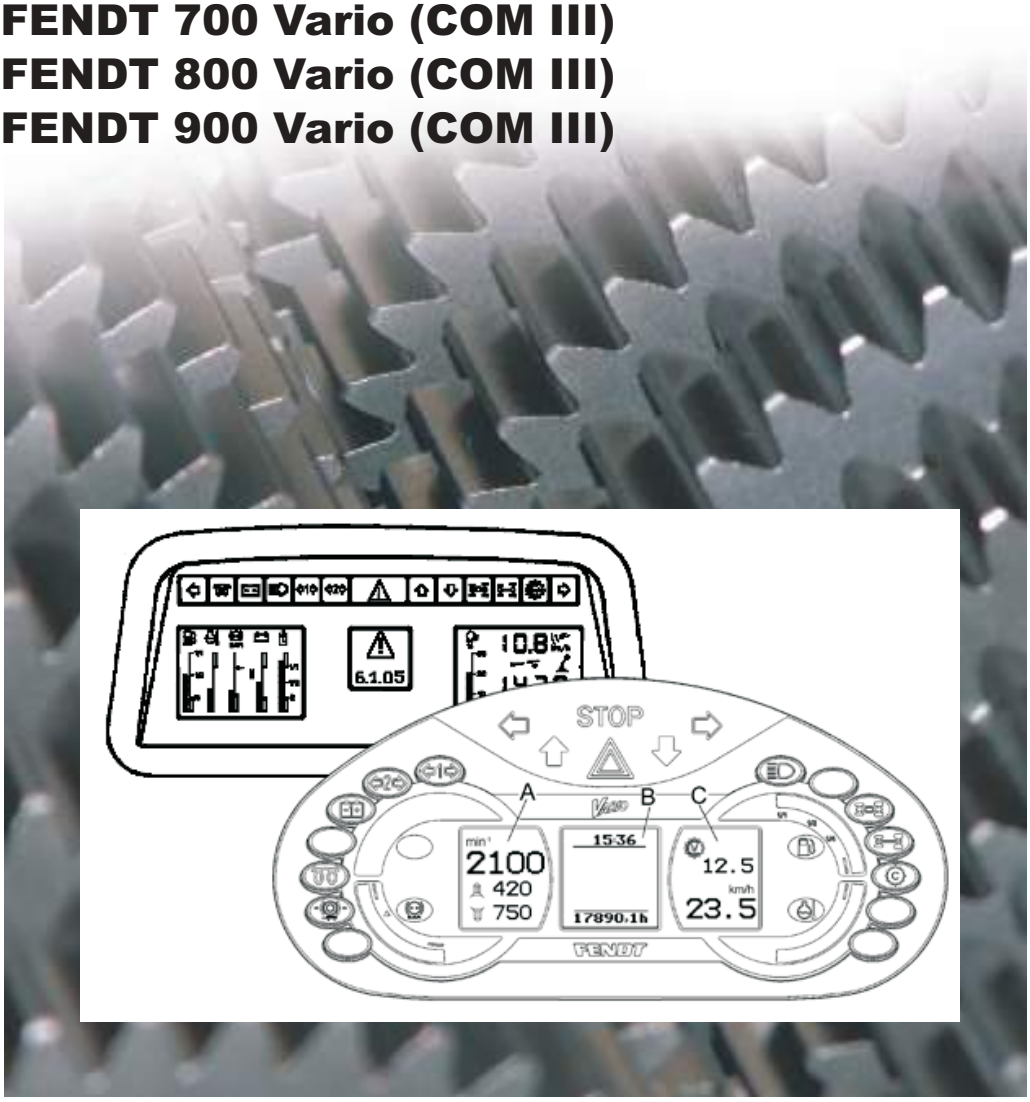
Service Training

Vario tractors - fault code tables

Farmer 400
Favorit 700
Favorit 900

FENDT 700 Vario
FENDT 800 Vario
FENDT 900 Vario

FENDT 300 Vario (COM III)
FENDT 400 Vario (COM III)
FENDT 700 Vario (COM III)
FENDT 800 Vario (COM III)
FENDT 900 Vario (COM III)



X990.005.448.012 - Englisch

FENDT Service-Training Dokumentation

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All relevant accident prevention regulations and all generally accepted safety, health and road traffic regulations must be strictly observed. The manufacturer does not accept liability for damage resulting from unauthorised modifications.

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Storingscodetabellen

FENDT 409 Vario 409 .. / 1001-
FENDT 410 Vario 410 .. / 1001-
FENDT 411 Vario 411 .. / 1001-
FENDT 412 Vario 412 .. / 1001-

FENDT 711 Vario 711 .. / 1001-
FENDT 712 Vario 712 .. / 1001-
FENDT 714 Vario 714 .. / 1001-
FENDT 716 Vario 716 .. / 1001-

FENDT 815 Vario 715 .. / 1001-
FENDT 817 Vario 717 .. / 1001-
FENDT 818 Vario 718 .. / 1001-

FENDT 916 Vario 916 .. / 1001-
FENDT 920 Vario 920 .. / 1001-
FENDT 924 Vario 924 .. / 1001-
FENDT 926 Vario 926 .. / 1001-
FENDT 930 Vario 930 .. / 1001-

Fault code table
Tableau de codes défauts
Tabella codici disturbi
Tabla código averías
Storingscodetabel

FENDT Vario (COM I / COM II)

409 .. 1001- / 410 .. 1001- / 411 .. 1001- / 412 .. 1001- * 711 .. 1001- / 712 .. 1001- / 714 .. 1001- / 716 .. 1001-
715 .. 1001- / 717 .. 1001- / 718 .. 1001- * 916 .. 1001- / 920 .. 1001- / 924 .. 1001- / 926 .. 1001- / 930 .. 1001-

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
0.0.11	A021; A022	ECU, EDC; ECU, EMR	EDC / EMR bus fault. Fault in ECU	Tractor can be driven using accelerator.		
			Programming errors in ECU.	Fault message, no restrictions.		EOL reprogramming necessary.
0.0.12	A008	Vario terminal	Bus fault	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuse F039, F046	
0.0.13	A004	Control console	Bus fault	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuse F040, F041	
0.0.14	A009	Transmission control unit	Bus fault	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuse F040, F041	
0.0.15	A001, A002	4WD engagement; Diff. lock engagement	Bus fault	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuses F040, F041	
0.0.16	A001, A002	Rear PTO	Bus fault	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuses F040, F041	
0.0.17	A001, A002	Front PTO	Bus fault	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuses F040, F041	
0.0.18	A005, A014	Rear EPC	Bus fault	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuses F040, F041	
0.0.19	A002	Front power lift	Bus fault	No functions available, no display		See Service Training EPC C (X990.005.023.026en)

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
0.0.1A	A002, Y015, Y016, Y017, Y018, Y019	ECU, enhanced control, electric auxiliary control valves	Bus fault	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuses F040, F041	
0.0.1B	A002	ECU, enhanced control	TeachIn bus faulty - Master (Variotronic TI) ('Teach-in data transfer fault')	Emergency mode		
0.0.1E		ECU, Neumaier	Bus fault Neumaier reversing system	Neumaier System doesn't work		(Neumaier Service Manual)
0.0.1F	A034	Joystick	Joystick bus fault ('Drive switch data transfer fault')	Emergency operation, no auxiliary valve operation	Power supply for CAN bus is in circuit board A013; fuse F047	JOYSTICK CAN - JOYSTICK
0.0.20	A007	Instrument cluster	CAN Bus fault between A007 instrument cluster and tractor electronics	No functions available, no display	Power supply for CAN bus is in circuit board A013; fuses F040, F041	
0.1.50	A007	Instrument cluster	VDO instrument cluster EEPROM not programmed	Malfunctions in instrument cluster		EOL reprogramming necessary
0.1.51	B012	Engine oil pressure sensor	Sensor fault, wiring fault	No monitoring	'Instrument cluster' circuit diagram	
			12 V supply fault		A013 fuse 24	
0.1.54	B019	Compressed air tank pressure sensor	Sensor fault, wiring fault	No display	'Instrument cluster' circuit diagram	
			12 V supply fault		A013 fuse 25	
0.1.55	S036	Hydraulic oil level sensor	Sensor fault, wiring fault	No monitoring	'Spool valves 1' circuit diagram	
0.1.56	B005, A021, A022	Temperature sensor engine temp. (=water), (ECU,EDC / EMR)	Sensor fault, wiring fault	No monitoring	'Instrument cluster' circuit diagram	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
0.1.57	B006, A022	Sensor, charge air temperature, ECU, EMR	Sensor fault, wiring fault	No monitoring	Circuit diagram: "Instrument cluster" (F400, F700); "EDC control" (F900); "EMR engine control (F7/800 Vario)	**For EDC/EMR** EDC - level converter / SERDIA diagnostics
0.1.59	B007; B034	Fuel level sensor	Sensor fault, wiring fault	No display	'Instrument cluster' circuit diagram	
1.1.01, poss.	B038 or B055	EDC / EMR foot throttle rotary position sensor (yellow), combi-sensor	Signal too high, signal too low, signal missing for longer than 2000 ms	Chapter 2000 Reg.B (EDC fault or EMR fault)	'EDC Engine control', 'EMR Engine control' circuit diagram	TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL
1.1.03	B029, B038 or B055	EST foot throttle rotary position sensor EST (red), EDC foot throttle rotary position sensor (yellow), combi-sensor	B029 and B038 do not match, no match B055 - combi-sensor (PIN 3 to PIN 6)	Restricted operating mode, Chapter 2000 Reg.B (EDC fault or EMR fault)	'EDC Engine control', 'EMR Engine control' circuit diagram	TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL, calibration code '4005'
1.1.04	A002	ECU, enhanced control	Tractor Management System (TMS) checksum error	Tractor Management System (TMS) doesn't function		EOL reprogramming necessary
1.1.05	A021; A022	EDC control module	Engine configuration could not be read from the EDC / EMR - control unit	TMS is disengaged	'EDC Engine control', 'EMR Engine control' circuit diagram	
1.1.7E	B035	Hand throttle rotary position sensor	Signal out of range	Restricted operating mode, Chapter 2000 Reg.B (EDC fault or EMR fault)	'EDC Engine control', 'EMR Engine control' circuit diagram	TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL
			8.5 V supply fault		Fuse 26	
1.1.7F	A004	Control console	Electrical fault in hand throttle memory keys (EDC/EMR). No communication with control console.	Last speed setting is retained. Engine speed can be changed using hand throttle or accelerator.		JOYSTICK, CAN-JOYSTICK

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.1.9E	A002, A004	ECU, enhanced control Control console (B035 - sensor, hand throttle)	CAN connection (enhanced control Bus); A002 - ECU (enhanced control) to A004 - ECU (control console) faulty	Restricted operating mode, Chapter 2000 Reg.B (EDC fault or EMR fault)	'EDC Engine control', 'EMR Engine control' circuit diagram	JOYSTICK, CAN-JOYSTICK
1.1.9F	A034	Drive switch (memory buttons)	A034 - Drive switch (memory buttons) faulty / CAN connection (enhanced control BUS): A002 ECU (enhanced control) to A034 - Drive switch faulty	Restricted operating mode, Chapter 2000 Reg.B (EDC fault or EMR fault)	'EDC Engine control', 'EMR Engine control', 'Transmission Bus', 'Enhanced control Bus' circuit diagram	JOYSTICK, CAN-JOYSTICK
1.1.A0	A021	EDC control module	EDC control module (A021) cannot be identified, EOL programming error	Torque is limited according to fault grading. Chapter 2000 Reg.B (EDC fault or EMR fault)	'EDC Engine control', 'EMR Engine control' circuit diagram	EDC - level converter or Serdia diagnostics
1.1.A1	A002, A021, A022	ECU (enhanced control), EDC engine control module, EMR engine control module	CAN enhanced control module (A002) - Engine control module (A021/A022) connection fault	Chapter 2000 Reg.B (EDC fault or EMR fault)	"Transmission Bus" circuit diagram	EDC - level converter or Serdia diagnostics
1.1.B0			CAN-bus communication restricted			EOL reprogramming necessary.
1.1.E0	A002, B035	A002 - ECU (enhanced control) ; Sensor hand throttle EDC / EMR	EEPROM checksum is wrong	Restricted operating mode, Chapter 2000 Reg.B (EDC fault or EMR fault)	'EDC Engine control', 'EMR Engine control' circuit diagram	New end-of-line programming required or load new data record

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.01	B041	Sensor, EMR (camshaft)	Signal error, gap to camshaft sprocket too wide, cable connection broken	B042 - EMR sensor (crankshaft) takes over rpm control, no effect on tractor driving mode. **Note: If both sensors fail (B041, B042), the diesel engine dies**	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.02	B042	Sensor, EMR (crankshaft)	Signal error, gap to flywheel too wide, cable connection broken	B041 - EMR sensor (camshaft) takes over rpm control, no effect on tractor driving mode. **Note: If both sensors fail (B041, B042), the diesel engine dies**	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.04	B041, B042	Sensor, EMR camshaft / crankshaft	Overspeed shutoff	Engine stop; tractor in 'Push' mode, check B041/B042 wiring, Y035 - check EMR actuator	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.05	B038 or B055	Sensor, foot throttle EMR;combi-sensor	Signal too high / signal too low	Error message, no effect on tractor driving mode.	see also Chapter 2000 Reg. B - EMR troubleshooting plan	TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL SERDIA diagnostics calibration code "4005"
1.2.07	B053	Sensor, charge air temperature / boost pressure (EMR)	Boost pressure signal error. Signal out of range	The A022 - ECU, EMR uses a substitute value to calculate the quantity injected, or reduced output of the tractor. Check the sensor cable connection, replace the sensor	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.09	B048	Sensor, water temperature (EMR)	Signal out of range	if necessary, reduce output, stop engine, check sensor cable connection, replace sensor	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.10	B053	Sensor, charge air temperature / boost pressure (EMR)	Charge air temperature signal error, signal too high, signal too low	The A022 - ECU, EMR uses a substitute value to calculate the quantity injected, or reduced output of the tractor. Check the sensor cable connection, replace the sensor	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.13	G001, G003, G001, A021	Battery 1, battery 2, alternator, engine control module (EDC)	Fault in EDC control module power supply	No engine powerChapter 2000 Reg.B (EDC fault)	"Power supply" circuit diagram	
1.2.17		Engine speed too high (EDC)	Poor driving (e.g. driving downhill)	Chapter 2000 Reg.B (EDC fault)		
1.2.18	A020	Pump control unit (injection pump) (EDC) needle movement sensor	Injection start system deviation	Reduced power, Chapter 2000 Reg.B (EDC fault)	Check fuel supply, primary pressure, interior pressure of pump	EDC level converter
1.2.1A	B026	Needle movement sensor NBF (EDC)	Signal fault	Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter
1.2.1F	A021	Engine control unit (EDC)	CAN message: fault between engine control module and connected electrical system	Chapter 2000 Reg.B (EDC fault)	'EDC control module', 'transmission bus' circuit diagram	
1.2.21	A002	Enhanced control module, transmission bus (EDC)	Fendt ECU not connected or CAN connection to transmission bus interrupted.	Chapter 2000 Reg.B (EDC fault) Chapter 9000 Reg.E (Can Bus)	'EDC control module', 'transmission bus', 'enhanced control bus' circuit diagrams	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.23	A002	Enhanced control module (EDC)	CAN communication fault between enhanced control module (A002) and EDC	Chapter 2000 Reg.B (EDC fault) Chapter 9000 Reg.E (Can Bus)	'Transmission bus', 'EDC engine control' circuit diagram	
1.2.25	K020	Ub30 EDC relay	Contact does not open, ground contact	Battery can discharge, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.2A	A002, A021	Enhanced control module, EDC control module, transmission bus, enhanced control bus (EDC)	CAN message fault from enhanced control module (A002) to EDC control module (A021), 'Engine brake function'	Engine brake non-operational, Chapter 2000 Reg.B (EDC fault)	'EDC engine control', 'transmission bus', 'engine brake' circuit diagrams	TRANSMISSION CRUISE CONTROL
1.2.2B	A002, A021	Enhanced control module, EDC control module, transmission bus, enhanced control bus (EDC)	CAN message fault from enhanced control module (A002) to EDC control module (A021), 'Engine brake function'	Engine brake non-operational, Chapter 2000 Reg.B (EDC fault)	'EDC engine control', 'transmission bus', 'engine brake' circuit diagrams	TRANSMISSION CRUISE CONTROL
1.2.2C	A002, A021	Enhanced control module, EDC control module, transmission bus, enhanced control bus (EDC)	CAN message fault from enhanced control module (A002) to EDC control module (A021), 'Engine brake function'	Engine brake non-operational, Chapter 2000 Reg.B (EDC fault)	'EDC engine control', 'transmission bus', 'engine brake' circuit diagrams	TRANSMISSION CRUISE CONTROL
1.2.2D	A002, A021	Enhanced control module, engine control module, transmission bus (EDC)	CAN signal fault from enhanced control module (A002) to EDC control module (A021)	Chapter 2000 Reg.B (EDC fault), Chapter 9000 Reg.E (Can Bus)	'EDC engine control', 'transmission bus' circuit diagram	
1.2.2E	A002, A021	Enhanced control module, engine control module, transmission bus (EDC)	CAN signal fault from enhanced control module (A002) to EDC control module (A021)	Chapter 9000 Reg.E (Can Bus)	'EDC engine control', 'transmission bus' circuit diagram	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.31	A022, B048	ECU, EMR2 ; Sensor, water temperature	Coolant temperature warning threshold exceeded	After a delay period (and coolant temperature remains too high), reduce engine output -- clean the radiator, check coolant level, check B048 sensor	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.32	A022, B053	ECU, EMR2 ; Sensor, charge air temperature / boost pressure	Charge air temperature warning threshold exceeded	After a delay (and if the charge air temperature remains too high), engine power is reduced Clean radiator, test B053 - Sensor	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.35	A022, B041, B042	ECU, EMR2 ; Sensor, EMR (camshaft) Sensor, EMR (crankshaft)	Engine speed too high (for example in 'push' operation)	The control rod is brought to zero delivery position. When speed falls below the recovery threshold, control passes back to the A022 - ECU	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.38	A021	Engine control module (EDC)	Fault in operation of EDC control module, 'Engine stop'	Reduced power, Chapter 2000 Reg.B (EDC fault)	"EDC engine control", "power supply" circuit diagram	EDC level converter
1.2.41	A022 ; B048	ECU, EMR2 ; Sensor, water temperature	Coolant temperature has gone over shutoff threshold	Clean radiator, check coolant lever, test sensor	also refer to Chapter 2000 Reg. B - EMR troubleshooting, Chapter 9000 Reg. E	SERDIA diagnostics
1.2.42 (DEU-TZ EMR)	A022, B053	ECU, EMR2 ; Sensor, charge air temperature / boost pressure	Charge air temperature has gone below shutoff threshold	Clean radiator, test sensor	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.42 (MAN EDC)	A020	Pump control unit (injection pump) (EDC)	Injection pump (pump control unit), fuel temperature too high (overheating)	Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.46	Bus system	Enhanced control bus, transmission bus, EDC bus	CAN-bus message fault	restricted driving mode, Chapter 2000 Reg.B (EDC fault), Chapter 9000 Reg.E (Can Bus)	"EDC engine control", "transmission bus", "enhanced control bus" circuit diagrams	
1.2.50	A022, Y035	ECU EMR2, EMR actuator ('Rotary magnet and position sensor')	Feedback fault from position sensor	**Emergency shutoff, engine does not start** check actuator (SERDIA diagnostics), check wiring from actuator	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.52	A022, Y035	ECU EMR2, EMR actuator ('Rotary magnet and position sensor')	Feedback fault from position sensor (reference coil)	**Emergency shutoff, engine does not start,** check actuator, check wiring from actuator, check A022 - ECU EMR	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.53	A022, Y035	ECU EMR2, EMR actuator ('Rotary magnet and position sensor')	Difference between **target** control travel (ECU EMR2) and **actual** control travel (actuator) greater than 10%	Error message (disappears when difference is less than 10%), check actuator, check whether control rod functions smoothly	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.67	A022	ECU, EDC	ECU EMR internal error (ERROR Hand Step 1)	Check ECU EMR2, if necessary load a new data record (important: save old data record!!), if necessary replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	
1.2.68	A022	ECU, EDC	ECU EMR internal error (ERROR CAN Step 1)	Check ECU EMR2, if necessary load a new data record (important: save old data record!!), if necessary replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.70	A022	ECU, EDC	CAN Bus controller fault	possible reduced engine running characteristics --- check transmission bus terminating resistors (A013 - circuit board, A009 - actuator unit), check ECU EMR2	also refer to Chapter 2000 Reg.B (EMR Troubleshooting), Chapter 9000 Reg.E (Can Bus)	
1.2.71	A022, X810	ECU, EMR2 ; diagnostics socket	CAN interface fault	possible reduced engine running characteristics --- check transmission bus terminating resistors (A013 - circuit board, A009 - actuator unit), check ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.74	A022; A002	CAN bus, wiring (EMR)	Cable broken, short circuit or serious CAN bus fault; CAN bus passive	Running of engine may be reduced	see also Chapter 2000 Reg. B - EMR troubleshooting plan	'Transmission Bus' circuit diagram
1.2.76	A022	ECU EMR2	Parameter settings incorrect	**Emergency, engine does not start** --- Switch ignition OFF then ON, check again, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	load new data record
1.2.77	A022	ECU EMR2	continuous monitoring of program memory delivers an error	**Emergency, engine does not start** --- Switch ignition OFF then ON, check again, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.78	A022	ECU EMR2	continuous monitoring of program memory delivers an error	**Emergency, engine does not start** --- Switch ignition OFF then ON, check again, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	
1.2.80	A022, Y035	ECU EMR2, EMR actuator	Voltage supply to EMR actuator out of allowed range	Error message (disappears again when the current is in the normal range), turn ignition OFF and ON again, recheck, if error occurs again --> replace ECU EMR2	also refer to Chapter 2000 Reg. B - EMR Troubleshooting, **checking cable harness**	SERDIA diagnostics
1.2.81	B038 or B 055	EDC foot throttle rotary position sensor (yellow), combi-sensor	Signal fault	Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	TRANSMISSION AUTOMATIC MAXIMUM OUTPUT CONTROL
1.2.82	A020	Pump control unit (injection pump) (EDC)	Fault in high-pressure solenoid valve actuation time	Engine stalls, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter
1.2.83	A022	ECU EMR2	Reference voltage 1 for Y035 - actuator out of allowed range	Error message (disappears when current is back in normal range), substitute value 5 VDC, check voltage supply to ECU EMR2, switch ignition OFF then ON, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.84 (DEU-TZ EMR)	A022	ECU EMR2	Reference voltage 2 for Y035 - actuator out of permissible range	Error message (disappears when current is back in normal range), substitute value 5 VDC, check voltage supply to ECU EMR2, switch ignition OFF then ON, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.84 (MAN EDC)	B025	EDC speed sensor	Signal fault	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter
1.2.85 (DEU-TZ EMR)	A022	ECU EMR2	Reference voltage 4 for Y035 - actuator out of permissible range	Error message (disappears when current is back in normal range), substitute value 5 VDC, check voltage supply to ECU EMR2, switch ignition OFF then ON, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.85 (MAN EDC)	B028	Boost pressure sensor (EDC)	Signal fault	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter
1.2.86	A022	ECU EMR2	Temperature in ECU EMR2 too high	Error message (disappears when temperature is back in normal range), switch ignition OFF then ON, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.87 (DEU-TZ EMR)	A022	ECU EMR2	Atmospheric pressure sensor in ECU EMR2 faulty	Error message (disappears when pressure is back in normal range), switch ignition OFF then ON, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.87 (MAN EDC)	B027	Water temperature sensor (EDC)	Signal fault	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter
1.2.89	A020	Pump control unit (injection pump)	Electronic volume controller fault	Engine won't start, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.90	A022	ECU EMR2	Incorrect parameter (EEPROM reading, or checksum error)	Engine does not start, switch ignition OFF then ON, if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	load new data record
1.2.91	B025	EDC speed sensor	Signal fault	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter
1.2.92	A020 A021	Engine control module, pump control unit (injection pump) (EDC)	Engine stop via 'Injected volume = 0' faulty, see Chapter 2710 Reg. A 'Engine stop'	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.93	A022	ECU EMR2	internal processing error in ECU EMR2 (batch overflow)	**Emergency shutoff, engine does not start,** switch ignition OFF then ON, if error reappears --> load new data record in ECU EMR2 (important: save old data record!!) if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.94	A022	ECU EMR2	internal processing error in ECU EMR2	**Emergency shutoff, engine does not start,** switch ignition OFF then ON, if error reappears --> load new data record in ECU EMR2 (important: save old data record!!) if error reappears --> replace ECU EMR2	see also Chapter 2000 Reg. B - EMR troubleshooting plan	SERDIA diagnostics
1.2.96	A021	Engine control module monitoring unit (EDC)	Fault in EDC control module monitoring unit (A021)	Engine stalls, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.99	A020 A021	Engine control module and pump control unit (injection pump) (EDC)	Engine stop via power monitor within EDC control module, Chapter 2710 Reg.A 'Engine Stop'.	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.9B	A020, A021	Engine control module, pump control unit (injection pump) (EDC)	Engine stop via engine stop solenoid valve, Chapter 2710 Reg.A Engine Stop	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.A2	K021	Relay "solenoid valve shut-off" (EDC)	Engine stop via relay K021, Chapter 2710 Reg.A Engine Stop	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.A6	A021, A020	Engine control module, pump control unit (injection pump) (EDC)	Engine stop, fault in signal processing in EDC control module	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.A8	A021	Engine control module (EDC)	Fault in barometric pressure sensor	Chapter 2000 Reg.B (EDC fault)		EDC level converter
1.2.A9	A020	Pump control unit (injection pump) (EDC)	Fault identified during self-diagnostic test	Reduced power, engine won't start, Chapter 2000 Reg.B (EDC fault)		

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.B1	A021, A020	Engine control module, pump control unit (injection pump) (EDC)	EDC CAN message: fault between EDC control module and pump control unit	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.B2	A020	Pump control unit (injection pump) (EDC)	Fault identified during self-diagnostic test	Reduced power, Chapter 2000 Reg.B (EDC fault)		
1.2.B3	A020	Pump control unit (injection pump) (EDC)	Fault in pump control unit power supply. Chapter 2710 Reg.A 'Engine stop'.	Engine stalls, engine won't start, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.B4	A020 A021	Engine control module, pump control unit (injection pump) (EDC)	CAN message: fault between pump control unit and engine control module	Engine idling, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.B5	A020	Pump control unit (injection pump) (EDC)	Fault during pump control unit self-diagnostic test (EEPROM checksum)	Reduced power, Chapter 2000 Reg.B (EDC fault)		
1.2.B6	A020	Pump control unit (injection pump) (EDC)	Fault during pump control unit self-diagnostic test (EEPROM status)	Reduced power, Chapter 2000 Reg.B (EDC fault)		
1.2.B7	A020, B025	Pump control unit (injection pump), engine speed sensor (EDC)	Fault in speed signal to pump control unit, signal processing fault in pump control unit	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter
1.2.B9	A020	Pump control unit (injection pump) (EDC)	Fault during injection pump self-diagnostic test (RAM fault)	Engine stops. Chapter 2000 Reg.B (EDC fault)		

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.C1	A020	Pump control unit (injection pump) (EDC)	Fault during pump control unit self-diagnostic test (solenoid valve output stage)	Chapter 2000 Reg.B (EDC fault)	**Fault only when starting** - check batteries	**Fault during operation** -check primary pressure and interior pressure of pump
1.2.C3	A021, A020	Engine control module, pump control unit (injection pump) (EDC)	CAN message: fault between engine control module and pump control unit when engine starts	Engine idling (720 rpm), Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.C4	A020	Pump control unit (injection pump) (EDC)	Fault in CAN communication to pump control unit	Engine idling (720 rpm), Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.C5	A021, A020	Engine control module, pump control unit (injection pump) (EDC)	Fault in engine stop via engine stop solenoid valve, Chapter 2710 Reg.A Engine Stop	Reduced power, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.C7	A020	Pump control unit (injection pump) (EDC)	Pump speed sensor fault (IWZ signal)	Engine stops. Chapter 2000 Reg.B (EDC fault)	**Fault only when starting** - check batteries	
1.2.C8	A021, B026, B028	EDC CAN BUS, engine control module, needle movement sensor, boost pressure sensor (EDC)	Engine control module: injection quantity calculation inaccurate	Engine stalls, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	EDC level converter
1.2.C9	A020	Pump control unit (injection pump) (EDC)	Fault during pump control unit self-diagnostic test (solenoid valve output stage)	Chapter 2000 Reg.B (EDC fault)	**Fault only when starting** - check batteries	
1.2.CA	A020	Pump control unit (injection pump) (EDC)	Injection controller out of range	Reduced power, Chapter 2000 Reg.B (EDC fault)	Check primary pressure and interior pressure of pump	Check EDC level converter, needle movement sensor

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1.2.CB	A021, A020	Engine control module, pump control unit (injection pump) (EDC)	Fault in CAN communication to pump control unit	Engine idling, Chapter 2000 Reg.B (EDC fault)	'EDC control' circuit diagram	
1.2.CD	A021, A020	Engine control module, pump control unit (injection pump) (EDC)	Fault in propagation time of CAN communication between pump control unit and EDC control module	Reduced power, Chapter 2000 Reg.B (EDC fault)		
1.2.DE	A002, A021	Enhanced control module, engine control module (EDC)	Propagation time of CAN communication missing	Restricted operating mode, Chapter 2000 Reg.B (EDC fault)		
1.2.E0	A021, A002	Engine control module, enhanced control module (EDC)	Fault during CAN communication between EDC control module and enhanced control module	Chapter 2000 Reg.B (EDC fault) Chapter 9000 Reg.E (Can Bus)	'EDC engine control', 'transmission bus' circuit diagram	
1.2.E1			Fault in speed signal (B014 - sensor, accumulator shaft, B015 - sensor - bevel pinion) or PTO is driving engine (running on)	Fault display, Chapter 2000 Reg.B (EDC fault)		
2.1.E0	A002, A034	ECU, enhanced control Joystick	CAN communication fault between ECU enhanced control and drive switch	Emergency operation -- check enhanced control bus (Chapter 9000 Reg.E)		
2.1.EE		ISO/LBS implement	Fault in LBS ECU	Mounted implement can no longer be operated via joystick controls or terminal.		
2.1.EF		ISO/LBS implement		Limited operation of implement, depending on manufacturer	For fault description, please see implement manufacturer's literature	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
3.1.01	A004	Control console	Internal RAM, EEPROM faults	Functions switched off: - button panel, - digital / analogue inputs, - LED actuation	Fit new control console	
3.1.02	A004	Control console	Internal RAM, EEPROM faults	Functions switched off: - button panel, - digital / analogue inputs, - LED actuation	Fit new control console	
3.1.03	A004	Control console	Internal RAM, EEPROM faults	Functions switched off: - button panel, - digital / analogue inputs, - LED actuation	Fit new control console	
3.1.04	A004	Control console	Internal RAM, EEPROM faults	Functions switched off: - button panel, - digital / analogue inputs, - LED actuation	Fit new control console	
3.1.05	A004	Control console	Internal 8.5 V fault, keypad fault	Functions switched off: - button panel, - digital / analogue inputs, - LED actuation	Fit new control console	
3.1.06	A004	Control console	External 8.5 V fault	Functions switched off: - button panel, - digital / analogue inputs, - LED actuation	Fit new control console	
4.1.01	A003, A034	Acceleration ramp I-IV	Signal fault	Continuation in emergency mode possible		TRANSMISSION manu. adjustment
			8.5 V supply fault		A013 fuse 5	Joystick
4.1.03		Neumaier reverse drive facility clutch pedal potentiometer	Signal fault	Continuation in emergency mode possible		(Neumaier Service Manual) calibration code "4011"
			8.5 V supply fault		A013 fuse 9	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.04	B017	Clutch pedal rotary position sensor	Signal fault	Loss of enhanced control / function in final speed control; cruise control does not function, TMS is switched off	'Transmission control' circuit diagram	TRANSMISSION, OPERATING RANGE
			8.5 V supply fault		A013 fuse 8	
4.1.05	B039	High pressure sensor II (push detection)	Signal fault	Loss of enhanced control functions during drive operation (no 'active parking function')		TRANSMISSION, TURBOCLUTCH
			12 V supply fault		A013 fuse 2	
4.1.06 **(with mech. engin-e contr-ol)**	B018	Target engine speed position sensor	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL
			8.5 V supply fault		A013 fuse 14	
4.1.06 **(for EDC or EMR)**	B029 or B055	EST foot throttle rotary position sensor (red), combi-sensor	Signal fault	Restricted operation (no hand throttle, no memory keys)	'EDC control' circuit diagram	TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL
			8.5 V supply fault		A013 fuse 17	
4.1.07	B008	Transmission drive pressure high-pressure sensor	Signal fault	Shifting from driving mode 1 to 2 not possible, TMS is switched off	'Transmission control' circuit diagram	TRANSMISSION, TURBOCLUTCH
			8.5 V supply fault		A013 fuse 3	
4.1.08	B016	Actual speed range position sensor	Signal fault	Not possible to change between driving modes; current driving mode is maintained	'Transmission control' circuit diagram	TRANSMISSION, OPERATING RANGE
			8.5 V supply fault		A013 fuse 13	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.20	A002, A034	ECU, enhanced control Joystick	Accelerator pedal release pot. ('Slide switch') not calibrated or EEPROM checksum error	Driving in accelerator pedal mode not possible		JOYSTICK, CAN - JOYSTICK calibration code" 4010"
4.1.21	S045	'Reverse operation sensor' solenoid switch	Signal fault			TRANSMISSION, FUNCTION OVERVIEW
4.1.22	A034	Joystick	Accelerator pedal release pot. ('Slide switch') faulty	Accelerator pedal mode not functioning		JOYSTICK, CAN - JOYSTICK
4.1.23	A003, A034	Joystick 'cruise control ON'	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
4.1.24	S015	Hand brake solenoid switch	Signal fault	Hand brake automatic mode not available	'Transmission control' circuit diagram	TRANSMISSION, OPERATING RANGE
4.1.25	A003, A034	Joystick 'Rapid reversing'	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manu. adjustment
4.1.26	A034	Joystick	Joystick signal 'accelerator pedal mode' faulty	Accelerator pedal mode not functioning		JOYSTICK, CAN - JOYSTICK
4.1.27	A034	Joystick	Rapid reverse button (F/R rocker) fault	F/R rocker in the armrest not functioning	(joystick lock)	JOYSTICK, CAN - JOYSTICK
4.1.28	A009	Transmission control unit, F/R incremental encoder	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION CONTROL
4.1.29	A003, A034	Joystick 'Rest position'	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manu. adjustment
4.1.2A	B015	Bevel pinion direction (=direction of travel) Hall sensor	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.2B	A003, A034	Button for driving mode selection	Signal fault	Actual driving mode is maintained; switching is not possible	'Transmission control' circuit diagram	TRANSMISSION, OPERATING RANGE
4.1.2C	A003, A034	Button to toggle between 'Neutral / Active stationary mode'	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, OPERATING RANGE
4.1.2D	S014 or S061	'Rapid reversing' control on control stalk	Signal fault	Rapid reversing still possible via joystick	'Transmission control' circuit diagram	TRANSMISSION manu. adjustment
4.1.2E	A003, A034	'v+ transmission control' (joystick forwards)	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manu. adjustment
4.1.2F	A003	'v- transmission control' (joystick to rear)	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manu. adjustment
4.1.30	MS	'Emergency mode hatch' solenoid switch	Signal fault	Continuation in emergency mode possible		Service Training ML 200 (X 990.005.023.027en)
4.1.31	B014	Hall sensor for accumulator shaft direction (partially also defined by 'Hydrostat')	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
4.1.32	A003, A034	'Activating key' within joystick	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manu. adjustment
4.1.33		'Automatic maximum output control' key on membrane keypad	Signal fault	Function not available		Service Training ML 200 (X 990.005.023.027en)
4.1.34		'Cruise control' key on membrane keypad	Signal fault	Function not available		Service Training ML 200 (X 990.005.023.027en)
4.1.35		'Store reverse transmission ratio' key on membrane keypad	Signal fault	Function not available		Service Training ML 200 (X 990.005.023.027en)

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.36		'Rear PTO automatic' key on membrane keypad	Signal fault	Function not available		see Service Training ML 200 (X 990.005.023.027en)
4.1.37		'Front PTO automatic' key on membrane keypad	Signal fault	Function not available		Service Training ML 200 (X 990.005.023.027en)
4.1.38		'Store forward transmission ratio' key on membrane keypad	Signal fault	Function not available		Service Training ML 200 (X 990.005.023.027en)
4.1.41	B011	Engine speed Hall sensor 2	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
			12 V supply fault		A013 fuse 2	
4.1.42	B014	Hall sensor for accumulator shaft speed (partially also defined by 'Hydrostat')	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
			8.5 V supply fault		A013 fuse 16	
4.1.44	B010	Engine speed Hall sensor 1	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
			12 V supply fault		A013 fuse 4	
4.1.45	B015	Bevel pinion speed (=travel speed) Hall sensor	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
			8.5 V supply fault		A013 fuse 7	
4.1.50	S017	'Transmission oil filter clogged' switch	Filter clogged	No further indication of clogging	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER switch function **not** active under 50° oil temperature

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.53	B009	Thermo switch	'Transmission oil temperature more than 110°C'	Continuing to drive will cause transmission damage!	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER
4.1.56	S017	'Transmission oil filter clogged' switch	Signal fault	No further display!	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER
4.1.58		Transmission slip monitor	Transmission output speed deviates by more than 30% from setpoint	may occur at extremely low temperatures in isolated cases; repeated occurrence under normal conditions results in a rise in oil temperature and transmission damage;TMS is switched off	Fault **not** active if **-** turboclutch function is on **-** clutch is depressed	TRANSMISSION, TRANSMISSION ADJUSTMENT ('ideal ratio / actual ratio' comparison)
4.1.59		'Emergency operation' actuation	Emergency operation activated manually without apparent reason			Fault code will not be stored
			Fault in emergency mode			
4.1.61	Y002	'Shifting from speed range 2 to 1' solenoid valve	Actuation fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, OPERATING RANGE
4.1.62	Y003	'Shifting from speed range 1 to 2' solenoid valve	Actuation fault	Continuation in emergency mode possible		TRANSMISSION, OPERATING RANGE
4.1.63	Y005	'Speed governor' solenoid valve (=limiting angle of rotation of actuator shaft)	Actuation fault	Possible to continue at max. 30 km/h	'Transmission control' circuit diagram	TRANSMISSION, FUNCTION OVERVIEW
4.1.64	Y004	Turboclutch solenoid valve	PWM actuation fault		'Transmission control' circuit diagram	TRANSMISSION, TURBOCLUTCH

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.65	Y006; Y051	'Engine brake' solenoid valve; Relay cardan brake	Actuation fault			
4.1.66	K051, Y053	Relay, active parking function, solenoid valve, active parking function	Relay faulty, solenoid valve faulty, signal transmission faulty	No active parking function	"Engine brake and active parking function" circuit diagram	
4.1.67	K051	Relay, active parking function	Relay test not required, relay contacts (Pin 3 / 5) stuck.	No active parking function.	'Engine brake and active parking function' circuit diagram	
4.1.70	A004	'Cruise control 1' key	Key fault	Cruise control cannot be activated	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
			Bus fault from A004 to transmission control module			TRANSMISSION, CRUISE CONTROL
4.1.71	A004	'Cruise control 2' key	Key fault	Cruise control cannot be activated	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
			Bus fault from A004 to transmission control module			TRANSMISSION, CRUISE CONTROL
4.1.72	S017	'Transmission oil filter clogged' switch	Signal fault	No further display or monitoring, possibly transmission damage	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER
4.1.73	B033	'Discharge oil temperature' sensor	Signal fault	No further display or monitoring, possibly transmission damage	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER
4.1.74	S015	'Hand brake ON/OFF sensor' solenoid switch	Signal fault	TMS is switched off	'Transmission control' circuit diagram	TRANSMISSION manu. adjustment
4.1.75	S045	'Reverse operation sensor' solenoid switch	Signal fault		'Transmission control' circuit diagram	TRANSMISSION, FUNCTION OVERVIEW
4.1.76	S047	Engine brake plunger-operated switch	Signal fault	TMS is switched off	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.77	A034	Joystick	Switch, acceleration ramp I ... IV faulty	Only acceleration rate III available		JOYSTICK, CAN - JOYSTICK
4.1.78	S053	Seat switch	Signal fault from seat switch	Selection of direction of travel is disabled in accelerator pedal mode when vehicle is stationary (the tractor driver must re-activate the selection of direction of travel)		TRANSMISSION manu. adjustment
4.1.7E	B035	Setpoint engine speed EDC/EMR rotary position sensor, 'hand throttle potentiometer'	Signal fault		'EDC control' circuit diagram	TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL, calibration code '4002'
4.1.7F	A003, A034	Memory key MIN/ MAX setpoint engine speed EDC/EMR	Signal fault		'EDC control' circuit diagram	Joystick
4.1.81	B010 B011	Engine speed Hall sensor 1/2	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, CRUISE CONTROL
4.1.82	B014 B015 B016	Drive collector shaft rpm Hall sensor / driving mode detection bevel pinion sensor	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	'Transmission control' circuit diagram	possible fault; Potentiometer range change B016, Hydrostat.- bevel pinion sensor
4.1.83	B014 B015	Accumulator shaft/bevel pinion speed Hall sensor	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	'Transmission control' circuit diagram	possible fault; Potentiometer range change B016, Hydrostat.- bevel pinion sensor
4.1.84	A003 or A034	Joystick switch (V, R, VR, cruise control, default position)	Plausibility error (=signals do not match logically)	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manu. adjustment; joystick

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.85	B010	Engine speed Hall sensor 1	Engine speed sensor does not supply plausible speed curves. Output speed increase or decrease is outside limits.	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL
4.1.86	B008, B039	High pressure sensor I (transmission drive pressure) ; High pressure sensor II (push detection)	Plausibility error between B008 sensor and B039 sensor	Loss of enhanced control when driving ('Active parking function not functioning'), TMS is switched off		TRANSMISSION, CRUISE CONTROL
4.1.87	S061	Switch, rapid reverse on the steering wheel adjustment	Plausibility error at the F / R switch, rapid reverse	F / R switch not functioning, rapid reverse on the steering wheel adjustment lever, S061- switch,	Check rapid reverse Chapter 9000 Reg. E	TRANSMISSION manu. adjustment
4.1.88	A034	Joystick	Plausibility error at the ON / OFF key of the accelerator pedal mode	Key not functioning		Joystick
4.1.90	A001 A004	Cruise control 1 - data communication	Data communication fault	Key not available		TRANSMISSION manu. adjustment
4.1.91	A001 A004	Cruise control 2 - data communication	Data communication fault	Key not available		TRANSMISSION manu. adjustment
4.1.92	A001 A002	Brake pedal left / right, data communication	Data communication fault	Automatic cruise control not available		TRANSMISSION manu. adjustment
4.1.93	A001 A002	Brake pedal left, data communication	Data communication fault	Automatic cruise control not available		TRANSMISSION manu. adjustment
4.1.94	A034	Joystick	CAN communication fault between A002 - ECU, enhanced control and A034 - joystick	Joystick functions limited.		Joystick

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.A0	A009	Transmission control unit	Actuation fault in transmission control module	Continuation in emergency mode possible		
4.1.A1	A009	Transmission control unit	Turn angle is not reached within 2 seconds.	Continuation in emergency mode possible	Mechanical test: Check smooth adjustment action in emergency operation	TRANSMISSION, TRANSMISSION ADJUSTMENT refer to Service Information 26/04
4.1.A2	A009 A001 or A002	Transmission control unit	CAN-bus actuation fault	Continuation in emergency mode possible	Chapter 9000 Reg. E - Testing CAN - BUS	TRANSMISSION, TRANSMISSION CONTROL
4.1.A3	A009	Transmission control unit	Fault or logical error in incremental sensor signal (actual position signal)	Continuation in emergency mode possible		TRANSMISSION, TRANSMISSION CONTROL
4.1.A4	A009	Transmission control unit	Fault or logical error in ECU signal.	Continuation in emergency mode possible		TRANSMISSION, TRANSMISSION CONTROL
4.1.A5	A009	Transmission control unit	Initial reference (=zero position) could not be reached during ignition 'ON'	Continuation in emergency mode possible		TRANSMISSION, TRANSMISSION ADJUSTMENT refer to Service Information 26/04
4.1.A6	A009	Transmission control unit	Reference point signal fault during operation	Continuation in emergency mode possible		TRANSMISSION, TRANSMISSION CONTROL
4.1.B0		all Bus users	Initialisation error	Restricted CAN-bus data communication	Chapter 9000 Reg. E - Testing CAN BUS	
4.1.B1	Y001 Y002	Speed range control	Illogical speed range operation (=fatal error)	Continuation in emergency mode possible		

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.B2	A002	ECU, enhanced control	Fault in EPROM programming (driving mode selector I / II)	Range cannot be changed while driving.		EOL reprogramming necessary
4.1.B3	A002	ECU, enhanced control	Fault in EPROM programming (rapid reversing ramp parameters)	Rapid reversing possible with standard values.		EOL reprogramming necessary
4.1.B4	B010	Sensor, engine 1	Input parameter values for plausibility monitoring are incorrect.	Standard parameters are stored, plausibility monitoring system remains functional.		EOL reprogramming necessary
4.1.B5	A002	ECU, enhanced control	Checksum error ramp parameter, rapid reverse for Tractor Management System (TMS)			EOL reprogramming necessary
4.1.B6		Equipment 'Neumaier reverse drive facility'	Neumaier reverse drive facility has failed or is faulty			(Neumaier Service Manual)
4.1.E0	Y004	Turboclutch characteristic	Wrong characteristic stored	Continuation in emergency mode possible		EOL reprogramming necessary
4.1.E1	A002	ECU, enhanced control	Pressure regulator control parameters in tractive power control (ML - transmission adjustment) not plausible or read incorrectly			EOL reprogramming necessary
4.1.E2	A002	ECU, enhanced control	Pressure regulator control parameters in tractive power control not plausible (B008 / B039) or read incorrectly.			EOL reprogramming necessary

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.E3	A002	ECU, enhanced control	Checksum error parameter for accelerator pedal mode	TMS is switched off		EOL reprogramming necessary
4.1.E4	A002	ECU, enhanced control	Checksum error parameter for active parking function			EOL reprogramming necessary
4.1.E8		Equipment 'Neumaier reverse drive facility'	Checksum error on clutch pedal potentiometer on Neumaier reverse drive facility or clutch calibration faulty			(Neumaier Service Manual) calibration code '4011'
4.1.E9	B016		Values for shift from range II to I outside tolerances	Shifting only possible when stationary		Calibration code '4003'
4.1.EA	A002		Internal fault (RAM / EEPROM)	Continuation in emergency mode possible		EOL reprogramming necessary
4.1.EB	B016	Speed range operation	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION, OPERATING RANGE; calibration code '4003'
4.1.EC	B029, B038 or B055	Specified engine speed rotary position sensor ('accelerator pedal') combi-sensor	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL, calibration code '4005'
4.1.ED	B017	Clutch pedal rotary position sensor	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION, OPERATING RANGE; calibration code '4001'
4.1.EE	A002	Transmission characteristic	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL, calibration code '4007'

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
4.1.EF	A002	Turboclutch characteristic	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION, TURBOCLUTCH FUNCTION, calibration code '4009'
4.1.FF	A001 A002	Transmission e-box	Internal fault (RAM / EEPROM)	Continuation in emergency mode possible		
5.1.00	A002	ECU, enhanced control	EEPROM checksum error			Run new EOL programming.
5.1.31	A004	4WD 100% key	Key/A004 signal fault	Other functions remain active	'4WD / Diff. Lock' circuit diagram	4WD ENHANCED CONTROL
			Bus fault A004 / A002			
5.1.32	A004	4WD automatic key	Key/A004 signal fault	Other functions remain active	'4WD / Diff. Lock' circuit diagram	4WD ENHANCED CONTROL
			Bus fault A004 / A002			
5.1.33	Y009	4WD clutch solenoid valve	Actuation fault	4WD engages	'4WD / Diff. Lock' circuit diagram	4WD ENHANCED CONTROL
5.1.34	B047	Proximity sensor - steering angle sensor 1	Signal / switch fault	4WD/diff. lock automatic system out of order	'4WD / Diff. Lock' circuit diagram	4WD ENHANCED CONTROL
5.1.35	B047	Proximity sensor - steering angle sensor 2	Signal / switch fault	4WD/diff. lock automatic system out of order	'4WD / Diff. Lock' circuit diagram	4WD ENHANCED CONTROL
5.1.51	A004	Diff. lock 100% key	Key/A004 signal fault	Other functions remain active	'4WD / Diff. Lock' circuit diagram	DIFFERENTIAL LOCK ENHANCED CONTROL
			Bus fault A004 / A002			
5.1.52	A004	Diff. lock automatic system key	Key/A004 signal fault	Other functions remain active	'4WD / Diff. Lock' circuit diagram	DIFFERENTIAL LOCK ENHANCED CONTROL
			Bus fault A004 / A002			
5.1.53	Y010	Diff. lock solenoid valve	Actuation fault	Diff. lock disengages	'4WD / Diff. Lock' circuit diagram	DIFFERENTIAL LOCK ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
5.1.54	S006	Left brake pedal solenoid switch	Signal fault	Differential lock automatic mode no longer available, TMS is switched off	'4WD / Diff. Lock' circuit diagram	DIFFERENTIAL LOCK ENHANCED CONTROL
5.1.55	S005	Right brake pedal solenoid switch	Signal fault	Differential lock automatic mode no longer available, TMS is switched off	'4WD / Diff. Lock' circuit diagram	DIFFERENTIAL LOCK ENHANCED CONTROL
5.1.61	B003	Suspension position sensor	Signal fault	No further functions available, suspension remains in last position. Continuation without suspension possible	'Suspension' circuit diagram	ENHANCED CONTROL SUSPENSION
			8.5 V supply fault		A013 fuse 18	
5.1.62	Y014	'Raise' suspension solenoid valve	12V supply fault	No further functions available, suspension remains in last position. Continuation without suspension possible	'Suspension' circuit diagram	ENHANCED CONTROL SUSPENSION
5.1.63	Y013	'Lower' suspension solenoid valve	12V supply fault	No further functions available, suspension remains in last position. Continuation without suspension possible	'Suspension' circuit diagram	ENHANCED CONTROL SUSPENSION
5.1.64	A004	'Suspension ON' key	Fault in signal from key to A004	Suspension not operational. Continuation without suspension possible		ENHANCED CONTROL SUSPENSION
			Fault in bus signal from A004 to A002		'CAN/enhanced controls bus' circuit diagram	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
5.1.65	A004	'Suspension OFF / Lock' key	Fault in signal from key to A004	Suspension not operational. Continuation without suspension possible		ENHANCED CONTROL SUSPENSION
			Fault in bus signal from A004 to A002		'CAN/enhanced controls bus' circuit diagram	
5.1.66	Y012	Valve, charge suspension	Actuation fault	Suspension moves to 'Lock' status.		Only in Farmer 400
5.1.6E	B003	Suspension position sensor	Incorrect calibration	Suspension not operational		ENHANCED CONTROL SUSPENSION calibration code '7666'
5.1.8D	A002	ECU, enhanced control	Checksum error old config data	Limited enhanced control operation		Run new EOL programming.
5.1.8F	A002	ECU, enhanced control	Checksum error old automatic mode sequence data	Limited enhanced control operation		Run new EOL programming.
5.1.91	A003, A034	'Rear automatic ON / OFF' key in joystick	Signal fault	Rear automatic not functioning		EPC REAR ACTUATORS; Joystick
5.1.93	A003, A034	'Front automatic ON / OFF' key in joystick	Signal fault	Front automatic not functioning		EPC REAR ACTUATORS; Joystick
5.1.95	A003, A034	'Automatic functions STOP' key in joystick	Signal fault	Automatic stop not functioning		EPC REAR ACTUATORS; Joystick
5.1.98	S025	LS pump pressure-operated switch	Minimum pressure is not reached	Valve may lock or quantity may be reduced	El. valves 1"circuit diagram", also refer to Chapter 9000 Reg. E	Fault code only after at least 1 second > 1000 rpm
5.1.99	S026	Auxiliary pump flow monitor	Minimum quantity is not reached	Control valve quantity automatically reduced to 20 l/min.	El. valves 1'circuit diagram', also refer to Chapter 9000 Reg. E	Fault code only after at least 1 second > 1000 rpm
5.1.99	S025, S026	LS pump pressure-operated switch, auxiliary pump flow monitor	Short to ground in the signal line	No monitoring for either pump.	El. valves 1'circuit diagram', also refer to Chapter 9000 Reg. E	ENHANCED CONTROL STEERING/FLUID LEVELS

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
5.1.9A	S026	Auxiliary pump flow monitor	Switch faulty (doesn't close / is open even without oil volume)	Plausibility error (wrong voltage value / Ohm value)	El. valves 1'circuit diagram', also refer to Chapter 9000 Reg. E	Fault code appears 8 seconds after 'Ignition ON'. Fault code can be cancelled, but appears again after 10 minutes.
5.1.9B	S025, S026	LS pump pressure-operated switch, auxiliary pump flow monitor	While engine is running, interruption between connector and e-box or connector and flow controller	No monitoring	El. valves 1'circuit diagram', also refer to Chapter 9000 Reg. E	Fault code with engine running
			Already before ignition ON, interruption between e-box and connector (the same when both components are disconnected)	No monitoring	El. valves 1'circuit diagram', also refer to Chapter 9000 Reg. E	Fault code already present at 'Ignition ON'.
5.1.9E	S034	Engine coolant level switch	Coolant level too low	Major engine damage!	'Instrument cluster' circuit diagram	Fault message can be cleared only temporarily; it is repeated every 2 minutes
5.1.9F	S034	Engine coolant level switch	Signal fault	No further monitoring	'Instrument cluster' circuit diagram	
5.1.B0	A002	ECU, enhanced control	CAN-bus communication restricted			EOL reprogramming necessary
5.1.FF	A002	ECU, enhanced control	Internal fault (RAM / EEPROM)			
6.1.01	A004	Rear PTO ON / OFF key in cab	Key / A004 signal fault	PTO disengages	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
			Bus fault A004 / A002			
6.1.02	S020	Right external 'Rear PTO ON / OFF' pushbutton	Signal fault	PTO can be engaged by pressing emergency key in cab for 5 seconds.	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
6.1.03	S019	Left external 'Rear PTO ON / OFF' pushbutton	Signal fault	PTO can be engaged by pressing emergency key in cab for 5 seconds.	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.04	Y008	Rear PTO clutch solenoid valve	Actuation fault	PTO disengages	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.05	B021	Hall speed sensor at rear PTO clutch	Signal fault	PTO can be engaged by pressing emergency key in cab for 5 seconds.	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
			12 V supply fault		A013 fuse 33	
6.1.06	A004	Rear PTO speed selector key 1	Key / A004 signal fault			REAR PTO ENHANCED CONTROL
			Bus fault A004 / A002			
6.1.07	A004	Rear PTO speed selector key 2	Signal fault			REAR PTO ENHANCED CONTROL
			Bus fault A004 / A002			
6.1.08	Y026	Rear PTO speed 1 solenoid valve	Actuation fault			REAR PTO ENHANCED CONTROL
6.1.09	Y027	Rear PTO speed 2 solenoid valve	Actuation fault			REAR PTO ENHANCED CONTROL
6.1.0A	A004	'Active' key (only NA version)	Key / A004 signal fault	PTO cannot be engaged		REAR PTO ENHANCED CONTROL
6.1.10	B020	Hall speed sensor on rear PTO stub shaft	Signal fault	PTO can be engaged by pressing emergency key in cab for 5 seconds.		REAR PTO ENHANCED CONTROL
			12 V supply fault		A013 fuse 32	
6.1.11	A004	Rear PTO automatic mode key	Signal fault	PTO disengages, automatic mode OFF	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.15	A004	NEUTRAL speed selector key	Key / A004 signal fault	PTO speed cannot be modified or selected	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.16	A004	540 rpm speed selector key	Key / A004 signal fault	PTO speed cannot be modified or selected	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
6.1.17	A004	750 rpm speed selector key	Key / A004 signal fault	PTO speed cannot be modified or selected	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.18	A004	1000 rpm speed selector key	Key / A004 signal fault	PTO speed cannot be modified or selected	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.1A	Y026	Rear PTO speed 540 solenoid valve	Actuation fault	PTO cannot be engaged	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.1B	Y027 **Not 900**	Rear PTO speed 750 solenoid valve	Actuation fault	PTO cannot be engaged	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.1B	Y026 **Only 900**	Rear PTO speed 750 solenoid valve	Actuation fault	PTO cannot be engaged	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.1C	Y028 **Not 900**	Rear PTO speed 1000 solenoid valve	Actuation fault	PTO cannot be engaged	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.1C	Y027 **Only 900**	Rear PTO speed 1000 solenoid valve	Actuation fault	PTO cannot be engaged	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.41	A004	Rear PTO ON / OFF key (in cab)	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	Speed selection moves to neutral, no preselection possible	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.42	S020	Right external 'Rear PTO ON / OFF' pushbutton	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	No speed selection, PTO cannot be engaged	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.43	S019	Left external 'Rear PTO ON / OFF' pushbutton	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	No speed selection, PTO cannot be engaged	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
6.1.45	B021	Hall speed sensor at rear PTO clutch	Speed selection in neutral, clutch not engaged, B021 shows speed, clutch disc package does not separate, PTO brake non operational	Activating speeds remains possible, press 'Engage PTO' key for more than 5 seconds (emergency mode).	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
			Speed is selected, clutch 100% engaged, clutch speed deviates by more than 20% from engine speed. Clutch is slipping.	Activating speeds remains possible, press 'Engage PTO' key for more than 5 seconds (emergency mode).	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
			Speed of PTO clutch is slower than PTO stub speed	Activating speeds remains possible, press 'Engage PTO' key for more than 5 seconds (emergency mode).	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.4A	A004	'Active' key (only NA version)	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	No PTO operation possible		REAR PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
6.1.50	B020	Rear PTO stub shaft Hall speed sensor	Speed at PTO stub shaft > 1300 rpm, signal fault in Hall sensor (B020 or B021)	Activating speeds remains possible, press 'Engage PTO' key for more than 5 seconds (emergency mode).	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
			Selected speed is active, speed at stub is lower than clutch speed, power supply fault to Hall sensor B020, speed selection solenoid valve (Y026, Y027, Y028) stuck in 'OFF' position.	Electric speed selection remains possible, press 'Engage PTO' key for more than 5 seconds (emergency mode). In case of a faulty solenoid valve, corresponding speed cannot be engaged.	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.55	A004	NEUTRAL speed selector key	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	All speeds can be selected and engaged. Neutral cannot be selected.	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.56	A004	540 rpm speed selector key	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	As long as '540' is selected, engagement can occur. '1000' and '750' can be selected, press 'Engage PTO' key for longer than 5 seconds. '540' cannot be selected.	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.57	A004	750 rpm speed selector key	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	As long as '750' is selected, engagement can occur. '1000' and '540' can be selected, press 'Engage PTO' key for longer than 5 seconds. '750' cannot be selected.	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
6.1.58	A004	1000 rpm speed selector key	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	As long as '1000' is selected, engagement can occur. '750' and '540' can be selected, press 'Engage PTO' key for longer than 5 seconds. '1000' cannot be selected.	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.60	B020 B021	PTO stub shaft Hall speed sensor B020, Hall speed sensor on PTO clutch B021	Actual speed of stub shaft differs by more than plus / minus 12% from setpoint speed of PTO clutch. Solenoid valve (Y026, Y027, Y028) wrongly wired or seized. Mechanical fault in speed selector. Signal fault at Hall sensor (B020, B021)	Electric speed selection remains possible, press 'Engage PTO' key for more than 5 seconds (emergency mode). In case of a faulty solenoid valve, corresponding speed cannot be engaged.	'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.A1	A004	Rear PTO 'ON' key	Communication fault		'PTOs' circuit diagram	REAR PTO ENHANCED CONTROL
6.1.AA	A004	'Active' key (only NA version)	Communication fault			REAR PTO ENHANCED CONTROL
6.1.B0	A004		CAN-bus communication restricted	Rear PTO non-operational		EOL reprogramming necessary.
6.1.B5	A004	NEUTRAL speed selector key	Communication fault			REAR PTO ENHANCED CONTROL
6.1.B6	A004	540 rpm speed selector key	Communication fault			REAR PTO ENHANCED CONTROL
6.1.B7	A004	750 rpm speed selector key	Communication fault			REAR PTO ENHANCED CONTROL
6.1.B8	A004	1000 rpm speed selector key	Communication fault			REAR PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
6.1.E0	A002	ECU, enhanced control	Checksum error parameter current control for speed selector			Run new EOL programming.
6.1.E1	A002	ECU, enhanced control	Checksum error PTO parametrisation			Run new EOL programming.
7.1.01	A004	Front PTO ON / OFF key	Key / A004 signal fault		'PTOs' circuit diagram	FRONT PTO ENHANCED CONTROL
			Bus fault A004 / A002			
7.1.02	S041	'Release front PTO brake' external pushbutton	Signal fault		'PTOs' circuit diagram	FRONT PTO ENHANCED CONTROL
7.1.03	Y034	'Release brake' front PTO solenoid valve	Actuation fault		'PTOs' circuit diagram	
7.1.04	Y011	'PTO clutch' front PTO solenoid valve	Actuation fault			FRONT PTO ENHANCED CONTROL
7.1.05	B002	Front PTO Hall speed sensor	Signal fault		'PTOs' circuit diagram	FRONT PTO ENHANCED CONTROL
			12 V supply fault		A013 fuse 22	
7.1.06	S042	Front PTO speed sensor 1 solenoid switch	Signal fault		Service Training ML 200 (X 990.005.023.027en)	FRONT PTO ENHANCED CONTROL
7.1.07	S042	Front PTO speed sensor 2 solenoid switch	Signal fault		Service Training ML 200 (X 990.005.023.027en)	FRONT PTO ENHANCED CONTROL
7.1.08	S042	Front PTO speed sensor 3 solenoid switch	Signal fault		Service Training ML 200 (X 990.005.023.027en)	FRONT PTO ENHANCED CONTROL
7.1.09	A004	Front PTO automatic mode key	Key / A004 signal fault		'PTOs' circuit diagram	FRONT PTO ENHANCED CONTROL
			Bus fault A004 / A002			
7.1.0A	A004	'Active' key (only NA version)	Key / A004 signal fault			FRONT PTO ENHANCED CONTROL
			Bus fault A004 / A002			

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
7.1.41	A004	Front PTO 'ON' key	Plausibility error, key has been pressed for more than 30 seconds			FRONT PTO ENHANCED CONTROL
7.1.42	S041	'Release brake' key	Plausibility error, key has been pressed for more than 30 seconds			FRONT PTO ENHANCED CONTROL
7.1.4A	A004	'Active' key (only NA version)	Plausibility error, key has been pressed for more than 30 seconds			FRONT PTO ENHANCED CONTROL
7.1.A1	A004	Front PTO 'ON' key	Communication fault			FRONT PTO ENHANCED CONTROL
7.1.A2			Communication fault			FRONT PTO ENHANCED CONTROL
7.1.AA	A004	'Active' key (only NA version)	Communication fault			FRONT PTO ENHANCED CONTROL
8.1.43	A004	Automatic function (switching from control console to joystick)	Fault in switch/A004 contact	Switching not possible	'Electrohydraulic power lift control' circuit diagram	REAR EPC ACKNOWLEDGEMEN-TS / STATUS
			CAN (K-bus) fault A004 / A005			
8.3.11	A005, A014, Y 021	Rear EPC, 'Raise' function	Fault in signal line to valve	Control locked	'Electrohydraulic power lift control' circuit diagram	REAR EPC ACTUATORS / STATUS
			Solenoid valve faulty			
			E-box fault			
8.3.12	Y021	Rear EPC, 'Lower' function	Fault in signal line to valve	Control locked	'Electrohydraulic power lift control' circuit diagram	REAR EPC ACTUATORS / STATUS
			Solenoid valve faulty			
			E-box fault			

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
8.3.14	S029	'Raise' rear power lift external pushbutton, cab, left rear	Signal line fault, key fault	Control locked	'Electrohydraulic power lift control' circuit diagram	REAR EPC EXTERNAL PUSHBUTTONS
8.3.15	S030	'Lower' rear power lift external pushbutton, cab, left rear	Signal line fault	Control locked	'Electrohydraulic power lift control' circuit diagram	REAR EPC EXTERNAL PUSHBUTTONS
8.3.16	A005, A014	E-box rear power lift, ECU, OBE	Stable voltage < 1 volt	Control locked	'Electrohydraulic power lift control' circuit diagram	REAR EPC CURRENT FAULT STATUS
8.3.17	A005, A014	E-box rear power lift, ECU, OBE	Supply voltage >18 volt	Control locked	'Electrohydraulic power lift control' circuit diagram	
8.3.18	S027	'Raise' rear power lift external pushbutton, cab, right rear	Signal line fault	Control locked	'Electrohydraulic power lift control' circuit diagram	REAR EPC EXTERNAL PUSHBUTTONS
			Key fault			
8.3.19	S028	'Lower' rear power lift external pushbutton, cab, right rear	Signal line fault	Control locked	'Electrohydraulic power lift control' circuit diagram	REAR EPC EXTERNAL PUSHBUTTONS
			Key fault			
8.3.21		Rotary control for 'Position/traction hybrid control' for rear EPC	Signal fault			Service Training EPC C (X 990.005.023.026en)
8.3.22	B030	Rear EPC position sensor	Signal fault	Control locked	'Electrohydraulic power lift control' circuit diagram	REAR EPC SETPOINT / POSITION SENSOR
			Fault in 9.5 V supply to A005			
8.3.23	A004	Rear EPC 'Depth control' setpoint setting	Signal line fault	Control locked		REAR EPC SETPOINT / POSITION SENSOR
8.3.24		Rear power lift 'lift height limit' rotary control	Signal fault	Control locked		Service Training EPC C (X 990.005.023.026en)

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
8.3.26		External position sensor for rear power lift	Signal line fault	Control locked	'Electrohydraulic power lift control' circuit diagram	
			Sensor out of position			
			Sensor fault			
8.3.28	A004	Control console ECU	Fault in rear EPC quick lift switch	'Raise'and 'Lower' only possible via external buttons.	'Electrohydraulic power lift control' circuit diagram	REAR EPC ACKNOWLEDGEMEN-TS / STATUS
8.3.31	B031	Rear EPC right draft-sensing pin	Signal line fault	Restricted control quality with traction control	'Electrohydraulic power lift control' circuit diagram	EPC REAR DRAUGHT SENSING PIN
			9.5 V supply fault			
			Sensor fault			
8.3.32	B032	Rear EPC left draught sensing pin	Signal line fault	Restricted control quality with traction control	'Electrohydraulic power lift control' circuit diagram	EPC-REAR DRAUGHT SENSING PIN
			Fault in 9.5 V supply to A005			
			Sensor fault			
8.3.34		Rear power lift 'Lowering speed' rotary control	Signal fault	Cannot be changed		Service Training EPC C (X 990.005.023.026en)
8.3.35		Rear power lift 'Operating mode' rotary control	Signal fault	Cannot be changed		Service Training EPC C (X 990.005.023.026en)
8.3.38		Rear power lift pressure sensor	Signal fault, pressure sensor fault	Control is continued		Service Training EPC C (X 990.005.023.026en)
8.3.39		Rear power lift 'Rapid lowering / Hitch lift' switch	Signal fault	Control is continued		Service Training EPC C (X 990.005.023.026en)

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
8.3.40	A004	Rear power lift quick lift switch	Fault in switch / A004 contact	Raising and lowering only via external controls	'Electrohydraulic power lift control' circuit diagram	REAR EPC ACTUATOR / STATUS
			CAN (K-Bus) fault A004 / A005			
8.3.41	A004	Rear power lift rapid lift control	Fault in switch/A004 contact	Rapid lowering system not functioning	'Electrohydraulic power lift control' circuit diagram	REAR EPC ACTUATOR / STATUS
			CAN (K-Bus) fault A004 / A005			
8.3.42	A004	Rear EPC, hitch function	Fault in switch/A004 contact	Hitch function not operational	'Electrohydraulic power lift control' circuit diagram	REAR EPC ACTUATOR / STATUS
			CAN (K-bus) fault A004 / A005			
8.3.43	A004	Automatic function (switching from control console to joystick)	Fault in switch/ A004 contact	Switching not possible	'Electrohydraulic power lift control' circuit diagram	REAR EPC ACTUATOR / STATUS
			CAN fault A004 / A005			
8.3.50	B031 draug-ht sensin-g pin	Rear EPC right draught sensing pin	Draught sensing pin is overloaded as a result of twisting lift in upper range (90-100% lift height) due to too tight setting	Fault code will not be stored	'Electrohydraulic power lift control' circuit diagram	EPC-REAR DRAUGHT SENSING PIN
8.3.51	B032 draug-ht sensin-g pin	Rear EPC left draught sensing pin	Draught sensing pin is overloaded as a result of twisting lift in upper range (90-100% lift height) due to too tight setting	Fault code will not be stored	'Electrohydraulic power lift control' circuit diagram	EPC-REAR DRAUGHT SENSING PIN
9.1.50	Y019	Spool valve fault	Valve cannot be identified via bus line.	No valve operation available	Signal flow diagram A002 CAN II pin 4 and 5	FRONT POWER LIFT / VENDI

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
9.1.51	Y019	Spool valve fault	EEPROM inconsistent	Valve moves into neutral position		FRONT POWER LIFT / VENDI
9.1.52		Spool valve fault	Supply voltage > 8 volts	Valve moves into neutral position		FRONT POWER LIFT / VENDI
9.1.53	Y019	Spool valve fault	Supply voltage > 18 volts	Valve moves into neutral position		FRONT POWER LIFT / VENDI
9.1.54	Y019	Spool valve fault	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Test control pressure M5, test diaphragm accumulator, test RV7/ FP	FRONT POWER LIFT / VENDI
			Hydraulic oil temperature too low			
9.1.55	Y019	Spool valve fault	Overvoltage (> 45 volts)	Valve moves into neutral position		
9.1.56	Y019	Spool valve fault	Magnet output stage fault within spool valve	Valve moves into neutral position		FRONT POWER LIFT / VENDI
9.1.57	Y019	Spool valve fault	Internal position sensor fault	Valve moves into neutral position		FRONT POWER LIFT / VENDI
9.1.58	Y019	Spool valve fault	Main piston cannot return to neutral position because of oil contamination.		Manual actuation must not have play, slider must go into the middle position by itself	FRONT POWER LIFT / VENDI
9.1.59	Y019	Spool valve fault	Main piston cannot return to neutral position when switched on because of oil contamination.			FRONT POWER LIFT / VENDI
9.1.5A	Y019	Spool valve fault	Main piston deflected too far	Valve moves into neutral position		FRONT POWER LIFT / VENDI
9.1.5B	Y019	Spool valve fault	Floating position is not reached	Valve moves into neutral position		FRONT POWER LIFT / VENDI

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
9.1.5C	Y019	Spool valve fault	Floating position has been set manually	No consequences		FRONT POWER LIFT / VENDI
9.1.5F	Y019	Spool valve fault	Setpoint message missing	Valve moves into neutral position		FRONT POWER LIFT / VENDI
			Configuration message missing			
			Setpoint message is not plausible			
			Configuration message is not plausible			
			Potentiometer or PWM fault			
9.1.A0	A002	ECU, enhanced control	EEPROM fault while storing	Set values (enhanced controls) are not stored.		
9.1.A1	A002	ECU, enhanced control	EEPROM fault while loading	Set values (enhanced controls) cannot be read.		
9.1.B0	B040	Position sensor	Not calibrated	No position control available		FRONT POWER LIFT calibration code "9002"
9.1.B1	B040	Position sensor	Signal fault	No position control available	'Spool valves 2' circuit diagram	Front power lift
			8.5 V supply fault		A013 fuse 11	
9.1.B2	A004	Depth control setpoint potentiometer	Not calibrated	Setpoint cannot be set		FRONT POWER LIFT calibration code '9001'
9.1.B3	A004	Depth control setpoint potentiometer	Switch / A004 signal fault	Setpoint cannot be set		Front power lift
9.1.C0	A004	Control console	Not available or bus not connected			
9.1.C1	A004	Automatic (switching from control console to armrest)	Key fault			Front power lift

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
9.1.C2	A004	Valve locked	Key fault			Front power lift
9.1.C3	A004	Floating position	Key fault			Front power lift
9.1.C4	A004	'Lift' quick lift switch	Key fault			Front power lift
9.1.C5	A004	'Lower' quick lift switch	Key fault			Front power lift
9.1.C6 9.1.C7 9.1.C8 9.1.C9 9.1.CA	A004	Control console	CAN-bus fault	Malfunctions which cannot be further specified		
9.1.D0	S021	'Raise' front power lift external pushbutton	Key fault	Non-operational	'Spool valves 2' circuit diagram	Front power lift
9.1.D1	S022	'Lower' front power lift external pushbutton	Key fault	Non-operational	'Spool valves 2' circuit diagram	Front power lift
9.1.D2	S021, S022	External button front power lift 'raise', external button front power lift 'lower'	Button double operation (button possibly stuck)		'Spool valves 2' circuit diagram	Front power lift
9.3.11		Rear EPC, 'Raise' function	Fault in signal line to valve	Control locked		Service Training EPC C (X 990.005.023.026en)
			Solenoid valve faulty			
			E-box fault			
9.3.12		Front EPC, 'Lower' function	Fault in signal line to valve	Control locked		Service Training EPC C (X 990.005.023.026en)
			Solenoid valve faulty			
			E-box fault			
9.3.14		Pushbutton ext. front power lift "raise"	Signal line fault, key fault	Control locked		Service Training EPC C (X 990.005.023.026en)
9.3.15		Pushbutton ext. front power lift 'lower'	Signal line fault	Control locked		Service Training EPC C (X 990.005.023.026en)

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
9.3.17		Battery	Supply voltage >18 volt	Control locked		Service Training EPC C (X 990.005.023.026en)
9.3.21		Rotary control for 'position/traction hybrid control' for front EPC	Signal fault			Service Training EPC C (X 990.005.023.026en)
9.3.22		Front EPC rotary position sensor	Signal fault	Control locked		Service Training EPC C (X 990.005.023.026en)
9.3.23		Front EPC 'Depth control' setpoint setting	Signal line fault	Control locked		Service Training EPC C (X 990.005.023.026en)
9.3.24		Front power lift 'lift height limit' rotary control	Signal fault	Control locked		Service Training EPC C (X 990.005.023.026en)
9.3.26		External position sensor for front power lift	Signal line fault	Control locked		Service Training EPC C (X 990.005.023.026en)
9.3.28		Quick lift switch, front	Fault in front EPC quick lift switch	'Raise' and 'Lower' only possible via external buttons.		Service Training EPC C (X 990.005.023.026en)
9.3.34		Front power lift 'Lowering speed' rotary control	Signal fault	Cannot be changed		Service Training EPC C (X 990.005.023.026en)
A.1.10	Y015	Spool valve fault, valve 1	Valve cannot be recognised by valve bus	No valve operation available	Signal flow diagram A002 CAN II pin 4 and 5	
A.1.11	Y015	Spool valve fault, valve 1	EEPROM inconsistent	Valve moves into neutral position		
A.1.12	Y015	Spool valve fault, valve 1	Supply voltage < 8 volts	Valve moves into neutral position		
A.1.13	Y015	Spool valve fault, valve 1	Supply voltage > 18 volts	Valve moves into neutral position		

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.14	Y015	Spool valve fault, valve 1	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Test control pressure M5, test diaphragm accumulator, test RV7/ FP	ELECTRICAL VALVES VALVE 1 / VENDI
			Hydraulic oil temperature too low			
A.1.15	Y015	Spool valve fault, valve 1	Overvoltage (> 45 volts)	Valve moves into neutral position		
A.1.16	Y015	Spool valve fault, valve 1	Magnet output stage fault within spool valve	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1 / VENDI
A.1.17	Y015	Spool valve fault, valve 1	Internal position sensor fault	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1 / VENDI
A.1.18	Y015	Spool valve fault, valve 1	Main piston cannot return to neutral position because of oil contamination.	Undefined and uncontrolled functions can occur, DANGER!	Manual actuation must not have play, slider must go into the middle position by itself	ELECTRICAL VALVES VALVE 1 / VENDI
A.1.19	Y015	Spool valve fault, valve 1	Main piston cannot return to neutral position when switched on because of oil contamination.			ELECTRICAL VALVES VALVE 1 / VENDI
A.1.1A	Y015	Spool valve fault, valve 1	Main piston deflected too far	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1 / VENDI
A.1.1B	Y015	Spool valve fault, valve 1	Floating position is not reached	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1 / VENDI
A.1.1C	Y015	Spool valve fault, valve 1	Floating position has been set manually	No consequences		ELECTRICAL VALVES VALVE 1 / VENDI

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.1F	Y015	Spool valve fault, valve 1	Setpoint message is missing or not plausible	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1 / VENDI
			Configuration message is missing or not plausible			
			Potentiometer or PWM fault			
A.1.20	Y016	Spool valve fault, valve 2	Valve cannot be recognised by valve bus	No valve operation available	Signal flow diagram A002 CAN II pin 4 and 5	
A.1.21	Y016	Spool valve fault, valve 2	EEPROM inconsistent	Valve moves into neutral position		
A.1.22	Y016	Spool valve fault, valve 2	Supply voltage < 8 volts	Valve moves into neutral position		
A.1.23	Y016	Spool valve fault, valve 2	Supply voltage > 18 volts	Valve moves into neutral position		
A.1.24	Y016	Spool valve fault, valve 2	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Test control pressure M5, test diaphragm accumulator, test RV7/ FP	ELECTRICAL VALVES VALVE 2 / VENDI
			Hydraulic oil temperature too low			
A.1.25	Y016	Spool valve fault, valve 2	Overvoltage (> 45 volts)	Valve moves into neutral position		
A.1.26	Y016	Spool valve fault, valve 2	Magnet output stage fault within spool valve	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2 / VENDI
A.1.27	Y016	Spool valve fault, valve 2	Internal position sensor fault	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2 / VENDI
A.1.28	Y016	Spool valve fault, valve 2	Main piston cannot return to neutral position because of oil contamination.	Undefined and uncontrolled functions can occur, DANGER!	Manual actuation must not have play, slider must go into the middle position by itself	ELECTRICAL VALVES VALVE 2 / VENDI

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.29	Y016	Spool valve fault, valve 2	Main piston cannot return to neutral position when switched on because of oil contamination.			ELECTRICAL VALVES VALVE 2 / VENDI
A.1.2A	Y016	Spool valve fault, valve 2	Main piston deflected too far	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2 / VENDI
A.1.2B	Y016	Spool valve fault, valve 2	Floating position is not reached	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2 / VENDI
A.1.2C	Y016	Spool valve fault, valve 2	Floating position has been set manually	No consequences		ELECTRICAL VALVES VALVE 2 / VENDI
A.1.2F	Y016	Spool valve fault, valve 2	Setpoint message is missing or not plausible	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2 / VENDI
			Configuration message is missing or not plausible			
			Potentiometer or PWM fault			
A.1.30	Y017	Spool valve fault, valve 3	Valve cannot be recognised by valve bus	No valve operation available	Signal flow diagram A002 CAN II pin 4 and 5	
A.1.31	Y017	Spool valve fault, valve 3	EEPROM inconsistent	Valve moves into neutral position		
A.1.32	Y017	Spool valve fault, valve 3	Supply voltage < 8 volts	Valve moves into neutral position		
A.1.33	Y017	Spool valve fault, valve 3	Supply voltage > 18 volts	Valve moves into neutral position		
A.1.34	Y017	Spool valve fault, valve 3	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Test control pressure M5, test diaphragm accumulator, test RV7/ FP	ELECTRICAL VALVES VALVE 3 / VENDI
			Hydraulic oil temperature too low			

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.35	Y017	Spool valve fault, valve 3	Overvoltage (> 45 volts)	Valve moves into neutral position		
A.1.36	Y017	Spool valve fault, valve 3	Magnet output stage fault within spool valve	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3 / VENDI
A.1.37	Y017	Spool valve fault, valve 3	Internal position sensor fault	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3 / VENDI
A.1.38	Y017	Spool valve fault, valve 3	Main piston cannot return to neutral position because of oil contamination.	Undefined and uncontrolled functions can occur, DANGER!	Manual actuation must not have play, slider must go into the middle position by itself	ELECTRICAL VALVES VALVE 3 / VENDI
A.1.39	Y017	Spool valve fault, valve 3	Main piston cannot return to neutral position when switched on because of oil contamination.			ELECTRICAL VALVES VALVE 3 / VENDI
A.1.3A	Y017	Spool valve fault, valve 3	Main piston deflected too far	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3 / VENDI
A.1.3B	Y017	Spool valve fault, valve 3	Floating position is not reached	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3 / VENDI
A.1.3C	Y017	Spool valve fault, valve 3	Floating position has been set manually	No consequences		ELECTRICAL VALVES VALVE 3 / VENDI
A.1.3F	Y017	Spool valve fault, valve 3	Setpoint message is missing or not plausible	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3 / VENDI
			Configuration message is missing or not plausible			
			Potentiometer or PWM fault			
A.1.40	Y018	Spool valve fault, valve 4	Valve cannot be recognised by valve bus	No valve operation available	Signal flow diagram A002 CAN II pin 4 and 5	
A.1.41	Y018	Spool valve fault, valve 4	EEPROM inconsistent	Valve moves into neutral position		

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.42	Y018	Spool valve fault, valve 4	Supply voltage < 8 volts	Valve moves into neutral position		
A.1.43	Y018	Spool valve fault, valve 4	Supply voltage > 18 volts	Valve moves into neutral position		
A.1.44	Y018	Spool valve fault, valve 4	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Test control pressure M5, test diaphragm accumulator, test RV7/ FP	ELECTRICAL VALVES VALVE 4 / VENDI
			Hydraulic oil temperature too low			
A.1.45	Y018	Spool valve fault, valve 4	Overvoltage (> 45 volts)	Valve moves into neutral position		
A.1.46	Y018	Spool valve fault, valve 4	Magnet output stage fault within spool valve	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4 / VENDI
A.1.47	Y018	Spool valve fault, valve 4	Internal position sensor fault	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4 / VENDI
A.1.48	Y018	Spool valve fault, valve 4	Main piston cannot return to neutral position because of oil contamination.	Undefined and uncontrolled functions can occur, DANGER!	Manual actuation must not have play, slider must go into the middle position by itself	ELECTRICAL VALVES VALVE 4 / VENDI
A.1.49	Y018	Spool valve fault, valve 4	Main piston cannot return to neutral position when switched on because of oil contamination.			ELECTRICAL VALVES VALVE 4 / VENDI
A.1.4A	Y018	Spool valve fault, valve 4	Main piston deflected too far	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4 / VENDI
A.1.4B	Y018	Spool valve fault, valve 4	Floating position is not reached	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4 / VENDI
A.1.4C	Y018	Spool valve fault, valve 4	Floating position has been set manually	No consequences		ELECTRICAL VALVES VALVE 4 / VENDI

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.4F	Y018	Spool valve fault, valve 4	Setpoint message is missing or not plausible	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4 / VENDI
			Configuration message is missing or not plausible			
			Potentiometer or PWM fault			
A.1.A0	A002	E-box	EEPROM fault while storing			
A.1.A1	A002	E-box	EEPROM fault while loading			
A.1.A2			More valves connected than registered via end-of-line programming. Program.	Not all valves can be operated		
A.1.B0	A003, A034	Crossgate lever	Not calibrated	Valves cannot be operated		Calibration code '1001'
A.1.B1	A003, A034	Crossgate lever	X-axis signal fault	Valves cannot be operated	'Spool valves 1' circuit diagram	SPOOL VALVES OPERATION
A.1.B2	A003, A034	Crossgate lever	Y-axis signal fault	Valves cannot be operated	'Spool valves 1' circuit diagram	SPOOL VALVES OPERATION
A.1.B3	A003, A034	Crossgate lever	X and Y axis signal fault; crossgate lever missing	Valves cannot be operated	'Spool valves 1' circuit diagram	SPOOL VALVES OPERATION
A.1.B4	A003, A034	Crossgate lever	Zero position signals of X- and Y-axes are not identical to the 'Rest position' signal (=plausibility check)	Valves cannot be operated	'Spool valves 1' circuit diagram	SPOOL VALVES OPERATION
A.1.B5	A003, A034	Crossgate lever	'Rest position' signal fault	Valves cannot be operated	'Spool valves 1' circuit diagram	SPOOL VALVES OPERATION
A.1.C0	A004	Control console	Not available or bus not connected			

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.C1	A004	Automatic (switching from control console to armrest)	Key fault			SPOOL VALVES OPERATION
A.1.C2	A004	Valve locked	Key fault			SPOOL VALVES OPERATION
A.1.C3	A004	Control console	Floating position key faulty	No floating position		SPOOL VALVES OPERATION
A.1.C4	A004	Control console	Time function key faulty	No time function		SPOOL VALVES OPERATION
A.1.C5	A004	Switching function	Key fault			SPOOL VALVES OPERATION
A.1.C6 A.1.C7 A.1.C8 A.1.C9 A.1.CA	A004	Control console	CAN-bus fault	Malfunctions which cannot be further specified		
A.1.CB	A034	Joystick	CAN joystick not available. (CAN bus fault)	Valves cannot be operated.		Run new EOL programming.
A.1.CC	A002, A034	ECU, enhanced control, joystick	CAN communication fault ECU and joystick.	Limited valve operation		Run new EOL programming.
A.1.D1	A003, A034	Joystick button for spool valve 3 Raising / Lowering	Key fault	No valve operation available		SPOOL VALVES OPERATION
A.1.D3	A003, A034	Joystick button for spool valve 4 Raising / Lowering	Key fault	No valve operation available		SPOOL VALVES OPERATION
A.1.D4	S023	Release for external operation / position of front power lift	Solenoid switch or signal fault	Impossible to switch mode from hydraulic connection to front power lift	'Spool valves 1' circuit diagram	STANDARD FRONT POWER LIFT

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.D5	S022	'Lower' external pushbutton		No valve operation available	'Spool valves 1' circuit diagram	STANDARD FRONT POWER LIFT or ENHANCED-CONTRO-L FRONT POWER LIFT
A.1.D6	S021	External 'Raise' pushbutton		No valve operation available	'Spool valves 1' circuit diagram	STANDARD FRONT POWER LIFT or ENHANCED-CONTRO-L FRONT POWER LIFT
A.1.D7	S036	Hydraulic oil level sensor	Break in cable or sensor disconnected	No further monitoring	'Spool valves 1' circuit diagram	ENHANCED CONTROL STEERING FLUID LEVELS
A.1.D9	S036	Hydraulic oil level sensor	Tank is empty	All valves are locked	'Spool valves 1' circuit diagram	ENHANCED CONTROL STEERING FLUID LEVELS
A.1.DA	B022	'Kickout' pressure-operated switch (only in NA model)	Switch fault	'Kickout' function not available	'Spool valves 1' circuit diagram	
A.1.DB			Hydraulic oil tank characteristic implausible.	Incorrect tank display		EOL reprogramming necessary.
A.1.DD	S021, S022	External button 'raise', external button 'lower',	Button double operation (button possibly stuck)	No valve operation available	'Spool valves 2' circuit diagram	STANDARD FRONT POWER LIFT or ENHANCED-CONTRO-L FRONT POWER LIFT
A.1.F0	Y032	Control pressure solenoid valve	Fault in electric actuation system or solenoid valve.	Valves in neutral position	'Spool valves 1' circuit diagram	ELECTRICAL VALVES 1-4
A.1.F1	Y033 MVV	'Flush valve' solenoid	12V supply fault	No oil heating during start-up process for LS pump at low ambient temperature	'Suspension' circuit diagram	ELECTRICAL VALVES 1-4

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
A.1.F2	Y032	Control pressure solenoid valve	current too high (short to ground)	Valves in neutral position	'Spool valves 1' circuit diagram	ELECTRICAL VALVES 1-4
A.1.F3	Y032	Control pressure solenoid valve	break in wiring	Valves in neutral position	'Spool valves 1' circuit diagram	ELECTRICAL VALVES 1-4
A.1.FA	S067	External valve actuation button 'raise'	Button faulty; signal line faulty	External valve actuation no longer possible	'Spool valves 1' circuit diagram	
A.1.FB	S068	External valve actuation button 'lower'	Button faulty; signal line faulty	External valve actuation no longer possible	'Spool valves 1' circuit diagram	
A.1.FC	S067; S068	External valve actuation button 'raise' / 'lower'	Button double operation (button possibly stuck)	External valve actuation no longer possible	'Spool valves 1' circuit diagram	
B.1.11	A002	ECU, enhanced control	Electrical fault in TI automatic operation (user teach-in fault (ECU or sensor))	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.12	A002, A008	ECU enhanced control, terminal	Electrical fault in TI automatic operation (user teach-in fault (ECU or sensor))	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.13	A002	ECU, enhanced control	Electrical fault in TI automatic operation	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.14	A002	ECU, enhanced control	Electrical fault in TI automatic operation	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.21	A002	ECU, enhanced control	CAN Bus - Communication fault in TI automatic operation	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
B.1.22	A002, A008	ECU enhanced control, terminal	CAN Bus - Communication fault between A008 - Terminal and Teach-in (program run)	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	
B.1.23	A002, A004	ECU enhanced control, control console	CAN Bus - Communication fault between A004 - Control console and Teach-in (program run)	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.24	A002, A034	ECU enhanced control, drive switch	CAN Bus - Communication fault between A034 - Drive switch and Teach-in (program run)	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.41	A002	ECU, enhanced control	'Internal communication Teach-in' error counter overflow	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.42	A002, A008	ECU enhanced control, terminal	Error counter overflow between A008 - Terminal and Teach-in (program run)	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.43	A002, A004	ECU enhanced control, control console	Error counter overflow between A004 - Control console and Teach-in (program run)	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.44	A002, A034	ECU enhanced control, drive switch	Error counter overflow between A304 - Drive switch and Teach-in (program run)	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
B.1.B0	A002	ECU, enhanced control	Read error during Teach-in (program run)	Teach-in does not function	See also Chapter 9700 Reg. A - Principle of Variotronic TI operation ('Teach-in')	ENHANCED CONTROL TeachIn
B.1.B4	A002	ECU, enhanced control	Teach-in error - working storage function	Teach-in does not function --- Switch ignition OFF then ON, if error occurs again --> load new band edge programming in ECU Enhanced Control; if error occurs again --> replace ECU Enhanced Control		ENHANCED CONTROL TeachIn
F.1.00	A034	Joystick	Initialisation error in reading EEPROM	Check A034 - drive switch with FENDIAS diagnostics program		Run new EOL programming (A034 - joystick)
F.1.B0	A034	Joystick	Routing data GD false			Run new EOL programming (A034 - joystick)
F.1.F0	A034	Joystick	Diagnosis / filter data checksum error			Run new EOL programming (A034 - joystick)
F.1.FF	A034	Joystick	Byte address checksum error			Run new EOL programming (A034 - joystick)

Storingscodetabellen

FENDT 411 Vario COM III 400 .. / 1001-
FENDT 412 Vario COM III 401 .. / 1001-
FENDT 413 Vario COM III 402 .. / 1001-
FENDT 414 Vario COM III 403 .. / 1001-
FENDT 415 Vario COM III 404 .. / 1001-

FENDT 712 Vario COM III 724 .. / 1001-
FENDT 714 Vario COM III 725 .. / 1001-
FENDT 716 Vario COM III 726 .. / 1001-
FENDT 718 Vario COM III 727 .. / 1001-

FENDT 818 Vario COM III 729 .. / 1001-
FENDT 820 Vario COM III 731 .. / 1001-

Fault code table
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FENDT 400 / 700 / 800 Vario COM III

400 .. 1001- / 401 .. 1001- / 402 .. 1001- / 403 .. 1001- / 404 .. 1001-
724 .. 1001- / 725 .. 1001- / 726 .. 1001- / 727 .. 1001- / 729 .. 1001- / 731 .. 1001-

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
0.0.11	**A002** - ECU, enhanced control	Data transfer A002 restricted to A051	Tractor can be driven using the foot throttle	Wiring diagram Sheet 22 / 6	EOL programming
0.0.12	**A008** - Terminal	Bus fault	No functions available, no display	Wiring diagram Sheet 22 / 6	
0.0.13	**A004** - ECU, control panel	Bus fault	No functions available, no display	Wiring diagram Sheet 22 / 6	
0.0.14	**A009** - Actuator unit	Bus fault	No functions available, no display	Wiring diagram Sheet 22 / 6	
0.0.15	**A002** - ECU, enhanced control	Bus fault; 4WD differential lock switch	No functions available, no display	Wiring diagram Sheet 22 / 6	
0.0.16	**A002** - ECU, enhanced control	Rear PTO bus fault	No functions available, no display	Wiring diagram Sheet 22 / 6	
0.0.17	**A002** - ECU, enhanced control	Front PTO bus fault	No functions available, no display	Wiring diagram Sheet 22 / 6	
0.0.18	**A014** - ECU, EPC OBE	Bus fault	No functions available, no display	Wiring diagram Sheet 22 / 6	
0.0.1A	**A002** - ECU, enhanced control **Y015** - Auxiliary control valve **Y016** - Auxiliary control valve **Y017** - Auxiliary control valve **Y018** - Auxiliary control valve **Y019** - Auxiliary control valve	Bus fault	No functions available, no display	Wiring diagram Sheet 22 / 6 Sheet 26	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
0.0.1B	**A002** - ECU, enhanced control	Teach-in bus fault – master (Variotronic TI) ("teach-in data transfer faulty")	Emergency mode	Wiring diagram Sheet 22 / 6	
0.0.1E	ECU, Neumaier	Neumaier reversing system bus fault	Neumaier system not functioning		(Neumaier service manual)
0.0.1F	**A034** - Driving switch, CAN bus	Driving switch bus fault (driving switch data transfer faulty)	Emergency operation, auxiliary control valve not functioning	Wiring diagram Sheet 22 / 6	JOYSTICK CAN - JOYSTICK
0.0.20	**A007** - Instrument panel	CAN bus fault between A007 and tractor electronics	No functions available, no display	Wiring diagram Sheet 22 / 6	
0.1.50	**A007** - Instrument panel	VDO instrument panel EEPROM not programmed	Malfunctions in instrument panel		EOL programming
0.1.54	**B019** - Sensor, compressed air supply	Sensor faulty, Signal line fault	No display	Wiring diagram Sheet 24	
		12 V supply fault		A013 fuse 25	
0.1.55	**S036** - Switch, hydraulic oil level indicator	Sensor faulty, Signal line fault	No monitoring	Wiring diagram Sheet 26	ENHANCED CONTROL FLUID LEVELS
0.1.56	**B089** - Temperature sensor, Deutz	Sensor faulty, Signal line fault	No monitoring	Wiring diagram Sheet 36	SERDIA
0.1.57	**B092** - Sensor, charge air pressure/ temperature	Sensor faulty, Signal line fault	No monitoring	Wiring diagram Sheet 36	SERDIA
0.1.59	**B034** - Immersed tube sensor (fuel)	Sensor faulty, Signal line fault	No display	Wiring diagram Sheet 24	
1.1.01	**B055** - Sensor, foot throttle	Signal too high, signal too low, no signal for longer than 2000 ms	Chapter 2000 Reg.B (EDC fault)	Wiring diagram Sheet 35	TRANSMISSION LOAD LIMIT CONTROL

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.1.03	**B055** - Sensor, foot throttle	No match B055 combination sensor (PIN 3 to PIN 6)	Restricted operating mode, Chapter 2000 Reg.B (EDC fault)	Wiring diagram Sheet 35	TRANSMISSION LOAD LIMIT CONTROL Calibration code "4005"
1.1.04	**A002** - ECU, enhanced control	Tractor Management System (TMS) checksum error	TMS is switching off		EOL programming
1.1.05	**A051** - ECU, engine control unit (EDC 7).	Not able to read off engine configuration from EDC control unit	TMS is switching off	Wiring diagram Sheet 35	
1.1.06	**A002** - ECU, enhanced control	EST memory could not be reserved	TMS non-operable		EOL programming
1.1.07	**A002** - ECU, enhanced control	Motor parameter checksum incorrect	Driving possible in emergency operating mode		EOL programming
1.1.7E	**B035** - Sensor, hand throttle	Signal too high, signal too low.	Restricted operating mode, Chapter 2000 Reg.B (EDC fault)	Wiring diagram Sheet 33	TRANSMISSION LOAD LIMIT CONTROL
		Faulty 8.5 V supply		Fuse 26	
1.1.7F	**A034** - Driving switch, CAN bus	Hand throttle memory keys defective (electrical fault). No communication with EST.	Last RPM speed is retained. Engine RPM speed can be changed using hand or foot throttle.		JOYSTICK CAN - JOYSTICK
1.1.9E	**A002** - ECU, enhanced control **A004** - ECU, control panel	CAN connection (enhanced control BUS): A002 to A004 ECU faulty	Restricted operating mode, Chapter 2000 Reg.B (EDC fault)	Wiring diagram Sheet 22 / 23	JOYSTICK CAN - JOYSTICK
1.1.9F	**A034** - Driving switch, CAN bus	A034 driving switch (memory keys) defective; CAN connection A002 ECU to A034 faulty	Restricted operating mode, Chapter 2000 Reg.B (EDC fault)	Wiring diagram Sheet 22 / 23	JOYSTICK CAN - JOYSTICK

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.1.A0	**A051** - ECU, engine control unit (EDC 7).	Wrong engine control unit (A051), wrong EOL programming	Torque limited following fault grading. Chapter 2000 Reg.B (EDC fault)		EOL programming new data record
1.1.A1	**A002** - ECU, enhanced control **A051** - ECU, engine control unit (EDC 7).	CAN enhanced control module (A002) connection to engine control unit (A051) faulty	Chapter 2000 Reg.B (EDC fault)	Wiring diagram Sheet 28	SERDIA
1.1.B0	**A050** - ECU, basic control unit **A051** - ECU, engine control unit (EDC 7).	CAN bus communication and function restricted	restricted engine function		EOL programming
1.1.E0	**A002** - ECU, enhanced control	EEPROM checksum is incorrect	Restricted operating mode, Chapter 2000 Reg.B (EDC fault)		Calibration code "4002"
If the following errors occur (1.2...), they must be deleted in the engine control unit following error correction with SERDIA!					
1.2.00	**A051** - ECU, engine control unit (EDC 7).	Original error, Deutz			SERDIA (delete error)
1.2.01	**G001** - Battery 1 (12 VDC)	Input, battery, battery voltage outside setpoint range	Start not possible		SERDIA (delete error) FC:0016, 0017
1.2.02	**B092** - Sensor, charge air pressure/ temperature	Boost pressure sensor, break in wiring or short circuit. Charge pressure outside setpoint range	Reduced power	Wiring diagram Sheet 36	SERDIA (delete error) FC:0020, 0021
1.2.03	**B092** - Sensor, charge air pressure/ temperature	Sensor Charge air temperature, break in wiring or short circuit. Charge air temperature above setpoint value	Reduced power	Wiring diagram Sheet 36	SERDIA (delete error) FC:0095, 0096

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.2.04	**B089** - Temperature sensor, Deutz	Coolant temperature sensor: break in wiring or short circuit. Coolant temperature outside setpoint area		Wiring diagram Sheet 36	SERDIA (delete error) FC:0037, 0038
1.2.06	**B085** - Camshaft speed **B088** - Crankshaft speed	Camshaft sensor defective or signal absent; Crankshaft sensor defective or signal absent; RPM signals from camshaft/crankshaft out of phase	Starting possible after prolonged unsuccessful attempt, engine runs "rough"	Wiring diagram Sheet 36	SERDIA (delete error) FC:004B, 004C, 004D, 004E, 004F, 0050
1.2.07	**B091** - Sensor, water in fuel	Fuel filter/water sedimentor sensor, brake in wiring or short circuit Water level above setpoint range	Drain water from fuel filter	Wiring diagram Sheet 36	SERDIA (delete error) FC:0057, 0059
1.2.08	**B087** - Fuel low pressure	Brake in wiring or short circuit Fuel low pressure outside setpoint rage	Check fuel system, possibly air in system or fuel filter clogged	Wiring diagram Sheet 36	SERDIA (delete error) FC:005A, 005B, 005E
1.2.0A	**B035** - Sensor, hand throttle	Break in wiring or short circuit, signal from idle sensor not plausible			SERDIA (delete error) FC: 008A
1.2.0E	**B090** - Sensor, oil pressure	Brake in wiring or short circuit. Oil pressure outside of setpoint range		Wiring diagram Sheet 36	SERDIA (delete error) FC:00C4, 00C5, 00C6, 00C7
1.2.12	**S002** - Switch, ignition	Pin 50, Ignition starter switch sticking		Wiring diagram Sheet 7	SERDIA (delete error) FC:00E3, 00E4
1.2.13	**A051** - ECU, engine control unit (EDC 7).	Travel speed above setpoint range, signal fault			SERDIA (delete error) FC:00E8
1.2.14	**B055** - Sensor, foot throttle	Brake in wiring or short circuit Signal does not match idle sensor signal	Speed maintained, can be used by hand throttle by increasing speed briefly	Wiring diagram Sheet 35	SERDIA (delete error) FC:000C, 000E, 000F

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.2.21	**K063** - Heater flange relay	Brake in wiring or short circuit	Pre-heater inoperable	Wiring diagram Sheet 36	SERDIA (delete error) FC:0011
1.2.22	**K063** - Heater flange relay	Break in wiring or incorrectly connected	Pre-heater inoperable	Wiring diagram Sheet 36	SERDIA (delete error) FC:0013, 0014
1.2.23	**S047** - Switch, engine brake	Brake in wiring or short circuit		Wiring diagram Sheet 9	SERDIA (delete error) FC:0034
1.2.24	**Y006** - Solenoid valve, engine brake	Faulty valve, faulty actuation		Wiring diagram Sheet 36	SERDIA (delete error) FC:004A
1.2.25	**Y006** - Solenoid valve, engine brake	Brake in wiring or short circuit		Wiring diagram Sheet 36	SERDIA (delete error) FC:0052
1.2.27	**G001** - Battery 1 (12 VDC)	Short circuit to battery or earth	Start not possible		SERDIA (delete error) FC:00B6, 00B7, 00BA, 00BC
1.2.2C	**K008** - Relay, starter lockout	Brake in wiring or short circuit	Start not possible	Wiring diagram Sheet 7	SERDIA (delete error) FC:00DF, 00E0
1.2.30	**B004** - Vacuum switch (air filter)	Pressure loss above setpoint range	Clean/replace air filter	Wiring diagram Sheet 35	SERDIA (delete error) FC:000B, 00F2
1.2.34	**S034** - Switch, coolant level	Coolant outside of setpoint level	Check coolant level	Wiring diagram Sheet 35	SERDIA (delete error) FC:0025
1.2.37	**A051** - ECU, engine control unit (EDC 7).	Fan speed above setpoint range			SERDIA (delete error)
1.2.3A	**A051** - ECU, engine control unit (EDC 7).	Misfiring			SERDIA (delete error) FC:002F
1.2.50	**Y091** - Dispensing unit (fuel)	Dispensing unit not connected, short circuit to battery or earth	Message that the engine will stop after approx. 5 minutes is displayed	Wiring diagram Sheet 36	SERDIA (delete error) FC:00B0, 00B1, 00B2, 00B3

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.2.51	Mechanical rail pressure limiting valve	Rail pressure limiting valve was opened	Message that the engine will stop after approx. 5 minutes is displayed		SERDIA (delete error) FC:00D0, 00EC
1.2.52	**B086** - Rail pressure sensor	Brake in wiring or short circuit	Message that the engine will stop after approx. 5 minutes is displayed	Wiring diagram Sheet 36	SERDIA (delete error) FC:00D1, 00D2
1.2.53	**B086** - Rail pressure sensor	Rail pressure outside setpoint range	Message that the engine will stop after approx. 5 minutes is displayed	Wiring diagram Sheet 36	SERDIA (delete error) FC:00D3, 00D4, 00D5, 00D6, 00D7, 00D8
1.2.54	**B086** - Rail pressure sensor	Rail pressure monitoring deactivated			SERDIA (delete error) FC:00AF
1.2.60	**A051** - ECU, engine control unit (EDC 7).	Misfiring on several cylinders			SERDIA (delete error) FC:002E
1.2.61	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 1			SERDIA (delete error) FC:0026
1.2.62	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 2			SERDIA (delete error) FC:0027
1.2.63	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 3			SERDIA (delete error) FC:0028
1.2.64	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 4			SERDIA (delete error) FC:0029
1.2.65	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 5			SERDIA (delete error) FC:002A
1.2.66	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 6			SERDIA (delete error) FC:002B

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.2.70	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 1 outside setpoint range or absent.			SERDIA (delete error) FC:0018
1.2.71	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 2 outside setpoint range or absent.			SERDIA (delete error) FC:0019
1.2.72	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 3 outside setpoint range or absent.			SERDIA (delete error) FC:001A
1.2.73	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 4 outside setpoint range or absent.			SERDIA (delete error) FC:001B
1.2.74	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 5 outside setpoint range or absent.			SERDIA (delete error) FC:001C
1.2.75	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 6 outside setpoint range or absent.			SERDIA (delete error) FC:001D
1.2.78	**A051** - ECU, engine control unit (EDC 7).	Short circuit in cylinder bank 1 injector valves			SERDIA (delete error) FC:0099
1.2.79	**A051** - ECU, engine control unit (EDC 7).	Break in wiring of cylinder bank 1 injector valves			SERDIA (delete error) FC:009A
1.2.7A	**A051** - ECU, engine control unit (EDC 7).	Short circuit in cylinder bank 2 injector valves			SERDIA (delete error) FC:009B
1.2.7B	**A051** - ECU, engine control unit (EDC 7).	Break in wiring of cylinder bank 2 injector valves			SERDIA (delete error) FC:009C
1.2.7C	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 1			SERDIA (delete error) FC:009F, 00A0
1.2.7D	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 2			SERDIA (delete error) FC:00A1, 00A2

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.2.7E	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 3			SERDIA (delete error) FC:00A3, 00A4
1.2.7F	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 4			SERDIA (delete error) FC:00A5, 00A6
1.2.80	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 5			SERDIA (delete error) FC:00A7, 00A8
1.2.81	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 6			SERDIA (delete error) FC:00A9, 00AA
1.2.90	**Y094** - Actuator unit, AGR (exhaust gas recirculation)	Short circuit to battery, earth, break in wiring or short circuit			SERDIA (delete error) FC:0045, 0046, 0047, 0048
1.2.B0	**A051** - ECU, engine control unit (EDC 7).	CAN message, no throttle pedal or outside setpoint range		Wiring diagram Sheet 36	SERDIA (delete error) FC:005E
1.2.B1	**A051** - ECU, engine control unit (EDC 7).	CAN message, no control function mode		Wiring diagram Sheet 36	SERDIA (delete error) FC:005F
1.2.B2	**A051** - ECU, engine control unit (EDC 7).	CAN message, no engine protection mechanism		Wiring diagram Sheet 36	SERDIA (delete error) FC:006A
1.2.B3	**A051** - ECU, engine control unit (EDC 7).	CAN message, no pre-heater or engine command		Wiring diagram Sheet 36	SERDIA (delete error) FC:006E
1.2.B4	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:0070
1.2.B5	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:0071
1.2.B6	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:0075

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.2.B7	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:0076
1.2.B8	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:0078
1.2.B9	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:0079
1.2.BA	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:007A
1.2.BB	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:007B
1.2.BC	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:007C
1.2.BD	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:007D
1.2.BE	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:007E
1.2.BF	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:007F
1.2.C0	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Wiring diagram Sheet 36	SERDIA (delete error) FC:0080
1.2.C1	**A051** - ECU, engine control unit (EDC 7).	CAN bus times out with at least one sent message		Wiring diagram Sheet 36	SERDIA (delete error) FC:0083

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.2.C2	**A051** - ECU, engine control unit (EDC 7).	CAN bus A, break in wiring or short circuit	Possible to drive with foot throttle/throttle pedal	Wiring diagram Sheet 35	SERDIA (delete error) FC:00C0
1.2.C3	**A051** - ECU, engine control unit (EDC 7).	CAN bus B, break in wiring or short circuit	Possible to drive with foot throttle/throttle pedal	Wiring diagram Sheet 36	SERDIA (delete error) FC:00C1
1.2.C4	**A051** - ECU, engine control unit (EDC 7).	CAN bus C, break in wiring or short circuit	Possible to drive with foot throttle/throttle pedal	Wiring diagram Sheet 36	SERDIA (delete error) FC:00C2
1.2.D0	**A051** - ECU, engine control unit (EDC 7).	Faulty external pressure sensor			SERDIA (delete error) FC:0010
1.2.D1	**A051** - ECU, engine control unit (EDC 7).	Faulty engine control unit			SERDIA (delete error) FC:008D
1.2.D2	**A051** - ECU, engine control unit (EDC 7).	EEPROM memory access			SERDIA (delete error) FC:008E
1.2.D3	**A051** - ECU, engine control unit (EDC 7).	Injector valve (Chip) faulty			SERDIA (delete error) FC:009E
1.2.D4	**A051** - ECU, engine control unit (EDC 7).	Injector valve (Chip) faulty			SERDIA (delete error) FC:009E
1.2.D5	**A051** - ECU, engine control unit (EDC 7).	Faulty engine control			SERDIA (delete error) FC:00B8
1.2.D6	**A051** - ECU, engine control unit (EDC 7).	Engine monitoring system overloaded			SERDIA (delete error) FC:00DA
1.2.D7	**A051** - ECU, engine control unit (EDC 7).	Incorrect voltage for internal 5 V reference source 1			SERDIA (delete error) FC:00DB
1.2.D8	**A051** - ECU, engine control unit (EDC 7).	Incorrect voltage for internal 5 V reference source 2			SERDIA (delete error) FC:00DD
1.2.D9	**A051** - ECU, engine control unit (EDC 7).	Incorrect voltage for internal 5 V reference source 3			SERDIA (delete error) FC:00DE

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
1.2.DB	**A051** - ECU, engine control unit (EDC 7).	Faulty serial communication interface			SERDIA (delete error) FC:00EB
2.1.E0	**A002** - ECU, enhanced control **A034** - Driving switch, CAN bus	CAN communication between A002 and A034 faulty	Emergency operation – check enhanced control bus (Chapter 9000 Reg.E)		JOYSTICK CAN - JOYSTICK
2.1.EE	ISO/LBS mounted implement	ISO/LBS job computer failed	Mounted implement can no longer be operated via joystick controls or terminal.	For fault description, please refer to implement manufacturer's documentation	
2.1.EF	ISO/LBS mounted implement	ISO/LBS job computer failed	Restricted operation of mounted implement, depending on manufacturer	For fault description, please refer to implement manufacturer's documentation	
3.1.01	**A004** - ECU, control panel	Internal RAM, EEPROM faults	Functions switched off: – Keypad, - digital / analogue inputs, – LED actuation	Replace control panel	
3.1.02	**A004** - ECU, control panel	Internal RAM, EEPROM faults	Functions switched off: – Keypad, - digital / analogue inputs, - LED actuation	Replace control panel	
3.1.03	**A004** - ECU, control panel	Internal RAM, EEPROM faults	Functions switched off: – Keypad, - digital / analogue inputs, - LED actuation	Replace control panel	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
3.1.04	**A004** - ECU, control panel	Internal RAM, EEPROM faults	Functions switched off: – Keypad, - digital / analogue inputs, - LED actuation	Replace control panel	
3.1.05	**A004** - ECU, control panel	Internal 8.5 V fault, keypad fault	Functions switched off: – Keypad, - digital / analogue inputs, - LED actuation	Replace control panel	
3.1.06	**A004** - ECU, control panel	External 8.5 V fault	Functions switched off: – Keypad, - digital / analogue inputs, - LED actuation	Replace control panel	
4.1.03	Neumaier reversing system – clutch pedal potentiometer	Signal fault	Continuation in emergency mode possible		(Neumaier service manual) Calibration code "4011"
		Faulty 8.5 V supply		A013 fuse 9	
4.1.04	**B017** - Sensor, clutch pedal	Signal fault	Loss of enhanced control/function in final speed control; no Tempomat cruise control function, TMS is switched off	Wiring diagram Sheet 29	TRANSMISSION TRAVEL RANGE
		Faulty 8.5 V supply		A013 fuse 8	
4.1.05	**B039** - Sensor, high-pressure 2	Signal fault	Loss of enhanced control functions in operating mode (no "active hold function")	Wiring diagram Sheet 29	TRANSMISSION TURBO CLUTCH
		12 V supply fault		A013 fuse 2	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
4.1.06	**B055** - Sensor, foot throttle	Signal fault	Restricted operation (no hand throttle, no memory keys)	Wiring diagram Sheet 35	TRANSMISSION LOAD LIMIT CONTROL
		Faulty 8.5 V supply		A013 fuse 17	
4.1.07	**B008** - Sensor, high-pressure 1	Signal fault	Travel range switching from 1 to 2 not possible, TMS switched off	Wiring diagram Sheet 29	TRANSMISSION TURBO CLUTCH
		Faulty 8.5 V supply		A013 fuse 3	
4.1.08	**B016** - Sensor, travel range detection	Signal fault	Travel range switching not possible; current travel range is retained	Wiring diagram Sheet 29	TRANSMISSION TRAVEL RANGE
		Faulty 8.5 V supply		A013 fuse 13	
4.1.20	**A002** - ECU, enhanced control	Accelerator pedal release potentiometer ("slide switch") not calibrated or EEPROM checksum error	Driving in accelerator pedal mode not possible		JOYSTICK CAN - JOYSTICK Calibration code "4010"
4.1.22	**A034** - Driving switch, CAN bus	Accelerator pedal release potentiometer ("slide switch") faulty	Throttle pedal mode inoperable		JOYSTICK CAN - JOYSTICK
4.1.23	**A034** - Driving switch, CAN bus	Signal fault ("Tempomat cruise control on")	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION, CRUISE CONTROL
4.1.25	**A034** - Driving switch, CAN bus	Signal fault ("Quick reverse")	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION man. ADJUSTMENT
4.1.26	**A034** - Driving switch, CAN bus	Driving switch signal "throttle pedal mode" faulty	Throttle pedal mode inoperable		JOYSTICK CAN - JOYSTICK

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
4.1.28	**A009** - Actuator unit VR incremental encoder	Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION TRANSMISSION ADJUSTMENT
4.1.29	**A034** - Driving switch, CAN bus joystick "centre position"	Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	JOYSTICK CAN - JOYSTICK
4.1.2A	**B015** - Sensor, bevel pinion (= travel direction)	Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION, CRUISE CONTROL
		Faulty 8.5 V supply		A013 fuse 7	
4.1.2B	**A034** - Driving switch, CAN bus	Signal fault	Current travel range remains applied; further switching not possible	Wiring diagram Sheet 29	JOYSTICK CAN - JOYSTICK
4.1.2C	**A034** - Driving switch, CAN bus	Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	JOYSTICK CAN - JOYSTICK
4.1.2D	**S061** - Switch, quick reverse	Signal fault	Quick reverse still possible via joystick	Wiring diagram Sheet 29	JOYSTICK CAN - JOYSTICK
4.1.2E	**A034** - Driving switch, CAN bus	"v+ transmission adjustment" (joystick forwards) Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	JOYSTICK CAN - JOYSTICK
4.1.2F	**A034** - Driving switch, CAN bus	"v- transmission adjustment" (joystick to rear) Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	JOYSTICK CAN - JOYSTICK
4.1.31	**B014** - Sensor, hydrostatic collecting shaft (= travel direction)	Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION TEMPOMAT cruise control
		Faulty 8.5 V supply		A013 fuse 16	
4.1.32	**A034** - Driving switch, CAN bus	"Activation button" on joystick Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	JOYSTICK CAN - JOYSTICK
4.1.42	**B014** - Sensor, hydrostatic collecting shaft (= RPM)	Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION, CRUISE CONTROL

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
		Faulty 8.5 V supply		A013 fuse 16	
4.1.44	**B010** - Sensor, engine speed	Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION, CRUISE CONTROL
		12 V supply fault		A013 fuse 4	
4.1.45	**B015** - Sensor, bevel pinion (= travel speed)	Signal fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION TEMPOMAT cruise control
		Faulty 8.5 V supply		A013 fuse 7	
4.1.50	**S017** - Switch, transmission oil contamination	Filter clogged	No further indication of clogging	Wiring diagram Sheet 29	TRANSMISSION TRANSMISSION OIL/FILTER switch function inactive below oil temperature of 50°C
4.1.53	**B009** - Discharge temperature	"Transmission oil temperature above 110°C"	transmission damage if journey is continued!	Wiring diagram Sheet 29	TRANSMISSION TRANSMISSION OIL/FILTER
4.1.58	Transmission slip monitor	Transmission output speed deviates by more than 30% from setpoint value	May occur at extremely low temperatures in isolated cases; repeated occurrence under normal conditions causes a rise in oil temperature and further transmission damage; TMS is switched off	Fault not active when turbo-clutch (TC) function is on – clutch depressed,	TRANSMISSION TRANSMISSION ADJUSTMENT (Comparison "ideal gear ratio / actual gear ratio")
4.1.59	"Emergency operation" actuation	Emergency operation activated manually without apparent reason			Fault code is not stored
		Fault in emergency mode			
4.1.61	**Y002** - Solenoid valve, travel range I "switching from travel range 2 - 1"	Actuation fault	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION TRAVEL RANGE

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
4.1.62	**Y003** - Solenoid valve, travel range II "switching from travel range 1 – 2"	Actuation fault	Continuation in emergency mode possible		TRANSMISSION TRAVEL RANGE
4.1.63	**Y005** - Solenoid valve, speed governor (= restriction of actuator shaft rotation angle)	Actuation fault	Possible to continue at max. 30 km/h	Wiring diagram Sheet 29	TRANSMISSION FUNCTIONAL OVERVIEW
4.1.64	**Y004** - Solenoid valve, turbo-clutch	PWM actuation fault		Wiring diagram Sheet 29	TRANSMISSION TURBO CLUTCH
4.1.65	**Y053** - Active hold function solenoid valve	Actuation fault	No active hold function	Wiring diagram Engine brake – stationary control	TRANSMISSION FUNCTIONAL OVERVIEW
4.1.66	**K051** - Relay, active hold function **Y053** - Active hold function solenoid valve	Relay faulty, solenoid valve faulty, signal line faulty	No active hold function	Wiring diagram Engine brake – stationary control	TRANSMISSION FUNCTIONAL OVERVIEW
4.1.67	**K051** - Relay, active hold function	Relay test unsuccessful, relay contacts (pin 3 / 5) stuck.	No active hold function	Wiring diagram Engine brake and active hold function	TRANSMISSION FUNCTIONAL OVERVIEW
4.1.68	**A002** - ECU, enhanced control **A009** - Actuator unit	Transmission characteristic shifted in neutral point			TRANSMISSION CALIBRATION
4.1.70	**A004** - ECU, control panel	Faulty button "Tempomat cruise control 1" button	Tempomat cruise control cannot be activated	Wiring diagram Sheet 29	TRANSMISSION TEMPOMAT cruise control
4.1.71	**A004** - ECU, control panel	Faulty button "Tempomat cruise control 2" button	Tempomat cruise control cannot be activated	Wiring diagram Sheet 29	TRANSMISSION TEMPOMAT cruise control
4.1.72	**S017** - Switch, transmission oil contamination	Signal fault	No further display or monitoring, possibly transmission damage	Wiring diagram Sheet 29	TRANSMISSION TRANSMISSION OIL/FILTER
4.1.73	**B009** - Discharge temperature	Signal fault	No further display or monitoring, possibly transmission damage	Wiring diagram Sheet 29	TRANSMISSION TRANSMISSION OIL/FILTER

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
4.1.74	**S015** - Switch, hand brake "OPEN/CLOSED" detection	Signal fault	TMS is switched off	Wiring diagram Sheet 29	TRANSMISSION man. ADJUSTMENT
4.1.76	**S047** - Switch, engine brake	Signal fault	TMS is switched off	Wiring diagram Sheet 29	TRANSMISSION TEMPOMAT cruise control
4.1.77	**A034** - Driving switch, CAN bus	Acceleration ramp I ... IV switch faulty	Only acceleration rate III available		JOYSTICK CAN - JOYSTICK
4.1.78	**S053** - Switch, driver seat	Signal from seat switch faulty	Selection of direction of travel is disabled in accelerator pedal mode when vehicle is stationary (the driver must re-activate the selection of direction of travel)		TRANSMISSION man. ADJUSTMENT
4.1.82	**B014** - Sensor, hydrostatic collecting shaft **B015** - Sensor, bevel pinion **B016** - Sensor, travel range detection	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION TEMPOMAT cruise control
4.1.83	**B014** - Sensor, hydrostatic collecting shaft **B015** - Sensor, bevel pinion	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION TEMPOMAT cruise control
4.1.84	**A034** - Driving switch, CAN bus	Plausibility error (F, R, FR, Tempomat cruise control, default positions do not match)	Continuation in emergency mode possible	Wiring diagram Sheet 29	JOYSTICK CAN - JOYSTICK
4.1.85	**B010** - Sensor, engine speed	Engine speed sensor does not report plausible speed curves. Output speed increase or decrease outside limits.	Continuation in emergency mode possible	Wiring diagram Sheet 29	TRANSMISSION LOAD LIMIT CONTROL

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
4.1.86	**B008** - Sensor, high-pressure 1 **B039** - Sensor, high-pressure 2	Plausibility error between B008 sensor (transmission drive pressure) and B039 sensor (push detection)	Loss of enhanced control when driving ("no active hold function"), TMS switched off		TRANSMISSION TEMPOMAT cruise control
4.1.87	**S061** - Switch, quick reverse	Plausibility error at VR switch, quick reverse	VR switch inoperable, quick reverse on steering wheel adjustment lever, S061 switch,	Check quick reverse Chapter 9000 Reg. E	TRANSMISSION man. ADJUSTMENT
4.1.88	**A034** - Driving switch, CAN bus	Plausibility error at the ON/OFF button of the accelerator pedal mode	Button not functioning		JOYSTICK CAN - JOYSTICK
4.1.89	**B009** - Discharge temperature	Plausibility error, transmission temperature	Sensor or wiring faulty		TRANSMISSION TRANSMISSION OIL/FILTER
4.1.94	**A034** - Driving switch, CAN bus	CAN communication fault between A002 ECU, enhanced control and A034 joystick	Driving switch functions limited.		JOYSTICK CAN - JOYSTICK
4.1.A1	**A009** - Actuator unit	Turn angle is not reached within 2 seconds.	Continuation in emergency mode possible	Mechanical check: check smooth adjustment action in emergency mode.	TRANSMISSION TRANSMISSION ADJUSTMENT
4.1.A2	**A009** - Actuator unit	CAN bus actuation fault	Continuation in emergency mode possible	Check CAN bus, Chapter 9000 Reg. E	TRANSMISSION TRANSMISSION ADJUSTMENT
4.1.A3	**A009** - Actuator unit	Fault or logic error in incremental sensor signal (actual position signal)	Continuation in emergency mode possible		TRANSMISSION TRANSMISSION ADJUSTMENT
4.1.A4	**A009** - Actuator unit	Fault or logical error in EST signal.	Continuation in emergency mode possible		TRANSMISSION TRANSMISSION ADJUSTMENT

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
4.1.A5	**A009** - Actuator unit	Initial reference (=zero position) could not be found during ignition ON	Continuation in emergency mode possible		TRANSMISSION TRANSMISSION ADJUSTMENT
4.1.A6	**A009** - Actuator unit	Reference point signal fault during operation	Continuation in emergency mode possible		TRANSMISSION TRANSMISSION ADJUSTMENT
4.1.B0	All bus users	Initialisation error	Restricted CAN bus data communication	Check CAN bus, Chapter 9000 Reg. E	EOL programming
4.1.B2	**A002** - ECU, enhanced control	Fault in EPROM programming (travel range selector I/II)	Range cannot be changed while driving.		EOL programming
4.1.B3	**A002** - ECU, enhanced control	Fault in EPROM programming (quick reverse rate parameters)	Quick reversing possible with standard values.		EOL programming
4.1.B4	**B010** - Sensor, engine speed	Input parameter values for plausibility monitoring are incorrect.	Standard parameters are stored, plausibility monitoring system remains functional.		EOL programming
4.1.B5	**A002** - ECU, enhanced control	Checksum error rate parameters, quick reverse for Tractor Management System (TMS)			EOL programming
4.1.B6	"Neumaier reversing system" equipment	Neumaier reversing system control failed or faulty			(Neumaier service manual)
4.1.E0	**Y004** - Solenoid valve, turbo-clutch	Wrong characteristic stored	Continuation in emergency mode possible		Calibration code "4009"
4.1.E1	**A002** - ECU, enhanced control	Pressure regulator control parameters in tractive power control (ML transmission adjustment) not plausible or read incorrectly			EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
4.1.E2	**A002** - ECU, enhanced control	Pressure regulator control parameters in tractive power control not plausible (B008/ B039) or read incorrectly.			EOL programming
4.1.E3	**A002** - ECU, enhanced control	Checksum error, parameter for throttle pedal mode	TMS is switched off		EOL programming
4.1.E4	**A002** - ECU, enhanced control	Checksum error for active hold function parameters			EOL programming
4.1.E5	**A002** - ECU, enhanced control	Checksum error for range control parameters			EOL programming
4.1.E6	**A002** - ECU, enhanced control	Checksum error for load limit control parameters			EOL programming
4.1.E7	**A002** - ECU, enhanced control	Checksum error for joystick parameters			EOL programming
4.1.E8	"Neumaier reversing system" equipment	Checksum error in clutch pedal potentiometer on Neumaier reversing system, or clutch calibration faulty			(Neumaier service manual) Calibration code "4011"
4.1.E9	**A002** - ECU, enhanced control	Values for shift from range II to I outside tolerance	Shifting only possible when stationary		Calibration code "4003"
4.1.EA	**A002** - ECU, enhanced control	Internal fault (RAM/EEPROM)	Continuation in emergency mode possible		EOL programming
4.1.EB	**B016** - Sensor, travel range detection	No calibration or drifted, altered values	Continuation in emergency mode possible		TRANSMISSION TRAVEL RANGE Calibration code "4003"
4.1.EC	**B055** - Sensor, foot throttle	No calibration or drifted, altered values	Continuation in emergency mode possible		TRANSMISSION, LOAD LIMIT CONTROL, calibration code "4005"

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
4.1.ED	**B017** - Sensor, clutch pedal	No calibration or drifted, altered values	Continuation in emergency mode possible		TRANSMISSION TRAVEL RANGE Calibration code "4001"
4.1.EE	**A002** - ECU, enhanced control	No calibration or drifted, altered values	Continuation in emergency mode possible		TRANSMISSION TRANSMISSION ADJUSTMENT Calibration code "4007"
4.1.EF	**A002** - ECU, enhanced control	No calibration or drifted, altered values	Continuation in emergency mode possible		TRANSMISSION TURBO CLUTCH Calibration code "4009"
4.1.F0	**A002** - ECU, enhanced control	Incorrect checksum for transmission calibration parameters	Transmission calibration not possible		EOL programming
4.1.FF	**A002** - ECU, enhanced control	Internal fault (RAM/EEPROM)	Continuation in emergency mode possible		EOL programming
5.1.00	**A002** - ECU, enhanced control	EEPROM checksum error			EOL programming
5.1.31	**A004** - ECU, control panel 4WD 100% button	Faulty signal, button/A004	Other functions remain active	Wiring diagram Sheet 33	ENHANCED CONTROL 4WD
5.1.32	**A004** - ECU, control panel Auto 4WD button	Faulty signal, button/A004	Other functions remain active	Wiring diagram Sheet 33	ENHANCED CONTROL 4WD
5.1.33	**Y009** - Solenoid valve, 4WD	Actuation fault	4WD engages	Wiring diagram Sheet 33	ENHANCED CONTROL 4WD
5.1.34	**B094** - Sensor, steering angle (4WD differential lock)	Signal/switch fault	4WD/differential lock auto system inoperable	Wiring diagram Sheet 33	ENHANCED CONTROL 4WD
5.1.35	**B094** - Sensor, steering angle (4WD differential lock)	Signal/switch fault	4WD/differential lock auto system inoperable	Wiring diagram Sheet 33	ENHANCED CONTROL 4WD
5.1.51	**A004** - ECU, control panel Differential lock 100% button	Faulty signal, button/A004	Other functions remain active	Wiring diagram Sheet 33	ENHANCED CONTROL DIFFERENTIAL LOCK

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
5.1.52	**A004** - ECU, control panel Differential lock auto system button	Faulty signal, button/A004	Other functions remain active	Wiring diagram Sheet 33	ENHANCED CONTROL DIFFERENTIAL LOCK
5.1.53	**Y010** - Solenoid valve, differential lock (rear)	Actuation fault	Differential lock disengages	Wiring diagram Sheet 33	ENHANCED CONTROL DIFFERENTIAL LOCK
5.1.54	**S006** - Switch, left brake	Signal fault	Differential lock auto system no longer available, TMS switched off	Wiring diagram Sheet 33	ENHANCED CONTROL DIFFERENTIAL LOCK
5.1.55	**S005** - Switch, right brake	Signal fault	Differential lock auto system no longer available, TMS switched off	Wiring diagram Sheet 33	ENHANCED CONTROL DIFFERENTIAL LOCK
5.1.61	**B003** - Sensor, front axle suspension position	Signal fault	No further functionality, suspension remains in last position. Further travel without suspension possible	Wiring diagram Sheet 31	ENHANCED CONTROL SUSPENSION
		Faulty 8.5 V supply		A013 fuse 18	
5.1.62	**Y014** - Raise suspension solenoid valve	12 V actuation faulty	No further functionality, suspension remains in last position. Further travel without suspension possible	Wiring diagram Sheet 31	ENHANCED CONTROL SUSPENSION
5.1.63	**Y013** - Pressure cut-off valve, suspension	12 V actuation faulty	No further functionality, suspension remains in last position. Further travel without suspension possible	Wiring diagram Sheet 31	ENHANCED CONTROL SUSPENSION
5.1.64	**A004** - ECU, control panel "Suspension ON" button	Fault in signal from button to A004	Suspension not operational. Further travel without suspension possible		ENHANCED CONTROL SUSPENSION

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
5.1.65	**A004** - ECU, control panel "Suspension OFF/Lock" button	Fault in signal from button to A004	Suspension not operational. Further travel without suspension possible		ENHANCED CONTROL SUSPENSION
5.1.6E	**B003** - Sensor, front axle suspension position	Incorrect calibration	Suspension not operational		ENHANCED CONTROL SUSPENSION Calibration code "7666"
5.1.8D	**A002** - ECU, enhanced control	Checksum error old config. data	Limited enhanced control operation		EOL programming
5.1.8F	**A002** - ECU, enhanced control	Checksum error old auto system sequence data	Limited enhanced control operation		EOL programming
5.1.91	**A034** - Driving switch, CAN bus	Signal fault from "Rear automatic system ON/OFF" button on joystick	Rear automatic system not functioning		JOYSTICK
5.1.93	**A034** - Driving switch, CAN bus	Signal fault from "Front automatic system ON/OFF" button on joystick	Front automatic system not functioning		JOYSTICK
5.1.95	**A034** - Driving switch, CAN bus	Signal fault from "Automatic function STOP" button on joystick	Automatic stop not functioning		REAR EPC ACTUATION; JOYSTICK
5.1.98	**S025** - Switch, LS pump pressure monitor	Minimum pressure not reached	Valves may lock or flow may be reduced	Wiring diagram Sheet 26 See also Chapter 9000 Reg. E	Fault code only after min. 1 second > 1000 rpm
5.1.99	**S026** - Switch, steering pump flow controller	Minimum flow not reached	Control valve flow automatically reduced to 20 l/min.	Wiring diagram Sheet 26 See also Chapter 9000 Reg. E	Fault code only after min. 1 second > 1000 rpm

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
5.1.9A	**S026** - Switch, steering pump flow controller	Switch faulty (no longer closes/remains open even without oil flow)	Plausibility error (incorrect voltage value/ Ohm value)	Wiring diagram Sheet 26 See also Chapter 9000 Reg. E	Fault code appears 8 seconds after "Ignition ON". Error message can be acknowledged, but reappears after 10 minutes.
5.1.9B	**S025** - Switch, LS pump pressure monitor	Faulty pressure switch	No monitoring	Wiring diagram Sheet 26 See also Chapter 9000 Reg. E	Fault code with engine running
5.1.9D	**B091** - Sensor, water in fuel	Water in fuel	Drain container	Wiring diagram Sheet 36	
5.1.9E	**S034** - Switch, coolant level	Level too low	Engine damage!	Wiring diagram Sheet 24	Error message can be cleared only temporarily; it is repeated every 2 minutes
5.1.9F	**S034** - Switch, coolant level	Signal fault	No further monitoring	Wiring diagram Sheet 24	
5.1.B0	**A002** - ECU, enhanced control	CAN bus communication restricted			EOL programming
5.1.FD	**A002** - ECU, enhanced control	CAN3 component could not be initialised	ISO bus may not be fully functioning		
5.1.FF	**A002** - ECU, enhanced control	Internal fault (RAM/EEPROM)			EOL programming
6.1.01	**A004** - ECU, control panel Rear PTO button in cab ON/OFF	Signal fault, button/A004	PTO disengages	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.02	**S020** - Switch (external), rear right PTO	Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.03	**S019** - Switch (external), rear left PTO	Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
6.1.04	**Y008** - Solenoid valve, rear PTO (clutch)	Actuation fault	PTO disengages	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.05	**B021** - Sensor, rear PTO speed (clutch)	Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
		12 V supply fault		A013 fuse 33	
6.1.0A	**A004** - ECU, control panel "Active" button (only NA version)	Button signal fault	PTO cannot be engaged		ENHANCED CONTROL REAR PTO
6.1.10	**B020** - Sensor, rear PTO speed (stub shaft)	Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
		12 V supply fault		A013 fuse 32	
6.1.11	**A004** - ECU, control panel Rear PTO auto mode button	Signal fault	PTO disengages, automatic mode OFF	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.15	**A004** - ECU, control panel Speed selector button NEUTRAL	Button signal fault	PTO speed cannot be modified or selected	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.16	**A004** - ECU, control panel Speed selector button 540 rpm	Button signal fault	PTO speed cannot be modified or selected	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.17	**A004** - ECU, control panel Speed selector button 750 rpm	Button signal fault	PTO speed cannot be modified or selected	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.18	**A004** - ECU, control panel Speed selector key 1000 rpm	Button signal fault	PTO speed cannot be modified or selected	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.1A	**Y026** - Solenoid valve, rear PTO, stage I	Actuation fault	PTO cannot be engaged	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.1B	**Y027** - Solenoid valve, rear PTO, stage II	Actuation fault	PTO cannot be engaged	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
6.1.1C	**Y028** - Solenoid valve, rear PTO, stage III	Actuation fault	PTO cannot be engaged	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.41	**A004** - ECU, control panelECU, control panel Rear PTO ON/OFF button (in cab)	has been pressed for more than 30 seconds, mechanical or electrical fault in button	Speed selection moves to "neutral", no preselection possible	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.42	**S020** - Switch (external), rear right PTO	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No speed selection, PTO cannot be engaged	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.43	**S019** - Switch (external), rear left PTO	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No speed selection, PTO cannot be engaged	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.45	**S021** - Switch (external), raise front power lift	Speed selection in neutral, PTO clutch not engaged, B021 shows speed, PTO clutch disc package does not separate, PTO brake not operational	elec. speed selection remains possible, press PTO clutch ON/OFF button for at least 5 seconds (emergency mode)	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
		Speed is selected, PTO clutch 100% engaged, PTO clutch speed deviates by more than 20% from engine speed. PTO clutch disc package slipping.	elec. speed selection remains possible, press PTO clutch ON/OFF button for at least 5 seconds (emergency mode)		
		PTO clutch speed is below PTO stub speed	elec. speed selection remains possible, press PTO clutch ON/OFF button for at least 5 seconds (emergency mode)		
6.1.4A	**A004** - ECU, control panel "Active" button (only NA version)	Button has been pressed for more than 30 seconds, mechanical or electrical fault.	No PTO operation possible		ENHANCED CONTROL REAR PTO

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
6.1.50	**B020** - Sensor, rear PTO speed (stub shaft)	PTO stub shaft speed > 1300 rpm, signal fault in Hall sensor (B020 or B021)	elec. speed selection remains possible, press PTO clutch ON/ OFF button for at least 5 seconds (emergency mode)	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
		Electric speed selection possible, press PTO clutch ON/ OFF button for at least 5 seconds (emergency mode). In the event of a faulty solenoid valve, the corresponding speed cannot be engaged.	elec. speed selection remains possible, press PTO clutch ON/ OFF button for at least 5 seconds (emergency mode)	Wiring diagram Sheet 32	
6.1.55	**A004** - ECU, control panel Speed selector button NEUTRAL	has been pressed for more than 30 seconds, mechanical or electrical fault in button	All speeds can be selected and engagement is possible. Neutral button cannot be selected.	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.56	**A004** - ECU, control panel Speed selector button 540 rpm	has been pressed for more than 30 seconds, mechanical or electrical fault in button	Engagement possible, provided "540" is selected. "1000" and "750" selectable, press PTO clutch button for longer than 5 secs. "540" not selectable.	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.57	**A004** - ECU, control panel Speed selector button 750 rpm	has been pressed for more than 30 seconds, mechanical or electrical fault in button	Engagement possible provided "750" is selected. "1000" and "540" selectable, press PTO clutch button for longer than 5 secs. "750" not selectable.	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
6.1.58	**A004** - ECU, control panel Speed selector key 1000 rpm	has been pressed for more than 30 seconds, mechanical or electrical fault in button	Engagement possible provided "1000" is selected. "750" and "540" selectable, press PTO clutch button for longer than 5 secs. "1000" not selectable.	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.60	**B020** - Sensor, rear PTO speed (stub shaft) **B021** - Sensor, rear PTO speed (clutch)	The actual speed of the PTO stub (corrected by the transmission rate) differs from the specified speed of the PTO clutch by more than 12%. Solenoid valve (Y026, Y027, Y028) incorrectly wired or stuck. Mechanical fault in speed selector. Signal fault in Hall sensor (B020, B021)	Electric speed selection remains possible, press "Engage PTO" button for more than 5 seconds (emergency mode). In case of a faulty solenoid valve, corresponding speed cannot be engaged.	Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.A1	**A004** - ECU, control panel Rear PTO "ON" button	Communication fault		Wiring diagram Sheet 32	ENHANCED CONTROL REAR PTO
6.1.AA	**A004** - ECU, control panel "Active" button (only NA version)	Communication fault			ENHANCED CONTROL REAR PTO
6.1.B0	**A004** - ECU, control panel	CAN bus communication restricted.	Rear PTO non-operational		EOL programming
6.1.B5	**A004** - ECU, control panel Speed selector button NEUTRAL	Communication fault			ENHANCED CONTROL REAR PTO
6.1.B6	**A004** - ECU, control panel Speed selector button 540 rpm	Communication fault			ENHANCED CONTROL REAR PTO
6.1.B7	**A004** - ECU, control panel Speed selector button 750 rpm	Communication fault			ENHANCED CONTROL REAR PTO
6.1.B8	**A004** - ECU, control panel Speed selector key 1000 rpm	Communication fault			ENHANCED CONTROL REAR PTO

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
6.1.E0	**A002** - ECU, enhanced control	Checksum error, parameter current control for speed selector			EOL programming
6.1.E1	**A002** - ECU, enhanced control	Checksum error, PTO parameterisation			EOL programming
7.1.01	**A004** - ECU, control panel Button, front PTO ON/OFF	Signal fault,		Wiring diagram Sheet 32	ENHANCED CONTROL FRONT PTO
7.1.04	**Y011** - Solenoid valve, front PTO (clutch)	Actuation fault			ENHANCED CONTROL FRONT PTO
7.1.05	**B002** - Sensor, front PTO speed	Signal fault		Wiring diagram Sheet 32	ENHANCED CONTROL FRONT PTO
		12 V supply fault		A013 fuse 22	
7.1.09	**A004** - ECU, control panel Front PTO "Automatic mode" button	Signal fault,		Wiring diagram Sheet 32	ENHANCED CONTROL FRONT PTO
7.1.0A	**A004** - ECU, control panel "Active" button (only NA version)	Signal fault,			ENHANCED CONTROL FRONT PTO
7.1.41	**A004** - ECU, control panel Front PTO "ON" button	Plausibility error, button has been pressed for more than 30 seconds			ENHANCED CONTROL FRONT PTO
7.1.4A	**A004** - ECU, control panel "Active" button (only NA version)	Plausibility error, button has been pressed for more than 30 seconds			ENHANCED CONTROL FRONT PTO
7.1.A1	**A004** - ECU, control panel Front PTO "ON" button	Communication fault			ENHANCED CONTROL FRONT PTO
7.1.AA	**A004** - ECU, control panel "Active" button (only NA version)	Communication fault			ENHANCED CONTROL FRONT PTO
8.1.43	**A004** - ECU, control panel Automatic function (switching from control panel to joystick)	Faulty button	Switching not possible	Wiring diagram Sheet 25	REAR EPC ACTUATION/STATUS

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
8.3.11	**A014** - ECU, EPC OBE	E-box fault (raise output)	Control barred and locked	Wiring diagram Sheet 25	REAR EPC ACTUATION/STATUS
8.3.12	**A014** - ECU, EPC OBE	E-box fault (lower output)	Control barred and locked	Wiring diagram Sheet 25	REAR EPC ACTUATION/STATUS
8.3.14	**S029** - Switch (external), raise rear power lift, left	Signal line fault Faulty button	Control barred and locked	Wiring diagram Sheet 25	REAR EPC EXTERNAL BUTTONS
8.3.15	**S030** - Switch (external), lower rear power lift, left	Signal line fault Faulty button	Control barred and locked	Wiring diagram Sheet 25	REAR EPC EXTERNAL BUTTONS
8.3.16	**A014** - ECU, EPC OBE	Voltage < 1 V	Control barred and locked	Wiring diagram Sheet 25	REAR EPC CURRENT FAULT STATUS
8.3.17	**A014** - ECU, EPC OBE	Supply voltage >18 V	Control barred and locked	Wiring diagram Sheet 25	
8.3.18	**S027** - Switch (external), raise rear power lift, right	Signal line fault, button faulty	Control barred and locked	Wiring diagram Sheet 25	REAR EPC EXTERNAL BUTTONS
8.3.19	**S028** - Switch (external), lower rear power lift, right	Signal line fault, button faulty	Control barred and locked	Wiring diagram Sheet 25	REAR EPC EXTERNAL BUTTONS
8.3.22	**B030** - Sensor, rear power lift position	Signal fault Supply of 10.0 V from A014 faulty	Control barred and locked	Wiring diagram Sheet 25	REAR EPC SPECIFIED VALUE/POSITION SENSOR
8.3.23	**A004** - ECU, control panel Specified value setting for rear power lift "Depth control"	Signal line fault	Control barred and locked		REAR EPC SPECIFIED VALUE/POSITION SENSOR
8.3.26	External position sensor for rear power lift	Signal line fault Sensor out of position Sensor faulty	Control barred and locked	Wiring diagram Sheet 25	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
8.3.28	**A004** - ECU, control panel	Fault in rear EPC quick lift switch	"Raise" and "Lower" only possible via external buttons.	Wiring diagram Sheet 25	REAR EPC ACTUATION/STATUS
8.3.31	**B031** - Sensor, right draught sensing pin	Signal line fault Sensor faulty Supply of 10.0 V from A014 faulty	Limited performance during traction control	Wiring diagram Sheet 25	REAR EPC DRAUGHT SENSING PIN
8.3.32	**B032** - Sensor, left draught sensing pin	Signal line fault Sensor faulty Supply of 10.0 V from A014 faulty	Limited performance during traction control	Wiring diagram Sheet 25	REAR EPC DRAUGHT SENSING PIN
8.3.33	**A014** - ECU, EPC OBE **G001** - Battery 1 (12 VDC)	Battery voltage < 11.0 V	Control barred and locked	Wiring diagram Sheet 25	
8.3.40	**A004** - ECU, control panel Rear power lift quick lift switch	Switch faulty	Raising and lowering only via external controls	Wiring diagram Sheet 25	REAR EPC ACTUATION/STATUS
		CAN (K bus) fault A004/A014			
8.3.41	**A004** - ECU, control panel Rear power lift quick entry button	Faulty button	Quick entry not functioning	Wiring diagram Sheet 25	REAR EPC ACTUATION/STATUS
		CAN (K bus) fault A004/A014			
8.3.42	**A004** - ECU, control panel Rear EPC, hitch function	Faulty button	Hitch function not operational	Wiring diagram Sheet 25	REAR EPC ACTUATION/STATUS
		CAN (K bus) fault A004/A014			
8.3.43	**A004** - ECU, control panel Automatic function (switching from control panel to joystick)	Faulty button	Switching not possible	Wiring diagram Sheet 25	REAR EPC ACTUATION/STATUS
		CAN (K bus) fault A004/A014			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
8.3.50	**B031** - Sensor, right draught sensing pin	Draught sensing pin is overloaded by stress on the lifting gear in the upper range (90-100% lift height) due to the setting being too narrow.	Fault code will not be stored	Wiring diagram Sheet 25	REAR EPC DRAUGHT SENSING PIN
8.3.51	**B032** - Sensor, left draught sensing pin	Draught sensing pin is overloaded by stress on the lifting gear in the upper range (90-100% lift height) due to the setting being too narrow.	Fault code will not be stored	Wiring diagram Sheet 25	REAR EPC DRAUGHT SENSING PIN
9.1.50	**Y019** - Auxiliary control valve	No signal from valve via bus line.	No valve operation available	Wiring diagram Sheet 28	FRONT POWER LIFT/VENDI
9.1.51	**Y019** - Auxiliary control valve	EEPROM inconsistent	Valve moves into neutral position		FRONT POWER LIFT/VENDI
9.1.52	**Y019** - Auxiliary control valve	Supply voltage < 8 V	Valve moves into neutral position		FRONT POWER LIFT/VENDI
9.1.53	**Y019** - Auxiliary control valve	Supply voltage > 18 V	Valve moves into neutral position		FRONT POWER LIFT/VENDI
9.1.54	**Y019** - Auxiliary control valve	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Check control pressure M5, check diaphragm accumulator, check RV7/FP	FRONT POWER LIFT/VENDI
		Hydraulic oil temperature too low			
9.1.55	**Y019** - Auxiliary control valve	Overvoltage (> 45 V)	Valve moves into neutral position		
9.1.56	**Y019** - Auxiliary control valve	Output fault at control valve magnet	Valve moves into neutral position		FRONT POWER LIFT/VENDI
9.1.57	**Y019** - Auxiliary control valve	Internal position sensor fault	Valve moves into neutral position		FRONT POWER LIFT/VENDI

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
9.1.58	**Y019** - Auxiliary control valve	Main piston cannot return to neutral position due to oil contamination.		Manual actuation, actuator must not have any play, actuator must move to the centre position by itself	FRONT POWER LIFT/VENDI
9.1.59	**Y019** - Auxiliary control valve	Main piston cannot return to neutral position when switched on due to oil contamination.			FRONT POWER LIFT/VENDI
9.1.5A	**Y019** - Auxiliary control valve	Main piston deflected too far	Valve moves into neutral position		FRONT POWER LIFT/VENDI
9.1.5B	**Y019** - Auxiliary control valve	Floating position is not reached	Valve moves into neutral position		FRONT POWER LIFT/VENDI
9.1.5C	**Y019** - Auxiliary control valve	Floating position has been deflected manually	No consequences		FRONT POWER LIFT/VENDI
9.1.5F	**Y019** - Auxiliary control valve	Specified value message missing	Valve moves into neutral position		FRONT POWER LIFT/VENDI
		Configuration message missing			
		Specified value message is not plausible			
		Configuration message is not plausible			
		Potentiometer or PWM fault			
9.1.A0	**A002** - ECU, enhanced control	EEPROM fault while saving	Set values (enhanced controls) not stored.		
9.1.A1	**A002** - ECU, enhanced control	EEPROM fault while loading	Set values (enhanced controls) cannot be read.		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
9.1.B0	**B040** - Sensor, front power lift position	Not calibrated	No position control available		FRONT POWER LIFT Calibration code "9002"
9.1.B1	**B040** - Sensor, front power lift position	Signal fault	No position control available	Wiring diagram Sheet 27	FRONT POWER LIFT
		8.5 V supply fault		A013 fuse 11	
9.1.B2	**A004** - ECU, control panel Depth control specified value potentiometer	Not calibrated	Specified value cannot be set		FRONT POWER LIFT Calibration code "9001"
9.1.B3	**A004** - ECU, control panel Depth control specified value potentiometer	Signal fault,	Specified value cannot be set		FRONT POWER LIFT
9.1.C0	**A004** - ECU, control panel Control panel	Not available or bus not connected			
9.1.C1	**A004** - ECU, control panel Automatic system (switching from control panel/joystick)	Faulty button			FRONT POWER LIFT
9.1.C2	**A004** - ECU, control panel Valve locking	Faulty button			FRONT POWER LIFT
9.1.C3	**A004** - ECU, control panel Floating position	Faulty button			FRONT POWER LIFT
9.1.C4	**A004** - ECU, control panel "Raise" quick lift switch	Faulty button			FRONT POWER LIFT
9.1.C5	**A004** - ECU, control panel "Lower" quick lift switch	Faulty button			FRONT POWER LIFT
9.1.C6 9.1.C7 9.1.C8 9.1.C9 9.1.CA	**A004** - ECU, control panel	CAN bus faulty	Unspecified malfunctions		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
9.1.D0	**S021** - Switch (external), raise front power lift	Faulty button	Function non-operable	Wiring diagram Sheet 27	FRONT POWER LIFT
9.1.D1	**S022** - Switch (external), lower front power lift	Faulty button	Function non-operable	Wiring diagram Sheet 27	FRONT POWER LIFT
9.1.D2	**S021** - Switch (external), raise front power lift**S022** - Switch (external), lower front power lift	Double button operation (button possibly stuck)		Wiring diagram Sheet 27	FRONT POWER LIFT
A.1.10	**Y015** - Auxiliary control valve	No signal from valve to valve bus	No valve operation available	Wiring diagram Sheet 28	
A.1.11	**Y015** - Auxiliary control valve	EEPROM inconsistent	Valve moves into neutral position		
A.1.12	**Y015** - Auxiliary control valve		Valve moves into neutral position		
A.1.13	**Y015** - Auxiliary control valve	Supply voltage > 18 V	Valve moves into neutral position		
A.1.14	**Y015** - Auxiliary control valve	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Check control pressure M5, check diaphragm accumulator, check RV7/FP	ELECTRICAL VALVES VALVE 1/VENDI
		Hydraulic oil temperature too low			
A.1.15	**Y015** - Auxiliary control valve	Overvoltage (> 45 V)	Valve moves into neutral position		
A.1.16	**Y015** - Auxiliary control valve	Output fault at control valve magnet	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1/VENDI
A.1.17	**Y015** - Auxiliary control valve	Internal position sensor fault	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1/VENDI

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.18	**Y015** - Auxiliary control valve	Main piston cannot return to neutral position due to oil contamination.	Valve may cause uncontrolled functions, DANGER!	Manual actuation, actuator must not have any play, actuator must move to the centre position by itself	ELECTRICAL VALVES VALVE 1/VENDI
A.1.19	**Y015** - Auxiliary control valve	Main piston cannot return to neutral position when switched on due to oil contamination.			ELECTRICAL VALVES VALVE 1/VENDI
A.1.1A	**Y015** - Auxiliary control valve	Main piston deflected too far	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1/VENDI
A.1.1B	**Y015** - Auxiliary control valve	Floating position is not reached	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1/VENDI
A.1.1C	**Y015** - Auxiliary control valve	Floating position has been deflected manually	without result		ELECTRICAL VALVES VALVE 1/VENDI
A.1.1F	**Y015** - Auxiliary control valve	Specified value message is missing or not plausible	Valve moves into neutral position		ELECTRICAL VALVES VALVE 1/VENDI
		Configuration message is missing or not plausible			
		Potentiometer or PWM fault			
A.1.20	**Y016** - Auxiliary control valve	No signal from valve to valve bus	No valve operation available	Wiring diagram Sheet 28	
A.1.21	**Y016** - Auxiliary control valve	EEPROM inconsistent	Valve moves into neutral position		
A.1.22	**Y016** - Auxiliary control valve		Valve moves into neutral position		
A.1.23	**Y016** - Auxiliary control valve	Supply voltage > 18 V	Valve moves into neutral position		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.24	**Y016** - Auxiliary control valve	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Check control pressure M5, check diaphragm accumulator, check RV7/FP	ELECTRICAL VALVES VALVE 2/VENDI
		Hydraulic oil temperature too low			
A.1.25	**Y016** - Auxiliary control valve	Overvoltage (> 45 V)	Valve moves into neutral position		
A.1.26	**Y016** - Auxiliary control valve	Output fault at control valve magnet	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2/VENDI
A.1.27	**Y016** - Auxiliary control valve	Internal position sensor fault	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2/VENDI
A.1.28	**Y016** - Auxiliary control valve	Main piston cannot return to neutral position due to oil contamination.	Valve may cause uncontrolled functions, DANGER!	Manual actuation, actuator must not have any play, actuator must move to the centre position by itself	ELECTRICAL VALVES VALVE 2/VENDI
A.1.29	**Y016** - Auxiliary control valve	Main piston cannot return to neutral position when switched on due to oil contamination.			ELECTRICAL VALVES VALVE 2/VENDI
A.1.2A	**Y016** - Auxiliary control valve	Main piston deflected too far	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2/VENDI
A.1.2B	**Y016** - Auxiliary control valve	Floating position is not reached	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2/VENDI
A.1.2C	**Y016** - Auxiliary control valve	Floating position has been deflected manually	without result		ELECTRICAL VALVES VALVE 2/VENDI
A.1.2F	**Y016** - Auxiliary control valve	Specified value message is missing or not plausible	Valve moves into neutral position		ELECTRICAL VALVES VALVE 2/VENDI

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
		Configuration message is missing or not plausible			
		Potentiometer or PWM fault			
A.1.30	**Y017** - Auxiliary control valve	No signal from valve to valve bus	No valve operation available	Wiring diagram Sheet 28	
A.1.31	**Y017** - Auxiliary control valve	EEPROM inconsistent	Valve moves into neutral position		
A.1.32	**Y017** - Auxiliary control valve		Valve moves into neutral position		
A.1.33	**Y017** - Auxiliary control valve	Supply voltage > 18 V	Valve moves into neutral position		
A.1.34	**Y017** - Auxiliary control valve	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Check control pressure M5, check diaphragm accumulator, check RV7/FP	ELECTRICAL VALVES VALVE 3/VENDI
		Hydraulic oil temperature too low			
A.1.35	**Y017** - Auxiliary control valve	Overvoltage (> 45 V)	Valve moves into neutral position		
A.1.36	**Y017** - Auxiliary control valve	Output fault at control valve magnet	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3/VENDI
A.1.37	**Y017** - Auxiliary control valve	Internal position sensor fault	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3/VENDI
A.1.38	**Y017** - Auxiliary control valve	Main piston cannot return to neutral position due to oil contamination.	Valve may cause uncontrolled functions, DANGER!	Manual actuation, actuator must not have any play, actuator must move to the centre position by itself	ELECTRICAL VALVES VALVE 3/VENDI

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.39	**Y017** - Auxiliary control valve	Main piston cannot return to neutral position when switched on due to oil contamination.			ELECTRICAL VALVES VALVE 3/VENDI
A.1.3A	**Y017** - Auxiliary control valve	Main piston deflected too far	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3/VENDI
A.1.3B	**Y017** - Auxiliary control valve	Floating position is not reached	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3/VENDI
A.1.3C	**Y017** - Auxiliary control valve	Floating position has been deflected manually	without result		ELECTRICAL VALVES VALVE 3/VENDI
A.1.3F	**Y017** - Auxiliary control valve	Specified value message is missing or not plausible	Valve moves into neutral position		ELECTRICAL VALVES VALVE 3/VENDI
		Configuration message is missing or not plausible			
		Potentiometer or PWM fault			
A.1.40	**Y018** - Auxiliary control valve	No signal from valve to valve bus	No valve operation available	Wiring diagram Sheet 28	
A.1.41	**Y018** - Auxiliary control valve	EEPROM inconsistent	Valve moves into neutral position		
A.1.42	**Y018** - Auxiliary control valve		Valve moves into neutral position		
A.1.43	**Y018** - Auxiliary control valve	Supply voltage > 18 V	Valve moves into neutral position		
A.1.44	**Y018** - Auxiliary control valve	Main piston travel too short due to drop of control pressure below 22 bar	Valve moves into neutral position	Check control pressure M5, check diaphragm accumulator, check RV7/FP	ELECTRICAL VALVES VALVE 4/VENDI

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
		Hydraulic oil temperature too low			
A.1.45	**Y018** - Auxiliary control valve	Overvoltage (> 45 V)	Valve moves into neutral position		
A.1.46	**Y018** - Auxiliary control valve	Output fault at control valve magnet	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4/VENDI
A.1.47	**Y018** - Auxiliary control valve	Internal position sensor fault	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4/VENDI
A.1.48	**Y018** - Auxiliary control valve	Main piston cannot return to neutral position due to oil contamination.	Valve may cause uncontrolled functions, DANGER!	Manual actuation, actuator must not have any play, actuator must move to the centre position by itself	ELECTRICAL VALVES VALVE 4/VENDI
A.1.49	**Y018** - Auxiliary control valve	Main piston cannot return to neutral position when switched on due to oil contamination.			ELECTRICAL VALVES VALVE 4/VENDI
A.1.4A	**Y018** - Auxiliary control valve	Main piston deflected too far	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4/VENDI
A.1.4B	**Y018** - Auxiliary control valve	Floating position is not reached	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4/VENDI
A.1.4C	**Y018** - Auxiliary control valve	Floating position has been deflected manually	without result		ELECTRICAL VALVES VALVE 4/VENDI
A.1.4F	**Y018** - Auxiliary control valve	Specified value message is missing or not plausible	Valve moves into neutral position		ELECTRICAL VALVES VALVE 4/VENDI
		Configuration message is missing or not plausible			
		Potentiometer or PWM fault			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.50	**S053** - Switch, driver seat	Seat not "loaded" when steering is activated			
A.1.51	**B094** - Sensor, steering angle (4WD differential lock)	Despite the steering valve being open, the steering angle sensor produces no fresh values within 1 second		Steering angle sensor mechanical fault, no hydraulic oil in the steering valve	
A.1.52	**B094** - Sensor, steering angle (4WD differential lock)	Invalid calibration values for steering angle sensor in EEPROM			
A.1.53	**A058** - Top Dock (Autoguide)	Top Dock bus fault	No signal from Top Dock to transmission bus	Top Dock voltage supply	
A.1.55	**A057** - ECU, steering controller (Autoguide)	An EEPROM description fault has occurred			EOL programming If there is no remedy, replace box
A.1.56	**A057** - ECU, steering controller (Autoguide)	An EEPROM reading fault has occurred			EOL programming If there is no remedy, replace box
A.1.57	**A057** - ECU, steering controller (Autoguide)	The EEPROM contains invalid data			EOL programming
A.1.5A	**A057** - ECU, steering controller (Autoguide)	Invalid EEPROM parameters for the steering control regulator	Invalid data set		EOL programming
A.1.5B	**A057** - ECU, steering controller (Autoguide)	Invalid EEPROM parameters for the steering control regulator	Invalid data set		EOL programming
A.1.5C	**A057** - ECU, steering controller (Autoguide)	Invalid EEPROM parameters for the steering control regulator	Invalid data set		EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.5D	**A057** - ECU, steering controller (Autoguide)	Invalid frequency for steering control regulator, entered as EEPROM parameters	Invalid data set		EOL programming
A.1.5E	**A057** - ECU, steering controller (Autoguide)	Supply voltage < 10.1 VDC		Wiring diagram Sheet 39	
A.1.5F	**A057** - ECU, steering controller (Autoguide)	Internal fault			EOL programming
A.1.60	Fault only possible in calibration mode	Autoguide is active and calibration of the steering valve is started at the same time or calibration is restarted although it has not yet finished	Successful calibration indicated by OK	Restart calibration	
A.1.61	Fault only possible in calibration mode	The value of the steering angle sensor has not changed although the valve is 100% open		Steering angle sensor mechanical fault, no hydraulic oil in the steering valve	
A.1.62	Fault only possible in calibration mode	Although the steering should be moved to the left during calibration, a steering movement to the right was detected.	Repeat calibration, paying attention to the sideways freedom of movement of the front wheels		
A.1.63	Fault only possible in calibration mode	The steering wheel was moved during calibration	Repeat calibration		
A.1.64	**Y087** - Steering valve block, Autoguide	The steering valve has not yet been calibrated			Calibration code "2403"
A.1.65	**Y087** - Steering valve block, Autoguide	Unidentified fault in the steering valve	Check the steering valve		
A.1.66	**Y087** - Steering valve block, Autoguide	Wiring of the position sensor in the steering valve either broken or short-circuited	Check the steering valve, or replace steering head		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.67	**Y087** - Steering valve block, Autoguide	Steering valve monitoring error message			
A.1.68	**Y087** - Steering valve block, Autoguide	Steering valve status message not received within the specified time	CAN bus fault in the transmission bus	Wiring diagram Sheet 39	
A.1.69	**Y087** - Steering valve block, Autoguide	Supply voltage > 32 V		Wiring diagram Sheet 39	
A.1.6A	**Y087** - Steering valve block, Autoguide	Supply voltage < 10 V		Wiring diagram Sheet 39	
A.1.6B	**Y087** - Steering valve block, Autoguide	Steering actuator cannot reach neutral (during operation)	Mechanical fault on steering actuator or position sensor		
A.1.6C	**Y087** - Steering valve block, Autoguide	Actuator not in neutral during "RUNUP" (same at switch on)	Mechanical fault on steering actuator or position sensor		
A.1.6D	**Y087** - Steering valve block, Autoguide	Actuator position greater than reference position	Mechanical fault on steering actuator or position sensor		
A.1.70	**B094** - Sensor, steering angle (4WD differential lock)	Break in steering sensor signal line	Check signal line	Wiring diagram Sheet 33 / 39	
A.1.71	**A057** - ECU, steering controller (Autoguide)**Y087** - Steering valve block, Autoguide	Break in the steering valve electrical supply line	Check the steering valve electrical supply line	Wiring diagram Sheet 38 / 39	
A.1.72	**Y099** - Solenoid valve, pilot pressure (Autoguide)	Break in the electrical supply line to the pilot pressure solenoid valve		Wiring diagram Sheet 39	
A.1.74	**S088** - Switch, Autoguide pressure	Break in the pressure switch signal line		Wiring diagram Sheet 39	
A.1.80	**B094** - Sensor, steering angle (4WD differential lock)	Short circuit in steering angle sensor supply		Wiring diagram Sheet 33 / 39	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.82	**Y099** - Solenoid valve, pilot pressure (Autoguide)	Short circuit in supply line or pilot pressure solenoid valve wiring break		Wiring diagram Sheet 39	
A.1.84	**S088** - Switch, Autoguide pressure	Short-circuit in the supply line of the pressure switch signal line		Wiring diagram Sheet 39	
A.1.85	**B094** - Sensor, steering angle (4WD differential lock) **S088** - Switch, Autoguide pressure	Short circuit in the voltage supply for the steering angle sensor and pressure switch		Wiring diagram Sheet 39	
A.1.90	**B094** - Sensor, steering angle (4WD differential lock)	Short circuit in steering angle sensor earth		Wiring diagram Sheet 33 / 39	
A.1.91	**A057** - ECU, steering controller (Autoguide) **Y087** - Steering valve block, Autoguide	Short circuit in steering valve block voltage supply earth		Wiring diagram Sheet 39	
A.1.92	**Y099** - Solenoid valve, pilot pressure (Autoguide)	Short circuit in pilot pressure solenoid valve earth		Wiring diagram Sheet 39	
A.1.94	**S088** - Switch, Autoguide pressure	Short circuit in pressure switch signal line earth		Wiring diagram Sheet 39	
A.1.95	**A057** - ECU, steering controller (Autoguide) **B094** - Sensor, steering angle (4WD differential lock) **S088** - Switch, Autoguide pressure	Short circuit in earth of voltage supply for steering angle sensor and pressure switch		Wiring diagram Sheet 39	
A.1.A0	**A002** - ECU, enhanced control	EEPROM fault while saving			
A.1.A1	**A002** - ECU, enhanced control	EEPROM fault while loading			
A.1.A2		More valves connected than registered via EOL programming	Not all valves can be actuated		EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.B0	**A034** - Driving switch, CAN bus Crossgate lever	Not calibrated	Valves cannot be operated		Calibration code "1001"
A.1.B1	**A034** - Driving switch, CAN bus Crossgate lever	X axis signal fault	Valves cannot be operated	Wiring diagram Sheet 26	ELECTRICAL VALVES OPERATION
A.1.B2	**A034** - Driving switch, CAN bus Crossgate lever	Y axis signal fault	Valves cannot be operated	Wiring diagram Sheet 26	ELECTRICAL VALVES OPERATION
A.1.B3	**A034** - Driving switch, CAN bus Crossgate lever	X and Y axis signal fault; crossgate lever missing	Valves cannot be operated	Wiring diagram Sheet 26	ELECTRICAL VALVES OPERATION
A.1.B4	**A034** - Driving switch, CAN bus Crossgate lever	Zero position signals of X and Y axes are not identical to the "centre position" signal (=plausibility check)	Valves cannot be operated	Wiring diagram Sheet 26	ELECTRICAL VALVES OPERATION
A.1.B5	**A034** - Driving switch, CAN bus Crossgate lever	"Centre position" signal fault	Valves cannot be operated	Wiring diagram Sheet 26	ELECTRICAL VALVES OPERATION
A.1.C0	**A004** - ECU, control panel	Not available or bus not connected			
A.1.C1	**A004** - ECU, control panel	Automatic system (switching from control panel/joystick) button faulty			ELECTRICAL VALVES OPERATION
A.1.C2	**A004** - ECU, control panel	Valve locking button faulty			ELECTRICAL VALVES OPERATION
A.1.C3	**A004** - ECU, control panel	Floating position button faulty	No floating position		ELECTRICAL VALVES OPERATION
A.1.C4	**A004** - ECU, control panel	Time function button faulty	No time function		ELECTRICAL VALVES OPERATION
A.1.C5	**A004** - ECU, control panel	Switching function button faulty			ELECTRICAL VALVES OPERATION

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.C6 A.1.C7 A.1.C8 A.1.C9 A.1.CA	**A004** - ECU, control panel	CAN bus faulty	Unspecified malfunctions		
A.1.CB	**A034** - Driving switch, CAN bus	CAN joystick not available. (CAN bus faulty)	Valves cannot be operated		EOL programming
A.1.CC	**A002** - ECU, enhanced control **A034** - Driving switch, CAN bus	ECU and joystick CAN communication faulty.	Restricted valve operation		EOL programming
A.1.D1	**A034** - Driving switch, CAN bus	Control valve 3 Raise/Lower button faulty	No valve operation available		ELECTRICAL VALVES OPERATION
A.1.D3	**A034** - Driving switch, CAN bus	Control valve 4 Raise/Lower button faulty	No valve operation available		ELECTRICAL VALVES OPERATION
A.1.D4	**S023** - Switch (external), lock front power lift	Solenoid switch or Signal fault	Switching operating mode from hydraulic connection to front power lift not possible	Wiring diagram Sheet 26	STANDARD FRONT POWER LIFT
A.1.D5	**S022** - Switch (external), lower front power lift	Faulty button, signal fault	No valve operation available	Wiring diagram Sheet 26	STANDARD FRONT POWER LIFT or FRONT POWER LIFT ENHANCED CONTROL
A.1.D6	**S021** - Switch (external), raise front power lift	Faulty button, signal fault	No valve operation available	Wiring diagram Sheet 26	STANDARD FRONT POWER LIFT or FRONT POWER LIFT ENHANCED CONTROL
A.1.D7	**S036** - Switch, hydraulic oil level indicator	Break in wiring or sensor disconnected	No further monitoring	Wiring diagram Sheet 26	ENHANCED CONTROL STEERING FLUID LEVELS
A.1.D9	**S036** - Switch, hydraulic oil level indicator	Tank is empty	All valves are locked	Wiring diagram Sheet 26	ENHANCED CONTROL STEERING FLUID LEVELS

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
A.1.DA	**S022** - Switch (external), lower front power lift	Switch faulty	"Kickout" function not available	Wiring diagram Sheet 26	
A.1.DB	**S036** - Switch, hydraulic oil level indicator	Hydraulic oil tank characteristic implausible.	Incorrect level indicated		EOL programming
A.1.DC	Auxiliary control unit	Prio volume greater than pump volume			
A.1.DD	**S021** - Switch (external), raise front power lift **S022** - Switch (external), lower front power lift	Double button operation (button possibly stuck)	No valve operation available	Wiring diagram Sheet 27	STANDARD FRONT POWER LIFT or ENHANCED CONTROL FRONT POWER LIFT
A.1.F0	**Y032** - Control pressure solenoid valve	Fault in electric actuation or in solenoid valve.	Valves in neutral position	Wiring diagram Sheet 26	ELECTRICAL VALVES 1-4
A.1.F1	**Y033** - Solenoid valve, hydraulic oil preheater	12 V actuation faulty	No oil heating during LS pump start-up at low temperatures	Wiring diagram Sheet 31	ELECTRICAL VALVES 1-4
A.1.F2	**Y032** - Control pressure solenoid valve	Electric current too high (earth connection)	Valves in neutral position	Wiring diagram Sheet 26	ELECTRICAL VALVES 1-4
A.1.F3	**Y032** - Control pressure solenoid valve	Break in wiring	Valves in neutral position	Wiring diagram Sheet 26	ELECTRICAL VALVES 1-4
A.1.FA	**S067** - Switch (external), valve actuation, raise	Button faulty, signal line faulty	External valve actuation no longer possible	Wiring diagram Sheet 26	
A.1.FB	**S068** - Switch (external), valve actuation, lower	Button faulty, signal line faulty	External valve actuation no longer possible	Wiring diagram Sheet 26	
A.1.FC	**S067** - Switch (external), valve actuation, raise **S068** - Switch (external), valve actuation, lower	Double button operation (button possibly stuck)	External valve actuation no longer possible	Wiring diagram Sheet 26	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
B.1.11	**A002** - ECU, enhanced control	Electrical fault in automatic TI function (user teach-in fault (ECU or sensor))	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.12	**A002** - ECU, enhanced control **A008** - Terminal	Electrical fault in automatic TI function (electrical fault in terminal setting)	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.13	**A002** - ECU, enhanced control	Electrical fault in automatic TI function	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.14	**A002** - ECU, enhanced control	Electrical fault in automatic TI function	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.21	**A002** - ECU, enhanced control	CAN bus communication error in automatic TI function	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.22	**A002** - ECU, enhanced control **A008** - Terminal	CAN bus communication error between A008 terminal and teach-in (program run)	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.23	**A002** - ECU, enhanced control **A004** - ECU, control panel	CAN bus communication error between A004 control panel and teach-in (program run)	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.24	**A002** - ECU, enhanced control **A034** - Driving switch, CAN bus	CAN bus communication error between A034 driving switch and teach-in (program run)	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
B.1.41	**A002** - ECU, enhanced control	"Internal communication teach-in" error counter overflow	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.42	**A002** - ECU, enhanced control **A008** - Terminal	Error counter overflow between A008 terminal and teach-in (program run)	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.43	**A002** - ECU, enhanced control **A034** - Driving switch, CAN bus	Error counter overflow between A004 control panel and teach-in (program run)	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.44	**A002** - ECU, enhanced control **A034** - Driving switch, CAN bus	Error counter overflow between A034 driving switch and teach-in (program run)	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.B0	**A002** - ECU, enhanced control	Read error during teach-in (program run)	Teach-in not operational	See also Chapter 9700 Reg. A - Principles of Variotronic TI operation	ENHANCED CONTROL teach-in
B.1.B4	**A002** - ECU, enhanced control	Teach-in error in working storage function	Teach-in not operational --- Switch ignition OFF and ON, if error re-occurs --> reload EOL programming in ECU, enhanced control; if error re-occurs --> replace ECU, enhanced control		ENHANCED CONTROL teach-in
F.1.00	**A034** - Driving switch, CAN bus	Initialisation error in reading EEPROM	Check A034 driving switch with FENDIAS diagnostics program		EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS / Note
F.1.B0	**A034** - Driving switch, CAN bus	GD routing data incorrect			EOL programming
F.1.F0	**A034** - Driving switch, CAN bus	Diagnostics/filter data checksum error			EOL programming
F.1.FF	**A034** - Driving switch, CAN bus	Byte address checksum error			EOL programming

störcodetabelle

FENDT 309 Vario COM III 336 .. / 1001-
FENDT 310 Vario COM III 337 .. / 1001-
FENDT 311 Vario COM III 338 .. / 1001-
FENDT 312 Vario COM III 339 .. / 1001-

Fault code table
Tableau de codes défauts
Tabella codici disturbi
Tabla código averías
Storingscodetabel

FENDT 309 / 310 / 311 / 312 Vario COM III

336 .. 1001- / 337 .. 1001- / 338 .. 1001- / 339 .. 1001-

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
00.0.01	A002	ECU, enhanced control	Bus error EDC/EMR, speed setpoint to EDC missing	Engine malfunction	El circuit diagram "Electronics voltage supply"	
00.0.04	A002	ECU, enhanced control	Bus error transmission, setpoint to actuator missing	No functions available, no display	El circuit diagram 'Electronics voltage supply'	
00.0.05	A002	ECU, enhanced control	Bus error 4WD/diff.	No functions available, no display	El circuit diagram 'Electronics voltage supply'	
00.0.06	A002	ECU, enhanced control	Bus error rear PTO	No functions available, no display	El circuit diagram 'Electronics voltage supply'	
00.0.07	A002	ECU, enhanced control	Bus error front PTO	Does not function, no display	El circuit diagram 'Electronics voltage supply'	
00.0.08	A024	ECU, EPC B	Bus error rear EPC	Does not function, no display	El circuit diagram "Electronic lifting gear control"	
00.0.15	A002	ECU, enhanced control	Bus error FA suspension	Does not function, no display	El circuit diagram 'Electronics voltage supply'	
00.0.16	A024	ECU, EPC B	Bus fault rear EPC automatic mode.	Does not function, no display	El circuit diagram 'Electronic lifting gear control'	
00.0.1E	A007	Instrument panel	Bus error output from EDC on instrument cluster	Does not function, no display	El circuit diagram 'Electronics voltage supply'	
00.1.4D	A007	Instrument cluster	Checksum menu icons (24x24), memory in instrument cluster faulty	Display error in instrument cluster		EOL programming
00.1.4E	A007	Instrument cluster	Checksum warning icons (64x64), memory in instrument cluster faulty	Display error in instrument cluster		EOL programming

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
00.1.4F	A007	Instrument cluster	Checksum GD table, memory in instrument cluster faulty	Display error in instrument cluster		EOL programming
00.1.50	A007	Instrument cluster	VDO instrument cluster EEPROM not programmed	Malfunctions in instrument cluster		EOL programming
00.1.54	B019	Compressed air tank pressure sensor	Sensor fault, wiring fault	Compressed air indicator does not function	'Instrument cluster' circuit diagram	
			12 V supply fault			
00.1.59	B007	Fuel level sensor	Sensor fault, wiring fault	No display	'Instrument cluster' circuit diagram	
00.1.71	A036	Control panel, Enter key	Enter key	Key does not function.	'Instrument cluster' circuit diagram	Control console
00.1.72	A036	Control panel, Esc key	Esc key	Key does not function.	'Instrument cluster' circuit diagram	Control console
00.1.73	A036	Control panel, Up key	Up key	Key does not function.	'Instrument cluster' circuit diagram	Control console
00.1.74	A036	Control panel, Down key	Down key	Key does not function.	'Instrument cluster' circuit diagram	Control console
00.1.75	A036	Control panel, Enter key	Enter key pressed >30s	Key does not function or release key.	'Instrument cluster' circuit diagram	Control console
00.1.76	A036	Control panel, Esc key	Esc key pressed >30s	Key does not function or release key.	'Instrument cluster' circuit diagram	Control console
00.1.77	A036	Control panel, Up key	Up key pressed >30s	Key does not function or release key.	'Instrument cluster' circuit diagram	Control console
00.1.78	A036	Control panel, Down key	Down key pressed >30s	Key does not function or release key.	'Instrument cluster' circuit diagram	Control console
01.1.01	B055	Rotary position sensor, combi-sensor - foot throttle pedal	Signal too high, signal too low, signal missing for longer than 2000 ms	Chapter 2000 Reg. B	'EDC control' circuit diagram	TRANSMISSION, LOAD LIMIT CONTROL
01.1.03	B055	Rotary position sensor, combi-sensor - foot throttle pedal	No congruence B055 - combi-sensor (PIN 3 to PIN 6)	limited driving operation, Chapter 2000 Reg.B	'EDC control' circuit diagram	TRANSMISSION, LOAD LIMIT CONTROL, calibration code '4005'

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
01.1.04	A002	ECU, enhanced control	Checksum error TMS	TMS driving not possible		EOL programming
01.1.06	A002	ECU, enhanced control	Memory could not be reserved in EST.			EOL programming
01.1.07	A051	ECU, engine control unit	Checksum engine parameter incorrect			EOL programming
01.1.7D	B055	Rotary position sensor, combi-sensor - foot throttle pedal	Idle switch faulty		'EDC control' circuit diagram	
01.1.7F	A036	Control console	Hand throttle memory keys faulty (electric fault). No communication with control console.	Last speed setting is retained. Engine speed can be changed using hand throttle or foot throttle.		Control console
01.1.A0	A051	EDC control module	Wrong engine control unit (A051), wrong EOL programming, engine model does not match tractor model	Torque is limited according to fault grading. Chapter 2000 Reg. B	'EDC control' circuit diagram	SERDIA
01.1.A1	A002, A051	ECU (enhanced control), engine control unit EDC	CAN connection enhanced control module (A002) - engine control unit (A051) faulty	Chapter 2000 Reg. B	'Transmission bus', 'EDC engine control' circuit diagram	SERDIA
01.1.B0	A002	ECU, enhanced control	CAN-bus communication restricted	Engine function is limited	'EDC control' circuit diagram	EOL programming
04.1.01	A036	Acceleration ramp switch faulty.	Signal fault	Continuation in emergency mode possible		Control console
			8.5 V supply fault		A013 fuse 4	
04.1.04	B017	Clutch pedal rotary position sensor	Signal fault	Loss of enhanced control / functions in the final speed control; cruise control does not function, TMS is switched off	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
			8.5 V supply fault		A013 fuse 3	

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
04.1.05	B039	High pressure sensor II (push detection)	Signal fault	TMS is switched off		TRANSMISSION, TURBOCLUTCH
			8.5 V supply fault		A013 fuse 15	
04.1.07	B008	High pressure sensor, transmission drive pressure	Signal fault	Transmission peak loads are no longer monitored	'Transmission control' circuit diagram	TRANSMISSION, TURBOCLUTCH
			8.5 V supply fault		A013 fuse 10	
04.1.23	A036	Joystick 'cruise control ON'	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
04.1.24	S015	Hand brake solenoid switch	Signal fault	Hand brake automatic mode not available	'Transmission control' circuit diagram	TRANSMISSION functional overview
04.1.26	A036	Pedal mode key	Signal fault	Pedal mode does not function		Control console
04.1.28	A009	Transmission control unit, F/R incremental encoder	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION CONTROL
04.1.29	A036	Joystick 'Rest position'	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manual control
04.1.2 A	B015	Bevel pinion direction (=direction of travel) Hall sensor	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
			8.5 V supply fault		A013 fuse 2	
04.1.2C	A036	Button to toggle between 'Neutral / Active stationary mode'	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, OPERATING RANGE
04.1.2D	S061	'Rapid reversing' control on control stalk	Signal fault	Rapid reversing still possible via joystick	'Transmission control' circuit diagram	TRANSMISSION manual control
04.1.2E	A036	'v+ transmission control' (joystick forwards)	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manual control

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
04.1.2F	A036	'v- transmission control' (joystick to rear)	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manual control
04.1.31	B014	Hall sensor for accumulator shaft direction (partially also defined by 'Hydrostat')	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
			8.5 V supply fault		A013 fuse 1	
04.1.32	A002, A036	'Activating key' within joystick	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manual control
04.1.3 A	S070	Range/idle switch	Transmission neutral sleeve. Switch faulty, transmission calibration no longer possible	Transmission calibration no longer possible	'Transmission control' circuit diagram	
04.1.42	B014	Hall sensor for accumulator shaft speed (partially also defined by 'Hydrostat')	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
			8.5 V supply fault		A013 fuse 1	
04.1.44	B010	Engine speed Hall sensor 1	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
			12 V supply fault		A013 fuse 11	
04.1.45	B015	Bevel pinion speed (=travel speed) Hall sensor	Signal fault	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
			8.5 V supply fault		A013 fuse 2	
04.1.50	S017	'Transmission oil filter clogged' switch	Filter clogged	No further indication of clogging	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER switch function **not** active under 50° oil temperature
04.1.53	B009	Thermo switch	'Transmission oil temperature more than 110°C'	Continuing to drive damages the transmission !	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
04.1.58	A002, A009, B014	Transmission slip monitor	Transmission output speed deviates from the setpoint by more than 30%, clutch on actuator may be faulty	Under extremely low temperatures, single occurrences are possible; repeated occurrences under normal conditions cause oil overheating and other damage to the transmission, TMS is switched off	Fault **not** active if **-** turboclutch function is on **-** clutch is depressed	TRANSMISSION, TRANSMISSION CONTROL ('ideal ratio / actual ratio' comparison)
04.1.64	Y004	Turboclutch solenoid valve	PWM actuation fault		'Transmission control' circuit diagram	TRANSMISSION, TURBOCLUTCH
04.1.72	S017	'Transmission oil filter clogged' switch	Signal fault	No further display or monitoring, possibly transmission damage	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER
04.1.73	B009	'Discharge oil temperature' sensor	Signal fault	No further display or monitoring, possibly transmission damage	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION OIL/FILTER
04.1.78	S053	Seat switch	Signal fault from seat switch	Travel direction selection is deactivated in pedal mode if vehicle is stationary (must be reactivated)	El circuit diagram "Seat compressor sockets"	TRANSMISSION, FUNCTION OVERVIEW
04.1.79	H007	Buzzer reverse travel	Output for reverse travel alerter is not in order (current > 2500 mA or short circuit)		'Transmission control' circuit diagram	
04.1.82	B014, B015	Accumulator shaft rpm Hall sensor / bevel pinion sensor	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
04.1.83	B014, B015	Accumulator shaft/bevel pinion speed Hall sensor	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION CRUISE CONTROL
04.1.84	A002, A036	Joystick switch (V, R, VR, cruise control, default position)	Plausibility error (=signals do not match logically)	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION manual control

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
04.1.85	B010	Engine speed Hall sensor 1	Engine speed sensor does not supply plausible speed curves. Output speed increase or decrease is outside limits.	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, LOAD LIMIT CONTROL
04.1.87	S061	Switch, rapid reverse on the steering wheel adjustment	Plausibility error at the F / R switch, rapid reverse	F / R switch not functioning, rapid reverse on the steering wheel adjustment lever, S061-switch,	Check rapid reverse Chapter 9000 Reg. E	TRANSMISSION manual control
04.1.89	A007, B009	Switch, oil temperature	Plausibility error transmission temperature	Temperature sensor or wiring faulty		TRANSMISSION TRANSMISSION OIL
04.1.8 A	B017, S074	Sensor, clutch pedal	Plausibility error electrical clutch pedal (TC line does not open when clutch pedal is actuated)		'Transmission control' circuit diagram	TRANSMISSION TURBOCLUTCH FUNCTION
04.1.A1	A009	Transmission control unit	Turn angle is not reached within 2 seconds.	Continuation in emergency mode possible	Check transmission control unit Chapter 9000 Reg. E	TRANSMISSION, TRANSMISSION CONTROL
04.1.A2	A009, A002	Transmission control unit	CAN-bus actuation fault	Continuation in emergency mode possible	Chapter 9000 Reg. E - Testing CAN BUS	TRANSMISSION, TRANSMISSION CONTROL
04.1.A3	A009	Transmission control unit	Fault or logical error in incremental sensor signal (actual position signal)	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION CONTROL
04.1.A4	A009	Transmission control unit	Fault or logical error in ECU signal.	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION CONTROL
04.1.A5	A009	Transmission control unit	Initial reference (=zero position) could not be reached during ignition 'ON'	Continuation in emergency mode possible	'Transmission control' circuit diagram	TRANSMISSION, TRANSMISSION CONTROL
04.1.A6	A009	Transmission control unit	Reference point signal fault during operation	Continuation in emergency mode possible		TRANSMISSION, TRANSMISSION CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
04.1.B0	A002	all Bus users	Initialisation error	Only limited CAN bus function possible		EOL programming
04.1.B2	A002	ECU, enhanced control	EPROM programming faulty			EOL programming
04.1.B3	A002	ECU, enhanced control	Fault in EPROM programming (rapid reversing ramp parameters)	Rapid reversing possible with standard values.		EOL programming
04.1.B4	A002	ECU, enhanced control	Input parameter values for plausibility monitoring are incorrect.	Standard parameters are stored, plausibility monitoring system remains functional.		EOL programming
04.1.B5	A002	ECU, enhanced control	Checksum error ramp parameter, rapid reverse for Tractor Management System (TMS)			EOL programming
04.1.E0	A002	Turboclutch characteristic	Wrong characteristic stored	Continuation in emergency mode possible		EOL programming
04.1.E1	A002	ECU, enhanced control	Pressure regulator control parameters in tractive power control (ML - transmission adjustment) not plausible or read incorrectly			EOL programming
04.1.E2	A002	ECU, enhanced control	Pressure regulator control parameters in tractive power control not plausible (B008 / B039) or read incorrectly.			EOL programming
04.1.E3	A002	ECU, enhanced control	Checksum error parameter for pedal mode	TMS is switched off		EOL programming
04.1.E6	A002	ECU, enhanced control	Checksum parameter load limit control incorrect			EOL programming

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
04.1.EA	A002	ECU, enhanced control	Internal fault (RAM / EEPROM)	Continuation in emergency mode possible		EOL programming
04.1.EC	B055	Engine speed setpoint ('foot throttle') rotary position sensor; combi-sensor	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION, LOAD LIMIT CONTROL, calibration code '4005'
04.1.ED	B017	Clutch pedal rotary position sensor	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION TURBOCLUTCH FUNCTION calibration code "4001"
04.1.EE	A002	Transmission characteristic	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION, TRANSMISSION CONTROL, calibration code '4007'
04.1.EF	A002	Turboclutch characteristic	No calibration or drifted values	Continuation in emergency mode possible		TRANSMISSION, TURBOCLUTCH FUNCTION, calibration code '4009'
04.1.FF	A002	ECU, enhanced control	Internal fault (RAM / EEPROM)	Continuation in emergency mode possible		EOL programming
05.1.00	A002	ECU, enhanced control	EEPROM checksum error			EOL programming
05.1.33	Y009	4WD clutch solenoid valve	Actuation fault	4WD engages	'4WD / Diff. Lock' circuit diagram	4WD ENHANCED CONTROL
05.1.51	A036	Diff. lock 100% key	Signal from key is faulty	Other functions remain active	'4WD / Diff. Lock' circuit diagram	DIFFERENTIAL LOCK ENHANCED CONTROL
05.1.53	Y010	Diff. lock solenoid valve	Actuation fault	Diff. lock disengages	'4WD / Diff. Lock' circuit diagram	DIFFERENTIAL LOCK ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
05.1.61	B003	Suspension position sensor	Signal fault	No further functions available, suspension remains in last position. Continuation without suspension possible	'Suspension' circuit diagram	ENHANCED CONTROL SUSPENSION
			8.5 V supply fault		A013 fuse 5	
05.1.62	Y014	'Raise' suspension solenoid valve	12V control fault	No further functions available, suspension remains in last position. Continuation without suspension possible	'Suspension' circuit diagram	ENHANCED CONTROL SUSPENSION
05.1.63	Y013	'Lower' suspension solenoid valve	12V control fault	No further functions available, suspension remains in last position. Continuation without suspension possible	'Suspension' circuit diagram	ENHANCED CONTROL SUSPENSION
05.1.64	A036	'Suspension ON' key	Signal from key is faulty	Suspension not operational. Continuation without suspension possible		ENHANCED CONTROL SUSPENSION
05.1.66	Y012	Valve, charge suspension	Actuation fault	Suspension moves to 'Lock' status.		
05.1.6E	B003	Suspension position sensor	Incorrect calibration	Suspension not operational		ENHANCED CONTROL SUSPENSION calibration code '7666'
05.1.9D	A051, B091	Sensor, water separator	Water in fuel	Drain water from tank	Circuit diagram 'Deutz engine control'	
05.1.B0	A002	ECU, enhanced control	CAN-bus communication restricted			EOL programming
05.1.FF	A002	ECU, enhanced control	Internal fault (RAM / EEPROM)			EOL programming
06.1.01	A036	Rear PTO ON / OFF key in cab	Key signal fault	PTO disengages	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
06.1.02	S020	Right external 'Rear PTO ON / OFF' pushbutton	Signal fault	PTO can be engaged by pressing emergency key in cab for 5 seconds.	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.03	S019	Left external 'Rear PTO ON / OFF' pushbutton	Signal fault	PTO can be engaged by pressing emergency key in cab for 5 seconds.	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.04	Y008	Rear PTO clutch solenoid valve	Actuation fault	PTO disengages	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.10	B020	Hall sensor on rear PTO stub shaft	Signal fault	PTO can be engaged by pressing emergency key in cab for 5 seconds.		REAR PTO ENHANCED CONTROL
			12 V supply fault		A013 fuse 13	
06.1.11	A036	Rear PTO automatic mode key	Signal fault	PTO disengages, automatic mode OFF	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.15	A036	NEUTRAL speed selector key	Key signal fault	PTO speed cannot be modified or selected	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.1 A	Y026	Rear PTO speed 540 solenoid valve	Actuation fault	PTO cannot be engaged	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.1B	Y027	Rear PTO speed 750 solenoid valve	Actuation fault	PTO cannot be engaged	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.1C	Y028	Rear PTO speed 1000 solenoid valve	Actuation fault	PTO cannot be engaged	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.41	A036	Rear PTO ON / OFF key (in cab)	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	Speed selection moves to neutral, no preselection possible	'PTO's' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.42	S020	Right external 'Rear PTO ON / OFF' pushbutton	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	No speed selection, PTO cannot be engaged	'PTO shafts' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.43	S019	Left external 'Rear PTO ON / OFF' pushbutton	has been pressed for more than 30 seconds, mechanical or electrical fault in key.	No speed selection, PTO cannot be engaged	'PTO shafts' circuit diagram	REAR PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
06.1.50	B020	Hall sensor, rear PTO stub shaft	Speed at PTO stub greater than 1300 rpm, signal fault on Hall sensor B020	Activating speeds remains possible, press PTO clutch ON/OFF key for more than 5 seconds (emergency operating mode).	'PTO shafts' circuit diagram	REAR PTO ENHANCED CONTROL
			Selected speed is active, speed at stub is lower than clutch speed, power supply fault to Hall sensor B020, speed selection solenoid valve (Y026, Y027, Y028) stuck in 'OFF' position.	Electric speed selection remains possible, press 'PTO clutch ON/OFF' key for more than 5 seconds (emergency operating mode). In case of a faulty solenoid valve, corresponding speed cannot be engaged.	'PTO shafts' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.60	B020, B010	Hall sensor, PTO stub speed B020, Hall sensor, engine speed B010	Actual speed of stub shaft differs by more than plus / minus 12% from engine speed setpoint. Solenoid valve (Y026, Y027, Y028) wrongly wired or seized. Mechanical fault in speed selector. Signal fault at Hall sensor (B020, B010)	Electric speed selection remains possible, press 'PTO clutch ON/OFF' key for more than 5 seconds (emergency operating mode). In case of a faulty solenoid valve, corresponding speed cannot be engaged.	'PTO shafts' circuit diagram	REAR PTO ENHANCED CONTROL
06.1.E0	A002	ECU, enhanced control	Checksum error parameter current control for speed selector			EOL programming
06.1.E1	A002	ECU, enhanced control	Checksum error PTO parametrisation			EOL programming
07.1.01	A036	Front PTO ON / OFF key	Key signal fault		'PTO shafts' circuit diagram	FRONT PTO ENHANCED CONTROL
07.1.04	Y011	'PTO clutch' front PTO solenoid valve	Actuation fault			FRONT PTO ENHANCED CONTROL

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
07.1.05	B002	Front PTO Hall sensor	Signal fault		'PTO shafts' circuit diagram	FRONT PTO ENHANCED CONTROL
			12 V supply fault		A013 fuse 14	
07.1.41	A036	Front PTO 'ON' key	Plausibility error, key has been pressed for more than 30 seconds	Front PTO does not function		FRONT PTO ENHANCED CONTROL
08.1.11	Y021	Rear power lift, 'raise' function	Solenoid valve 'raise' faulty	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.12	Y022	Rear power lift, 'lower' function	Solenoid valve 'lower' faulty	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.13	Y021, Y022	Power lift	Solenoid valve short circuit pin 2 to 6 or pin 14 to 6	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.14	S027, S029	Raise button, rear power lift,	Raise button	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.15	S028, S030	Lower button, rear power lift,	Lower button	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.16	A024	ECU, EPC B	Ub_Stab / sensor supply	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	
08.1.17	A024, G002	ECU, EPC B; generator	Ub+ > 18 Volt	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	
08.1.18	S072	Quick lift switch, ECU, EPC B	Quick lift switch faulty	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.22	A024, B030	Rotary position sensor, rear power lift "position sensor"	Position sensor_signal	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
08.1.23	A024, A035	Setpoint potentiometer, rear power lift	Setpoint potentiometer_signal	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.24	A024, A035	Limit position potentiometer, rear power lift	Upper limit position potentiometer	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.25	S071	Switch, rapid lowering	Rapid lowering short circuit Ub+	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.26	S048	Switch, EPC lock	Rigid drawbar, short circuit ground	Control locked	Circuit diagram 'Electrohydraulic lifting gear control'	Wiring / check switch
08.1.31	B031	Right draft sensing pin, rear power lift	Draft sensing pin_right	Reduced control performance	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.32	B032	Left draft sensing pin, rear power lift	Draft sensing pin_left	Reduced control performance	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.34	A035	Rotary switch, rear power lift, "lowering speed"	Lower potentiometer	Changes cannot be made	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
8.1.36	A035	Rotary switch, rear power lift, 'mixed control'	Mix potentiometer	Changes cannot be made	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.37	S027, S029	External button raise left and right, rear power lift	Button raise line interruption	Reduced control performance	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.38	S028, S030	External button lower left and right, rear power lift	Button lower line interruption	Reduced control performance	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.50	B031	Right draft sensing pin, rear power lift	Draft sensing pin right overload	Reduce load on draft sensing pin	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
08.1.51	B032	Left draft sensing pin, rear power lift	Draft sensing pin left overload	Reduce load on draft sensing pin	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC
08.1.A0	A024	ECU, EPC B	Checksum incorrect			EOL programming
08.1.A1	A024	ECU, EPC B	Checksum incorrect			EOL programming
08.1.B0	B030	Position sensor, rear power lift	Position sensor not calibrated	Position setting no longer possible	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC calibration code " 8002"
08.1.B2	A035	Rotary switch, setpoint setting	Setpoint potentiometer not calibrated	Setpoint can no longer be set	Circuit diagram 'Electrohydraulic lifting gear control'	Rear EPC calibration code ' 8001'
01.1.E0	A002, B035	A002 - ECU (enhanced control) ; EDC / EMR hand throttle sensor	EEPROM checksum is wrong	limited driving operation, Chapter 2000 Reg.B	'EDC control' circuit diagram	End-of-line programming required or load new data record
1E.1.00	A051	EDC engine control unit	Undefined error	Read error out with SERDIA		SERDIA
1E.1.01	G001	Battery	Battery input, battery voltage outside target range.	Starting not possible		SERDIA (clear fault)
1E.1.02	B092	Boost pressure sensor	Boost pressure sensor, cable break or short circuit. Boost pressure outside target range	Reduced performance	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0020, 0021
1E.1.03	B092	Boost pressure sensor	Charge air temperature sensor, cable break or short circuit. Charge air temperature above target range	Reduced performance	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0095, 0096
1E.1.04	B089	Coolant - temperature sensor	Coolant temperature sensor, cable break or short circuit. Coolant temperature outside target range		Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0037, 0038

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1E.1.06	B085, B088	Camshaft speed sensor, crankshaft speed sensor	Camshaft speed signal, shaft faulty or signal missing; crankshaft speed signal faulty or missing; camshaft/crankshaft speed signals out of phase	Irregular running	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:004B, 004C, 004D, 004E, 004F, 0050
1E.1.07	B091	Water separator sensor	Fuel filter sensor/water separator, cable break or short circuit, water level higher than target range	Drain water from fuel filter	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0057, 0059
1E.1.08	B087	Fuel low pressure sensor	Cable break or short circuit. Fuel low pressure below target range	Check fuel system, may be air in system or filter clogged	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:005A, 005B, 005E
1E.1.0A	B035	Hand throttle sensor	Cable break or short circuit. Signal from hand throttle implausible		Circuit diagram'EDC control'	SERDIA (clear fault) FC:008A
1E.1.0E	B090, B093	Sensor, engine oil pressure	Cable break or short circuit. Oil pressure outside target range		Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:00C4, 00C5, 00C6, 00C7
1E.1.12	S002	Ignition switch	Pin 50, engine start switch hangs		Circuit diagram'EDC control'	SERDIA (clear fault) FC:00E3, 00E4
1E.1.13	A051	ECU, engine control unit (EDC7)	Driving speed above target range, signal faulty		Circuit diagram'EDC control'	SERDIA (clear fault) FC:00E8
1E.1.14	B055	Foot throttle sensor	Cable break or short circuit. Signal not plausible with signal from foot throttle sensor	Speed is maintained, can be taken over with hand throttle by briefly increasing speed	Circuit diagram'EDC control'	SERDIA (clear fault) FC:000C, 000E, 000F
1E.1.21	K063	Heater relay	Cable break or short circuit	Preheating system does not function	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0011
1E.1.22	K063	Heater relay	Cable break or incorrectly connected	Preheating system does not function	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0013, 0014
1E.1.23	S047	Engine brake	Cable break or short circuit		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0034

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1E.1.24	Y006	Engine brake flap valve	Valve faulty		Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:004A
1E.1.25	Y006	Engine brake flap valve	Cable break or short circuit		Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0052
1E.1.26	Y024	Air-conditioning compressor magnetic clutch	Cable break or short circuit		Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0053
1E.1.27	G001	Battery	Short circuit to battery or short to ground	Starting not possible		SERDIA (clear fault) FC:00B6, 00B7, 00BA, 00BC
1E.1.2C	K065	Start relay	Cable break or short circuit	Starting not possible		SERDIA (clear fault) FC:00DF, 00E0
1E.1.30	B004	Air filter	Pressure loss above target range	Clean/change air filter	Circuit diagram'EDC control'	SERDIA (clear fault) FC:000B, 00F2
1E.1.34	S034	Switch, coolant level	Coolant outside of specified range	Check coolant level	Circuit diagram'EDC control'	SERDIA (clear fault) FC:0025
1E.1.37	A051	ECU, engine control unit (EDC7)	Fan speed outside of specified range	Clean/change air filter	Circuit diagram'EDC control'	SERDIA (clear fault)
1E.1.3A	A051	ECU, engine control unit (EDC7)	Misfire			SERDIA (clear fault) FC:002F
1E.1.50	A091	Metering unit	Metering unit valve not connected, short circuit to battery or short to ground	Error message appears stating that the engine will stop in approx. 5 minutes	Circuit diagram'EDC control'	SERDIA (clear fault) FC:00B0, 00B1, 00B2, 00B3
1E.1.51	B086	Rail pressure sensor, rail pressure limiting valve	Rail pressure limiting valve opening failure.	an error message is displayed stating that the engine will stop in approx. 5 minutes		SERDIA (clear fault) FC:00D0, 00EC
1E.1.52	B086	Rail pressure sensor	Cable break or short circuit	an error message is displayed stating that the engine will stop in approx. 5 minutes	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:00D1, 00D2
1E.1.53	B086	Rail pressure sensor	Rail pressure outside target range	Error message appears stating that the engine will stop in 4 minutes	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:00D3, 00D4, 00D5, 00D6, 00D7, 00D8

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1E.1.54	B086	Rail pressure sensor	Compression test active	Rail pressure monitoring is deactivated	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:00AF
1E.1.60	A051	ECU, engine control unit (EDC7)	Misfire detected in multiple cylinders			SERDIA (clear fault) FC:002E
1E.1.61	A051	ECU, engine control unit (EDC7)	Misfire detected in cylinder 1.			SERDIA (clear fault) FC:0026
1E.1.62	A051	ECU, engine control unit (EDC7)	Misfire detected in cylinder 2.			SERDIA (clear fault) FC:0027
1E.1.63	A051	ECU, engine control unit (EDC7)	Misfire detected in cylinder 3.			SERDIA (clear fault) FC:0028
1E.1.64	A051	ECU, engine control unit (EDC7)	Misfire detected in cylinder 4.			SERDIA (clear fault) FC:0029
1E.1.70	A051	ECU, engine control unit (EDC7)	Begin of injection period in cylinder 1 outside target range or missing			SERDIA (clear fault) FC:0018
1E.1.71	A051	ECU, engine control unit (EDC7)	Begin of injection period in cylinder 2 outside target range or missing			SERDIA (clear fault) FC:0019
1E.1.72	A051	ECU, engine control unit (EDC7)	Begin of injection period in cylinder 3 outside target range or missing			SERDIA (clear fault) FC:001A
1E.1.73	A051	ECU, engine control unit (EDC7)	Begin of injection period in cylinder 4 outside target range or missing			SERDIA (clear fault) FC:001B
1E.1.78	A051	ECU, engine control unit (EDC7)	Injectors of cylinder bank 1 short circuit	Cylinder shut-off		SERDIA (clear fault) FC:0099
1E.1.79	A051	ECU, engine control unit (EDC7)	Injectors of cylinder bank 1 cable break	Cylinder shut-off		SERDIA (clear fault) FC:009A
1E.1.7C	A051	ECU, engine control unit (EDC7)	Short circuit or cable break to injector 1	Injection failure		SERDIA (clear fault) FC:009F, 00A0
1E.1.7D	A051	Injector 2	Short circuit or cable break to injector 2	Injection failure		SERDIA (clear fault) FC:00A1, 00A2

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1E.1.7E	A051	Injector 3	Short circuit or cable break to injector 3	Injection failure		SERDIA (clear fault) FC:00A3, 00A4
1E.1.7F	A051	ECU, engine control unit (EDC7)	Short circuit or cable break to injector 4	Injection failure		SERDIA (clear fault) FC:00A5, 00A6
1E.1.90	Y094	Exhaust gas recirculation actuator	Short circuit to battery, short to ground, cable break or short circuit	Reduced performance	Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:0045, 0046, 0047, 0048
1E.1.B0	A051	ECU, engine control unit (EDC7)	CAN message speed control lever missing or above target range.		Circuit diagram'EDC control'	SERDIA (clear fault) FC:005E
1E.1.B1	A051	ECU, engine control unit (EDC7)	CAN message function mode control missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:005F
1E.1.B2	A051	ECU, engine control unit (EDC7)	CAN message engine protection missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:006A
1E.1.B3	A051	ECU, engine control unit (EDC7)	CAN message preheat and engine command missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:006E
1E.1.B4	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0070
1E.1.B5	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0071
1E.1.B6	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0075
1E.1.B7	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0076
1E.1.B8	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0078
1E.1.B9	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0079
1E.1.BA	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:007A
1E.1.BB	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:007B

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1E.1.BC	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:007C
1E.1.BD	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:007D
1E.1.BE	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:007E
1E.1.BF	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:007F
1E.1.C0	A051	ECU, engine control unit (EDC7)	CAN message missing		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0080
1E.1.C1	A051	ECU, engine control unit (EDC7)	CAN bus timeout in at least one of the sent messages		Circuit diagram'EDC control'	SERDIA (clear fault) FC:0083
1E.1.C2	A051	ECU, engine control unit (EDC7)	CAN bus A, cable break or short circuit	Driving with foot throttle is possible	Circuit diagram'EDC control'	SERDIA (clear fault) FC:00C0
1E.1.C3	A051	ECU, engine control unit (EDC7)	CAN bus B, cable break or short circuit	Driving with foot throttle is possible	Circuit diagram'EDC control'	SERDIA (clear fault) FC:00C1
1E.1.C4	A051	ECU, engine control unit (EDC7)	CAN bus C, cable break or short circuit	Driving with foot throttle is possible	Circuit diagram'EDC control'	SERDIA (clear fault) FC:00C2
1E.1.D0	A051	ECU, engine control unit (EDC7)	Ambient pressure sensor faulty			SERDIA (clear fault) FC:0010
1E.1.D1	A051	ECU, engine control unit (EDC7)	Engine control unit faulty			SERDIA (clear fault) FC:008D
1E.1.D2	A051	ECU, engine control unit (EDC7)	EEPROM memory access			SERDIA (clear fault) FC:008E
1E.1.D3	A051	ECU, engine control unit (EDC7)	Injector (chip) faulty			SERDIA (clear fault) FC:009D
1E.1.D4	A051	ECU, engine control unit (EDC7)	Injector (chip) faulty			SERDIA (clear fault) FC:009E
1E.1.D5	A051	ECU, engine control unit (EDC7)	Engine control faulty			SERDIA (clear fault) FC:00B8

Fault code	Id code	Brief description	Description	Consequences	Link	FENDIAS / Note
1E.1.D6	A051	ECU, engine control unit (EDC7)	Watchdog counter exceeds maximum		Circuit diagram'EDC control'	SERDIA (clear fault) FC:00DA
1E.1.D7	A051	ECU, engine control unit (EDC7)	Wrong voltage of internal 5V reference source 1		Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:00DB
1E.1.D8	A051	ECU, engine control unit (EDC7)	Wrong voltage of internal 5V reference source 2		Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:00DD
1E.1.D9	A051	ECU, engine control unit (EDC7)	Wrong voltage of internal 5V reference source 3		Circuit diagram 'Deutz engine control'	SERDIA (clear fault) FC:00DE
1E.1.DB	A051	ECU, engine control unit (EDC7)	Serial communication interface faulty		Circuit diagram'EDC control'	SERDIA (clear fault) FC:00EB

störcodetabelle

FENDT 922 Vario COM III 919 .. / 1001-
FENDT 924 Vario COM III 922 .. / 1001-
FENDT 927 Vario COM III 925 .. / 1001-
FENDT 930 Vario COM III 928 .. / 1001-
FENDT 933 Vario COM III 931 .. / 1001-
FENDT 936 Vario COM III 934 .. / 1001-

Fault code table
Tableau de codes défauts
Tabella codici disturbi
Tabla código averías
Storingscodetabel

FENDT 922 / 924 / 927 / 930 / 933 / 936 Vario COM III

919 .. 1001- / 922 .. 1001- / 925 .. 1001- / 928 .. 1001- / 931 .. 1001- / 934 .. 1001-

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
00.0.01	**A050** - ECU, basic control unit	Bus fault EDC, no speed setting to EDC	Engine malfunction		EOL programming
00.0.02	**A008** - Terminal	Terminal bus fault, does not report to bus			EOL programming
00.0.03	**A039** - MFA, multifunction armrest	Multifunction armrest bus fault, does not report to bus			EOL programming
00.0.04	**A050** - ECU, basic control unit	Transmission bus fault, no setpoint value to actuator unit	Functions non-operational, no display		EOL programming
00.0.05	**A050** - ECU, basic control unit	Bus fault AR/Diff.	Functions non-operational, no display		EOL programming
00.0.06	**A050** - ECU, basic control unit	Bus fault, rear PTO	Functions non-operational, no display		EOL programming
00.0.07	**A050** - ECU, basic control unit	Bus fault, front PTO	Function non-operable, no display		EOL programming
00.0.08	**A050** - ECU, basic control unit	Bus fault, rear EPC	Function non-operable, no display		EOL programming
00.0.09	**A050** - ECU, basic control unit	Bus fault, front EPC			EOL programming
00.0.0A	**A050** - ECU, basic control unit	Bus fault, el. valve			EOL programming
00.0.0B	**A050** - ECU, basic control unit	Bus fault, teach-in function			EOL programming
00.0.0F	**A038** - ECU, central electrical system	Bus fault, central electrical system			EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
00.0.10	**A050** - ECU, basic control unit	Bus fault, air conditioning system			EOL programming
00.0.15	**A050** - ECU, basic control unit	Bus fault, VA suspension	Function non-operable, no display		EOL programming
00.0.16	**A050** - ECU, basic control unit	EPC CAN bus fault Auto mode	Function non-operable, no display		EOL programming
00.0.17	**A050** - ECU, basic control unit	Bus fault, Vario control unit			EOL programming
00.0.18	**A050** - ECU, basic control unit	Bus fault, electro-hydraulic steering (EHL)			EOL programming
00.0.19	**A050** - ECU, basic control unit	Bus fault, ISO task			EOL programming
00.0.1E	**A050** - ECU, basic control unit	Bus fault, EDC7 reports incorrectly to instrument panel			EOL programming
00.0.1F	**A050** - ECU, basic control unit	Bus fault, fault management			EOL programming
00.1.4D	**A007** - Instrument panel	Checksum Menu images (24x24), faulty instrument panel memory	Display fault in instrument panel		EOL programming
00.1.4E	**A007** - Instrument panel	Checksum Menu images (64x64), faulty instrument panel memory	Display fault in instrument panel		EOL programming
00.1.4F	**A007** - Instrument panel	Checksum GD table	Display fault in instrument panel		EOL programming
00.1.50	**A007** - Instrument panel	VDO instrument panel EEPROM not programmed	Malfunctions in instrument panel		EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
00.1.54	**B060** - Sensor, compressed air unit pressure	Sensor faulty Signal fault	Function non-operable Compressed air display	Circuit diagram Sheet 12	
		12 V supply faulty			
00.1.55	**B084** - Sensor, hydraulic oil level	Sensor faulty Signal fault			
00.1.59	**B034** - Immersed tube sensor (fuel)	Sensor faulty, Signal fault	No display	Circuit diagram Sheet 12	
00.1.5A	**B019** - Sensor, compressed air supply	Sensor faulty Signal fault			
00.1.71	**A037** - Control panel, dashboard left	Enter button	Button non-operable		
00.1.72	**A037** - Control panel, dashboard left	ESC button	Button non-operable		
00.1.73	**A037** - Control panel, dashboard left	Up button	Button non-operable		
00.1.74	**A037** - Control panel, dashboard left	Down button	Button non-operable		
00.1.75	**A037** - Control panel, dashboard left	Enter button pressed > 30s	Button non-operable or button released		
00.1.76	**A037** - Control panel, dashboard left	Esc button pressed > 30s	Button non-operable or button released		
00.1.77	**A037** - Control panel, dashboard left	Up button pressed > 30s	Button non-operable or button released		
00.1.78	**A037** - Control panel, dashboard left	Down button pressed > 30s	Button non-operable or button released		
00.1.A7	**B060** - Sensor, compressed air unit pressure	Compressed air supply 1, overpressure		Circuit diagram Sheet 12	
00.1.A8	**B060** - Sensor, compressed air unit pressure	Compressed air supply 1, vacuum		Circuit diagram Sheet 12	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
00.1.A9	**B019** - Sensor, compressed air supply	Compressed air supply 2, overpressure		Circuit diagram Sheet 12	
00.1.AA	**B019** - Sensor, compressed air supply	Compressed air supply 2, vacuum		Circuit diagram Sheet 12	
01.1.01	**B055** - Sensor, foot throttle	Signal too high, Signal to low, No signal for longer than 2000 ms		Circuit diagram Sheet 21	TRANSMISSION LOAD LIMIT CONTROL
01.1.03	**B055** - Sensor, foot throttle	(red side) to A050 ECU, basic control unit (yellow side) to A051 ECU, engine No concordance		Circuit diagram Sheet 21	TRANSMISSION LOAD LIMIT CONTROL Calibration "4005"
01.1.04	**A050** - ECU, basic control unit	Checksum error TMS	No TMS drive possible		EOL programming
01.1.05	**A051** - ECU, engine control unit (EDC 7).	Not able to read-off engine configuration from EDC control unit	TMS non-operable		EDC possibly not working, G bus possibly interrupted
01.1.06	**A050** - ECU, basic control unit	Memory in EXT could not be reserved	TMS non-operable		EXT error
01.1.07	**A051** - ECU, engine control unit (EDC 7).	Checksum Incorrect engine parameters	Travel in emergency mode possible		EOL programming
01.1.08	**A051** - ECU, engine control unit (EDC 7).	Checksum of Power Boost parameter incorrect	Overall engine power reduction to 70%		EOL programming
01.1.30	**B083** - Immobiliser control	No ignition key taught in	Start not possible	Teach in vehicle key	
01.1.31	**B083** - Immobiliser control	Invalid transponder data from ignition key	Cannot start with this key	Use taught-in key	
01.1.32	**B083** - Immobiliser control	Ignition key without transponder recognised	Cannot start with this key	Use taught-in key	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
01.1.34	**B083** - Immobiliser control	No response from immobiliser control			
01.1.35	**B083** - Immobiliser control	Immobiliser control is in "ready for teach-in" mode, A051 (EDC) is not			
01.1.36	**B083** - Immobiliser control	No immobilisation communication exchange with A051 (EDC)			
01.1.37	**B083** - Immobiliser control	Performance curve not sent to A051 (EDC)			
01.1.38	**B083** - Immobiliser control	Performance curve not available			EOL programming
01.1.39	**B083** - Immobiliser control	Equipment data not available	New activation		EOL programming
01.1.3A	**U001** - Immobiliser aerial	Aerial faulty, signal line faulty			
01.1.3E	**B083** - Immobiliser control	A050 (ECU basic) equipment features cannot be read	Speed governor and 4WD engage when braking		EOL programming
01.1.3F	**B083** - Immobiliser control	A050 (ECU basic) equipment features do not match	Speed governor and 4WD engage when braking		EOL programming
01.1.7A	**A039** - MFA, multifunction armrest Cruise control button MAX (on joystick)	Electrical fault	TMS is switched off		
01.1.7B	**A039** - MFA, multifunction armrest Cruise control button MIN (on joystick)	Electrical fault	TMS is switched off		
01.1.7C	**A039** - MFA, multifunction armrest TMS button	Electrical fault	TMS is switched off		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
01.1.7E	**A039** - MFA, multifunction armrest Potentiometer, hand throttle	Electrical fault			
01.1.9A	**A039** - MFA, multifunction armrest	Communication fault with cruise control button MIN	TMS is switched off	CAN bus	
01.1.9B	**A039** - MFA, multifunction armrest	Communication fault with cruise control button MAX	TMS is switched off	CAN bus	
01.1.9C	**A039** - MFA, multifunction armrest	Communication fault with TMS button	TMS is switched off	CAN bus	
01.1.9E	**A039** - MFA, multifunction armrest	Communication error to hand throttle potentiometer			
01.1.A0	**A051** - ECU, engine control unit (EDC 7).	Engine type does not match entered tractor type	Torque reduction	Circuit diagram Sheet 21	SERDIA diagnostics
01.1.A1	**A050** - ECU, basic control unit **A051** - ECU, engine control unit (EDC 7).	CAN connection fault EDC fails to report	Engine does not start	Circuit diagram Sheet 5 or sheet 21	SERDIA diagnostics
01.1.B0	**A050** - ECU, basic control unit **A051** - ECU, engine control unit (EDC 7).	CAN bus communication restricted	restricted Engine function	Circuit diagram Sheet 5 or sheet 21	EOL programming
01.2.C0	**A039** - MFA, multifunction armrest	Warning message "Seat switch with active TMS"			
01.1.E0	**A050** - ECU, basic control unit	EEPROM: Checksum incorrect for hand throttle	Hand throttle not working		EOL programming
01.1.F1	**A051** - ECU, engine control unit (EDC 7).	Power reduction in EDC			
01.1.F2	**A051** - ECU, engine control unit (EDC 7).	Manipulation protection message not available			
02.1.E0	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest	Faulty CAN communication between e-box and CAN joystick			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
02.1.EE	**A050** - ECU, basic control unit	Error message from LBS job controller			
02.1.EF	**A050** - ECU, basic control unit	Internal tractor GD error message			
03.1.01	**A039** - MFA, multifunction armrest	Faulty hardware (e.g. RAM without flash)	Function non-operable		EOL programming
03.1.02	**A039** - MFA, multifunction armrest	Incorrect checksum for the first 128 bytes in the EEPROM	Function non-operable		EOL programming
03.1.03	**A039** - MFA, multifunction armrest	Software error	Function non-operable		EOL programming
03.1.08	**A039** - MFA, multifunction armrest	Invalid parameters for flashing in EEPROM			EOL programming
03.1.09	**A039** - MFA, multifunction armrest	Invalid parameters for brightness setting in the EEPROM			EOL programming
03.1.18	**A039** - MFA, multifunction armrest	Invalid parameters for acceleration rate	Uses predefined values		EOL programming
03.1.20	**A039** - MFA, multifunction armrest	Invalid parameter for cross-gate lever	Uses predefined values		EOL programming
03.1.30	**A039** - MFA, multifunction armrest	Invalid parameters for linear module (valve rockers)	Uses predefined values		EOL programming
03.1.40	**A039** - MFA, multifunction armrest	Invalid parameters for hand throttle and throttle pedal speed range	Uses predefined values		EOL programming
03.1.50	**A039** - MFA, multifunction armrest	Invalid parameters for FRONT power lift module	Uses predefined values		EOL programming
03.1.60	**A039** - MFA, multifunction armrest	Invalid parameters for REAR power lift module	Uses predefined values		EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.04	**B017** - Sensor, clutch pedal	Sensor faulty, Signal fault	Loss of enhanced control/function in final speed control; No cruise control function, TMS is switched off	Circuit diagram Sheet 6	TRANSMISSION, TRAVEL RANGE
		Faulty 8.5 V supply			
04.1.05	**B039** - Sensor, high-pressure 2	Sensor faulty, Signal fault	TMS is switched off	Circuit diagram Sheet 6	
04.1.06	**B055** - Sensor, foot throttle	Faulty switch, Signal fault	Emergency mode if throttle pedal mode is active, TMS is switched off	Circuit diagram Sheet 21	
04.1.07	**B008** - Sensor, high-pressure 1	Sensor faulty, Signal fault	Peak loads in the transmission are no longer monitored, TMS is switched off	Circuit diagram Sheet 6	TRANSMISSION, TURBO-CLUTCH
		Faulty 8.5 V supply			
04.1.08	**B016** - Sensor, travel range detection	Sensor faulty, Signal fault	TMS is switched off	Circuit diagram Sheet 6	
04.1.19	**A050** - ECU, basic control unit	Error on reading-in throttle pedal parameters			
04.1.20	**A039** - MFA, multifunction armrest	EEPROM checksum incorrect or not calibrated	Throttle pedal mode not possible, TMS is switched off		
04.1.21	**S045** - Switch, reversing driver stand	Faulty switch, Signal fault		Circuit diagram Sheet 6	
04.1.22	**A039** - MFA, multifunction armrest	Throttle pedal resolution potentiometer faulty, Signal fault	TMS is switched off		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.23	**A039** - MFA, multifunction armrest	Joystick signal "Tempomat cruise control ON" faulty	Continuation in emergency mode possible	Circuit diagram Sheet 5	TRANSMISSION, CRUISE CONTROL
04.1.24	**S080** - Switch, hand brake	Faulty switch, Signal fault	Hand brake auto mode not available	Circuit diagram Sheet 6	TRANSMISSION, TRAVEL RANGE
04.1.25	**A039** - MFA, multifunction armrest	Joystick signal "F/R quick reverse" faulty	TMS is switched off		
04.1.26	**A039** - MFA, multifunction armrest	Accelerator pedal mode button faulty, Signal fault	Throttle pedal mode inoperable		
04.1.27	**B014** - Sensor, hydrostatic collecting shaft	Sensor faulty, Signal fault			
04.1.28	**A009** - Actuator unit VR incremental encoder	Faulty path signal	Continuation in emergency mode possible	Circuit diagram Sheet 6	TRANSMISSION, TRANSMISSION ADJUSTMENT
04.1.29	**A039** - MFA, multifunction armrest	Joystick signal "park position" faulty	TMS is switched off		
04.1.2A	**B015** - Sensor, bevel pinion	Sensor faulty, Signal fault	Continuation in emergency mode possible	Circuit diagram Sheet 6	TRANSMISSION, CRUISE CONTROL
04.1.2B	**A039** - MFA, multifunction armrest Button, travel range selection I/II	Faulty button, Signal fault			
04.1.2C	**A039** - MFA, multifunction armrest Neutral/Active Stationary button	Faulty button, Signal fault	Continuation in emergency mode possible		TRANSMISSION, TRAVEL RANGE
04.1.2D	**S079** - Switch, steering column "Quick reverse" button on control stalk	Faulty forward travel signal	TMS is switched off	Circuit diagram Sheet 6	
04.1.2E	**S079** - Switch, steering column "Quick reverse" button on control stalk	Faulty reverse travel signal	TMS is switched off	Circuit diagram Sheet 6	
04.1.2F	**A039** - MFA, multifunction armrest Joystick	Faulty joystick signal "v-" (joystick back)	Continuation in emergency mode possible	Circuit diagram	TRANSMISSION, MANUAL ADJUSTMENT
04.1.31	**B014** - Sensor, hydrostatic collecting shaft	Sensor faulty, Signal fault	Continuation in emergency mode possible	Circuit diagram Sheet 6	TRANSMISSION, CRUISE CONTROL

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.32	**A039** - MFA, multifunction armrest Joystick activation button	Faulty button, signal fault	Continuation in emergency mode possible	Circuit diagram	TRANSMISSION, MANUAL ADJUSTMENT
04.1.33	**A039** - MFA, multifunction armrest	Faulty joystick signal "v+" (joystick forward)	Continuation in emergency mode possible	Circuit diagram	TRANSMISSION, MANUAL ADJUSTMENT
04.1.42	**B014** - Sensor, hydrostatic collecting shaft	Sensor faulty, Signal fault	Continuation in emergency mode possible	Circuit diagram Sheet 6	TRANSMISSION, CRUISE CONTROL
		Faulty 8.5 V supply			
04.1.44	**B010** - Sensor, engine speed	Sensor faulty, Signal fault	Continuation in emergency mode possible	Circuit diagram Sheet 6	TRANSMISSION, CRUISE CONTROL
		12 V supply fault			
04.1.45	**B015** - Sensor, bevel pinion (=travel speed)	Sensor faulty, Signal fault	Continuation in emergency mode possible	Circuit diagram Sheet 6	TRANSMISSION, CRUISE CONTROL
		Faulty 8.5 V supply			
04.1.50	**S017** - Switch, transmission oil contamination	Filter clogged	No further indication of clogging	Circuit diagram Sheet 6	TRANSMISSION, TRANSMISSION OIL/FILTER switch function inactive below oil temperature of 50°
04.1.53	**B009** - Discharge temperature	"Transmission oil temperature more than 110°C"	transmission damage if journey is continued!	Circuit diagram Sheet 6	TRANSMISSION, TRANSMISSION OIL/FILTER
04.1.56	**S017** - Switch, transmission oil contamination	Sensor faulty, Signal line fault		Circuit diagram Sheet 6	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.58	**A050** - ECU, basic control unit **A009** - Actuator unit **B014** - Sensor, hydrostatic collecting shaft **B015** - Sensor, bevel pinion	Transmission slip monitor Transmission output speed deviates by more than 30% from setpoint value	May occur at extremely low temperatures in isolated cases; repeated occurrence under normal conditions causes a rise in oil temperature and further transmission damage; TMS is switched off	Fault not active if turbo-clutch (TK) function is on - clutch is depressed, check clutch from actuator unit	TRANSMISSION, TRANSMISSION ADJUSTMENT ("ideal ratio/actual ratio" comparison)
04.1.61	**A050** - ECU, basic control unit **Y002** - Solenoid valve, travel range I	Faulty valve actuation, travel range I		Circuit diagram Sheet 6	
04.1.62	**A050** - ECU, basic control unit **Y003** - Solenoid valve, travel range II	Faulty valve actuation, travel range II		Circuit diagram Sheet 6	
04.1.63	**A050** - ECU, basic control unit **Y005** - Solenoid valve, speed governor	Faulty valve actuation, mech. speed governor		Circuit diagram Sheet 6	
04.1.64	**A050** - ECU, basic control unit **Y004** - Solenoid valve, turbo-clutch	Faulty solenoid valve actuation, turbo-clutch	TK valve cannot be actuated manually, i.e. tractor must not be driven!	Circuit diagram Sheet 6	TRANSMISSION, TURBO-CLUTCH
04.1.65	**A050** - ECU, basic control unit **Y053** - Active hold function solenoid valve	Faulty stationary function actuation, low side brake	Fault on earth side to solenoid valve	Circuit diagram Sheet 6	
04.1.66	**A050** - ECU, basic control unit **Y053** - Active hold function solenoid valve	Faulty actuation of stationary function, high side brake	Fault on + side to solenoid valve	Circuit diagram Sheet 6	
04.1.67	**A050** - ECU, basic control unit **Y053** - Active hold function solenoid valve	Self-test on brake stationary function failed	Check electrical circuit, relay poss. incorrect	Circuit diagram Sheet 6	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.68	**A050** - ECU, basic control unit **Y053** - Active hold function solenoid valve	Faulty residual current, high to low side brake stationary function	External power source present	Circuit diagram Sheet 6	
04.1.70	**A039** - MFA, multifunction armrest Cruise control button, C1	Faulty button, Signal fault			
04.1.71	**A039** - MFA, multifunction armrest Cruise control button, C2	Faulty button, Signal fault			
04.1.76	**S047** - Switch, engine brake	Sensor faulty, Signal fault	TMS is switched off	Circuit diagram Sheet 21	
04.1.77	**A039** - MFA, multifunction armrest Joystick acceleration rate I…IV	Signal fault	No emergency mode, rate III only in the case of a fault		
04.1.78	**S053** - Switch, driver seat	Faulty switch, Signal fault	TMS is switched off		
04.1.79	**A050** - ECU, basic control unit	Output for reverse warning signal not OK (Current > 2500 mA or short circuit)			
04.1.82	**A050** - ECU, basic control unit **B014** - Sensor, hydrostatic collecting shaft **B015** - Sensor, bevel pinion	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	Circuit diagram Sheet 6	Possible faults; range change potentiometer B016, hydrostat. bevel pinion sensor
04.1.83	**A050** - ECU, basic control unit **B014** - Sensor, hydrostatic collecting shaft **B015** - Sensor, bevel pinion	Plausibility error (=speeds do not match)	Continuation in emergency mode possible	Circuit diagram Sheet 6	Possible faults; range change potentiometer B016, hydrostat. bevel pinion sensor
04.1.84	**A039** - MFA, multifunction armrest Joystick switch (V, R, VR, cruise control, default position)	Plausibility error (=signals do not match)	Continuation in emergency mode possible		TRANSMISSION man. ADJUSTMENT; JOYSTICK

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.85	**B010** - Sensor, engine speed	Engine speed sensor does not report plausible speed curves. Output speed increase or decrease outside limits.	Continuation in emergency mode possible	Circuit diagram Sheet 6	TRANSMISSION, LOAD LIMIT CONTROL
04.1.86	**B008** - Sensor, high-pressure 1 **B039** - Sensor, high-pressure 2	Plausibility error in both pressure sensors	TMS is switched off	Circuit diagram Sheet 6	
04.1.87	**S079** - Switch, steering column	Plausibility error at VR switch, quick reverse	VR switch inoperable, quick reverse on steering wheel adjustment lever, S061 switch,	Check quick reverse Chapter 9000 Reg. E	TRANSMISSION, MANUAL ADJUSTMENT
04.1.89	**B009** - Discharge temperature	Plausibility error, transmission temperature		Circuit diagram Sheet 6	
04.1.94	**A039** - MFA, multifunction armrest **A050** - ECU, basic control unit	Faulty CAN communication between e-box and CAN joystick			
04.1.A1	**A009** - Actuator unit	Turn angle is not reached within 2 seconds.	Continuation in emergency mode possible	Mechanical check: check smooth adjustment action in emergency mode.	TRANSMISSION, TRANSMISSION ADJUSTMENT refer to Service Information 26/04
04.1.A2	**A009** - Actuator unit **A050** - ECU, basic control unit	CAN bus actuation fault	Continuation in emergency mode possible	Check CAN bus Chapter 9000 Reg. E	TRANSMISSION, TRANSMISSION ADJUSTMENT
04.1.A3	**A009** - Actuator unit	Fault or logical error in incremental sensor signal (actual position signal)	Continuation in emergency mode possible	Circuit diagram Sheet 5/6	TRANSMISSION, TRANSMISSION ADJUSTMENT
04.1.A4	**A009** - Actuator unit	Fault or logical error in EST signal.	Continuation in emergency mode possible	Circuit diagram Sheet 5/6	TRANSMISSION, TRANSMISSION ADJUSTMENT
04.1.A5	**A009** - Actuator unit	Initial reference (=zero position) could not be found during ignition ON	Continuation in emergency mode possible	Circuit diagram Sheet 5/6	TRANSMISSION, TRANSMISSION ADJUSTMENT refer to Service Information 26/04

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.A6	**A009** - Actuator unit	Reference point signal fault during operation	Continuation in emergency mode possible	Circuit diagram Sheet 5/6	TRANSMISSION, TRANSMISSION ADJUSTMENT
04.1.B0	All bus users	Initialisation error TEACH-IN error	Restricted CAN bus data communication	Check CAN bus Chapter 9000 Reg. E	
04.1.B1	**A050** - ECU, basic control unit	Fatal error, range change (e.g. valve fault) TEACH-IN error	Emergency mode		
04.1.B2	**A050** - ECU, basic control unit	Fault in EPROM programming (travel range selector I/II)	Range cannot be changed while driving.		EOL programming
04.1.B3	**A050** - ECU, basic control unit	Fault in EPROM programming (quick reverse rate parameters)	Quick reversing possible with standard values.		EOL programming
04.1.B5	**A050** - ECU, basic control unit	Checksum error rate parameters, quick reverse for Tractor Management System (TMS)	TMS is switched off		EOL programming
04.1.B7	**B009** - Discharge temperature	Incorrect checksum			
04.1.CB	**A039** - MFA, multifunction armrest	Warning message "Travel range potentiometer under excessive pressure"			
04.1.CF	**A050** - ECU, basic control unit	Internal error, A050 basic operating system			
04.1.E0	**A050** - ECU, basic control unit **Y004** - Solenoid valve, turbo-clutch	Turbo-clutch characteristic read incorrectly	Continuation in emergency mode possible		EOL programming
04.1.E1	**A050** - ECU, basic control unit	Pressure regulator control parameters in tractive power control (ML transmission adjustment) not plausible or read incorrectly			EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.E2	**A050** - ECU, basic control unit	Pressure regulator control parameters in tractive power control not plausible (B008/ B039) or read incorrectly.			EOL programming
04.1.E3	**A050** - ECU, basic control unit	Checksum error, parameter for throttle pedal mode	Emergency mode TMS is switched off		EOL programming
04.1.E4	**A050** - ECU, basic control unit	Checksum error, electronic cardan brake parameters			EOL programming
04.1.E5	**A050** - ECU, basic control unit	Checksum error, range control, faulty speed limiting valve etc.	Range control not possible		EOL programming
04.1.E6	**A050** - ECU, basic control unit	Incorrect checksum, load limit control parameters	Emergency mode, transmission		EOL programming
04.1.E7	**A050** - ECU, basic control unit	Incorrect checksum, joystick parameters	Possible to drive with default values		EOL programming
04.1.E9	**A050** - ECU, basic control unit	Incorrect parameters, range control addresses 950-994			EOL programming
04.1.EA	**A050** - ECU, basic control unit	Error in checksum parameter for transmission teeth number	Continuation in emergency mode possible		EOL programming
04.1.EB	**B016** - Sensor, travel range detection	Checksum error or no range control calibration			
04.1.EC	**B055** - Sensor, foot throttle	No calibration or drifted, changed values	Continuation in emergency mode possible		TRANSMISSION, LOAD LIMIT CONTROL, calibration code "4005"
04.1.ED	**B017** - Sensor, clutch pedal	No calibration or drifted, changed values	Continuation in emergency mode possible		TRANSMISSION, TRAVEL RANGE, calibration code "4001"

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.EE	**A050** - ECU, basic control unit Transmission characteristic	No calibration or drifted, changed values	Continuation in emergency mode possible		TRANSMISSION, TRANSMISSION ADJUSTMENT, calibration code "4007"
04.1.EF	**A050** - ECU, basic control unit Turbo-clutch characteristic	No calibration or drifted, changed values	Continuation in emergency mode possible		TRANSMISSION, TURBOCLUTCH, calibration code "4009"
04.1.F0	**A050** - ECU, basic control unit	Checksum parameter for transmission calibration incorrect	Transmission cannot be calibrated		EOL programming
04.1.F1	**A050** - ECU, basic control unit	Checksum parameter for stationary control incorrect	Emergency mode		EOL programming
05.1.31	**A039** - MFA, multifunction armrest 4WD 100% button	Sensor faulty, Signal fault			
05.1.32	**A039** - MFA, multifunction armrest Auto 4WD button	Sensor faulty, Signal fault			
05.1.33	**Y009** - Solenoid valve, 4WD	Actuation fault	4WD engages	Circuit diagram Sheet 6	4WD ENHANCED CONTROL
05.1.34	**B067** - Sensor, steering angle	Sensor faulty, Signal fault		Circuit diagram Sheet 9	
05.1.51	**A039** - MFA, multifunction armrest Diff. lock 100% button	Faulty signal, button/A004	Other functions remain active		DIFFERENTIAL LOCK ENHANCED CONTROL
		Faulty bus A004/A002			
05.1.52	**A039** - MFA, multifunction armrest Diff. lock auto system button	Sensor faulty, Signal fault			
05.1.53	**Y010** - Solenoid valve, differential lock (rear)	Actuation fault	Diff. lock disengages	Circuit diagram Sheet 6	DIFFERENTIAL LOCK ENHANCED CONTROL
05.1.54	**S006** - Switch, left brake	Faulty switch, Signal fault	TMS is switched off	Circuit diagram Sheet 6	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
05.1.55	**S005** - Switch, right brake	Faulty switch, Signal fault	TMS is switched off	Circuit diagram Sheet 6	
05.1.56	**A050** - ECU, basic control unit	Checksum error, 4WD/Diff parameters	No auto mode possible		
05.1.57	**A050** - ECU, basic control unit	Checksum error, calibration data	No auto mode possible		
05.1.58	**S087** - Switch, brake wearing, left	Sensor faulty, Signal fault		Circuit diagram Sheet 11	
05.1.59	**S086** - Switch, brake wearing, right	Sensor faulty, Signal fault		Circuit diagram Sheet 11	
05.1.5A	**S087** - Switch, brake wearing, left	Brake pad worn		Circuit diagram Sheet 11	
05.1.5B	**S086** - Switch, brake wearing, right	Brake pad worn		Circuit diagram Sheet 11	
05.1.8D	**A050** - ECU, basic control unit	Checksum error, old auto config data			
05.1.8F	**A050** - ECU, basic control unit	Checksum error, old auto mode sequence data			
05.1.91	**A039** - MFA, multifunction armrest Button, rear auto mode	Faulty button, Signal fault			
05.1.93	**A039** - MFA, multifunction armrest Button, front auto mode	Faulty button, Signal fault			
05.1.95	**A039** - MFA, multifunction armrest Button, auto mode stop	Faulty button, Signal fault			
05.1.97	**S075** - Switch, guard rail pump flow monitor	Flow monitor reports guard rail pump failure	During forward travel and at speeds higher than 18 km/h, u must be > 1.1 V	Circuit diagram Sheet 7	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
05.1.98	**S025** - Switch, LS pump pressure monitor	Oil pressure below 8 bar		Circuit diagram Sheet 7	
05.1.99	**S026** - Switch, steering pump flow controller	Flow monitor reports constant displacement pump failure	At speeds higher than >1000 rpm, u must be > 1.1 V		
05.1.9A	**S026** - Switch, steering pump flow controller	Plausibility check of constant displacement pump flow monitor	When engine is OFF, u must be < 1.1 V	Circuit diagram Sheet 7	
05.1.9B	**S025** - Switch, LS pump pressure monitor	Faulty pressure switch		Circuit diagram Sheet 7	
05.1.9C	**S075** - Switch, guard rail pump flow monitor	Plausibility check on guard rail pump flow monitor	When stationary and during reverse travel, u must be < 1.1 V	Circuit diagram Sheet 7	
05.1.9D	**B091** - Sensor, water in fuel	Water in fuel	Drain container	Circuit diagram Sheet 22	
05.1.B1	**S026** - Switch, steering pump flow controller	Plausibility check on Constant displacement pump flow monitor	When engine is OFF, u must be < 1.1 V	Circuit diagram Sheet 7	
05.1.B2	**S075** - Switch, guard rail pump flow monitor	Plausibility check on guard rail pump flow monitor	When stationary and during reverse travel, u must be < 1.1 V	Circuit diagram Sheet 7	
06.1.01	**A039** - MFA, multifunction armrest Button in cab, rear PTO	Signal fault, Faulty button	PTO disengages		REAR PTO ENHANCED CONTROL
		Faulty bus			
06.1.02	**S020** - Switch (external), rear right PTO	Faulty button, Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
06.1.03	**S019** - Switch (external), rear left PTO	Faulty button, Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
06.1.04	**Y008** - Solenoid valve, rear PTO (clutch)	Actuation fault	PTO disengages	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
06.1.05	**B021** - Sensor, rear PTO speed (clutch)	Sensor faulty, Signal fault		Circuit diagram Sheet 10	
06.1.10	**B020** - Sensor, rear PTO speed (stub shaft)	Sensor faulty, Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
		12 V supply fault			
06.1.11	**A039** - MFA, multifunction armrest Rear PTO auto mode button	Faulty button, signal fault	PTO disengages, Auto mode OFF		REAR PTO ENHANCED CONTROL
06.1.13	**B020** - Sensor, rear PTO speed (stub shaft)	Overspeed warning		Circuit diagram Sheet 10	
06.1.15	**A039** - MFA, multifunction armrest Speed selector button NEUTRAL	Signal fault, button/A004	PTO speed cannot be modified or selected		REAR PTO ENHANCED CONTROL
06.1.16	**A039** - MFA, multifunction armrest Speed preselection button 540	Faulty button, signal fault			
06.1.17	**A039** - MFA, multifunction armrest Speed preselection button 750	Faulty button, signal fault			
06.1.18	**A039** - MFA, multifunction armrest Speed preselection button 1000	Faulty button, signal fault			
06.1.1A	**Y026** - Solenoid valve, rear PTO, stage I Speed rate 540	Actuation fault	PTO cannot be engaged	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
06.1.1B	**Y026** - Solenoid valve, rear PTO, stage I Speed rate 750	Actuation fault	PTO cannot be engaged	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
06.1.1C	**Y027** - Solenoid valve, rear PTO, stage II Speed rate 1000	Actuation fault	PTO cannot be engaged	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
06.1.41	**A039** - MFA, multifunction armrest Rear PTO ON/OFF button (in cab)	has been pressed for more than 30 seconds, mechanical or electrical fault in button	Speed selector moves to "Neutral", no preselection possible		REAR PTO ENHANCED CONTROL
06.1.42	**S020** - Switch (external), rear right PTO	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible, PTO cannot be engaged.	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
06.1.43	**S019** - Switch (external), rear left PTO	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible, PTO cannot be engaged.	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
06.1.45	**B020** - Sensor, rear PTO speed (stub shaft)	Plausibility error		Circuit diagram Sheet 10	
06.1.50	**B020** - Sensor, rear PTO speed (stub shaft)	PTO stub shaft speed > 1300 rpm, signal fault in Hall sensor (B020 or B021)	Speed selection remains possible, press "Engage PTO" button for more than 5 seconds (emergency mode)	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
		Selected speed is active, stub speed lower than clutch speed, power supply fault to B020 Hall sensor, speed selection solenoid valve (Y026, Y027) stuck in "OFF" position	Electric speed selection remains possible, press "Engage PTO" button for more than 5 seconds (emergency mode). In case of a faulty solenoid valve, corresponding speed cannot be engaged.	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
06.1.55	**A039** - MFA, multifunction armrest Speed preselection button neutral	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible		
06.1.56	**A039** - MFA, multifunction armrest Speed preselection button 540	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible		
06.1.57	**A039** - MFA, multifunction armrest Speed preselection button 750	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible		
06.1.58	**A039** - MFA, multifunction armrest Speed preselection button 1000	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible		
06.1.60	**B020** - Sensor, rear PTO speed (stub shaft)	The actual speed of the PTO stub (corrected by the transmission rate) differs from setpoint speed of PTO clutch by more than 12%. Solenoid valve (Y026, Y027) incorrectly wired or seized. Mechanical fault in speed selector. Signal fault in Hall sensor (B020, B021)	Electric speed selection remains possible, press "Engage PTO" button for more than 5 seconds (emergency mode). In case of a faulty solenoid valve, corresponding speed cannot be engaged.	Circuit diagram Sheet 10	REAR PTO ENHANCED CONTROL
06.1.81	**A039** - MFA, multifunction armrest Button, REAR PTO	Counter error			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
06.1.95	**A039** - MFA, multifunction armrest Button neutral, REAR PTO	Counter error			
06.1.96	**A039** - MFA, multifunction armrest Button 540, REAR PTO	Counter error			
06.1.97	**A039** - MFA, multifunction armrest Button 750, REAR PTO	Counter error			
06.1.98	**A039** - MFA, multifunction armrest Button 1000, REAR PTO	Counter error			
06.1.A1	**A039** - MFA, multifunction armrest Button, REAR PTO	Communication fault			
06.1.B0	**A039** - MFA, multifunction armrest REAR PTO	Initialisation error on communication driver	CAN bus communication restricted		
06.1.B5	**A039** - MFA, multifunction armrest Button, speed selector N, REAR PTO	Communication fault			
06.1.B6	**A039** - MFA, multifunction armrest Button, speed selector 540, REAR PTO	Communication fault			
06.1.B7	**A039** - MFA, multifunction armrest Button, speed selector 750, REAR PTO	Communication fault			
06.1.B8	**A039** - MFA, multifunction armrest Button, speed selector 1000, REAR PTO	Communication fault			
06.1.C0	**A050** - ECU, basic control unit	Warning: 540 stub shaft at rate 1000			
06.1.C1	**B015** - Sensor, bevel pinion	Switch-on speed not reached for PTO/power lift auto mode		Circuit diagram Sheet 6	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
06.1.E0	**A050** - ECU, basic control unit	Checksum error, parameter current control for speed selector			EOL programming
06.1.E1	**A050** - ECU, basic control unit	Checksum error, PTO parameterisation	Use default values		EOL programming
06.1.E2	**A050** - ECU, basic control unit	Error in checksum PW rise of rear PTO	Use default values		EOL programming
06.1.E3	**A050** - ECU, basic control unit	Checksum error, for PW of PTO	Use default values		EOL programming
06.1.E4	**A050** - ECU, basic control unit	Checksum error, over/under step counter of PTO	Use default values		EOL programming
06.1.E5	**A050** - ECU, basic control unit	Checksum error, speed limit sensor after rear PTO clutch	Use default values		EOL programming
06.1.E6	**A050** - ECU, basic control unit	Checksum error, pulses per revolution for shuttle stub shaft	Use default values		EOL programming
06.1.E7	**A050** - ECU, basic control unit	Checksum error for temperature limits and switching times of rear PTO	Use default values		EOL programming
06.1.E8	**A050** - ECU, basic control unit	Checksum error, masks for showing/hiding diagnostics on front and rear PTOs	Use default values		EOL programming
07.1.01	**A039** - MFA, multifunction armrest Button, front PTO ON/OFF	Signal fault, button/A004			FRONT PTO ENHANCED CONTROL
		Bus fault A004/A002			
07.1.04	**Y011** - Solenoid valve, front PTO (clutch)	Actuation fault		Circuit diagram Sheet 11	FRONT PTO ENHANCED CONTROL
07.1.05	**B002** - Sensor, front PTO speed	Sensor faulty, Signal fault		Circuit diagram Sheet 10	FRONT PTO ENHANCED CONTROL

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
		12 V supply fault			
07.1.09	**A039** - MFA, multifunction armrest Button, auto front PTO	Sensor faulty, Signal fault			
07.1.10	**B002** - Sensor, front PTO speed	Overspeed warning		Circuit diagram Sheet 10	
07.1.41	**A039** - MFA, multifunction armrest Front PTO "ON" button	Plausibility error, button has been pressed for more than 30 seconds	Front PTO inoperable		FRONT PTO ENHANCED CONTROL
07.1.81	**A039** - MFA, multifunction armrest Cab button, FRONT PTO	Counter error			
07.1.A1	**A039** - MFA, multifunction armrest Cab button, FRONT PTO	Communication fault			
07.1.B0	**A050** - ECU, basic control unit	Communication driver initialisation error; CAN bus communication restricted	CAN bus communication restricted		
07.1.C1	**B015** - Sensor, bevel pinion	Switch-on speed not reached for PTO/power lift auto mode		Circuit diagram Sheet 6	
07.1.E1	**A050** - ECU, basic control unit	Checksum error, front PTO parameterisation	Use default values		EOL programming
07.1.E2	**A050** - ECU, basic control unit	Error in checksum PW rise of front PTO	Use default values		EOL programming
07.1.E3	**A050** - ECU, basic control unit	Checksum error, PW of front PTO	Use default values		EOL programming
07.1.E4	**A050** - ECU, basic control unit	Checksum error, over/under step counter of front PTO	Use default values		EOL programming
08.1.22	**B030** - Sensor, rear power lift position	Sensor faulty, Signal fault	No control possible, operable via external button only	Circuit diagram Sheet 7	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.23	**A039** - MFA, multifunction armrest Setpoint value potentiometer, rear power lift	Faulty setpoint value potentiometer Signal fault	Setpoint values cannot be set Only position control possible		
08.1.24	External sensor, rear power lift	Faulty external sensor, Signal fault	No control possible, operable via external button only		
08.1.31	**B031** - Sensor, right draught sensing pin	Faulty draught sensing pin Signal fault	Only position control possible	Circuit diagram Sheet 7	
08.1.32	**B032** - Sensor, left draught sensing pin	Draught sensing pin faulty, signal corrupt or short circuit -	Only position control possible	Circuit diagram Sheet 7	
08.1.33	**B031** - Sensor, right draught sensing pin	Warning, draught sensing pin, right overloaded	Warning message only	Circuit diagram Sheet 7	
08.1.34	**B032** - Sensor, left draught sensing pin	Warning left draught sensing pin overloaded or short circuit +	Warning message only	Circuit diagram Sheet 7	
08.1.40	**S029** - Switch (external), raise rear power lift, left	Faulty button, signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
08.1.41	**S030** - Switch (external), lower rear power lift, left	Faulty button, signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
08.1.42	**S027** - Switch (external), raise rear power lift, right	Faulty button, signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
08.1.43	**S028** - Switch (external), lower rear power lift, right	Faulty button, signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
08.1.44	**A039** - MFA, multifunction armrest stop button, rear power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.45	**A039** - MFA, multifunction armrest Transport button, SAH rear power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start		
08.1.46	**A039** - MFA, multifunction armrest Control button, SAH rear power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start		
08.1.47	**A039** - MFA, multifunction armrest Quick entry button, SAH rear power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start		
08.1.48	**A039** - MFA, multifunction armrest Button, rear power lift	Communication fault (previously 99)	Button inoperable until next trouble-free cold start		
08.1.49	**Y055** - Rear pressure compensator lock valve	Faulty valve	Valve moves to neutral and locks	Circuit diagram Sheet 7	
08.1.4A	**Y062** - Solenoid valve, field pressure control (REAR)	Faulty valve	Valve moves to neutral and locks	Circuit diagram Sheet 7	
08.1.4B	**A039** - MFA, multifunction armrest Button, auto rear power lift	Faulty button (output via Teach-in)	No auto mode		
08.1.A0	**Y077** - EHR cut-off valve, rear	A050 ECU, basic control unit EEPROM error when saving			
08.1.A1	**Y077** - EHR cut-off valve, rear	A050 ECU, basic control unit EEPROM error when reading			
08.1.A2	**Y077** - EHR cut-off valve, rear	EEPROM error (valve)	Valve moves to neutral and locks		
08.1.A3	**Y077** - EHR cut-off valve, rear	RAM_Test	Valve moves to neutral and locks Pilot pressure OFF		
08.1.A4	**Y077** - EHR cut-off valve, rear	Flash_Test	Valve moves to neutral and locks Pilot pressure OFF		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.A5	**Y077** - EHR cut-off valve, rear	Incorrect valve code (SA/DA) for selecting EOL	Valve moves to neutral and locks		
08.1.B0	**B030** - Sensor, rear power lift position	Position sensor not calibrated (code 8002)	No control possible, operable only via external button		
08.1.B2	**A039** - MFA, multifunction armrest Setpoint value potentiometer, rear power lift	Setpoint value potentiometer not calibrated (code 8001)	Setpoint values cannot be set, only position control possible		
08.1.B3	External sensor, rear power lift	External sensor not calibrated	Default values are used		
08.1.C0	**A039** - MFA, multifunction armrest	MFA not fitted	No auto mode possible, operable only via external button		
08.1.C1	**A054** - Terminal	Terminal not fitted	Configuration cannot be changed		
08.1.F0	**Y077** - EHR cut-off valve, rear	Valve does not report to CAN bus	No actuation possible		
08.1.F2	**Y077** - EHR cut-off valve, rear	Undervoltage (where U < 8V)	Valve moves to neutral and locks		
08.1.F3	**Y077** - EHR cut-off valve, rear	Overvoltage, safe (where U > 18 V)	Valve moves to neutral and locks		
08.1.F4	**Y077** - EHR cut-off valve, rear	Valve actuator falls short (frequent cause: brief control pressure dips or oil too viscous at very low temperatures)	Valve moves to neutral and locks		
08.1.F5	**Y077** - EHR cut-off valve, rear	High overvoltage (> 45V)	Valve moves to neutral and locks		
08.1.F6	**Y077** - EHR cut-off valve, rear	Final stage error (pilot control solenoid valve)	Valve moves to neutral and locks		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.F7	**Y077** - EHR cut-off valve, rear	Position pickup sensor error	Valve moves to neutral and locks Pilot pressure OFF		
08.1.F8	**Y077** - EHR cut-off valve, rear	Valve actuator does not return to neutral position (frequent cause: valve actuator mechanically jams (pilot control or main actuator) caused by contamination in hydraulics area)	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		
08.1.F9	**Y077** - EHR cut-off valve, rear	Valve actuator not in neutral position when switched on (frequent cause: valve actuator mechanically jams (pilot control or main actuator) caused by contamination in hydraulics area)	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		
08.1.FA	**Y077** - EHR cut-off valve, rear	Valve actuator deflected too far	Valve moves to neutral and locks		
08.1.FB	**Y077** - EHR cut-off valve, rear	Floating position is not reached (dto. A.1.X4)	Valve moves to neutral and locks		
08.1.FC	**Y077** - EHR cut-off valve, rear	Manual actuation (occurs when a valve is deflected from its neutral position)	Valve locked, pilot pressure OFF		
08.1.FD	**Y077** - EHR cut-off valve, rear	Pilot control actuator jams	Valve locked, pilot pressure OFF		
08.1.FF	**Y077** - EHR cut-off valve, rear	No setpoint message	Valve moves to neutral and locks		
08.1.FF	**Y077** - EHR cut-off valve, rear	No configuration message.	Valve moves to neutral and locks		
08.1.FF	**Y077** - EHR cut-off valve, rear	Setpoint message not plausible	Valve moves to neutral and locks		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.FF	**Y077** - EHR cut-off valve, rear	Implausible config. message	Valve moves to neutral and locks		
08.1.FF	**Y077** - EHR cut-off valve, rear	Potentiometer/PWM error	Valve moves to neutral and locks		
09.1.22	**B040** - Sensor, front power lift position	Sensor faulty, Faulty signal line	No control possible, operable only via external button	Circuit diagram Sheet 7	
09.1.23	**A039** - MFA, multifunction armrest Setpoint potentiometer, front power lift	Faulty potentiometer, signal fault	Setpoint values cannot be set, only position control possible		
09.1.40	**S021** - Switch (external), raise front power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
09.1.41	**S022** - Switch (external), lower front power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
09.1.44	**A039** - MFA, multifunction armrest Stop button, front power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start		
09.1.45	**A039** - MFA, multifunction armrest Transport button, SAH front power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start		
09.1.46	**A039** - MFA, multifunction armrest Control button, SAH front power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
09.1.47	**A039** - MFA, multifunction armrest Quick entry button, SAH front power lift	Faulty button, signal fault	Button inoperable until next trouble-free cold start		
09.1.48	**A039** - MFA, multifunction armrest Button, front power lift	Button, communication fault (previously 99)	Button inoperable until next trouble-free cold start		
09.1.49	**Y021** - Front pressure compensator lock valve (SA-DA switchover),	Faulty lock valve, pressure compensator	Valve moves to neutral and locks	Circuit diagram Sheet 7	
09.1.4A	**Y022** - Field pressure control solenoid valve (front),	Faulty pressure-limiting valve	Valve moves to neutral and locks	Circuit diagram Sheet 7	
09.1.4B	**A039** - MFA, multifunction armrest Button, auto front power lift	Button, auto front power lift faulty (output via Teach-in)			
09.1.A0	**Y070** - EHR cut-off valve, front	A050 basic control unit EEPROM error when saving			
09.1.A1	**Y070** - EHR cut-off valve, front	A050 basic control unit EEPROM error when reading			
09.1.A2	**Y070** - EHR cut-off valve, front	EEPROM error (valve)	Valve moves to neutral and locks		
09.1.A3	**Y070** - EHR cut-off valve, front	RAM_Test	Valve moves to neutral and locks Pilot pressure OFF		
09.1.A4	**Y070** - EHR cut-off valve, front	Flash_Test	Valve moves to neutral and locks Pilot pressure OFF		
09.1.A5	**Y070** - EHR cut-off valve, front	Incorrect valve code (SA/DA) for selecting EOL			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
09.1.B0	**B040** - Sensor, front power lift position	Position sensor not calibrated (code 9002)	No control possible, operable only via external button	Circuit diagram Sheet 7	
09.1.B2	**A039** - MFA, multifunction armrest Setpoint potentiometer, front power lift	Setpoint value potentiometer not calibrated (code 9001)	Setpoint values cannot be set, only position control possible		
09.1.C0	**A039** - MFA, multifunction armrest	MFA not fitted	No auto mode possible, operable only via external button		
09.1.C1	**A054** - Terminal	Terminal not fitted	Configuration cannot be changed		
09.1.CE	**A007** - Instrument panel	Visual temperature limit warning FC 09.1.E8			
09.1.CF	**A007** - Instrument panel	Visual temperature limit warning FC 09.1.E8			
09.1.E0	**Y070** - EHR cut-off valve, front	Valve does not report to CAN bus	Valve moves to neutral and locks		
09.1.E2	**Y070** - EHR cut-off valve, front	Undervoltage (where U < 8V)	Valve moves to neutral and locks		
09.1.E3	**Y070** - EHR cut-off valve, front	Overvoltage, safe (where U > 18 V)	Valve moves to neutral and locks		
09.1.E4	**Y070** - EHR cut-off valve, front	Valve actuator falls short (frequent cause: brief control pressure dips or oil too viscous at very low temperatures)	Valve moves to neutral and locks		
09.1.E5	**Y070** - EHR cut-off valve, front	High overvoltage (> 45V)	Valve moves to neutral and locks		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
09.1.E6	**Y070** - EHR cut-off valve, front	Final stage error (pilot control solenoid valve)	Valve moves to neutral and locks		
09.1.E7	**Y070** - EHR cut-off valve, front	Position pickup sensor error	Valve moves to neutral and locks Pilot pressure OFF		
09.1.E8	**Y070** - EHR cut-off valve, front	Valve actuator does not return to neutral position (frequent cause: valve actuator mechanically jams (pilot control or main actuator) caused by contamination in hydraulics area)	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		
09.1.E9	**Y070** - EHR cut-off valve, front	Valve actuator not in neutral position when switched on (frequent cause: valve actuator mechanically jams (pilot control or main actuator) caused by contamination in hydraulics area)	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		
09.1.EA	**Y070** - EHR cut-off valve, front	Valve actuator deflected too far	Valve moves to neutral and locks		
09.1.EB	**Y070** - EHR cut-off valve, front	Floating position is not reached (dto. A.1.X4)	Valve moves to neutral and locks		
09.1.EC	**Y070** - EHR cut-off valve, front	Manual actuation (occurs when a valve is deflected from its neutral position)	Valve locked, pilot pressure OFF		
09.1.ED	**Y070** - EHR cut-off valve, front	Pilot control actuator jams	Valve locked, pilot pressure OFF		
09.1.EF	**Y070** - EHR cut-off valve, front	No setpoint message	Valve moves to neutral and locks Pilot pressure OFF		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
09.1.EF	**Y070** - EHR cut-off valve, front	No configuration message.	Valve moves to neutral and locks Pilot pressure OFF		
09.1.EF	**Y070** - EHR cut-off valve, front	Setpoint message not plausible	Valve moves to neutral and locks Pilot pressure OFF		
09.1.EF	**Y070** - EHR cut-off valve, front	Implausible config. message	Valve moves to neutral and locks Pilot pressure OFF		
0A.1.A0	Auxiliary control units	EEPROM fault while saving	Valve moves to neutral and locks		
0A.1.A1	Auxiliary control units	EEPROM fault while loading	Valve moves to neutral and locks		
0A.1.A2	Auxiliary control units	More valves connected than registered via EOL programming			
0A.1.B5	**A039** - MFA, multifunction armrest	Joystick centre position detection faulty (electrical fault)	Valve position not functioning, lock valve		
0A.1.B6	**A039** - MFA, multifunction armrest	Linear module 1 (rocker) not calibrated	Valve position not functioning		
0A.1.B7	**A039** - MFA, multifunction armrest	Faulty linear module 1 (rocker)	Valve position not functioning, lock valve		
0A.1.B8	**A039** - MFA, multifunction armrest	Linear module 2 (rocker) not calibrated	Valve position not functioning		
0A.1.B9	**A039** - MFA, multifunction armrest	Faulty linear module 2 (rocker)	Valve position not functioning, lock valve		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.BA	**A039** - MFA, multifunction armrest	Linear module 3 (rocker) not calibrated	Valve position not functioning		
0A.1.BB	**A039** - MFA, multifunction armrest	Faulty linear module 3 (rocker)	Valve position not functioning, lock valve		
0A.1.BC	**A039** - MFA, multifunction armrest	Linear module 4 (rocker) not calibrated	Valve position not functioning		
0A.1.BD	**A039** - MFA, multifunction armrest	Faulty linear module 4 (rocker)	Valve position not functioning, lock valve		
0A.1.C0	**A039** - MFA, multifunction armrest	MFA not fitted	No auto mode, Valve locked		
0A.1.C1	**A039** - MFA, multifunction armrest **A050** - ECU, basic control unit	MFA GD fault in button used by hydraulics	Valve locked		
0A.1.C2	**A039** - MFA, multifunction armrest	Faulty MFA button (total lock)	Total lock not possible, valves locking		
0A.1.C5	**A039** - MFA, multifunction armrest	Faulty MFA button (switching function)	No switching function possible, switching function maintained prior to error		
0A.1.CA	**A050** - ECU, basic control unit	Steering axle checksum incorrect	Steering axle deactivation		EOL programming
0A.1.CB	**A050** - ECU, basic control unit	Steering axle active			
0A.1.CE	Auxiliary control units	0x81: Valve actuator does not return to neutral	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		
0A.1.CF	Auxiliary control units	0x25: Floating position is not reached	Valve moves to neutral and locks		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.D0	**A039** - MFA, multifunction armrest Button, hydraulic circuit 3	Faulty button, Signal fault	Button inoperable until next trouble-free cold start		
0A.1.D1	**A039** - MFA, multifunction armrest Button, hydraulic circuit 4	Faulty button, Signal fault	Button inoperable until next trouble-free cold start		
0A.1.D2	**A039** - MFA, multifunction armrest Button, raise/lower/floating position valve 7	Faulty button, Signal fault	Valve position not functioning, Valve locked		
0A.1.D3	**A039** - MFA, multifunction armrest Button, raise/lower/floating position valve 8	Faulty button, Signal fault	Valve position not functioning, Valve locked		
0A.1.D4	**S021** - Switch (external), raise front power lift **S022** - Switch (external), lower front power lift	Double actuation; Faulty button, Signal fault	Valve in neutral	Circuit diagram Sheet 7	
0A.1.D5	**S022** - Switch (external), lower front power lift	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
0A.1.D6	**S021** - Switch (external), raise front power lift	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
0A.1.D7	**B084** - Sensor, hydraulic oil level	Sensor faulty, Signal fault	Fill level is no longer monitored	Circuit diagram Sheet 12	
0A.1.D8	**B084** - Sensor, hydraulic oil level	Warning, hydraulic oil tank	Warning display only	Circuit diagram Sheet 12	
0A.1.D9	**B084** - Sensor, hydraulic oil level	Hydraulic oil tank empty	Valves are locked and pilot control is switched off	Circuit diagram Sheet 12	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.DA	**B013** - Sensor, hydraulic oil temperature	Warning, hydraulic temperature sensor too high	Warning display only	Circuit diagram Sheet 12	
0A.1.DB	**B013** - Sensor, hydraulic oil temperature	Hydraulic temperature sensor too high		Circuit diagram Sheet 12	
0A.1.DC	**B013** - Sensor, hydraulic oil temperature	Warning, hydraulic temperature sensor not plausible	Warning display only	Circuit diagram Sheet 12	
0A.1.DD	**B063** - Pressure switch, filter contamination (hydraulic circuit)	Filter clogged	Warning display only	Circuit diagram Sheet 7	
0A.1.DE	**B063** - Pressure switch, filter contamination (hydraulic circuit)	Faulty button, signal fault	Warning display only	Circuit diagram Sheet 7	
0A.1.DF	Auxiliary control units	Prio volume greater than pump volume			
0A.1.EC	Trailer brake valve	ABV: bypass output 2 high fault			
0A.1.ED	Trailer brake valve	ABV: bypass output 2 low fault			
0A.1.EE	Trailer brake valve	ABV: bypass output 4 high fault			
0A.1.EF	Trailer brake valve	ABV: bypass output 4 low fault			
0A.1.F0	**Y032** - Control pressure solenoid valve	Short circuit Ub +	No valve actuation possible	Circuit diagram Sheet 7	
0A.1.F2	**Y032** - Control pressure solenoid valve	Current too high, faulty valve (short circuit to earth)	No valve actuation possible	Circuit diagram Sheet 7	
0A.1.F3	**Y032** - Control pressure solenoid valve	Break in wiring	No valve actuation possible	Circuit diagram Sheet 7	
0A.1.F4	**Y021** - Raise solenoid valve, (front power lift),	Short circuit to earth, short circuit to UB or brake in wiring	No raising possible	Circuit diagram Sheet 7	
0A.1.F5	**Y022** - Lower solenoid valve, (front power lift),	Short circuit to earth, short circuit to UB or brake in wiring	No lowering possible	Circuit diagram Sheet 7	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.F6	**Y060** - Hydraulic oil pre-heater solenoid valve (rear)	Actuation fault	No further valve heating possible	Circuit diagram Sheet 7	
0A.1.F7	**Y061** - Hydraulic oil pre-heater solenoid valve (front)	Actuation fault	No further valve heating possible	Circuit diagram Sheet 7	
0A.1.F8	**Y084** - Control pressure increase solenoid valve in Power Beyond mode	Actuation fault	No control pressure increase possible	Circuit diagram Sheet 7	
0A.1.FA	**S067** - Switch (external), valve actuation, raise	Faulty button, signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
0A.1.FB	**S068** - Switch (external), valve actuation, lower	Faulty button, signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Sheet 7	
0A.1.FC	**S067** - Switch (external), valve actuation, raise **S068** - Switch (external), valve actuation, lower	Double actuation, faulty button, signal fault		Circuit diagram Sheet 7	
0A.1.FD	**Y082** - Lower link stabiliser I solenoid valve	Fault with locking	No locking possible	Circuit diagram Sheet 9	
0A.1.FE	**Y083** - Lower link stabiliser II solenoid valve	Fault with opening	No opening possible	Circuit diagram Sheet 9	
X stands for the valve number, e.g. 0A.1.10 = position 1 valve does not report to CAN or 0A.1.37 = position pickup sensor error in position 3 valve					
0A.1.X0	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Valve does not report to CAN bus **(X= valve number)**	Valve moves to neutral and locks	Circuit diagram Sheet 8	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.X1	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	EEPROM inconsistent	Valve moves to neutral and locks	Circuit diagram Sheet 8	
0A.1.X2	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Undervoltage (where U < 8V)	Valve moves to neutral and locks	Circuit diagram Sheet 8	
0A.1.X3	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Overvoltage, safe (where U > 18 V)	Valve moves to neutral and locks	Circuit diagram Sheet 8	
0A.1.X4	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Valve actuator falls short (frequent cause: brief control pressure dips or oil too viscous at very low temperatures)	Valve moves to neutral and locks	Circuit diagram Sheet 8	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.X5	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	High overvoltage (> 45V)	Valve moves to neutral and locks	Circuit diagram Sheet 8	
0A.1.X6	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Final stage error (pilot control solenoid valve)	Valve moves to neutral and locks	Circuit diagram Sheet 8	
0A.1.X7	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Position pickup sensor error	Valve moves to neutral and locks	Circuit diagram Sheet 8	
0A.1.X8	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Valve actuator does not return to neutral position (frequent cause: valve actuator mechanically jams (pilot control or main actuator) caused by contamination in hydraulics area)	Valve remains deflected when engine is on; valve locks, Pilot pressure OFF	Circuit diagram Sheet 8	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.X9	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Valve actuator not in neutral position when switched on (frequent cause: valve actuator mechanically jams (pilot control or main actuator) caused by contamination in hydraulics area)	Valve remains deflected when engine is on; valve locks, Pilot pressure OFF	Circuit diagram Sheet 8	
0A.1.XA	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Valve actuator deflected too far	Valve moves to neutral and locks	Circuit diagram Sheet 8	
0A.1.XB	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Floating position is not reached (dto. A.1.X4)	Valve moves to neutral and locks	Circuit diagram Sheet 8	
0A.1.XC	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Manual actuation (occurs when a valve is deflected from its neutral position)	All valve positions, no function; Valve locked, Pilot pressure OFF	Circuit diagram Sheet 8	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.XD	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Pilot control actuator jams	Valve locked, Pilot pressure OFF	Circuit diagram Sheet 8	
0A.1.XE	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	RAM or FLASH test fault	Valve moves to neutral and locks, pilot pressure OFF	Circuit diagram Sheet 8	
0A.1.XF	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	No setpoint message	Valve moves to neutral and locks Pilot pressure OFF	Circuit diagram Sheet 8	
0A.1.XF	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	No configuration message.	Valve moves to neutral and locks Pilot pressure OFF	Circuit diagram Sheet 8	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.XF	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Setpoint message not plausible	Valve moves to neutral and locks Pilot pressure OFF	Circuit diagram Sheet 8	
0A.1.XF	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Implausible config. message	Valve moves to neutral and locks Pilot pressure OFF	Circuit diagram Sheet 8	
0A.1.XF	**Y071** - Control valve **Y072** - Control valve **Y074** - Control valve **Y075** - Control valve **Y076** - Control valve **Y078** - Control valve **Y079** - Control valve **Y080** - Control valve	Potentiometer/PW error	Valve moves to neutral and locks Pilot pressure OFF	Circuit diagram Sheet 8	
0B.2.00	**A050** - ECU, basic control unit TEACH-IN	Warning message when engine speed < 400 for sequence start at TEACH-IN			
0B.2.01	**A050** - ECU, basic control unit TEACH-IN	Warning message on cancel due to seat switch no longer being pressed			
0B.2.02	**A050** - ECU, basic control unit TEACH-IN	Warning message if speed is too high at the start of a sequence			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0B.2.03	**A050** - ECU, basic control unit TEACH-IN	Warning message if speed is too low at the start of a sequence			
0B.1.11	**A050** - ECU, basic control unit TEACH-IN	Electrical fault, internal communication			
0B.1.12	**A050** - ECU, basic control unit TEACH-IN	Electrical fault, terminal			
0B.1.21	**A050** - ECU, basic control unit TEACH-IN	Internal communication error			
0B.1.22	**A050** - ECU, basic control unit **A054** - Terminal TEACH-IN	Communication error between terminal and TEACH-IN			
0B.1.23	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest TEACH-IN	Communication error between MFA and TEACH-IN			
0B.1.25	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest TEACH-IN	MFA does not report to bus			
0B.1.41	**A050** - ECU, basic control unit TEACH-IN	Internal communication saving or read-out error			EOL programming
0B.1.42	**A050** - ECU, basic control unit **A054** - Terminal TEACH-IN	Saving or read-out error between terminal and TEACH-IN			EOL programming
0B.1.43	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest TEACH-IN	Saving or read-out error between MFA and TEACH-IN			EOL programming
0B.1.B0	**A050** - ECU, basic control unit TEACH-IN	CAN communication Teach-In initialisation error			EOL programming
0B.1.B1	**A050** - ECU, basic control unit TEACH-IN	Saving or read-out error in sequence data			Delete sequence and reprogram

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0B.1.B2	**A050** - ECU, basic control unit TEACH-IN	EEPROM checksum error, initialising sequence data storage			
0B.1.B3	**A050** - ECU, basic control unit	"No memory available for sequence data or configuration/ sequence data do not match"			
0B.1.B4	**A050** - ECU, basic control unit TEACH-IN	Configuration wizard: error with writing or reading settings and parameters on tractor start-up/end or formula management			
0F.1.01	**E066** - Brake and tail light left	Function non-operable	Brake light, left dipped for night driving	Circuit diagram Sheet 13/14	
0F.1.02	**E067** - Brake and tail light right	Function non-operable	Brake light, right dipped for night driving	Circuit diagram Sheet 13/14	
0F.1.03	**E055** - Wide vehicle marker lights, left	Function non-operable		Circuit diagram Sheet 14	
0F.1.04	**E054** - Wide vehicle marker lights, right	Function non-operable		Circuit diagram Sheet 14	
0F.1.05	**E098** - Drive headlight (main beam), right **E100** - Drive headlight (main beam), left	Function non-operable	Auto switchover to additional headlight	Circuit diagram Sheet 13	
0F.1.06	**E099** - Drive headlight (dipped beam), right **E101** - Drive headlight (dipped beam), left	Function non-operable	Auto switchover to additional headlight	Circuit diagram Sheet 13	
0F.1.07	**E003** - H4 additional headlight, right **E004** - H4 additional headlight, left	Function non-operable	Auto switchover to front headlight	Circuit diagram Sheet 13	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0F.1.08	**E003** - H4 additional headlight, right **E004** - H4 additional headlight, left	Function non-operable	Auto switchover to front headlight	Circuit diagram Sheet 13	
0F.1.09	**E089** - Direction direction indicator, front left	Function non-operable		Circuit diagram Sheet 15	
0F.1.0A	**E088** - Direction direction indicator, front right	Function non-operable		Circuit diagram Sheet 15	
0F.1.0B	**E064** - Rear direction indicator, left	Function non-operable		Circuit diagram Sheet 16	
0F.1.0C	**E065** - Rear direction indicator, right	Function non-operable		Circuit diagram Sheet 16	
0F.1.10	**M003** - Wiper pump, front	Function non-operable		Circuit diagram Sheet 17	
0F.1.11	**M005** - Wiper pump, rear	Function non-operable		Circuit diagram Sheet 17	
0F.1.12	**A038** - ECU, central electrical system	Faulty nozzle heater (planned although not yet fitted in X900)			
0F.1.13	**A038** - ECU, central electrical system	Position warning light, terminal 58 faulty			
0F.1.15	**A036** - Control panel, dashboard right	Function non-operable			
0F.1.16	**A037** - Control panel, dashboard left	Function non-operable			
0F.1.17	**E066** - Brake and tail light left	Function non-operable	Tail lamp, left switched for day driving	Circuit diagram Sheet 13/14	
0F.1.18	**E067** - Brake and tail light right	Function non-operable	Tail lamp, right switched for day driving	Circuit diagram Sheet 13/14	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0F.1.19	**A038** - ECU, central electrical system	Sensor supply voltage too high or too low			
0F.1.1A	**A038** - ECU, central electrical system	Main supply voltage too high or too low			
0F.1.1B	**A038** - ECU, central electrical system	Processor supply voltage too high or too low			
0F.1.1D	**M002** - Front wiper motor	Function non-operable		Circuit diagram Sheet 16	
0F.1.1E	**M004** - Rear wiper motor	Function non-operable		Circuit diagram Sheet 16	
0F.1.1F	**M010** - Fuel pump	Function non-operable		Circuit diagram Sheet 17	
0F.1.20	**A050** - ECU, basic control unit **A007** - Instrument panel	Communication problem: no information from instrument panel			
0F.1.21	**A050** - ECU, basic control unit	Checksum error over address range: 0-128d			
0F.1.22	**A050** - ECU, basic control unit	Checksum error over address range for diagnostic parameters			
0F.1.23	**A050** - ECU, basic control unit	Communication problem: no information from transmission (engine speed, theo. speed, reverse operation)			
0F.1.24	**A050** - ECU, basic control unit	Communication problem: no information from enhanced controls (brake)			
0F.1.25	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest	Communication problem: no information from MFA (Hydr3 button, Hydr4 button)			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0F.1.26	**A050** - ECU, basic control unit	Communication problem: no information from EHL task (steering angle)			
0F.1.27	**A038** - ECU, central electrical system	Checksum error over address range for central electrical system parameters			
0F.1.28	**A038** - ECU, central electrical system	Error on reading from EEP-ROM during initialisation			
0F.1.29	**A039** - MFA, multifunction armrest Button, hydraulic circuit 3	Faulty button, signal line fault			
0F.1.2A	**A039** - MFA, multifunction armrest Button, hydraulic circuit 4	Faulty button, signal line fault			
0F.1.2B	**A038** - ECU, central electrical system	Function non-operable			
0F.1.2C	**A038** - ECU, central electrical system	Valve for left reverse operation support inoperable			
0F.1.2D	**A038** - ECU, central electrical system	Valve for right reverse operation support inoperable			
0F.1.2E	**M002** - Front wiper motor	Warning (end position timed out)	Wiper tries to restart		
0F.1.2F	**A038** - ECU, central electrical system	Initialisation error			
0F.1.30	**M004** - Rear wiper motor	Warning (end position timed out)	Wiper tries to restart		
0F.2.0D	**A038** - ECU, central electrical system	Direction indicator, left trailer socket faulty			
0F.2.0E	**A038** - ECU, central electrical system	Direction indicator, right trailer socket faulty			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0F.2.0F	**A038** - ECU, central electrical system	Trailer socket, terminal 54 faulty			
0F.2.14	**A038** - ECU, central electrical system	Left trailer socket, terminal 58 faulty			
0F.2.1C	**A038** - ECU, central electrical system	Right trailer socket, terminal 58 faulty			
10.1.31	**M015** - Servomotor, top air valve	Function non-operable		Circuit diagram Sheet 18	
10.1.32	**M016** - Servomotor, bottom air valve	Function non-operable		Circuit diagram Sheet 18	
10.1.33	**B074** - Sensor, internal temperature	Function non-operable		Circuit diagram Sheet 15	
10.1.34	**Y024** - Magnetic clutch, air conditioning compressor	Function non-operable			
10.1.35	Output temperature sensor 2	Function non-operable		Circuit diagram Sheet 15	
10.1.36	**B071** - Sensor, output temperature	Function non-operable	Air conditioning running in emergency mode		
10.1.37	**B074** - Sensor, internal temperature	Function non-operable	Air conditioning running in emergency mode	Circuit diagram Sheet 15	
10.1.38	**A038** - ECU, central electrical system	Function non-operable	Air conditioning running in emergency mode		
10.1.39	**B076** - Sensor, external temperature	Function non-operable	Air conditioning running in emergency mode	Circuit diagram Sheet 15	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
10.1.3A	**A053** - ECU, air conditioning control	Checksum error, air conditioning (Adr 1000d- 1125)	Default parameters are read from flash		
10.1.3B	**A053** - ECU, air conditioning control	Overheating protection or anti-blocking mechanism faulty			
10.1.3C	**B073** - Sensor, solar (irradiation)	Function non-operable	Default parameters are used	Circuit diagram Sheet 15	
10.1.3D	**A053** - ECU, air conditioning control	Function non-operable			
10.1.3E	**A053** - ECU, air conditioning control **S035** - Switch, high-pressure/low-pressure (air conditioning system)	Malfunction			
15.1.62	**Y065** - Raise suspension solenoid valve	Function non-operable		Circuit diagram Sheet 9	
15.1.63	**Y064** - Suspension load pressure solenoid valve	Inoperable (in X900, this is a proportional valve with PWM actuation)		Circuit diagram Sheet 9	
15.1.64	**A039** - MFA, multifunction armrest Button, raise suspension (VA suspension)	Faulty button, signal fault			
15.1.65	**A039** - MFA, multifunction armrest Lock suspension button, FA suspension	Faulty button, signal fault			
15.1.66	**Y012** - Solenoid valve, load suspension	Function non-operable		Circuit diagram Sheet 7	
15.1.67	**B066** - Sensor, wheel position (left)	Sensor faulty, Signal fault		Circuit diagram Sheet 9	
15.1.68	**B068** - Sensor, wheel position (right)	Sensor faulty, Signal fault		Circuit diagram Sheet 9	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
15.1.69	**Y063** - Wobble stabiliser solenoid valve	Function non-operable		Circuit diagram Sheet 9	
15.1.6A	**Y067** - Lock suspension solenoid valve	Solenoid valve faulty, actuation fault		Circuit diagram Sheet 9	
15.1.6B	**Y067** - Lock suspension solenoid valve	Solenoid valve faulty, Actuation fault		Circuit diagram Sheet 9	
15.1.6C	**B066** - Sensor, wheel position (left) **B068** - Sensor, wheel position (right)	Position sensor not calibrated		Circuit diagram Sheet 9	
15.1.6D	**A050** - ECU, basic control unit	Checksum error, suspension			
15.1.6E	**B066** - Sensor, wheel position (left) **B068** - Sensor, wheel position (right)	Plausibility error		Circuit diagram Sheet 9	
18.1.01	**A039** - MFA, multifunction armrest Autoguide	Diagnostics button, partial activation in MFA			
18.1.02	**A039** - MFA, multifunction armrest Autoguide	Diagnostics button, full activation in MFA			
18.1.03	**A039** - MFA, multifunction armrest	MFA fails to report			
18.1.06	**S053** - Switch, driver seat	Diagnostics, seat switch			
18.1.07	**Y085** - Steering switch-off (Autoguide) solenoid valve	Diagnostics, steering wheel shut-off valve		Circuit diagram Sheet 9	
18.1.08	**Y086** - Steering switch-off (Autoguide) solenoid valve	Diagnostics, pilot pressure valve		Circuit diagram Sheet 9	
18.1.1A	**B067** - Sensor, steering angle	Diagnostics, steering angle sensor			
18.1.1C	**B067** - Sensor, steering angle	Invalid calibration values for steering angle sensor in EEPROM			
18.1.2A	**B081** - Steering wheel sensor (360°)	Diagnostics, steering wheel sensor			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
18.1.2C	**B081** - Steering wheel sensor (360°)	Invalid calibration values for steering wheel sensor in EEP-ROM			
18.1.30	**Y087** - Steering valve block, Autoguide	Unknown error from steering valve			
18.1.31	**Y087** - Steering valve block, Autoguide	Error with supply voltage from steering valve			
18.1.32	**Y087** - Steering valve block, Autoguide	Warning for steering valve actuator position			
18.1.33	**Y087** - Steering valve block, Autoguide	Error with steering valve actuator position			
18.1.34	**Y087** - Steering valve block, Autoguide	Error with steering valve actuation			
18.1.35	**Y087** - Steering valve block, Autoguide	Error with steering valve hardware			
18.1.36	**Y087** - Steering valve block, Autoguide	Warning for steering valve FLASH, E²PROM and software			
18.1.37	**Y087** - Steering valve block, Autoguide	Error with steering valve FLASH, E²PROM and software			
18.1.3A	**Y087** - Steering valve block, Autoguide	No response from valve			
18.1.3B	**Y087** - Steering valve block, Autoguide	Steering valve does not return to neutral on switch-off			
18.1.3C	**Y087** - Steering valve block, Autoguide	Invalid calibration values for steering valve in EEPROM			
18.1.4A	**A050** - ECU, basic control unit	Communication with TopDock interrupted	Last steering command is retained		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
18.1.4C	**A050** - ECU, basic control unit	Invalid settings (BSAC) for controller in EEPROM			
18.1.5C	**A050** - ECU, basic control unit	Invalid parameters for controller in EEPROM			
18.1.66	**Y087** - Steering valve block, Autoguide	Wire for flow measurement broken or short circuited			
18.1.69	**Y087** - Steering valve block, Autoguide	Supply voltage over 32 V			
18.1.6A	**Y087** - Steering valve block, Autoguide	Supply voltage below 10 V			
18.1.6B	**Y087** - Steering valve block, Autoguide	Actuator cannot reach neutral			
18.1.6C	**Y087** - Steering valve block, Autoguide	Actuator not in neutral during "RUNUP"			
18.1.6D	**Y087** - Steering valve block, Autoguide	Actuator position greater than reference position			
18.1.7F	**Y087** - Steering valve block, Autoguide	EHL system error			
18.2.05	**S053** - Switch, driver seat	Seat not "loaded" when steering is activated			
18.2.40	**A050** - ECU, basic control unit	Warning message when attempting to fully activate — no BSAC connection			
18.2.70	**Y087** - Steering valve block, Autoguide	Warning message when ISO is inactive			
If the following errors occur (1E.1.‡) they must be deleted in the engine control unit following error correction with SERDIA!					
1E.1.00	**A051** - ECU, engine control unit (EDC 7).	Original error, Deutz			SERDIA **(delete error)**

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.01	**G001** - Battery 1 (12 VDC)	Input, battery, battery voltage outside setpoint range	Start not possible		SERDIA (delete error) FC:0016, 0017
1E.1.02	**B092** - Sensor, charge air pressure/ temperature	Sensor, boost pressure, break in wiring or short circuit. Charge pressure outside setpoint range	Reduced power	Circuit diagram Sheet 22	SERDIA (delete error) FC:0020, 0021
1E.1.03	**B092** - Sensor, charge air pressure/ temperature	Sensor Charge air temperature, break in wiring or short circuit. Charge air temperature above setpoint value	Reduced power	Circuit diagram Sheet 22	SERDIA (delete error) FC:0095, 0096
1E.1.04	**B089** - Temperature sensor, Deutz	Sensor, coolant temperature: break in wiring or short circuit. Coolant temperature outside setpoint area		Circuit diagram Sheet 22	SERDIA (delete error) FC:0037, 0038
1E.1.06	**B085** - Camshaft speed **B088** - Crankshaft speed	Camshaft sensor faulty or no signal; Crankshaft sensor faulty or no signal; camshaft/crankshaft speed signals out of phase	Starting possible after prolonged unsuccessful attempt, engine runs "rough"	Circuit diagram Sheet 22	SERDIA (delete error) 004B, 004C, 004D, 004E, FC:004F, 0050
1E.1.07	**B091** - Sensor, water in fuel	Fuel filter/water sedimentor sensor, brake in wiring or short circuit Water level above setpoint range	Drain water from fuel filter	Circuit diagram Sheet 22	SERDIA (delete error) FC:0057, 0059
1E.1.08	**B087** - Fuel low pressure	Brake in wiring or short circuit Fuel low pressure outside setpoint rage	Check fuel system, possibly air in system or fuel filter clogged	Circuit diagram Sheet 22	SERDIA (delete error) FC:005A, 005B, 005E
1E.1.0A	**A039** - MFA, multifunction armrest Potentiometer, hand throttle	Brake in wiring or short circuit Idle sensor signal not plausible			SERDIA (delete error) FC:008A

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.0E	**B090** - Sensor, oil pressure	Brake in wiring or short circuit. Oil pressure outside of set-point range		Circuit diagram Sheet 22	SERDIA (delete error) FC:00C4, 00C5, 00C6, 00C7
1E.1.0F	**B079** - Sensor (combined), engine oil temperature/engine oil level	Sensor faulty, Signal fault		Circuit diagram Sheet 21	SERDIA (delete error) FC:00C9, 00CB
1E.1.12	**S002** - Switch, ignition	Pin 50, Ignition starter switch sticking		Circuit diagram Sheet 15	SERDIA (delete error) 00E3, 00E4
1E.1.13	**A051** - ECU, engine control unit (EDC 7).	Travel speed above setpoint range, signal fault			SERDIA (delete error) FC:00E8
1E.1.14	**B055** - Sensor, foot throttle	Brake in wiring or short circuit Signal does not match idle sensor signal	Speed maintained, can be used by hand throttle by increasing speed briefly	Circuit diagram Sheet 21	SERDIA (delete error) FC:000C, 000E, 000F
1E.1.21	**K063** - Heater flange relay	Brake in wiring or short circuit	Pre-heater inoperable	Circuit diagram Sheet 22	SERDIA (delete error) FC:0021
1E.1.22	**K063** - Heater flange relay	Break in wiring or incorrectly connected	Pre-heater inoperable	Circuit diagram Sheet 22	SERDIA (delete error) FC:0013,0014
1E.1.23	**S047** - Switch, engine brake	Brake in wiring or short circuit		Circuit diagram Sheet 21	SERDIA (delete error) FC:0034
1E.1.24	**Y006** - Solenoid valve, engine brake	Faulty valve, faulty actuation			SERDIA (delete error) FC:004A
1E.1.25	**Y006** - Solenoid valve, engine brake	Brake in wiring or short circuit			SERDIA (delete error) FC:0052
1E.1.26	**Y024** - Magnetic clutch, air conditioning compressor	Brake in wiring or short circuit			SERDIA (delete error) FC:0053
1E.1.27	**G001** - Battery 1 (12 VDC)	Short circuit to battery or earth	Start not possible		SERDIA (delete error) FC:00B6, 00B7, 00BA, 00BC

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.2C	**K065** - Starter relay	Brake in wiring or short circuit	Start not possible	Circuit diagram Sheet 21	SERDIA (delete error) FC:00DF, 00E0
1E.1.30	**B004** - Vacuum switch (air filter)	Pressure loss above setpoint range	Loss of power Clean/replace air filter	Circuit diagram Sheet 21	SERDIA (delete error) FC:000B, 00F2
1E.1.34	**S034** - Switch, coolant level	Coolant outside of setpoint level	Check coolant level	Circuit diagram Sheet 21	SERDIA (delete error) FC:0025
1E.1.37	**A051** - ECU, engine control unit (EDC 7).	Fan speed exceeds target range			SERDIA (delete error)
1E.1.3A	**A051** - ECU, engine control unit (EDC 7).	Misfiring			SERDIA (delete error) FC:002F
1E.1.50	**Y091** - Dispensing unit (fuel)	Dispensing unit not connected, short circuit to battery or earth	Message that the engine stops after approx. 5 minutes appears	Circuit diagram Sheet 22	SERDIA (delete error) FC:00B0, 00B1, 00B2, 00B3
1E.1.51	**B086** - Rail pressure sensor Pressure-limiting valve, mechanical rail pressure	Cut-off valve, rail pressure fails to open	Message that the engine stops after approx. 5 minutes appears		SERDIA (delete error) FC:00D0, 00EC
1E.1.52	**B086** - Rail pressure sensor	Brake in wiring or short circuit	Message that the engine stops after approx. 5 minutes appears	Circuit diagram Sheet 22	SERDIA (delete error) FC:00D1, 00D2
1E.1.53	**B086** - Rail pressure sensor	Rail pressure outside setpoint range	Message that the engine stops after approx. 5 minutes appears	Circuit diagram Sheet 22	SERDIA (delete error) FC:00D3, 00D4, 00D5, 00D6, 00D7, 00D8
1E.1.54	**B086** - Rail pressure sensor	Compression test active	Rail pressure monitoring deactivated		SERDIA (delete error) FC:00AF
1E.1.60	**A051** - ECU, engine control unit (EDC 7).	Misfiring on several cylinders			SERDIA (delete error) FC:002E

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.61	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 1			SERDIA (delete error) FC:0026
1E.1.62	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 2			SERDIA (delete error) FC:0027
1E.1.63	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 3			SERDIA (delete error) FC:0028
1E.1.64	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 4			SERDIA (delete error) FC:0029
1E.1.65	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 5			SERDIA (delete error) FC:002A
1E.1.66	**A051** - ECU, engine control unit (EDC 7).	Misfiring on cylinder 6			SERDIA (delete error) FC:002B
1E.1.70	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 1 outside setpoint range or absent.			SERDIA (delete error) FC:0018
1E.1.71	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 2 outside setpoint range or absent.			SERDIA (delete error) FC:0019
1E.1.72	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 3 outside setpoint range or absent.			SERDIA (delete error) FC:001A
1E.1.73	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 4 outside setpoint range or absent.			SERDIA (delete error) FC:001B
1E.1.74	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 5 outside setpoint range or absent.			SERDIA (delete error) FC:001C
1E.1.75	**A051** - ECU, engine control unit (EDC 7).	Start of injection period in cylinder 6 outside setpoint range or absent.			SERDIA (delete error) FC:001D

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.78	**A051** - ECU, engine control unit (EDC 7).	Short circuit in cylinder bank 1 injector valves	Cylinder switch-off		SERDIA (delete error) FC:0099
1E.1.79	**A051** - ECU, engine control unit (EDC 7).	Break in wiring of cylinder bank 1 injector valves	Cylinder switch-off		SERDIA (delete error) FC:009A
1E.1.7A	**A051** - ECU, engine control unit (EDC 7).	Short circuit in cylinder bank 2 injector valves	Cylinder switch-off		SERDIA (delete error) FC:009B
1E.1.7B	**A051** - ECU, engine control unit (EDC 7).	Break in wiring of cylinder bank 2 injector valves	Cylinder switch-off		SERDIA (delete error) FC:009C
1E.1.7C	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 1	Injection failure		SERDIA (delete error) FC:00A0, 009F
1E.1.7D	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 2	Injection failure		SERDIA (delete error) FC:00A1, 00A2
1E.1.7E	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 3	Injection failure		SERDIA (delete error) FC:00A3, 00A4
1E.1.7F	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 4	Injection failure		SERDIA (delete error) FC:00A5, 00A6
1E.1.80	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 5	Injection failure		SERDIA (delete error) FC:00A7, 00A8
1E.1.81	**A051** - ECU, engine control unit (EDC 7).	Short circuit or break in wiring to injector valve 6			SERDIA (delete error) FC:00A9, 00AA
1E.1.90	**Y094** - Actuator unit, AGR (exhaust gas recirculation)	Short circuit to battery, earth, break in wiring or short circuit	Reduction in power		SERDIA (delete error) FC:0045, 0046, 0047, 0048
1E.1.B0	**A051** - ECU, engine control unit (EDC 7).	CAN message, no throttle pedal or outside setpoint range		Circuit diagram Sheet 21	SERDIA (delete error) FC:005E
1E.1.B1	**A051** - ECU, engine control unit (EDC 7).	CAN message, no control function mode		Circuit diagram Sheet 21	SERDIA (delete error) FC:005F
1E.1.B2	**A051** - ECU, engine control unit (EDC 7).	CAN message, no engine protection mechanism		Circuit diagram Sheet 21	SERDIA (delete error) FC:006A

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.B3	**A051** - ECU, engine control unit (EDC 7).	CAN message, no pre-heater or engine command		Circuit diagram Sheet 21	SERDIA (delete error) FC:006E
1E.1.B4	**A051** - ECU, engine control unit (EDC 7).	No Tempomat cruise control CAN message		Circuit diagram Sheet 21	SERDIA (delete error) FC:0070
1E.1.B5	**A051** - ECU, engine control unit (EDC 7).	No engine temperature CAN message		Circuit diagram Sheet 21	SERDIA (delete error) FC:0071
1E.1.B6	**A051** - ECU, engine control unit (EDC 7).	No switch outputs CAN message		Circuit diagram Sheet 21	SERDIA (delete error) FC:0075
1E.1.B7	**A051** - ECU, engine control unit (EDC 7).	No speedometer signal CAN message		Circuit diagram Sheet 21	SERDIA (delete error) FC:0076
1E.1.B8	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:0078
1E.1.B9	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:0079
1E.1.BA	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:007A
1E.1.BB	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:007B
1E.1.BC	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:007C
1E.1.BD	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:007D
1E.1.BE	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:007E
1E.1.BF	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:007F
1E.1.C0	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram Sheet 21	SERDIA (delete error) FC:0080

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.C1	**A051** - ECU, engine control unit (EDC 7).	CAN bus times out with at least one sent message		Circuit diagram Sheet 21	SERDIA (delete error) FC:0083
1E.1.C2	**A051** - ECU, engine control unit (EDC 7).	CAN bus A, break in wiring or short circuit	Possible to drive with foot throttle/throttle pedal	Circuit diagram Sheet 21	SERDIA (delete error) FC:00C0
1E.1.C3	**A051** - ECU, engine control unit (EDC 7).	CAN bus B, break in wiring or short circuit	Possible to drive with foot throttle/throttle pedal	Circuit diagram Sheet 21	SERDIA (delete error) FC:00C1
1E.1.C4	**A051** - ECU, engine control unit (EDC 7).	CAN bus C, break in wiring or short circuit	Possible to drive with foot throttle/throttle pedal	Circuit diagram Sheet 21	SERDIA (delete error) FC:00C2
1E.1.D0	**A051** - ECU, engine control unit (EDC 7).	Faulty external pressure sensor			SERDIA (delete error) FC:0010
1E.1.D1	**A051** - ECU, engine control unit (EDC 7).	Faulty engine control unit			SERDIA (delete error) FC:008D
1E.1.D2	**A051** - ECU, engine control unit (EDC 7).	EEPROM memory access			SERDIA (delete error) FC:008E
1E.1.D3	**A051** - ECU, engine control unit (EDC 7).	Faulty injector valve (chip)			SERDIA (delete error) FC:009D
1E.1.D4	**A051** - ECU, engine control unit (EDC 7).	Faulty injector valve (chip)			SERDIA (delete error) FC:009E
1E.1.D5	**A051** - ECU, engine control unit (EDC 7).	Faulty engine control			SERDIA (delete error) FC:00B8
1E.1.D6	**A051** - ECU, engine control unit (EDC 7).	Engine monitoring system overloaded			SERDIA (delete error) FC:00DA
1E.1.D7	**A051** - ECU, engine control unit (EDC 7).	Incorrect voltage for internal 5 V reference source 1			SERDIA (delete error) FC:00DB
1E.1.D8	**A051** - ECU, engine control unit (EDC 7).	Incorrect voltage for internal 5 V reference source 2			SERDIA (delete error) FC:00DD

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.D9	**A051** - ECU, engine control unit (EDC 7).	Incorrect voltage for internal 5 V reference source 3			SERDIA (delete error) FC:00DE
1E.1.DB	**A051** - ECU, engine control unit (EDC 7).	Faulty serial communication interface			SERDIA (delete error) FC:00EB
1E.1.F0	**A051** - ECU, engine control unit (EDC 7).	Manipulation protection Torque envelope curve manipulation detected	Reduction in power		SERDIA (delete error) FC:00EF