	1	SCR system 3 - Feedback control reached min saturation
516660	0	SCR system 4 - Feedback control reached max saturation
516660	1	SCR system 4 - Feedback control reached min saturation
516662	5	NOx sensor (downstream SCR) - Open circuit
516662	3	NOx sensor (downstream SCR) - Short circuit
516662	2	NOx sensor (downstream SCR) 3 - Communication error
516662	7	NOx sensor (downstream SCR) 3 - Heater performance error
516662	11	NOx sensor (downstream SCR) 3 - Invalid sensor status
516662	0	NOx sensor (downstream SCR) 3 - Offset error
516662	31	NOx sensor (downstream SCR) 3 - Sensor removed from exhaust line
516663	5	NOx sensor (downstream SCR) - Open circuit
516663	3	NOx sensor (downstream SCR) - Short circuit
516663	2	NOx sensor (downstream SCR) 4 - Communication error
516663	7	NOx sensor (downstream SCR) 4 - Heater performance error
516663	11	NOx sensor (downstream SCR) 4 - Invalid sensor status
516663	0	NOx sensor (downstream SCR) 4 - Offset error
516663	31	NOx sensor (downstream SCR) 4 - Sensor removed from exhaust line
516666	1	SCR system - DEF level too low for cooling
516667	31	SCR system - Failed to prime

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Error code

SPN	FMI	Designation
516668	31	Secondary injection control unit - Error of messages configuration received from the ECU
516669	31	Engine control unit - Error of messages configuration received from the secondary injection control module
516679	11	NH3 sensor 3 - Electrical error
516679	15	NH3 sensor 3 - High NH3 concentration
516679	2	NH3 sensor 3 - Communication error
516679	31	NH3 sensor 3 - Installation error
516680	11	NH3 sensor 3 - Heater performance error
516681	11	NH3 sensor 3 - Internal memory error
516682	11	NH3 sensor 3 - Module-sensor communication error
516683	11	NH3 sensor 3 - Resistance error
516684	11	NH3 sensor 4 - Electrical error
516684	15	NH3 sensor 4 - High NH3 concentration
516684	2	NH3 sensor 4 - Communication error
516684	31	NH3 sensor 4 - Installation error
516685	11	NH3 sensor 4 - Heater performance error
516686	11	NH3 sensor 4 - Internal memory error
516687	11	NH3 sensor 4 - Module-sensor communication error
516688	11	NH3 sensor 4 - Resistance error
516689	15	Exhaust gas temperature (upstream SCR) 3 - Overtemperature warning
516689	5	Exhaust gas temperature sensor (upstream SCR) 3 - Open circuit
516689	3	Exhaust gas temperature sensor (upstream SCR) 3 - Short circuit to battery
516689	4	Exhaust gas temperature sensor (upstream SCR) 3 - Short circuit to ground
516689	31	Exhaust gas temperature sensor (upstream SCR) 3 - Supply voltage out of range
516689	11	Exhaust gas temperature sensor (upstream SCR) - 3 Plausibility error
516690	15	Exhaust gas temperature (upstream SCR) 4 - Overtemperature warning
516690	5	Exhaust gas temperature sensor (upstream SCR) 4 - Open circuit
516690	3	Exhaust gas temperature sensor (upstream SCR) 4 - Short circuit to battery
516690	4	Exhaust gas temperature sensor (upstream SCR) 4 - Short circuit to ground
516690	31	Exhaust gas temperature sensor (upstream SCR) 4 - Supply voltage out of range

SPN	FMI	Designation
516690	11	Exhaust gas temperature sensor (upstream SCR) - 4 Plausibility error
516714	31	Cylinder head temperature 1 - Cold cylinder
516715	31	Cylinder head temperature 2 - Cold cylinder
516716	31	Cylinder head temperature 3 - Cold cylinder
516717	31	Cylinder head temperature 4 - Cold cylinder
516718	31	Cylinder head temperature 5 - Cold cylinder
516719	31	Cylinder head temperature 6 - Cold cylinder
516720	31	Cylinder head temperature 7 - Cold cylinder
516721	31	Cylinder head temperature 8 - Cold cylinder
516722	31	Cylinder head temperature 9 - Cold cylinder
516723	31	Cylinder head temperature 10 - Cold cylinder
516724	31	Cylinder head temperature 11 - Cold cylinder
516725	31	Cylinder head temperature 12 - Cold cylinder
516726	31	Cylinder head temperature 13 - Cold cylinder
516727	31	Cylinder head temperature 14 - Cold cylinder
516728	31	Cylinder head temperature 15 - Cold cylinder
516729	31	Cylinder head temperature 16 - Cold cylinder
516730	31	Cylinder head temperature 17 - Cold cylinder
516731	31	Cylinder head temperature 18 - Cold cylinder
516732	31	Cylinder head temperature 19 - Cold cylinder
516733	31	Cylinder head temperature 20 - Cold cylinder
516742	3	Speed adjustment (current) - Short circuit to battery
516742	30	Speed adjustment (current) - Short circuit to ground or open circuit
516742	31	Speed adjustment (current) - Supply voltage out of range
516748	3	SCR system (pump heater or common rail heater) - Short circuit to battery
516748	4	SCR system (pump heater or common rail heater) - Short circuit to ground
516749	31	SCR system (pump inlet vacuum sensor) - Rationality low
516749	3	SCR system (pump inlet vacuum sensor) - Short circuit to battery
516749	4	SCR system (pump inlet vacuum sensor) - Short circuit to ground
516750	3	SCR system (filter heater) - Short circuit to battery
516750	4	SCR system (filter heater) - Short circuit to ground
516751	3	SCR system (BLDC port) - Short circuit to battery
516752	0	SCR system (filter) - Run time critical

SPN	FMI	Designation
516752	16	SCR system (filter) - Run time warning
516753	18	SCR system (DEF pump) - Cavitation protection capability low
516753	1	SCR system (DEF pump) - Cavitation protection capability too low
516754	2	SCR system - Variant coding procedure failed
516755	2	SCR system - Runtime reset procedure failed
516758	31	Prelubrication pump - Relay out of order
516762	31	SCR system - Dosing deviation error
516763	31	SCR system 2 - Dosing deviation error
516764	31	SCR system 3 - Dosing deviation error
516765	31	SCR system 4 - Dosing deviation error
516795	0	SCR system (DEF injector) - Temperature too high
516798	31	Volume control valve 2 - Current plausibility error
516812	31	Volume control valve - Current plausibility error
516842	31	NOx sensor (downstream SCR) 2 - Installation error
516843	31	NOx sensor (downstream SCR) 3 - Installation error
516844	31	NOx sensor (downstream SCR) 4 - Installation error
516846	6	Smart sensor supply relay 1 - Critical high output current
516846	11	Smart sensor supply relay 1 - Electrical error
516846	5	Smart sensor supply relay 1 - Open circuit
516846	3	Smart sensor supply relay 1 - Short circuit to battery
516846	4	Smart sensor supply relay 1 - Short circuit to ground
516847	6	Smart sensor supply relay 2 - Critical high output current
516847	11	Smart sensor supply relay 2 - Electrical error
516847	5	Smart sensor supply relay 2 - Open circuit
516847	3	Smart sensor supply relay 2 - Short circuit to battery
516847	4	Smart sensor supply relay 2 - Short circuit to ground
516848	6	Smart sensor supply relay 3 - Critical high output current
516848	11	Smart sensor supply relay 3 - Electrical error
516848	5	Smart sensor supply relay 3 - Open circuit
516848	3	Smart sensor supply relay 3 - Short circuit to battery
516848	4	Smart sensor supply relay 3 - Short circuit to ground
516852	31	Production Mode - Enter/exit mode

Tab. 61: Error code table

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