

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

ASPN = Alternate Suspect Parameter Number

FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
29		3	Handthrottle; signal out of range, short circuit to battery
		4	Handthrottle; signal out of range, short circuit to ground
51		3	Actuator error EGR-Valve (2.9;3.6) or Throttle-Valve (6.1,7.8); internal error
		4	Actuator error EGR-Valve (2.9;3.6) or Throttle-Valve (6.1,7.8); internal error
		5	Actuator error EGR-Valve (2.9;3.6) or Throttle-Valve (6.1,7.8); internal error
		6	Actuator error EGR-Valve (2.9;3.6) or Throttle-Valve (6.1,7.8); internal error
		7	Actuator error EGR-Valve (2.9;3.6) or Throttle-Valve (6.1,7.8); internal error
		11	Actuator error EGR-Valve (2.9;3.6) or Throttle-Valve (6.1,7.8); internal error
		12	Actuator error EGR-Valve (2.9;3.6) or Throttle-Valve (6.1,7.8); internal error
84		2	Sensor vehicle speed; plausibility error
91		3	Sensor error accelerator pedal; signal range check high
		4	Sensor error accelerator pedal; signal range check low
		11	Plausibility error between APP1 and APP2 or APP1 and idle switch
94		1	Low fuel pressure; system reaction initiated
		3	Sensor error low fuel pressure; signal range check high
		4	Sensor error low fuel pressure; signal range check low
97		3	Sensor error water in fuel; signal range check high
		4	Sensor error water in fuel; signal range check low
		12	Water in fuel level prefilter; maximum value exceeded
100		0	High oil pressure; system reaction initiated
		1	High oil pressure; system reaction initiated
		3	Sensor error oil pressure; signal range check high
		4	Sensor error oil pressure sensor; signal range check low
102		2	Charged air pressure; system reaction initiated
		3	Sensor error charged air pressure; signal range check high
		4	Sensor error charged air pressure; signal range check low
105		0	Charged air cooler temperature; system reaction initiated
		3	Sensor error charged air temperature; signal range check high
		4	Sensor error charged air temperature; signal range check low

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107		0	Air filter differential pressure; system reaction initiated
		3	Sensor error airfilter differential pressure; short circuit to battery
		4	Sensor error airfilter differential pressure; short circuit to ground
108		3	Sensor error ambient air pressure; signal range check high
		4	Sensor error ambient air pressure; signal range check low
110		0	Coolant temperature; system reaction initiated
		3	Sensor error coolant temperature; signal range check high
		4	Sensor error coolant temperature; signal range check low
111		1	Coolant level too low
132		11	Air flow sensor; sensor error
157		3	Sensor error rail pressure; signal range check high
		4	Sensor error rail pressure; signal range check low
164		2	Rail pressure safety function is not executed correctly
168		0	Physical range check high for battery voltage
		1	Physical range check low for battery voltage
		2	High battery voltage; warning threshold exceeded
		2	Battery voltage; system reaction initiated
		3	Sensor error battery voltage; signal range check high
		3	Sensor error battery voltage; signal range check high
		4	Sensor error battery voltage; signal range check low
		4	Sensor error battery voltage; signal range check low
171		3	Sensor error environment temperature; signal range check high
		4	Sensor error environment temperature; signal range check low
172		0	Physical range check high for intake air temperature
		1	Physical range check low for intake air temperature
		2	Intake air sensor; plausibility error
		3	Sensor error intake air; signal range check high
		4	Sensor error intake air sensor; signal range check low
			Sensor ambient air temperature; plausibility error
174		0	High Low fuel temperature; shut off threshold exceeded
			High low fuel temperature; warning threshold exceeded

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175		0	Oil temperature; out of range, system reaction initiated
		1	Physical range check low for oil temperature
		2	Oil temperature; plausibility error
		3	Sensor error oil temperature; signal range check high
		4	Sensor error oil temperature; signal range check low
190		0	Engine speed above warning threshold (FOC-Level 1)
		2	Offset angle between crank- and camshaft sensor is too large
		8	Speed detection; out of range, signal disrupted
		11	Engine speed above warning threshold (FOC-Level 2)
		12	Speed detection; out of range, signal disrupted
411		14	Speed detection; out of range, signal disrupted
		0	Physical range check high for differential pressure Venturiunit (EGR)
		1	Physical range check low for differential pressure Venturiunit (EGR)
		3	Sensor error differential pressure Venturiunit (EGR); signal range check high
		4	Physical range check low for EGR differential pressure Sensor error differential pressure Venturiunit (EGR); signal range check low
412		3	Sensor error EGR cooler downstream temperature; signal range check high
		4	Sensor error EGR cooler downstream temperature; signal range check low
520		9	Timeout Error of CAN-Receive-Frame TSC1TR; Setpoint
597		2	Break lever mainswitch and break lever redundancyswitch status not plausible
624		3	SVS lamp; short circuit to battery
		4	SVS lamp; short circuit to ground
		5	SVS lamp; open load
		12	SVS lamp; powerstage over temperature
630		12	Access error EEPROM
639		14	CAN-Bus 0 "BusOff-Status"

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651		3	Injector 1 (in firing order); short circuit
		4	High side to low side short circuit in the injector 1 (in firing order)
		5	Injector 1 (in firing order); interruption of electric connection
652		3	Injector 2 (in firing order); short circuit
		4	High side to low side short circuit in the injector 2 (in firing order)
		5	Injector 2 (in firing order); interruption of electric connection
653		3	Injector 3 (in firing order); short circuit
		4	High side to low side short circuit in the injector 3 (in firing order)
		5	Injector 3 (in firing order); interruption of electric connection
654		3	Injector 4 (in firing order); short circuit
		4	High side to low side short circuit in the injector 4 (in firing order)
		5	Injector 4 (in firing order); interruption of electric connection
655		3	Injector 5 (in firing order); short circuit
		4	High side to low side short circuit in the injector 5 (in firing order)
		5	Injector 5 (in firing order); interruption of electric connection
656		3	Injector 6 (in firing order); short circuit
		4	High side to low side short circuit in the injector 6 (in firing order)
		5	Injector 6 (in firing order); interruption of electric connection
676		11	Cold start aid relay; open load, relay error.
677		3	Starter relay; short circuit
		4	Starter relay; short circuit
		5	Starter relay; no load error
		12	Starter relay; powerstage over temperature
703		3	Engine running lamp; short circuit to battery
		4	Engine running lamp; short circuit to ground
		5	Engine running lamp; open load
		12	Engine running lamp; powerstage over temperature

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729		5	Cold start aid relay open load
		12	Cold start aid relay; over temperature error
898		9	Timeout Error of CAN-Receive-Frame TSC1TE; Setpoint
975		3	Fan control; short circuit to battery
		4	Fan control; short circuit to ground
		5	Fan control; open load
		12	Fan control; internal error
1079		13	Sensor supply voltage monitor 1 error (ECU)
1080		13	Sensor supply voltage monitor 2 error (ECU)
1109		2	Engine shut off demand ignored
1136		0	Physikal range check high for ECU temperature
		1	Physikal range check low for ECU temperature
		3	Sensor error ECU temperature; signal range check high
		4	Sensor error ECU temperature; signal range check low
1176		3	Sensor error pressure sensor upstream turbine; signal range check high
		4	Sensor error pressure sensor downstream turbine; signal range check high
1180		0	Exhaust gas temperature turbine upstream; out of range, system reaction initiated
		1	Exhaust gas temperature turbine upstream; out of range, system reaction initiated
		3	Sensor error exhaust gas temperature upstream turbine; signal range check high
		4	Sensor error exhaust gas temperature upstream turbine; signal range check low
		11	Sensor exhaust gas temperature upstream turbine; plausibility error
			Exhaust gas temperature upstream turbine; out of range, system reaction initiated
		Exhaust gas temperature upstream turbine; out of range, system reaction initiated	

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1188		2	Wastegate; status message from ECU missing
		7	Wastegate actuator; blocked
		11	Turbo charger wastegate actuator; internal error
		13	Wastegate actuator calibration deviation too large, recalibration required
1231		14	CAN-Bus 1 "BusOff-Status"
1235		14	CAN-Bus 2 "BusOff-Status"
1237		2	Override switch; plausibility error
1322		12	Too many recognized misfires in more than one cylinder
1323		12	Too many recognized misfires in cylinder 1 (in firing order)
		12	Too many recognized misfires in cylinder 1 (in firing order)
1324		12	Too many recognized misfires in cylinder 2 (in firing order)
1325		12	Too many recognized misfires in cylinder 3 (in firing order)
1326		12	Too many recognized misfires in cylinder 4 (in firing order)
1327		12	Too many recognized misfires in cylinder 5 (in firing order)
1328		12	Too many recognized misfires in cylinder 6 (in firing order)
1639		0	Sensor error fan speed; signal range check high
		1	Sensor error fan speed; signal range check low
1761		14	Urea tank level; warning threshold exceeded
2621		3	Flush valve burner (EPV DPF-System); short circuit to battery
		4	Flush valve burner (EPV DPF-System); short circuit to ground
		5	Flush valve burner (EPV DPF-System); open load
		12	Flush valve burner (EPV DPF-System); powerstage over temperature
2659		0	Physical range check high for EGR exhaust gas mass flow
		1	Physical range check low for EGR exhaust gas mass flow
		2	AGS sensor temperature exhaust gas mass flow; plausibility error
		12	Exhaust gas recirculation; AGS sensor has "burn off" not performed
			Exhaust gas recirculation AGS sensor; plausibility error

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2791		0	EGR actuator, temperature critical high
		2	EGR actuator, CAN error
		3	EGR actuator supply voltage is above the maximum threshold
		4	EGR actuator supply voltage is below minimum threshold
		6	EGR actuator current is above maximum threshold
		7	EGR actuator, actuator blocked or broken spring detected
		12	EGR actuator, internal electrical fault
		13	EGR actuator, EOL calibration error or learning process aborted or learning process out of range
		16	EGR actuator, temperature high
2797		4	Injector diagnostics; timeout error of short circuit to ground measurement cyl. Bank 0
2798		4	Injector diagnostics; short circuit Bank 0, Bank 1
			Injector diagnostics; timeout error of short circuit to ground measurement cyl. Bank 1
3031		0	AdBlue-Tank temperature: maximum exceeded
		1	DEF-Tank temperature: below minimum
		3	Sensor error urea tank temperature; short circuit to battery
		4	Sensor error urea tank temperature; short circuit to ground
3224		1	Nox sensor upstream of SCR Catalysator; low signal not plausible
		2	NOx Sensor; CAN DLC error
		9	NOx Sensor; CAN Timeout
3234		2	NOx Sensor; CAN DLC error
		9	NOx Sensor; CAN Timeout
		11	Nox Sensor downstream of SCR Catalysator; plausibility error "stuck in range"
3241		0	Sensor SCR catalyst upstream temperature too high; plausibility error
		1	Sensor SCR catalyst upstream temperature too low; plausibility error

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3248		0	Exhaust gas temperature particulate filter downstream; out of range, system reaction initiated
		1	Exhaust gas temperature particulate filter downstream; out of range, system reaction initiated
		2	Sensor exhaust gas temperature downstream DPF; plausibility error
		4	Sensor error particle filter downstream temperature; signal range check low
3251		0	Physical range check high for differential pressure (DPF); shut off regeneration
		1	Physical range check low for differential pressure (DPF); shut off regeneration
3253		2	Sensor differential pressure (DPF); plausibility error
		3	Sensor error differential pressure (DPF); signal range check high
		4	Sensor error differential pressure (DPF); signal range check low
3361		3	Urea dosing valve; short circuit to battery
		4	Urea dosing valve; short circuit to ground
		7	AdBlue dosing valve blocked (SCR)
3519		3	DEF quality sensor, internal temperature sensor short circuit to battery or open lead
		4	DEF quality sensor, internal temperature sensor short circuit to ground
		12	DEF tank temperature, temperature too high
		13	Temperature at UQS invalid
3520		3	DEF quality sensor, short circuit to battery or open load
		4	DEF quality sensor, short circuit to ground
		13	Urea quality at UQS invalid
3532		3	DEF level at UQS out of max. physical range
		3	Sensor error urea tank level; signal range check high
		4	Quality at UQS of min. physical range
		4	Sensor error urea tank level; signal range check low
3699		2	DPF differential pressure sensor and a further sensor or actuator CRT system defective
		14	Maximum stand-still-duration reached; oil exchange required
			Temperature sensor us. and ds. DOC simultaneously defect
3711		12	Regeneration temperature (PFItRgn LigtOff) not reached; regeneration aborted
3936		14	Standstill request ignored too long

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SPN	ASP	FMI	Description
4243		11	SCR system heater diagnostic reports error; shut off SCR-system
4334		0	Urea pump pressure; out of range
		1	Urea pump pressure; out of range
		3	Sensor error urea pump pressure; signal range check high
		4	Sensor error urea pump pressure; signal range check low
4341		3	SCR-heater urea supplyline; short circuit to battery
		4	SCR-heater urea supplyline; short circuit to ground
		5	SCR heater relay urea supplyline; open load
4343		3	SCR heater urea pressureline; short circuit to battery
		4	SCR heater urea pressureline; short circuit to ground
		5	SCR heater relay urea pressureline; open load
		11	General pressure check error (SCR)
4345		3	SCR heater urea returnline; short circuit to battery
		4	SCR heater urea returnline; short circuit to ground
		5	SCR heater relay urea returnline; open load
		11	Sensor backflow line pressure (SCR); plausibility error
4360		0	Physical range check high for urea catalyst upstream temperature
		1	Physical range low for urea catalyst upstream temperature
		3	Sensor error urea catalyst exhaust gas temperature upstream; signal range check high
		4	Sensor error urea catalyst exhaust gas temperature upstream; signal range check low
4365		0	Urea tank temperature too high
4366		3	SCR Tank heating valve; short circuit to battery
		4	SCR Tank heating valve; short circuit to ground
		5	SCR main relay (secondary side): open load
		12	SCR-heater relay urea tank powerstage output; over temperature
			SCR main relay; short circuit
			SCR Tank heating valve; open load
4374		13	Pressure stabilisation error dosing valve (SCR)

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4375		3	Urea pump motor; short circuit to battery
		4	Urea pump motor; short circuit to ground
		5	Urea pump motor; open load
4376		3	SCR reversing valve; short circuit to battery
		4	SCR reversing valve; short circuit to ground
		5	SCR reversing valve; open load
		12	SCR reversing valve; over temperature
4765		0	Physical range check high for exhaust gas temperature upstream (DOC)
		1	Physical range check low for exhaust gas temperature upstream (DOC)
4766		0	Physical range check high for exhaust gas temperature downstream (DOC)
		1	Physical range check low for exhaust gas temperature downstream (DOC)
4768		2	Sensor exhaust gas temperature upstream (DOC); plausibility error
		3	Sensor error exhaust gas temperature upstream (DOC); signal range check high
		4	Sensor error exhaust gas temperature upstream (DOC); signal range check low
4769		2	Sensor exhaust gas temperature (DOC) downstream; plausibility error
		3	Sensor error exhaust gas temperature downstream (DOC); signal range check high
		4	Sensor error exhaust gas temperature downstream (DOC); signal range check low
			Sensor exhaust gas temperature downstream (DOC); plausibility error
5763		0	Warning threshold for an internal actuator error exceeded, <4L EGR actuator and >4L Air Intake Flap
		1	Shutoff threshold for an internal actuator error exceeded, <4L EGR actuator and >4L Air Intake Flap
		3	Position sensor error of actuator EGR-Valve (2.9; 3.6) Signal range check high
		3	Actuator EGR-Valve (2.9; 3.6); short circuit to battery
		4	Actuator EGR-Valve (2.9; 3.6); short circuit to ground; Voltage below threshold
		5	Actuator EGR-Valve (2.9; 3.6); Open load on ECU output is detected
		6	Actuator error EGR-Valve; signal range check high
		7	Actuator position for EGR-Valve (2.9; 3.6)
		11	Power stage over temperature due to high current
20521		5	Actuator error EGR-Valve (2.9;3.6) Signal range check low

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SPN	ASP	FMI	Description
23006	64254	3	Controller mode switch; short circuit to battery
		4	Controller mode switch; short circuit to ground
23008	64256	1	Manipulation control was triggered
		2	Timeout error in Manipulation control
23009	64257	9	Pressure Relief Valve (PRV) reached maximum allowed opening count
		10	Pressure relief valve (PRV) reached maximum allowed open time
23090		2	Engine Brake Pre-Selection switch; Plausibility Error
23212	64460	9	Timeout Error of CAN-Receive-Frame ComEngPrt; Engine Protection
23216	64464	9	Timeout Error of CAN-Receive-Frame PrHtEnCmd; pre-heat command, engine command
23240	64488	9	Timeout CAN-message FunModCtl; Function Mode Control
23330	64578	14	Immobilizer status; fuel blocked
23350	64598	4	Injector cylinder-bank 1; short circuit
23352	64600	4	Injector cylinder-bank 2; short circuit
23354	64602	12	Injector powerstage output defect
23450	64698	2	Multiple Stage Switch constant speed; plausibility error
		3	Multiple Stage Switch constant speed; short circuit to battery
		4	Multiple Stage Switch constant speed; short circuit to ground
23451	64699	2	Multiple Stage Switch engine speed control parameter; plausibility error
		3	Multiple Stage Switch engine speed control parameter; short circuit to battery
		4	Multiple Stage Switch engine speed control parameter; short circuit to ground
23452	64700	2	Multiple Stage Switch engine torque limitation curve; plausibility error
		3	Multiple Stage Switch engine torque limitation curve; short circuit to battery
		4	Multiple Stage Switch engine torque limitation curve; short circuit to ground

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23470	64718	2	Pressure Relief Valve (PRV) forced to open
		7	Maximum rail pressure in limp home mode exceeded (PRV)
		11	Pressure Relief Valve (PRV) error; Rail pressure out of tolerance range
		12	Pressure Relief Valve (PRV) forced to open; system reaction initiated
		14	Pressure Relief Valve (PRV) is open Rail pressure out of tolerance range
23550	64798	12	T50 start switch active for too long
23601	64849	13	Sensor supply voltage monitor 3 error (ECU)
23602	64850	0	Fan control; out of range, system reaction initiated
23603	64851	9	Timeout Error of CAN-Receive-Frame AMB; Ambient Temperature Sensor
23605	64853	9	Timeout Error of CAN-Receive-Frame TSC1AE; Traction Control
23606	64854	9	Timeout Error of CAN-Receive-Frame TSC1AR; Retarder
23612	64860	12	ECU reported internal software error
		14	Softwarereset CPU
			Internal software error ECU
23613	64861	0	Rail pressure disrupted
		1	Minimum rail pressure exceeded (RailMeUn3)
		2	Setpoint of metering unit in overrun mode not plausible
23615	64863	3	Metering unit (Fuel-System); short circuit to battery
		4	Metering unit (Fuel-System); short circuit to ground
		5	Metering unit (Fuel-System); open load
		12	Metering unit (Fuel-System); powerstage over temperature
23619	64867	2	Physical range check high for exhaust gas temperature upstream (SCR-CAT)
23632	64880	0	Pressure overload of SCR-System
		1	Pressure build-up error SCR-System
		2	Metering control is not performed in time error
		16	Pump pressure SCR metering unit too high
		18	Pump pressure SCR metering unit too low
23633	64881	11	Nox conversion rate insufficient

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23698	64946	11	Shut off request from supervisory monitoring function
23704		12	Timeout Error of CAN-Transmit_Frame EEC3
23717	64965	12	Timeout Error of CAN-Transmit-Frame AmbCon; Weather environments
23718	64966	3	SCR main relay (primary side); short circuit to battery
		4	SCR main relay (primary side); short circuit to ground
		5	SCR main relay (primary side); open load
		12	SCR mainrelay; powerstage over temperature (only CV56B)
			SCR mainrelay; short circuit to battery (only CV56B)
			SCR mainrelay; short circuit to ground (only CV56B)
			SCR mainrelay; open load (only CV56B)
23719	64967	3	SCR heater urea supplymodule; short circuit to battery
		4	SCR heater urea supplymodule; short circuit to ground
		5	SCR heater relay urea supply module; open load
23720	64968	2	Urea supply module heater temperature; plausibility error
		8	Urea supply module heater temperature; signal disrupted
23721	64969	2	Urea supply module heater temperature; plausibility error
		8	Urea supply module temperature; signal disrupted
		11	Urea supply module temperature measurement not available
23722	64970	8	Urea supply module PWM signal; signal disrupted

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23723	64971	11	Detection of AdBlue filled SCR system in Init-State
23766	65014	9	Timeout Error of CAN-Receive-Frame Active TSC1AE
23767	65015	9	Timeout Error of CAN-Receive-Frame Passive TSC1AE
23768	65016	9	Timeout Error of CAN-Receive-Frame Active TSC1AR
23769	65017	9	Timeout Error of CAN-Receive-Frame Passive TSC1AR
23770	65018	9	Timeout Error of CAN-Receive-Frame Passive TSC1DE
23776	65024	9	Timeout Error of CAN-Receive-Frame TSC1TE - active
23777	65025	9	Passive Timeout Error of CAN-Receive-Frame TSC1TE; Setpoint
23778	65026	9	Active Timeout Error of CAN-Receive-Frame TSC1TR
23779	65027	9	Passive Timeout Error of CAN-Receive-Frame TSC1TR
23788	65036	0	Turbo charger wastegate; CAN Fehler
		12	Timeout Error of CAN-Transmit-Frame TrbCH; Status Wastegate
23793	65041	9	Timeout Error of CAN-Receive-Frame UAA10; AGS sensor service message
23794	65042	9	Timeout Error of CAN-Receive-Frame UAA11; AGS sensor data
23803	65051	9	Timeout Error of CAN-Receive-Frame RxEngPres; Status burner airpump
23867	65115	12	Timeout Error of CAN-Transmit-Frame UAA1 on CAN 2; Burner Air Pump Control
23895	65143	13	Check of missing injector adjustment value programming (IMA) injector 1 (in firing order)
23896	65144	13	check of missing injector adjustment value programming (IMA) injector 2 (in firing order)
23897	65145	13	check of missing injector adjustment value programming (IMA) injector 3 (in firing order)
23898	65146	13	check of missing injector adjustment value programming (IMA) injector 4 (in firing order)
23899	65147	13	check of missing injector adjustment value programming (IMA) injector 5 (in firing order)
23900	65148	13	check of missing injector adjustment value programming (IMA) injector 6 (in firing order)
23910	65158	0	Air Pump; internal error
		6	Air Pump; over current
		7	Air pump; CAN communication interrupted no purge function available
		9	Air Pump; CAN communication lost
		12	Air Pump; internal error
		14	Air pump doesn't achieve air mass flow setpoint

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23911	65159	0	Burner dosing valve (DV2); overcurrent at the end of the injection phase
		3	Burner dosing valve (DV2); short circuit to battery
		4	Burner dosing valve (DV2); short circuit to ground
		7	Burner dosing valve (DV2); blocked closed
		11	Burner dosing valve (DV2); short circuit high side powerstage
		12	Burner dosing valve (DV2); powerstage over temperature
23912	65160	0	Physical range check high for burner dosing valve (DV2) downstream pressure; shut off regeneration
		1	Physical range check low for burner dosing valve (DV2) downstream pressure; shut off regeneration. When burner injector is actuated, the measured pressure does not rise above ca. 1250mbar abs (expected: ca. 2400mbar).
		2	Burner dosing valve (DV2) downstream pressure sensor; plausibility error
		3	Sensor error burner dosing valve (DV2) downstream pressure sensor; signal range check high
		4	Sensor error burner dosing valve (DV2) downstream pressure sensor; signal range check low
23913	65161	3	Sensor error glow plug control diagnostic line voltage; signal range check high
		4	Sensor error glow plug control diagnostic line voltage; signal range check low
23914	65162	3	Glow plug control; short circuit to battery
		4	Glow plug control; short circuit to ground
		5	Glow plug control; open load
		11	Glow plug control; internal error
		12	Glow plug control; powerstage over temperature
23915	65163	0	HCI dosing valve (DV1); overcurrent at the end of the injection phase
		3	HCI dosing valve (DV1); short circuit to battery
		4	HCI dosing valve (DV1); short circuit to ground
		7	HCI dosing valve (DV1); blocked
		11	HCI dosing valve (DV1); short circuit high side powerstage
		12	HCI dosing valve (DV1); powerstage over temperature
23916	65164	0	Physical range check high for HCI dosing valve (DV1) downstream pressure; shut off regeneration
		1	Physical range check low for HCI dosing valve (DV1) downstream pressure; shut off regeneration
		2	Sensor HCI dosing valve (DV1) downstream pressure; plausibility error
		3	Sensor error HCI dosing valve (DV1) downstream pressure; signal range check high
		4	Sensor error HCI dosing valve (DV1) downstream pressure; signal range check low

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

ASPN = Alternate Suspect Parameter Number

FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
23917	65165	0	Physical range check high for DV1 & DV2 upstream pressure; shut off regeneration
		1	Physical range check low for DV1 & DV2 upstream pressure; shut off regeneration
		2	Sensor DV1 & DV2 upstream pressure; plausibility error
		3	Sensor error DV1 & DV2 upstream pressure; signal range check high
		4	Sensor error DV1 & DV2 upstream pressure; signal range check low
23918	65166	0	Physical range check high for DV1 & DV2 upstream temperature; shut off regeneration
		1	Physical range check low for DV1 & DV2 upstream temperature; shut off regeneration
		2	Sensor DV1 & DV2 upstream temperature; plausibility error
		3	Sensor error DV1 & DV2 upstream temperature; signal range check high
		4	Sensor error DV1 & DV2 upstream temperature; signal range check low
23919	65167	0	Physical range check high for airpump pressure; shut off regeneration
		1	Physical range check low for airpump pressure; shut off regeneration
		2	Sensor airpump pressure; plausibility error
		3	Sensor error airpump pressure; signal range check high
		4	Sensor error airpump pressure; signal range check low
23920	65168	0	Physical range check high for exhaustgas back pressure burner; shut off regeneration
		1	Physical range check low for exhaustgas back pressure burner; shut off regeneration
		2	Sensor exhaustgas back pressure; plausibility error
		3	Sensor error exhaustgas back pressure burner; signal range check high
		4	Sensor error exhaustgas back pressure burner; signal range check low
23921	65169	0	Physical range check high for burner temperature
		1	Physical range check low for burner temperature
		2	Sensor burner temperature; plausibility error
		3	Sensor error burner temperature; signal range check high
		4	Sensor error burner temperature; signal range check low
		11	Sensor burner temperature; plausibility error
23922	65170	3	Burner shut of valve; short circuit to battery
		4	Burner shut of valve; short circuit to ground
		5	Burner shut off valve; open load
		7	Shut off valve: blocked
		12	Over temperature error on burner shut of valve

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

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FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
23924		4	Short circuit to ground actuator relay 2
23925		3	Short circuit to battery error of actuator relay 3
		4	Short circuit to ground actuator relay 3
23926		4	Short circuit to ground actuator relay 4
23927		3	Short circuit to battery error of actuator relay 5
23929	65177	0	Fuel Balance Control integrator injector 1 (in firing order); maximum value exceeded
		1	Fuel Balance Control integrator injector 1 (in firing order); minimum value exceeded
23930	65178	0	Fuel Balance Control integrator injector 2 (in firing order); maximum value exceeded
		1	Fuel Balance Control integrator injector 2 (in firing order); minimum value exceeded
23931	65179	0	Fuel Balance Control integrator injector 3 (in firing order); maximum value exceeded
		1	Fuel Balance Control integrator injector 3 (in firing order); minimum value exceeded
23932	65180	0	Fuel Balance Control integrator injector 4 (in firing order); maximum value exceeded
		1	Fuel Balance Control integrator injector 4 (in firing order); minimum value exceeded
23933	65181	0	Fuel Balance Control integrator injector 5 (in firing order); maximum value exceeded
		1	Fuel Balance Control integrator injector 5 (in firing order); minimum value exceeded
23934	65182	0	Fuel Balance Control integrator injector 6 (in firing order); maximum value exceeded
		1	Fuel Balance Control integrator injector 6 (in firing order); minimum value exceeded
23935	65183	12	Timeout Error of CAN-Transmit-Frame EEC3VOL1; Engine send messages
23936	65184	12	Timeout Error of CAN-Transmit-Frame EEC3VOL2; Engine send messages
23938	65186	9	Timeout Error (BAM to packet) for CAN-Receive-Frame AT1IGCVol1 information; factors & Sensorcalibration for NOX Sensor (SCR-system upstream cat; DPF- system downstream cat)
23939	65187	9	Timeout Error (BAM to BAM) for CAN-Receive-Frame AT1IGCVol1 information; factors & Sensorcalibration for NOX Sensor (SCR-system upstream cat; DPF- system downstream cat)
23940	65188	9	Timeout Error (PCK2PCK) for CAN-Receive-Frame AT1IGCVol1 information; factors & Sensorcalibration for NOX Sensor (SCR-system upstream cat; DPF-system downstream cat)
23941	65189	9	Timeout Error (BAM to packet) for CAN-Receive-Frame AT1OGCVol2 information; factors & Sensorcalibration for NOX Sensor (SCR-system downstream cat; DPF- system downstream cat)
23942	65190	9	Timeout Error (BAM to BAM) for CAN-Receive-Frame AT1OGCVol2 information; factors & Sensorcalibration for NOX Sensor (SCR-system downstream cat; DPF- system downstream cat)

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

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FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
23943	65191	9	Timeout Error (PCK2PCK) for CAN-Receive-Frame AT1OGCVol2 information; factors & Sensorcalibration for NOX Sensor (SCR-system downstream cat; DPF- system downstream cat)
23946	65194	0	Zerofuel calibration injector 1 (in firing order); maximum value exceeded
		1	Zerofuel calibration injector 1 (in firing order); minimum value exceeded
23947	65195	0	Zerofuel calibration injector 2 (in firing order); maximum value exceeded
		1	Zerofuel calibration injector 2 (in firing order); minimum value exceeded
23948	65196	0	Zerofuel calibration injector 3 (in firing order); maximum value exceeded
		1	Zerofuel calibration injector 3 (in firing order); minimum value exceeded
23949	65197	0	Zerofuel calibration injector 4 (in firing order); maximum value exceeded
		1	Zerofuel calibration injector 4 (in firing order); minimum value exceeded
23950	65198	0	Zerofuel calibration injector 5 (in firing order); maximum value exceeded
		1	Zerofuel calibration injector 5 (in firing order); minimum value exceeded
23951	65199	0	Zerofuel calibration injector 6 (in firing order); maximum value exceeded
		1	Zerofuel calibration injector 6 (in firing order); minimum value exceeded
23960	65208	0	EGR cooler downstream temperature; out of range, system reaction initiated
		1	EGR cooler downstream temperature; out of range, system reaction initiated
			Exhaust gas temperature EGR downstream; out of range, system reaction initiated
			Exhaust gas temperature EGR downstream; out of range, system reaction initiated
23973	65221	14	SCR Tamper detection; derating timer below limit 1
23974	65222	14	SCR Tamper detection; derating timer below limit 2
23975	65223	14	Urea quality; derating timer below limit 1
23976	65224	14	Urea qulaity; derating timer below limit 2
23977	65225	14	Urea tank level; derating timer below limit 1
23978	65226	14	Urea tank level; derating timer below limit 2
23980	65228	14	Bad quality of reduction agent detected
23981	65229	11	Urea-tank without heating function (heating phase)
23982	65230	0	Powerstage diagnosis disabled; high battery voltage
		1	Powerstage diagnosis disabled; low battery voltage

Deutz TCD3.6 Engine Fault Codes

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FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
23984		3	UB6; Short circuit to battery error of actuator relay 6
23986		4	Actuator relay 5; voltage measured by ECU is out of target range
23987		4	Actuator relay 6; voltage measured by ECU is out of target range
23988	65236	3	Charging lamp; short circuit to battery
		4	Charging lamp; short circuit to ground
		5	Charging lamp; open load
		12	Charging lamp; over temperature
23989	65237	0	Fuel Balance Control integrator injector 7 (in firing order); maximum value exceeded
		1	Fuel Balance Control integrator injector 7 (in firing order); minimum value exceeded
23990	65238	0	Fuel Balance Control integrator injector 8 (in firing order); maximum value exceeded
		1	Fuel Balance Control integrator injector 8 (in firing order); minimum value exceeded
23992	65240	9	Timeout Error of CAN-Receive-Frame DM19Vol1; NOX sensor upstream
23993	65241	9	Timeout Error of CAN-Receive-Frame DM19Vol2; NOX sensor downstream
23995	65243	13	check of missing injector adjustment value programming (IMA) injector 7 (in firing order)
23996	65244	13	check of missing injector adjustment value programming (IMA) injector 8 (in firing order)
23998	65246	4	Injector cylinder bank 2 slave; short circuit
23999	65247	12	Injector powerstage output Slave defect
24000	65248	3	Injector 7 (in firing order); short circuit
		4	High side to low side short circuit in the injector 7 (in firing order)
		5	Injector 7 (in firing order); interruption of electric connection
24001	65249	3	Injector 8 (in firing order); short circuit
		4	High side to low side short circuit in the injector 8 (in firing order)
		5	Injector 8 (in firing order); interruption of electric connection
24004	65252	12	Too many recognized misfires in cylinder 7 (in firing order)
24005	65253	12	Too many recognized misfires in cylinder 8 (in firing order)

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

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FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
24011	65259	0	Zerofuel calibration injector 7 (in firing order); maximum value exceeded
		1	Zerofuel calibration injector 7 (in firing order); minimum value exceeded
24012	65260	0	Zerofuel calibration injector 8 (in firing order); maximum value exceeded
		1	Zerofuel calibration injector 8 (in firing order); minimum value exceeded
24013	65261	7	Burner operation disturbed
24014	65262	1	Air pressure glow plug flush line; below limit
24016	65264	2	Air Pump; air flow is not plausible
		11	HFM sensor; electrical fault
24017	65265	12	Spark plug control unit (SPCU); internal error
24018	65266	14	DPF wasn't regenerated, power reduction phase 1 (manuell regeneration request)
24019	65267	11	Air Pump; air lines blocked
24020	65268	14	Engine power; Not enough oxygen for regeneration
24021	65269	11	Burner fuel line pipe leak behind Shut Off Valve
24022	65270	14	DPF wasn't regenerated, power reduction phase 2 (manuell regeneration request)
24023	65271	14	DPF wasn't regenerated, warning condition (manuell regeneration mode)
24024	65272	11	Deviation of the exhaust gas temperature setpoint to actual value downstream (DOC) too high
24025	65273	5	DPF system; operating voltage error
		14	Particulate filter; regeneration not succesful
24028	65276	2	CAN message PROEGRActr; plausibility error
24029	65277	2	Timeout Error of CAN-Receive-Frame ComEGRActr - exhaust gas recirculation positioner
24030	65278	7	EGR actuator; internal error
24031	65279	13	EGR actuator; calibration error
24032	65280	2	EGR actuator; status message "EGRCust" is missing
24033	65281	7	EGR actuator; due to overload in Save Mode
24034	65282	3	Disc separator; short circuit to battery
		4	Disc separator; short circuit to ground
		5	Disc Separator; open load
		12	Disc Separator; powerstage over temperature

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

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FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
24035	65283	12	Injector diagnostics; time out error in the SPI communication
24036	65284	12	Injector diagnostics Slave; time out error in the SPI communication
24037	65285	3	Ashlamp; short circuit to battery
		4	Ashlamp; short circuit to ground
		5	Ashlamp; open load
24038	65286	9	Timeout error of CAN-Receive-Frame ComMS_Sys1TO (error memory Slave); Master-Slave internal CAN message
24039	65287	9	Timeout error of CAN-Receive-Frame ComMS_Sys2TO (error memory Slave); Master-Slave internal CAN message
24040	65288	9	Timeout error of CAN-Receive-Frame ComMS_Sys3TO (error memory Slave); Master-Slave internal CAN message
24041	65289	9	Timeout error of CAN-Receive-Frame ComMS_Sys4TO (error memory Slave); Master-Slave internal CAN message
24042	65290	9	Timeout error of CAN-Receive-Frame ComMS_Sys5TO (error memory Slave); Master-Slave internal CAN message
24043	65291	9	Timeout error of CAN-Receive-Frame ComMS_Sys6TO (error memory Slave); Master-Slave internal CAN message
24044	65292	9	CAN message ComMS_Sys7 not received from slave
24045	65293	9	Master-Slave CAN; Message-Counter-Error of CAN-Receive-Frame ComMSMoFOvR
24046	65294	9	Master-Slave CAN; Checksum-Error of CAN-Receive-Frame ComMSMoFOvR
24047	65295	9	Master-Slave CAN; Message-Length-Error of CAN-Receive-Frame ComMSMoFOvR
24048	65296	9	Timeout error CAN message ComMSMoFOvR1TO error memory Slave
24049	65297	9	Message copy error in the Master / Slave data transfer
24052	65300	11	MS ECU reported internal error
24055	65303	4	Spark Plug Control Unit (SPCU); short circuit to ground
24057	65305	2	Electric fuel pump; fuel pressure build up error
24062	65310	12	EAT-system HMI disrupted
24063		3	SCR main relay; short circuit to battery
		4	SCR heater main relay load side (K31 on heating valve (Y31))
		5	SCR heater return line; open load or SCR main relay not connected; or SCR heater pressureline; open load or SCR or SCR relay for suction line not connected or SCR heater supply module; open load or SCR heater tank; open load
		12	DEF supply module, time for defrosting too long or DEF tank, time for defrosting too long

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

ASPN = Alternate Suspect Parameter Number

FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
24065		0	Pressure sensor upstream SCR-CAT, pressure above upper physical threshold
		1	Pressure sensor upstream SCR-CAT, pressure below lower physical threshold
		2	Pressure sensor upstream SCR-CAT, plausibility error
		3	Pressure sensor upstream SCR-CAT, short circuit battery or open load
		4	Pressure sensor upstream SCR-CAT, short circuit ground
24067		0	DEF supply module, heater temperature above upper physical threshold
		1	DEF supply module, heater temperature below lower physical threshold
		2	Supply module heater temperature, plausibility error
24068	65316	2	Master ECU and Slave ECU have been identified as the same types
24069	65317	9	Timeout Error of CAN-Receive-Frame MSMon_FidFCCTO; Master-Slave CAN communication faulty
24074		9	NOx sensor downstream SCR-CAT, sensor internally open load
24075		11	NOx sensor downstream SCR-CAT, sensor internally short circuit
24076		9	NOx sensor downstream SCR-CAT, sensor internally open line
24077		11	NOx sensor upstream SCR-CAT, sensor internally short circuit
24078		9	NOx sensor downstream SCR-CAT, lambda value above upper physical threshold
24079		9	NOx sensor downstream SCR-CAT, lambda value below lower physical threshold
24080		9	NOx sensor upstream SCR-CAT, lambda value above upper physical threshold
24081		9	NOx sensor upstream SCR-CAT, lambda value below lower physical threshold
24083		9	NOx sensor downstream SCR-CAT, NOx value below minimum value
24085		9	NOx sensor upstream SCR-CAT, NOx value below lower physical threshold

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

ASPN = Alternate Suspect Parameter Number

FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
24097	65345	9	Timeout error of CAN-Transmit-Frame DPFBrnAirPmpCtl
24098	65346	9	Timeout error of CAN-Transmit-Frame ComDPFBrnPT
24099	65347	9	Timeout error of CAN-Transmit-Frame ComDPFC0
24100	65348	9	Timeout error of CAN-Transmit-Frame ComDPFHisDat
24101	65349	9	Timeout error of CAN-Transmit-Frame ComDPFTstMon
24102	65350	9	Timeout error of CAN-Receive-Frame ComRxDPFBrnAirPmpCtl
24103	65351	9	Timeout error of CAN-Receive-Frame ComRxDPFBrnAirPmp
24104	65352	9	Timeout error of CAN-Receive-Frame ComRxDPFCtl
24105	65353	9	Timeout error of CAN-Transmit-Frame ComEGRMsFlw
24106	65354	9	Timeout error of CAN-Receive-Frame ComRxEGRMsFlw1
24107	65355	9	Timeout error of CAN-Receive-Frame ComRxEGRMsFlw2
24108	65356	9	Timeout error of CAN-Transmit-Frame ComEGRTVActr
24109	65357	9	Timeout error of CAN-Receive-Frame ComRxEGRTVActr
24110	65358	9	Timeout error of CAN-Transmit-Frame ComETVActr
24111	65359	9	Timeout error of CAN-Receive-Frame ComRxETVActr
24112	65360	9	Timeout ComITVActr
24113	65361	9	Timeout error of CAN-Receive-Frame ComRxITVActr
24114	65362	9	Timeout error of CAN-Transmit-Frame A1DOC
24115	65363	9	Timeout error of CAN-Transmit-Frame AT1S

Deutz TCD3.6 Engine Fault Codes

SPN = Suspect Parameter Number

ASPN = Alternate Suspect Parameter Number

FMI = Failure Mode Identifier

SPN	ASPN	FMI	Description
24116	65364	9	Timeout error of CAN-Transmit-Frame SCR2
24117	65365	9	Timeout error of CAN-Transmit-Frame SCR3
24118	65366	9	Timeout error of CAN-Receive-Frame ComRxCM0
24119	65367	9	Timeout error of CAN-Receive-Frame ComRxCustSCR2
24120	65368	9	Timeout error of CAN-Receive-Frame ComRxSCRHtDiag
24121	65369	9	Timeout error of CAN-Receive-Frame ComRxTrbChActr
24122	65370	9	Timeout error of CAN-Receive-Frame ComRxUQSens
24123	65371	9	Timeout error of CAN-Receive-Frame ComSCRHtCtl
24124	65372	9	Timeout error of CAN-Receive-Frame ComTxAT1IMG
24125	65373	9	Timeout error of CAN-Receive-Frame ComTxTrbChActr
24141		7	DEF dosing valve, dosing valve blocked
24147		7	SCR System, reverting valve blocked
		13	SCR System, pressure build up not possible
24152		2	Urea Quality Sensor, Timeout CAN message
24153		2	Urea tank level & urea tank temperature via CAN bus, timeout of CAN message
24156		9	Timeout error of CAN-Receive-Frame ComRxEBC2
24175		0	SCR-CAT, Nox emissions above minimum threshold
24177		7	SCR System, DEF suction line blocked
24178		7	SCR System, DEF pressure out of range
24190		14	Not enough urea in tank or low urea quality or hardware tampering failure is detected or hardware failure is detected
24191		14	A low DEF tank level or a low DEF quality is detected or hardware tampering or hardware failures
24193		8	The standstill-regeneration mode time exceeds the long limit threshold; Vehicle was too long or too often in standstill mode; Change oil and reset counter
24194		8	The standstill-regeneration mode time exceeds the short limit threshold; Vehicle was too long or too often within a short time in standstill mode; Change oil and reset counter
24195		14	Standstill request due to crystalization ignored too long

Perkins 1104 Engine Fault Codes

SPN = Suspect Parameter Number

FMI = Failure Mode Identifier

SPN	FMI	Description
91	2	Incorrect throttle switch inputs
	3	Throttle position sensor: voltage above normal or shorted high
	4	Throttle position sensor: voltage below normal or shorted low
	8	Throttle position sensor: abnormal frequency, pulse width or period
100	3	Engine oil pressure sensor: voltage above normal or shorted high
	4	Engine oil pressure sensor :voltage below normal or shorted low
102	3	Boost pressure sensor voltage: voltage above normal or shorted high
	4	Boost pressure sensor voltage: voltage below normal or shorted low
	10	No 5V to sender
105	3	Intake manifold temperature sensor: temperature above normal or shorted high
	4	Intake manifold temperature sensor: temperature below normal or shorted low
105	3	Intake manifold air temperature open/short to battery positive (+)
	4	Intake manifold air temperature short to ground
110	3	Engine coolant temperature open/short to battery positive (+)
	4	Engine coolant temperature short to ground

SPN	FMI	Description
157	3	Fuel rail pressure open/short to battery positive (+)
	4	Fuel rail pressure short to ground
168	0	System voltage high
	1	System voltage low
	2	ECM battery power intermittent/erratic
172	3	Air inlet temperature voltage high
	4	Air inlet temperature voltage low
174	2	Fuel temperature sensor: data erratic/intermittent or incorrect
190	8	Engine speed signal abnormal
	15	Engine speed: overspeed WARNING
190	0	Engine overspeed
626	5	Ether start aid current low
	6	Ether start aid current high
630	2	System parameters incorrect
631	2	Personality module mismatch
637	11	Engine timing calibration invalid
637	139	Engine timing calibration required
639	9	J1939 data link communications
	12	J1939 data link malfunction
651	2	Cylinder #1 injector data incorrect
	5	Cylinder #1 injector open circuit
	6	Cylinder #1 injector short
	7	Cylinder #1 injector not responding
652	2	Cylinder #2 injector data incorrect
	5	Cylinder #2 injector open circuit
	6	Cylinder #2 injector short
	7	Cylinder #2 injector not responding

Perkins 1104 Engine Fault Codes

SPN = Suspect Parameter Number

FMI = Failure Mode Identifier

SPN	FMI	Description
653	2	Cylinder #3 injector data incorrect
	5	Cylinder #3 injector open circuit
	6	Cylinder #3 injector short
	7	Cylinder #3 injector not responding
654	2	Cylinder #4 injector data incorrect
	5	Cylinder #4 injector open circuit
	6	Cylinder #4 injector short
	7	Cylinder #4 injector not responding
678	3	8V DC supply short to battery positive (+)
	4	8V DC supply shorted to ground
723	8	Secondary engine speed signal abnormal
1188	5	Turbo wastegate drive current low
1196	9	Machine security system module non-communication
1347	5	Fuel rail pump output current low
	6	Fuel rail pump output current high
	7	Fuel rail pressure valve solenoid not responding
2882	2	Mode selector switch: data erratic/intermittent or incorrect
3509	3	5V DC power supply sensor short to battery positive (+)
	4	5V DC power supply sensor short to ground

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