Werkstatthandbuch
Workshopmanual
Manuel d´atelier
Manual de taller
Manuale per l´officina
Werkplaatshandboek

FENDT 900 Vario COM III

X 990.005.057.012

1

FENDT

B

Faults

FENDT 900 Vario - COM III

Volume 1

Volume 2

Volume 3

FENDT 900 Vario - COM III

Volume 4

B Faults

1 Confirming, calling up, deleting fault codes

Confirm fault code

Cancelling a fault code does not remove the fault; it is simply no longer displayed.

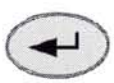
Press button repeatedly until no more fault codes are indicated on the display.

NOTE: *Each stored fault code must be cleared individually.*
The message will be displayed again the next time the tractor is started up.

Call up fault code

Press button, the first main menu level appears on the multiple display.

Press one of the buttons repeatedly until the symbol (A) flashes.



Press button, the following image appears on the multiple display:

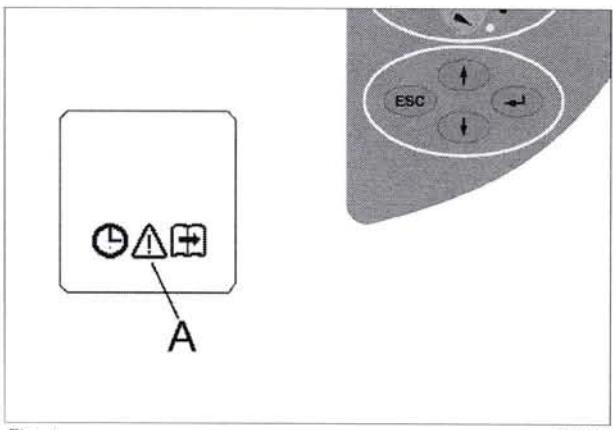


Fig. 1. I008552

A Number of faults
B Fault currently on display
C Fault code

Press one of the buttons and the faults are displayed one after the other along with their fault code.

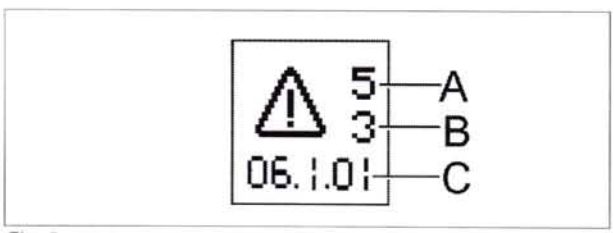
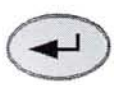


Fig. 2. I000441

Delete fault code

First call up the fault code, making a note of it if necessary.



Press button, the following image appears on the multiple display:

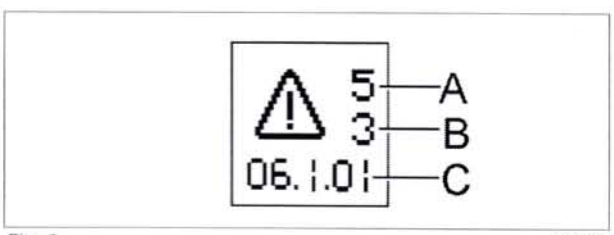


Fig. 3. I000441

Check Chassis Range!

Press buttons A, B and C simultaneously.
All fault codes in the fault memory of
A007 - Instrument panel are deleted.

NOTE: *Fault codes are also stored in the*
***A050** - ECU, basic control unit*
and, where necessary, in the
***A051** - ECU, engine control unit (EDC 7)..*

Fault codes can only be deleted from the A050 and A051 using the corresponding diagnostic software.

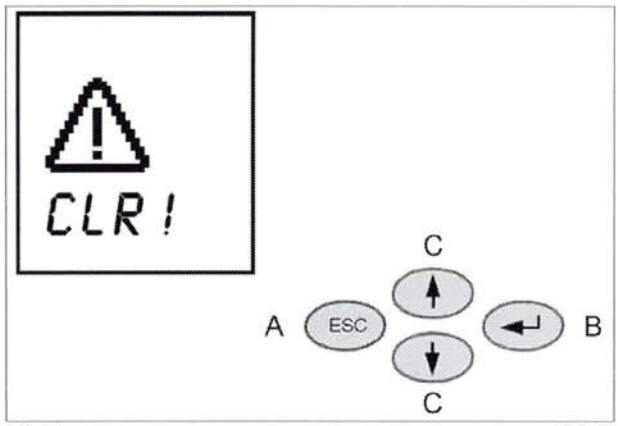


Fig. 4. I008550

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	**A073** - Terminal (A4)	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	Rear PTO bus fault	Functions non-operational, no display		EOL programming
00.0.07	**A050** - ECU, basic control unit	Front PTO bus fault	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. Valves			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
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

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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, instrument panel memory faulty	Display fault in instrument panel		EOL programming
00.1.4E	**A007** - Instrument panel	Checksum Warning images, instrument panel memory faulty	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
00.1.54	**B060** - Compressed air supply sensor	Sensor faulty Signal fault	Function non-operable Compressed air display	Circuit diagram Instrument panel/ABS/operator's seat	
		12 V supply fault	A007 - instrument panel		
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 Instrument panel/ABS/operator's seat	
00.1.5A	**B019** - Sensor, compressed air supply	Sensor faulty Signal fault	Function non-operable Compressed air display	Circuit diagram Instrument panel/ABS/operator's seat	
		12 V supply fault	A007 - instrument panel		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
00.1.71	**A036** - Control panel, dashboard right/left	Enter button	Button non-operable		
00.1.72	**A036** - Control panel, dashboard right/left	ESC button	Button non-operable		
00.1.73	**A036** - Control panel, dashboard right/left	Up button	Button non-operable		
00.1.74	**A036** - Control panel, dashboard right/left	Down button	Button non-operable		
00.1.75	**A036** - Control panel, dashboard right/left	Enter button pressed > 30s actuated	Button non-operable or button released		
00.1.76	**A036** - Control panel, dashboard right/left	Esc button pressed > 30s	Button non-operable or button released		
00.1.77	**A036** - Control panel, dashboard right/left	Up button pressed > 30s	Button non-operable or button released		
00.1.78	**A036** - Control panel, dashboard right/left	Down button pressed > 30s actuated	Button non-operable or button released		
00.1.A8	**B060** - Compressed air supply sensor	Compressed air supply 1, vacuum	On tractors with a 2-circuit brake system, below 4,6 bar the 4WD is permanently activated	Circuit diagram Instrument panel/ABS/operator's seat	
00.1.AA	**B019** - Sensor, compressed air supply	Compressed air supply 2, vacuum	On tractors with a 2-circuit brake system, below 4,6 bar the 4WD is permanently activated	Circuit diagram Instrument panel/ABS/operator's seat	

3 Fault code 01.1.00 -

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
01.1.01	**B055** - Sensor, foot throttle	Signal too high, Signal to low, No signal for longer than 2000 ms	TMS is switched off	Circuit diagram EDC engine 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 EDC engine control Calibration code "4005"	
01.1.04	**A050** - ECU, basic control unit	Checksum error TMS	No TMS drive possible		EOL programming
01.1.06	**A050** - ECU, basic control unit	Memory in EXT could not be reserved, EXT fault	TMS non-operable		
01.1.07	**A051** - ECU, engine control unit (EDC 7).	Checksum Incorrect engine parameters	Travel in emergency mode possible		EOL programming
01.1.30	**A077** - Immobiliser ECU **B083** - Immobiliser control	No ignition key taught in	Start not possible	Teach in vehicle key	
01.1.31	**A077** - Immobiliser ECU **B083** - Immobiliser control	Invalid transponder data from ignition key	Cannot start with this key	Use taught-in key	
01.1.32	**A077** - Immobiliser ECU **B083** - Immobiliser control	Ignition key without transponder recognised	Cannot start with this key	Use taught-in key	
01.1.34	**A077** - Immobiliser ECU **B083** - Immobiliser control	No response from immobiliser control			
01.1.35	**A077** - Immobiliser ECU **B083** - Immobiliser control	Immobiliser control is in "ready for teach-in" mode, A051 (EDC) is not			
01.1.36	**A051** - ECU, engine control unit (EDC 7). **A077** - Immobiliser ECU **B083** - Immobiliser control	No immobilisation communication exchange with A051 (EDC)			
01.1.37	**A051** - ECU, engine control unit (EDC 7). **A077** - Immobiliser ECU **B083** - Immobiliser control	Performance curve not sent to A051 (EDC)			
01.1.38	**A077** - Immobiliser ECU **B083** - Immobiliser control	Performance curve not available		New activation	EOL programming
01.1.39	**A077** - Immobiliser ECU **B083** - Immobiliser control	Equipment data not available		New activation	EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
01.1.3A	**A077** - Immobiliser ECU **U001** - Immobiliser aerial	Aerial faulty, signal line faulty			
01.1.3B	**A051** - ECU, engine control unit (EDC 7). **A077** - Immobiliser ECU **B083** - Immobiliser control	Vehicle serial number not the same in A051 and A077 or B083			
01.1.3C	**A050** - ECU, basic control unit **A077** - Immobiliser ECU **B083** - Immobiliser control	No immobilisation communication exchange or vehicle serial number not the same	Engine cuts out, transmission cannot be activated		EOL programming
01.1.3D	**A050** - ECU, basic control unit **A077** - Immobiliser ECU **B083** - Immobiliser control	Status message details cannot be called up	Engine cuts out, transmission cannot be activated		EOL programming
01.1.3E	**A050** - ECU, basic control unit **A077** - Immobiliser ECU **B083** - Immobiliser control	A050 equipment features cannot be read	Speed governor and 4WD engage when braking	New activation	EOL programming
01.1.3F	**A050** - ECU, basic control unit **A077** - Immobiliser ECU **B083** - Immobiliser control	A050 equipment features do not match	Speed governor and 4WD engage when braking	New activation	EOL programming
01.1.7A	**A039** - MFA, multifunction armrest Cruise control button MIN (on joystick)	Electrical fault	TMS is switched off		
01.1.7B	**A039** - MFA, multifunction armrest Cruise control button MAX (on joystick)	Electrical fault	TMS is switched off		
01.1.7C	**A039** - MFA, multifunction armrest TMS button	Electrical fault	TMS is switched off		
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 EDC engine control	SERDIA diagnostics

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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 CAN bus/EDC engine control	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 CAN bus/EDC engine control	EOL programming
01.1.E0	**A050** - ECU, basic control unit	EEPROM: Checksum incorrect for hand throttle	Hand throttle not working	Calibration code "4002"	
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			
01.2.C0	**A039** - MFA, multifunction armrest Seat switch	Warning message "Seat switch with active TMS"			

4 Fault code 02.1.00 -

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
02.1.E0	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest	Faulty CAN communication between e-box and CAN joystick			
02.1.EE	**A050** - ECU, basic control unit	Error message on ISO job computer,			
02.1.EF	**A050** - ECU, basic control unit	Internal tractor GD error message			EOL programming

5 Fault code 03.1.00 -

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
03.1.00	**A039** - MFA, multifunction armrest	unknown MFA fault			
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	Calibration code "4010"	EOL programming
03.1.20	**A039** - MFA, multifunction armrest	Invalid parameter for crossgate lever	Uses predefined values	Calibration code "1001"	EOL programming
03.1.30	**A039** - MFA, multifunction armrest	Invalid parameters for linear module (valve rockers)	Uses predefined values	Calibration code "1003"	EOL programming
03.1.40	**A039** - MFA, multifunction armrest	Invalid parameters for hand throttle and throttle pedal speed range	Uses predefined values	Calibration code "4010"	EOL programming
03.1.50	**A039** - MFA, multifunction armrest	Invalid parameters for FRONT power lift module	Uses predefined values	Calibration code "9001"	EOL programming
03.1.60	**A039** - MFA, multifunction armrest	Invalid parameters for REAR power lift module	Uses predefined values	Calibration code "8001"	EOL programming
03.1.7F	**A039** - MFA, multifunction armrest	MFA system fault			

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 Transmission control system	
		Faulty 8.5 V supply	A013, fuse 05		
04.1.05	**B039** - Sensor, high-pressure 2	Sensor faulty, Signal fault	TMS is switched off	Circuit diagram Transmission control system	
		12 V supply fault	A013, fuse 31		
04.1.06	**B055** - Sensor, foot throttle	Sensor faulty, Signal fault	Emergency mode if throttle pedal mode is active, TMS is switched off	Circuit diagram EDC engine control	
		Faulty 8.5 V supply	A013, fuse 19		
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 Transmission control system	
		12 V supply fault	A013, fuse 32		
04.1.08	**B016** - Sensor, travel range detection	Sensor faulty, Signal fault	TMS is switched off	Circuit diagram Transmission control system	
		Faulty 8.5 V supply	A013, fuse 08		
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	Calibration code "4010"	
04.1.21	**S045** - Switch, reversing driver stand	Faulty switch, Signal fault		Circuit diagram Transmission control system	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.22	**A039** - MFA, multifunction armrest	Throttle pedal resolution potentiometer faulty, Signal fault	TMS is switched off		
04.1.23	**A039** - MFA, multifunction armrest	Joystick signal "Tempomat cruise control ON" faulty	Continuation in emergency mode possible	Circuit diagram Transmission control system	
04.1.24	**S080** - Switch, hand brake	Faulty switch, Signal fault	Hand brake auto mode not available	Circuit diagram Transmission control system	
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		
04.1.28	**A009** - Actuator unit VR incremental encoder	Faulty path signal	Continuation in emergency mode possible	Circuit diagram Transmission control system	
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, Direction signal faulty	Continuation in emergency mode possible	Circuit diagram Transmission control system	
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		
04.1.2D	**S079** - Switch, steering column "Quick reverse" button on control stalk	Faulty forward travel signal	TMS is switched off	Circuit diagram Transmission control system	
04.1.2E	**S079** - Switch, steering column "Quick reverse" button on control stalk	Faulty reverse travel signal	TMS is switched off	Circuit diagram Transmission control system	
04.1.2F	**A039** - MFA, multifunction armrest Joystick	Faulty joystick signal "v-" (joystick back)	Continuation in emergency mode possible	Circuit diagram	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.31	**B014** - Sensor, collecting shaft	Sensor faulty, Direction signal faulty	Continuation in emergency mode possible	Circuit diagram Transmission control system	
04.1.32	**A039** - MFA, multifunction armrest Joystick activation button	Faulty button, signal fault	Continuation in emergency mode possible	Circuit diagram	
04.1.33	**A039** - MFA, multifunction armrest	Faulty joystick signal "v+" (joystick forward)	Continuation in emergency mode possible	Circuit diagram	
04.1.40	**B016** - Sensor, travel range detection	Transmission travel range is not recognised correctly		Calibration code "4003"	
04.1.42	**B014** - Sensor, collecting shaft	Sensor faulty, Speed signal faulty	Continuation in emergency mode possible	Circuit diagram Transmission control system	
		Faulty 8.5 V supply	A013, fuse 07		
04.1.44	**B010** - Sensor, engine speed	Sensor faulty, Signal fault	Continuation in emergency mode possible	Circuit diagram Transmission control system	
		12 V supply fault	A013, fuse 33		
04.1.45	**B015** - Sensor, bevel pinion (=travel speed)	Sensor faulty, Speed signal faulty	Continuation in emergency mode possible	Circuit diagram Transmission control system	
		Faulty 8.5 V supply	A013, fuse 08		
04.1.46	**Y004** - Solenoid valve, turbo-clutch	Pressure does not drop when the TK valve is opened	TK valve jams, TK valve external energising		
04.1.47	**B016** - Sensor, travel range detection **Y002** - Solenoid valve, travel range I **Y003** - Solenoid valve, travel range II	Travel range selector: Does not come out of gear when travel range valve is energised	Travel range detection sensor faulty, incorrect valve connected or valve is faulty		
04.1.48	**B016** - Sensor, travel range detection **Y002** - Solenoid valve, travel range I **Y003** - Solenoid valve, travel range II	Travel range selector: Cannot shift to neutral	Travel range detection sensor faulty, incorrect valve connected or valve is faulty		
04.1.50	**S017** - Filter contamination switch	Filter clogged	No further indication of clogging	Circuit diagram Transmission control system	Switch function not active at oil temperature below 50°
04.1.51	**B009** - Discharge temperature sensor	"Transmission oil temperature over 95°".	Switching from travel range 2 to travel range 1		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.52	**B009** - Discharge temperature sensor	"Transmission oil temperature over 105°".	Continuing to drive will cause transmission damage		
04.1.53	**B009** - Discharge temperature sensor	"Transmission oil temperature more than 110°C"	transmission damage if journey is continued!	Circuit diagram Transmission control system	
04.1.56	**S017** - Filter contamination switch	Faulty switch, Signal line fault		Circuit diagram Transmission control system	
04.1.58	**A050** - ECU, basic control unit **A009** - Actuator unit **B014** - Sensor, collecting shaft **B015** - Sensor, bevel pinion **B016** - Sensor, travel range detection	Transmission slip monitor Transmission output speed deviates by more than 30% from set-point 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	("Ideal ratio/actual ratio" comparison)
04.1.59	**A050** - ECU, basic control unit **S013** - Emergency mode button	Emergency operation activated manually/electronic emergency operation actuation faulty	TMS is switched off		
04.1.61	**A050** - ECU, basic control unit **Y002** - Solenoid valve, travel range I	Faulty valve actuation, travel range I	Cannot switch to travel range I	Circuit diagram Transmission control system	
04.1.62	**A050** - ECU, basic control unit **Y003** - Solenoid valve, travel range II	Faulty valve actuation, travel range II	Cannot switch to travel range II	Circuit diagram Transmission control system	
04.1.63	**A050** - ECU, basic control unit **Y005** - Solenoid valve, speed governor	Valve actuation for mechanical speed limiter faulty		Circuit diagram Transmission control system	
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 Transmission control system	
04.1.65	**A050** - ECU, basic control unit **Y053** - Active hold function solenoid valve	Actuation of earth side of solenoid valve faulty	Fault on earth side to solenoid valve	Circuit diagram Transmission control system	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.66	**A050** - ECU, basic control unit **Y053** - Active hold function solenoid valve	Actuation of + side of solenoid valve faulty	Fault on + side to solenoid valve	Circuit diagram Transmission control system	
04.1.67	**A050** - ECU, basic control unit **Y053** - Active hold function solenoid valve	Self-test on brake stationary function failed	Check electrical circuit	Circuit diagram Transmission control system	
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 Transmission control system	
04.1.70	**A039** - MFA, multifunction armrest Cruise control button, C1	Faulty button, Signal fault	Tempomat cruise control 1 cannot be activated		
04.1.71	**A039** - MFA, multifunction armrest Cruise control button, C2	Faulty button, Signal fault	Tempomat cruise control 2 cannot be activated		
04.1.76	**S047** - Switch, engine brake	Faulty switch, Signal fault	TMS is switched off	Circuit diagram EDC engine control	
04.1.77	**A039** - MFA, multifunction armrest Joystick acceleration rate I...IV	Signal fault	Only rate III available in emergency mode		
04.1.78	**A039** - MFA, multifunction armrest Seat switch	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	**B014** - Sensor, collecting shaft **B015** - Sensor, bevel pinion **B016** - Sensor, travel range detection	Plausibility error (=speeds do not match) fault output as of 5 km/h	Continuation in emergency mode possible	Circuit diagram Transmission control system	
04.1.83	**B014** - Sensor, collecting shaft **B015** - Sensor, bevel pinion	Plausibility error (=speeds do not match) Fault initially reported from 5 km/h	Continuation in emergency mode possible	Circuit diagram Transmission control system	
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		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
04.1.85	**B010** - Sensor, engine speed	Engine speed sensor does not supply plausible speed curves. Output speed increase or decrease is outside limits.	Continuation in emergency mode possible	Circuit diagram Transmission control system	
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 Transmission control system	
04.1.87	**S079** - Switch, steering column	Plausibility error at F/R switch, quick reverse	F/R switch inoperable, quick reverse on steering wheel adjustment, S079 switch,	Check quick reverse Chapter 9000 Reg. E	
04.1.89	**B009** - Discharge temperature sensor	Plausibility error, transmission temperature		Circuit diagram Transmission control system	
04.1.8B	**B014** - Sensor, collecting shaft **B015** - Sensor, bevel pinion	Plausibility error, stationary control hydrostatic pulse	Stationary control off until next key reset		EOL programming 7.63, version 04/09 or later
04.1.8C	**B014** - Sensor, collecting shaft **B015** - Sensor, bevel pinion	Plausibility error, stationary control hydrostatic direction	Stationary control off until next key reset		EOL programming 7.63, version 04/09 or later
04.1.8F		Currently selected tyre circumference is too small	- The speed display is no longer correct in certain circumstances - Transmission controls no longer working correctly in certain circumstances (e.g. TMS, final speed control, cruise control)		Enter larger tyre circumference
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. Refer to Service Information 26/04	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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	
04.1.A3	**A009** - Actuator unit	Fault or logic error in incremental sensor signal (actual position signal)	Continuation in emergency mode possible	Circuit diagram Transmission control system	
04.1.A4	**A009** - Actuator unit	Fault or logical error in EST signal.	Continuation in emergency mode possible	Circuit diagram Transmission control system	
04.1.A5	**A009** - Actuator unit	Initial reference (=zero position) could not be found during ignition ON	Continuation in emergency mode possible	Circuit diagram Transmission control system	
04.1.A6	**A009** - Actuator unit	Reference point signal fault during operation	Continuation in emergency mode possible	Circuit diagram Transmission control system	
04.1.B0	All bus users	Initialisation error TeachIn fault	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) TeachIn fault	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 sensor	Incorrect checksum			EOL programming
04.1.CB	**A039** - MFA, multifunction armrest	Warning message: Travel range button "under excessive pressure"			
04.1.CF	**A050** - ECU, basic control unit	Internal error, A050 basic operating system			
04.1.D0	**A050** - ECU, basic control unit	Workshop mode: Ratio restriction active			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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	Traction control regulator parameters (ML transmission adjustment) not plausible or read incorrectly	Emergency mode		EOL programming
04.1.E2	**A050** - ECU, basic control unit	Traction control regulator parameters not plausible (B008/B039) or read incorrectly.	Emergency mode		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 for range control, speed limiting valve etc. faulty	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	Speed selection parameters incorrect			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 range control calibration missing		Calibration code "4003"	
04.1.EC	**B055** - Sensor, foot throttle	No calibration or drifted, changed values	Continuation in emergency mode possible	Calibration code "4005"	
04.1.ED	**B017** - Sensor, clutch pedal	No calibration or drifted, changed values	Continuation in emergency mode possible	Calibration code "4001"	
04.1.EE	**A050** - ECU, basic control unit Transmission characteristic	No calibration or drifted, changed values	Continuation in emergency mode possible	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	Calibration code "4009"	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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
04.1.F2	**A050** - ECU, basic control unit	Characteristic offset deviation outside permitted range	Only fault code display		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
05.1.00	**A050** - ECU, basic control unit	EEPROM fault in basic control unit			EOL programming
05.1.31	**A039** - MFA, multifunction armrest 4WD 100% button	Faulty button, Signal fault			
05.1.32	**A039** - MFA, multifunction armrest Auto 4WD button	Faulty button, Signal fault			
05.1.33	**Y009** - Solenoid valve, 4WD	Actuation fault	4WD engages	Circuit diagram Transmission control system	
05.1.34	**B067** - Sensor, steering angle	Sensor faulty, Signal fault		Circuit diagram Suspension/Auto-Guide	
		Faulty 8.5 V supply	A013, fuse 16		
05.1.51	**A039** - MFA, multifunction armrest Differential lock 100% button	Faulty button, Signal fault	Other functions remain active		
		Faulty bus			
05.1.52	**A039** - MFA, multifunction armrest Differential lock auto system button	Faulty button, Signal fault			
05.1.53	**Y010** - Solenoid valve, differential lock	Actuation fault	Differential lock disengages	Circuit diagram Transmission control system	
05.1.54	**S006** - Switch, left brake	Faulty switch, Signal fault	TMS is switched off	Circuit diagram Transmission control system	
05.1.55	**S005** - Switch, right brake	Faulty switch, Signal fault	TMS is switched off	Circuit diagram Transmission control system	
05.1.56	**A050** - ECU, basic control unit	Checksum error, 4WD/differential lock parameters	No auto mode possible		EOL programming
05.1.57	**A050** - ECU, basic control unit	Checksum error, calibration data	No auto mode possible		EOL programming
05.1.58	**S087** - Switch, brake wearing, left	Faulty switch, Signal fault		Circuit diagram trailer brake	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
05.1.59	**S086** - Switch, brake wearing, right	Faulty switch, Signal fault		Circuit diagram trailer brake	
05.1.5A	**S087** - Switch, brake wearing, left	Brake pad worn		Circuit diagram trailer brake	
05.1.5B	**S086** - Switch, brake wearing, right	Brake pad worn		Circuit diagram trailer brake	
05.1.8D	**A050** - ECU, basic control unit	Checksum error, old auto config data			EOL programming
05.1.8F	**A050** - ECU, basic control unit	Checksum error, old auto mode sequence data			EOL programming
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 greater than 16 km/h, u must be > 1.1 V	Circuit diagram Hydraulics	
05.1.98	**S025** - Switch, LS pump pressure monitor	LS pump pressure below 8 bar		Circuit diagram Sheet 7	
05.1.99	**S026** - Switch, steering pump flow controller	Flow monitor reports steering pump failure	At speeds >1000 rpm, u must be > 1.7 V		
05.1.9A	**S026** - Switch, steering pump flow controller	Plausibility check of steering pump flow monitor	When engine is OFF, u must be < 1.1 V	Circuit diagram Hydraulics	
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 Hydraulics	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
05.1.B0	**A050** - ECU, basic control unit	Initialisation error on communication driver, CAN bus communication restricted, checksum error, EEPROM GD routing data			EOL programming
05.1.B1	**S026** - Switch, steering pump flow controller	Plausibility check on steering pump flow monitor	When engine is OFF, u must be < 1.1 V	Circuit diagram Hydraulics	
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 Hydraulics	
05.1.FE	**A050** - ECU, basic control unit	Checksum error, basic control unit	Applications will not start. They all display EXT bus fault		EOL programming
05.1.FF	**A050** - ECU, basic control unit	EEPROM fault in basic control unit			EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
06.1.01	**A039** - MFA, multifunction armrest Rear PTO button in cab ON/OFF	Faulty button, Signal fault	PTO disengages		
		Faulty bus			
06.1.02	**S020** - Button, rear PTO, external right	Faulty button, Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Circuit diagram PTO	
06.1.03	**S019** - Button, rear PTO, external left	Faulty button, Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Circuit diagram PTO	
06.1.04	**Y008** - Solenoid valve, rear PTO (clutch)	Actuation fault	PTO disengages	Circuit diagram PTO	
06.1.05	**B021** - Sensor, rear PTO speed (clutch)	Sensor faulty, Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Circuit diagram PTO	
		12 V supply fault	A013, fuse 34		
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 PTO	
		12 V supply fault	A013, fuse 35		
06.1.11	**A039** - MFA, multifunction armrest Automatic REAR PTO button	Faulty button, signal fault	PTO disengages, Auto mode OFF		
06.1.13	**B020** - Sensor, rear PTO speed (stub shaft)	Overspeed warning		Circuit diagram PTO	
06.1.15	**A039** - MFA, multifunction armrest Button neutral, REAR PTO	Faulty button, Signal fault	PTO speed cannot be modified or selected		
06.1.16	**A039** - MFA, multifunction armrest Button 540, REAR PTO	Faulty button, Signal fault	PTO speed cannot be modified or selected		
06.1.17	**A039** - MFA, multifunction armrest 540E button, REAR PTO	Faulty button, Signal fault	PTO speed cannot be modified or selected		
06.1.18	**A039** - MFA, multifunction armrest Button 1000, REAR PTO	Faulty button, Signal fault	PTO speed cannot be modified or selected		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
06.1.19	**A039** - MFA, multifunction armrest 1000E button, REAR PTO	Faulty button, Signal fault	PTO speed cannot be modified or selected		
06.1.1A	**Y026** - Solenoid valve, rear PTO, stage I Speed rate 540	Actuation fault	PTO cannot be engaged	Circuit diagram PTO	
06.1.1B	**Y026** - Solenoid valve, rear PTO, stage I Speed rate 540E	Actuation fault	PTO cannot be engaged	Circuit diagram PTO	
06.1.1C	**Y027** - Solenoid valve, rear PTO, stage II Speed rate 1000	Actuation fault	PTO cannot be engaged	Circuit diagram PTO	
06.1.1D	**Y026** - Solenoid valve, rear PTO, stage I Speed rate 1000E	Actuation fault	PTO cannot be engaged	Circuit diagram PTO	
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		
06.1.42	**S020** - Button, rear PTO, external right	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible, PTO cannot be engaged.	Circuit diagram PTO	
06.1.43	**S019** - Button, rear PTO, external left	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible, PTO cannot be engaged.	Circuit diagram PTO	
06.1.45	**B021** - Sensor, rear PTO speed (clutch)	Speed selection in neutral, PTO clutch not engaged, B021 shows speed, PTO clutch disc pack does not separate, PTO brake not operational	Elec. speed selection remains possible, actuate PTO clutch ON/OFF button for at least 5 seconds (emergency mode)	Circuit diagram PTO	
		Speed is selected, PTO clutch 100% engaged, PTO clutch speed deviates by more than 20% from engine speed. PTO clutch disc pack slipping.	Elec. speed selection remains possible, actuate 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, actuate PTO clutch ON/OFF button for at least 5 seconds (emergency mode)		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
06.1.50	**B020** - Sensor, rear PTO speed (stub shaft)	PTO stub shaft speed > 1300 rpm, signal fault in Hall sensor (B020 or B021)	Electr. speed selection possible, actuate PTO clutch ON/OFF button for at least 5 seconds (emergency mode)	Circuit diagram PTO	
		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	Electr. speed selection possible, actuate PTO clutch ON/OFF button for at least 5 seconds (emergency mode). The corresponding speed cannot be selected if there is a solenoid valve fault.		
06.1.55	**A039** - MFA, multifunction armrest Button neutral, REAR PTO	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible		
06.1.56	**A039** - MFA, multifunction armrest Button 540, REAR PTO	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible		
06.1.57	**A039** - MFA, multifunction armrest 540E button, REAR PTO	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible		
06.1.58	**A039** - MFA, multifunction armrest Button 1000, REAR PTO	has been pressed for more than 30 seconds, mechanical or electrical fault in button	No preselection possible		
06.1.59	**A039** - MFA, multifunction armrest 1000E button, REAR PTO	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 shaft (corrected by the transmission rate) differs by more than plus/minus 12% from setpoint speed of PTO clutch. Solenoid valve (Y026, Y027) incorrectly wired or seized. Mechanical fault in speed selector. Signal fault at Hall sensor (B020, B021)	Electr. speed selection possible, actuate PTO clutch ON/OFF button for at least 5 seconds (emergency mode). The corresponding speed cannot be selected if there is a solenoid valve fault.	Circuit diagram PTO	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
06.1.81	**A039** - MFA, multifunction armrest REAR PTO ON/OFF button	Counter error			
06.1.95	**A039** - MFA, multifunction armrest Button neutral, REAR PTO	Counter error			EOL programming
06.1.96	**A039** - MFA, multifunction armrest Button 540, REAR PTO	Counter error			EOL programming
06.1.97	**A039** - MFA, multifunction armrest 540E button, REAR PTO	Counter error			EOL programming
06.1.98	**A039** - MFA, multifunction armrest Button 1000, REAR PTO	Counter error			EOL programming
06.1.99	**A039** - MFA, multifunction armrest 1000E button, REAR PTO	Counter error			EOL programming
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 neutral, REAR PTO	Communication fault			
06.1.B6	**A039** - MFA, multifunction armrest Button 540, REAR PTO	Communication fault			
06.1.B7	**A039** - MFA, multifunction armrest 540E button, REAR PTO	Communication fault			
06.1.B8	**A039** - MFA, multifunction armrest Button 1000, REAR PTO	Communication fault			
06.1.B9	**A039** - MFA, multifunction armrest 1000E button, REAR PTO	Communication fault			
06.1.C0	**A050** - ECU, basic control unit	Warning: 540 stub shaft at rate 1000			
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

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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, temperature limits and switching times of rear PTO	Use default values		EOL programming
06.1.E8	**A050** - ECU, basic control unit	Checksum error, screens for showing/hiding diagnostics on front and rear PTOs	Use default values		EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
07.1.01	**A039** - MFA, multifunction armrest Button, front PTO ON/OFF	Faulty button Signal fault			
		Faulty bus			
07.1.04	**Y011** - Front PTO solenoid valve (clutch)	Actuation fault		Circuit diagram trailer brake	
07.1.05	**B002** - Sensor, front PTO speed	Sensor faulty, Signal fault	PTO can be engaged by pressing emergency button in cab for 5 seconds	Circuit diagram PTO	
		12 V supply fault	A013, fuse 36		
07.1.09	**A039** - MFA, multifunction armrest Button, auto front PTO	Faulty button, Signal fault			
07.1.10	**B002** - Sensor, front PTO speed	Overspeed warning		Circuit diagram PTO	
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		
07.1.81	**A039** - MFA, multifunction armrest Cab button, FRONT PTO	Counter error			EOL programming
07.1.A1	**A039** - MFA, multifunction armrest Cab button, FRONT PTO	Communication fault			
07.1.B0	**A050** - ECU, basic control unit	Initialisation error on communication driver	CAN bus communication restricted		
07.1.C1	**B015** - Sensor, bevel pinion	Switch-on speed not reached for PTO/power lift auto mode		Circuit diagram Transmission control system	
07.1.E1	**A050** - ECU, basic control unit	Checksum error, front PTO parameterisation	Use default values		EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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

10 Fault code 08.1.00 -

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.00	**Y077 [HKH]** - Cut-off valve, rear EPC	Unknown rear EPC fault			
08.1.22	**B030** - Sensor, rear power lift position	Sensor faulty, Signal fault	No control possible, operable via external button only	Circuit diagram Hydraulics	
		8.5 V supply	A013, fuse 15		
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 Steering axle automatic mode	Faulty external sensor, Signal fault	No control possible, operable via external button only		
08.1.31	**B031** - Sensor, draft sensing pin, right	Faulty draught sensing pin Signal fault	Only position control possible	Circuit diagram Hydraulics	
		8.5 V supply	A013, fuse 14		
08.1.32	**B032** - Sensor, draft sensing pin, left	Faulty draught sensing pin Signal fault	Only position control possible	Circuit diagram Hydraulics	
		8.5 V supply	A013, fuse 13		
08.1.33	**B031** - Sensor, draft sensing pin, right	Warning, draught sensing pin, right overloaded	Warning message only		
08.1.34	**B032** - Sensor, draft sensing pin, left	Warning, draught sensing pin, left overloaded	Warning message only		
08.1.40	**S029** - Button, rear power lift, left-hand external raise	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
08.1.41	**S030** - Button, rear power lift, left-hand external lower	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
08.1.42	**S027** - Button, rear power lift, right-hand external raise	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.43	**S028** - Button, rear power lift, right-hand external lower	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
08.1.44	**A039** - MFA, multifunction armrest Button, stop rear power lift	Faulty button, Signal fault	Button inoperable until next trouble-free cold start		
08.1.45	**A039** - MFA, multifunction armrest Transport button, quick lift, rear power lift	Faulty button, Signal fault	Button inoperable until next trouble-free cold start		
08.1.46	**A039** - MFA, multifunction armrest Control button, quick lift, rear power lift	Faulty button, Signal fault	Button inoperable until next trouble-free cold start		
08.1.47	**A039** - MFA, multifunction armrest Forced lowering button, quick lift, 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	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 Hydraulics	
08.1.4A	**Y062** - Solenoid valve, field pressure control (rear)	Faulty valve	Valve moves to neutral and locks	Circuit diagram Hydraulics	
08.1.4B	**A039** - MFA, multifunction armrest Button, auto rear power lift	Faulty button (output via TeachIn)	No auto mode		
08.1.A2	**Y077 [HKH]** - Cut-off valve, rear EPC	EEPROM is faulty (Valve)	Valve moves to neutral and locks		EOL programming
08.1.A3	**Y077 [HKH]** - Cut-off valve, rear EPC	RAM_Test	Valve moves to neutral and locks Pilot pressure OFF		
08.1.A4	**Y077 [HKH]** - Cut-off valve, rear EPC	Flash_Test	Valve moves to neutral and locks Pilot pressure OFF		
08.1.A5	**Y077 [HKH]** - Cut-off valve, rear EPC	Incorrect valve code (SA/DA) for selecting EOL	Valve moves to neutral and locks		EOL programming

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.B0	**B030** - Sensor, rear power lift position	Position sensor not calibrated	No control possible, operable only via external button	Calibration code "8002"	
08.1.B2	**A039** - MFA, multifunction armrest Setpoint value potentiometer, rear power lift	Setpoint value potentiometer not calibrated	Setpoint values cannot be set, only position control possible	Calibration code "8001"	
08.1.B3	**X015** - External control socket	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	**A073** - Terminal (A4)	Terminal not fitted	Configuration cannot be changed		
08.1.F0	**Y077 [HKH]** - Cut-off valve, rear EPC	Valve does not report to V bus	No actuation possible		
08.1.F2	**Y077 [HKH]** - Cut-off valve, rear EPC	Undervoltage (where U < 8V)	Valve moves to neutral and locks		
08.1.F3	**Y077 [HKH]** - Cut-off valve, rear EPC	Overvoltage, safe (where U > 18 V)	Valve moves to neutral and locks		
08.1.F4	**Y077 [HKH]** - Cut-off valve, rear EPC	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 [HKH]** - Cut-off valve, rear EPC	High overvoltage (> 45V)	Valve moves to neutral and locks		
08.1.F6	**Y077 [HKH]** - Cut-off valve, rear EPC	Output stage error	Valve moves to neutral and locks		
08.1.F7	**Y077 [HKH]** - Cut-off valve, rear EPC	Position pickup sensor error	Valve moves to neutral and locks Pilot pressure OFF		
08.1.F8	**Y077 [HKH]** - Cut-off valve, rear EPC	Valve actuator does not return to neutral position; frequent cause: valve actuator mechanically jams (pilot control or main actuator) due to contamination in hydraulics area	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
08.1.F9	**Y077 [HKH]** - Cut-off valve, rear EPC	Valve actuator not in neutral position when switched on; frequent cause: valve actuator mechanically jams (pilot control or main actuator) due to contamination in hydraulics area	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		
08.1.FA	**Y077 [HKH]** - Cut-off valve, rear EPC	Valve actuator deflected too far	Valve moves to neutral and locks		
08.1.FB	**Y077 [HKH]** - Cut-off valve, rear EPC	Floating position is not reached	Valve moves to neutral and locks		
08.1.FC	**Y077 [HKH]** - Cut-off valve, rear EPC	Manual actuation (occurs when a valve is deflected from its neutral position)	Valve locked, pilot pressure OFF		
08.1.FD	**Y077 [HKH]** - Cut-off valve, rear EPC	Pilot control actuator jams	Valve locked, pilot pressure OFF		
08.1.FF	**Y077 [HKH]** - Cut-off valve, rear EPC	No setpoint message, no configuration message, setpoint message not plausible, configuration message not plausible. Potentiometer/PWM error	Valve moves to neutral and locks		

11 Fault code 09.1.00 -

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
09.1.00	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Unknown error, front EPC			
09.1.22	**B040** - Sensor, front power lift position	Sensor faulty, Faulty signal line	No control possible, operable only via external button	Circuit diagram Hydraulics	
		8.5 V supply	A013, fuse 12		
09.1.23	**A039** - MFA, multifunction armrest Setpoint potentiometer, front power lift	Faulty setpoint value potentiometer Signal fault	Setpoint values cannot be set, only position control possible		
09.1.40	**S021** - Button, front power lift, external raise	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
09.1.41	**S022** - Button, front power lift, external lower	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
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, quick lift, front power lift	Faulty button, Signal fault	Button inoperable until next trouble-free cold start		
09.1.46	**A039** - MFA, multifunction armrest Control button, quick lift, front power lift	Faulty button, Signal fault	Button inoperable until next trouble-free cold start		
09.1.47	**A039** - MFA, multifunction armrest Forced lowering button, quick lift, 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	Button inoperable until next trouble-free cold start		
09.1.49	**Y021** - Front pressure compensator lock valve	Faulty lock valve, pressure compensator	Valve moves to neutral and locks	Circuit diagram Hydraulics	
09.1.4A	**Y022** - Field pressure control solenoid valve (front),	Faulty pressure-limiting valve	Valve moves to neutral and locks	Circuit diagram Hydraulics	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
09.1.4B	**A039** - MFA, multifunction armrest Button, auto front power lift	Auto front power lift button faulty (output via TeachIn)			
09.1.A2	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	EEPROM error (valve)	Valve moves to neutral and locks		
09.1.A3	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	RAM_Test	Valve moves to neutral and locks Pilot pressure OFF		EOL programming
09.1.A4	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Flash_Test	Valve moves to neutral and locks Pilot pressure OFF		EOL programming
09.1.A5	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Incorrect valve code (SA/DA) for selecting EOL			EOL programming
09.1.B0	**B040** - Sensor, front power lift position	Position sensor not calibrated	No control possible, operable only via external button	Calibration code "9002"	
09.1.B2	**A039** - MFA, multifunction armrest Setpoint potentiometer, front power lift	Setpoint value potentiometer not calibrated	Setpoint values cannot be set, only position control possible	Calibration code "9001"	
09.1.C0	**A039** - MFA, multifunction armrest	MFA not fitted	No auto mode possible, operable only via external button		
09.1.C1	**A039** - MFA, multifunction armrest Terminal	Terminal not fitted	Configuration cannot be changed		
09.1.CE	**A007** - Instrument panel	Temperature limit warning	Is not stored		
09.1.CF	**A007** - Instrument panel	Temperature limit warning	Is not stored		
09.1.E0	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Valve does not report to V bus	Valve moves to neutral and locks		
09.1.E2	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Undervoltage (where U < 8V)	Valve moves to neutral and locks		
09.1.E3	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Overvoltage, safe (where U > 18 V)	Valve moves to neutral and locks		
09.1.E4	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Valve actuator falls short (frequent cause: brief control pressure dips or oil too viscous at very low temperatures)	Valve moves to neutral and locks		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
09.1.E5	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	High overvoltage (> 45V)	Valve moves to neutral and locks		
09.1.E6	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Final stage error (pilot control solenoid valve)	Valve moves to neutral and locks		
09.1.E7	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Position pickup sensor error	Valve moves to neutral and locks Pilot pressure OFF		
09.1.E8	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Valve actuator does not return to neutral position; frequent cause: valve actuator mechanically jams (pilot control or main actuator) due to contamination in hydraulics area	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		
09.1.E9	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	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 [FKH]** - Cut-off valve, front power lift enhanced control	Valve actuator deflected too far	Valve moves to neutral and locks		
09.1.EB	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Floating position is not reached	Valve moves to neutral and locks		
09.1.EC	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Manual actuation (occurs when a valve is deflected from its neutral position)	Valve locked, pilot pressure OFF		
09.1.ED	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	Pilot control actuator jams	Valve locked, pilot pressure OFF		
09.1.EF	**Y070 [FKH]** - Cut-off valve, front power lift enhanced control	No setpoint message, no configuration message, setpoint message not plausible, configuration message not plausible	Valve moves to neutral and locks Pilot pressure OFF		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Valve does not report to CAN bus **(X= valve number)**	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	
0A.1.X1	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	EEPROM inconsistent	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.X2	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Undervoltage (where U < 8V)	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	
0A.1.X3	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Overvoltage, safe (where U > 18 V)	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.X4	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	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 Hydraulics/Auto-Guide	
0A.1.X5	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	High overvoltage (> 45V)	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.X6	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Final stage error (pilot control solenoid valve)	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	
0A.1.X7	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Position pickup sensor error	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.X8	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	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 Hydraulics/Auto-Guide	
0A.1.X9	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	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 Hydraulics/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.XA	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Valve actuator deflected too far	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	
0A.1.XB	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Floating position is not reached	Valve moves to neutral and locks	Circuit diagram Hydraulics/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.XC	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Manual actuation (occurs when a valve is deflected from its neutral position)	All valve positions, no function; Valve locked, Pilot pressure OFF	Circuit diagram Hydraulics/Auto-Guide	
0A.1.XD	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Pilot control actuator jams	Valve locked, Pilot pressure OFF	Circuit diagram Hydraulics/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.XE	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	RAM or FLASH test fault	Valve moves to neutral and locks, pilot pressure OFF	Circuit diagram Hydraulics/Auto-Guide	
0A.1.XF	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	No setpoint message, no configuration message, setpoint message not plausible, configuration message not plausible. Potentiometer/PW error	Valve moves to neutral and locks Pilot pressure OFF	Circuit diagram Hydraulics/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.A2	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	More valves connected than registered via EOL programming			
0A.1.B0	**A039** - MFA, multifunction armrest Crossgate lever	Crossgate lever is not calibrated	Crossgate lever not working	Calibration code "1001"	
0A.1.B1	**A039** - MFA, multifunction armrest Crossgate lever	Crossgate lever X axis faulty or engaged when ignition switched on	Crossgate lever not working		
0A.1.B2	**A039** - MFA, multifunction armrest Crossgate lever	Crossgate lever Y axis faulty or engaged when ignition switched on	Crossgate lever not working		
0A.1.B3	**A039** - MFA, multifunction armrest Crossgate lever	Crossgate lever missing (both axles)	Crossgate lever not working		
0A.1.B5	**A039** - MFA, multifunction armrest	Joystick centre position recognition faulty (electrical fault) or engaged when ignition switched on	Valve position not functioning, lock valve		
0A.1.B6	**A039** - MFA, multifunction armrest	Linear module 1 (rocker) not calibrated	Valve position not functioning	Calibration code "1003"	
0A.1.B7	**A039** - MFA, multifunction armrest	Linear module 1 (rocker) faulty or engaged when ignition switched on	Valve position not functioning, lock valve		
0A.1.B8	**A039** - MFA, multifunction armrest	Linear module 2 (rocker) not calibrated	Valve position not functioning	Calibration code "1004"	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.B9	**A039** - MFA, multifunction armrest	Linear module 2 (rocker) faulty or engaged when ignition switched on	Valve position not functioning, lock valve		
0A.1.BA	**A039** - MFA, multifunction armrest	Linear module 3 (rocker) not calibrated	Valve position not functioning	Calibration code "1005"	
0A.1.BB	**A039** - MFA, multifunction armrest	Linear module 3 (rocker) faulty or engaged when ignition switched on	Valve position not functioning, lock valve		
0A.1.BC	**A039** - MFA, multifunction armrest	Linear module 4 (rocker) not calibrated	Valve position not functioning	Calibration code "1006"	
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 (general locking)	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	Warning message only		
0A.1.CC	**A050** - ECU, basic control unit	Steering axle not active	Warning message only		
0A.1.CE	Auxiliary control units	Valve actuator does not return to neutral position	Valve remains deflected when engine is on, valve locks, pilot pressure OFF		
0A.1.CF	Auxiliary control units	Floating position is not reached	Valve moves to neutral and locks		
0A.1.D0	**A039** - MFA, multifunction armrest Button, hydraulic circuit 3	Faulty button, Signal fault	Button inoperable until next trouble-free cold start		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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 Red raise/lower/floating position button on joystick	Faulty button, Signal fault	Valve position not functioning, Valve locked		
0A.1.D3	**A039** - MFA, multifunction armrest Green raise/lower/floating position button on joystick	Faulty button, Signal fault	Valve position not functioning, Valve locked		
0A.1.D4	**S021** - Button, front power lift, external raise **S022** - Button, front power lift, external lower	Double actuation; Faulty button, Signal fault	Valve in neutral	Circuit diagram Hydraulics	
0A.1.D5	**S022** - Button, front power lift, external lower	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
0A.1.D6	**S021** - Button, front power lift, external raise	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
0A.1.D7	**B084** - Sensor, hydraulic oil level	Sensor faulty, Signal fault	Fill level is no longer monitored	Circuit diagram Instrument panel/ABS/operator's seat	
0A.1.D8	**B084** - Sensor, hydraulic oil level	Warning, hydraulic oil tank	Warning display only		
0A.1.D9	**B084** - Sensor, hydraulic oil level	Hydraulic oil tank empty	Valves are locked and pilot control is switched off	Circuit diagram Instrument panel/ABS/operator's seat	
0A.1.DA	**B013** - Sensor, hydraulic oil temperature	Warning, hydraulic oil temperature too high	Warning display only (without storing)		
0A.1.DB	**B013** - Sensor, hydraulic oil temperature	Hydraulic oil temperature too high	Is stored	Circuit diagram Instrument panel/ABS/operator's seat	
0A.1.DC	**B013** - Sensor, hydraulic oil temperature	Warning, hydraulic oil temperature not plausible	Warning display only		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.DD	**B063** - Pressure switch, filter contamination (hydraulic circuit)	Filter clogged	Warning display only		
0A.1.DE	**B063** - Pressure switch, filter contamination (hydraulic circuit)	Faulty switch, Signal fault	Warning display only		
0A.1.DF	**Y071 [2.1]** - Auxiliary control valve (olive) Position 7 **Y072 [2.2]** - Auxiliary control valve (grey) Position 8 **Y074 [1.1]** - Auxiliary control valve (yellow) Position 1 **Y075 [1.2]** - Auxiliary control valve (blue) Position 2 **Y076 [1.3]** - Auxiliary control valve (red) Position 3 **Y078 [1.4]** - Auxiliary control valve (green) Position 4 **Y079 [1.5]** - Auxiliary control valve (brown) Position 5 **Y080 [1.6]** - Auxiliary control valve (violet) Position 6	Prio volume greater than pump volume			
0A.1.EC	**Y088** - Solenoid valve, release trailer brake	ABV: bypass output 2 faulty (handbrake)			
0A.1.F0	**Y032** - Control pressure solenoid valve	+UB short circuit	No valve actuation possible	Circuit diagram Hydraulics	
0A.1.F2	**Y032** - Control pressure solenoid valve	Current too high, faulty valve (short circuit to earth)	No valve actuation possible	Circuit diagram Hydraulics	
0A.1.F3	**Y032** - Control pressure solenoid valve	Break in wiring	No valve actuation possible	Circuit diagram Hydraulics	
0A.1.F4	**Y021** - Lifting solenoid valve (standard front power lift)	Short circuit to earth or +UB or break in wiring	No raising possible	Circuit diagram Hydraulics	
0A.1.F5	**Y022** - Lowering solenoid valve (standard front power lift)	Short circuit to earth or +UB or break in wiring	No lowering possible	Circuit diagram Hydraulics	
0A.1.F6	**Y060** - Hydraulic oil pre-heater solenoid valve (rear)	Actuation fault	No further valve heating possible	Circuit diagram Hydraulics	
0A.1.F7	**Y061** - hydraulic oil pre-heater solenoid valve (middle)	Actuation fault	No further valve heating possible	Circuit diagram Hydraulics	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0A.1.F8	**Y084** - Solenoid valve, Power BeyondIn Power Beyond mode	Actuation fault	No control pressure increase possible	Circuit diagram Hydraulics	
0A.1.FA	**S067** - Button, valve actuation, external raise	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
0A.1.FB	**S068** - Button, valve actuation, external lower	Faulty button, Signal fault	Button inoperable until next trouble-free cold start	Circuit diagram Hydraulics	
0A.1.FC	**S067** - Button, valve actuation, external raise **S068** - Button, valve actuation, external lower	Double actuation, faulty button, signal fault		Circuit diagram Hydraulics	
0A.1.FD	**Y082** - Solenoid valve, lower link stabiliser, lock	Solenoid valve faulty	No locking possible	Circuit diagram Suspension/Auto-Guide	
0A.1.FE	**Y083** - Solenoid valve, lower link stabiliser, release	Solenoid valve faulty	No opening possible	Circuit diagram Suspension/Auto-Guide	

13 Fault code 0B.1.00 -

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0B.1.11	**A050** - ECU, basic control unit TeachIn	Electrical fault, internal communication			
0B.1.12	**A050** - ECU, basic control unit TeachIn	Electrical fault, terminal			
0B.1.21	**A050** - ECU, basic control unit TeachIn	Internal communication error			
0B.1.22	**A050** - ECU, basic control unit **A073** - Terminal (A4) TeachIn	Communication error between Terminal and TeachIn			
0B.1.23	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest TeachIn	Communication error between MFA and TeachIn			
0B.1.25	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest TeachIn	MFA does not report to bus			
0B.1.41	**A050** - ECU, basic control unit TeachIn	Internal communication saving or read-out error			EOL programming
0B.1.42	**A050** - ECU, basic control unit **A073** - Terminal (A4) TeachIn	Memory or read-out error between Teminal and TeachIn			EOL programming
0B.1.43	**A050** - ECU, basic control unit **A039** - MFA, multifunction armrest TeachIn	Memory or read-out error between MFA and TeachIn			EOL programming
0B.1.B0	**A050** - ECU, basic control unit TeachIn	CAN communication Teach-In initialisation error			EOL programming
0B.1.B1	**A050** - ECU, basic control unit TeachIn	Saving or read-out error in sequence data			Delete sequence and reprogram
0B.1.B2	**A050** - ECU, basic control unit TeachIn	EEPROM checksum error, initialising sequence data storage			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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 TeachIn	Configuration wizard: error with writing or reading settings and parameters on tractor start-up/end or formula management			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0D.1.01	**A073** - Terminal (A4)	Vario terminal cannot open ISO bus screen	Not enough free memory, delete the existing ISO implement projects from the terminal		
0D.1.02	**A073** - Terminal (A4)	Terminal has not reported to the ISO bus for 10 seconds	Check wiring, restart tractor		
0D.1.03	**A073** - Terminal (A4)	Incorrect number of terminal buttons	Faulty display on the terminal		
0D.1.04	**A073** - Terminal (A4)	Incorrect terminal resolution	Faulty display on the terminal		
0D.1.05	**A073** - Terminal (A4)	ISO is active and 25 seconds after switching it on, no ISO bus terminal was found	No display on the terminal		
0D.1.06	**A055** - ECU, data transfer	ISO bus error on Vario-Doc (bus off)	No display on the terminal		
0D.1.07	**A055** - ECU, data transfer	ISO bus error on Vario-Doc (receiver buffer)	Faulty display on the terminal, restart tractor		
0D.1.08	**A055** - ECU, data transfer	ISO bus error on Vario-Doc (transmitter buffer)	Faulty display on the terminal, restart tractor		
0D.1.09	**A055** - ECU, data transfer	Control bus error on Vario-Doc (bus off)	Faulty display on the terminal, restart tractor		
0D.1.0A	**A055** - ECU, data transfer	Control bus error on Vario-Doc (receiver buffer)	Faulty display on the terminal, restart tractor		
0D.1.0B	**A055** - ECU, data transfer	Control bus error on Vario-Doc (transmitter buffer)	Faulty display on the terminal, restart tractor		
0D.1.0C	**A055** - ECU, data transfer	Control bus error on Vario-Doc (receiver buffer)	Faulty display on instrument panel, restart tractor		
0D.1.0D	**A055** - ECU, data transfer	Control bus error on Vario-Doc (transmitter buffer)	Faulty display on instrument panel, restart tractor		
0D.1.0E	**A055** - ECU, data transfer	Control bus error on Vario-Doc (receiver buffer)	Faulty programming, restart tractor		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0D.1.0F	**A055** - ECU, data transfer	Control bus error on Vario-Doc (transmitter buffer)	Possible faulty programming, restart tractor		
0D.1.10	**A055** - ECU, data transfer	Control bus error on Vario-Doc (receiver buffer)	Faulty parameterisation, restart tractor		
0D.1.11	**A055** - ECU, data transfer	Control bus error on Vario-Doc (transmitter buffer)	Faulty parameterisation, restart tractor		
0D.1.12	**A073** - Terminal (A4)	ISO bus mode could not be detected	No display on the terminal, restart tractor		
0D.1.13	**A055** - ECU, data transfer	Inconsistency in operating data	Meaningful system operation not possible, synchronisation (call up data)		
0D.1.14	**A055** - ECU, data transfer	Version number for operating data does not correspond with that of the application	Meaningful system operation not possible, synchronisation (call up data)		
0D.1.15	**A055** - ECU, data transfer	Function not activated in the firmware	Meaningful system operation not possible, replace hardware		
0D.1.17	**A055** - ECU, data transfer	Time not available or time (RTC) module faulty	Meaningful system operation not possible, replace hardware		
0D.1.18	**A055** - ECU, data transfer	Data level at 100%	No more entries possible, synchronisation (call up data)		
0D.1.19	**A055** - ECU, data transfer	Data configuration error	No more entries possible, synchronisation (call up data)		
0D.1.1A	**A055** - ECU, data transfer	Write operation to DataFlash not possible	No more entries possible, synchronisation (call up data)		
0D.1.22	**A055** - ECU, data transfer	EEPROM communication reporting fault upon data receipt	System operation not possible, potentially Replace hardware, restart tractor		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0D.1.23	**A055** - ECU, data transfer	EEPROM communication reporting fault upon data transmission	System operation not possible, potentially Replace hardware, restart tractor		
0D.1.24	**A055** - ECU, data transfer	EEPROM communication checksum error	System operation not possible, potentially Replace hardware, restart tractor		
0D.1.25	**A055** - ECU, data transfer	Watchdog error when communicating with EEPROM	System operation not possible, potentially Replace hardware, restart tractor		
0D.1.26	**A055** - ECU, data transfer	Bluetooth module error (parity)	Replace hardware, restart tractor		
0D.1.27	**A055** - ECU, data transfer	Bluetooth module error (framing)	Replace hardware, restart tractor		
0D.1.28	**A055** - ECU, data transfer	Bluetooth module error (overflow)	Replace hardware, restart tractor		
0D.1.2B	**A055** - ECU, data transfer	Communication error to clock	No time, replace hardware, restart tractor		
0D.1.2C	**A055** - ECU, data transfer	Time module (RTC) losing data/hardware faulty	Time module (RTC) losing data, replace hardware		
0D.1.2D	**A055** - ECU, data transfer	Internal time module (RTC) battery faulty/hardware faulty	Time module (RTC) losing data, replace hardware		
0D.1.2E	**A055** - ECU, data transfer	Hardware faulty	No time, replace hardware if necessary		
0D.1.2F	**A055** - ECU, data transfer	Data from time module (RTC) checked for plausibility at system start-up	Incorrect time, set time		
0D.1.30	**G001** - Battery 1	Supply voltage not in 8 V to 18 V range (for longer than 10 seconds)	Check power supply; possible system failure		

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0D.1.31	**A055** - ECU, data transfer	Vario-Doc circuit board temperature higher than 60°C	Data transfer (via Bluetooth) not possible, allow tractor (roof area) to cool down		
0D.1.33	**A055** - ECU, data transfer	Break in Vario-Doc internal voltage; must be between 8 V and 12 V	System failure, replace hardware		
0D.1.34	ISO bus	ISO bus initialisation failed	System operation not possible, restart tractor		
0D.1.35	**A055** - ECU, data transfer	ISO application not operational. Internal fault in ISO bus driver	System operation not possible, restart tractor		
0D.1.36	**A073** - Terminal (A4)	Terminal does not answer the request for hardware information	System operation not possible, restart tractor		
0D.1.37	**A073** - Terminal (A4)	Terminal does not answer the request for number of buttons	System operation not possible, restart tractor		
0D.1.38	**A073** - Terminal (A4)	Terminal does not answer the request for available memory	System operation not possible, restart tractor		
0D.1.39	**A073** - Terminal (A4)	Screen deletion operation is not confirmed by the terminal	System operation not possible, restart tractor		
0D.1.3A	**A073** - Terminal (A4)	Terminal does not confirm the successful loading of screens from the terminal	System operation not possible, restart tractor		
0D.1.3B	**A073** - Terminal (A4)	Protocol error when uploading object pool or terminal does not confirm successful upload	System operation not possible, restart tractor		
0D.1.3C	**A073** - Terminal (A4)	Terminal reports fault when saving screens or does not respond to memory request	System operation not possible, restart tractor		
0D.1.3D	**A055** - ECU, data transfer **A073** - Terminal (A4)	ISO bus address request unsuccessful, probably no more free addresses in the permitted range	System operation not possible, restart tractor		

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Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0F.1.00	**A038** - ECU, central electrical system	Unknown error in central electrical system			
0F.1.01	**E066** - Brake and tail light left	Function non-operable	Brake light, left dipped for night driving	Circuit diagram Vehicle licensing regulations/corner light Vehicle licensing regulations/work lights	
0F.1.02	**E067** - Brake and tail light right	Function non-operable	Brake light, right dipped for night driving	Circuit diagram Vehicle licensing regulations/corner light Vehicle licensing regulations/work lights	
0F.1.03	**E055** - Wide vehicle marker lights, left	Function non-operable		Circuit diagram Vehicle licensing regulations/work lights	
0F.1.04	**E054** - Wide vehicle marker lights, right	Function non-operable		Circuit diagram Vehicle licensing regulations/work lights	
0F.1.05	**E098** - Drive headlight (main beam), right **E100** - Drive headlight (main beam), left	Function non-operable		Circuit diagram Vehicle licensing regulations/corner light	
0F.1.06	**E099** - Drive headlight (dipped beam), right **E101** - Drive headlight (dipped beam), left	Function non-operable		Circuit diagram Vehicle licensing regulations/corner light	
0F.1.07	**E003** - H4 additional headlight, right **E004** - H4 additional headlight, left	Function non-operable		Circuit diagram Vehicle licensing regulations/corner light	
0F.1.08	**E003** - H4 additional headlight, right **E004** - H4 additional headlight, left	Function non-operable		Circuit diagram Vehicle licensing regulations/corner light	
0F.1.09	**E089** - Direction direction indicator, front left	Function non-operable		Circuit diagram Vehicle licensing regulations/work lights	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0F.1.0A	**E088** - Direction direction indicator, front right	Function non-operable		Circuit diagram Vehicle licensing regulations/work lights	
0F.1.0B	**E064** - Rear direction indicator, left	Function non-operable		Circuit diagram Wiper/work lights	
0F.1.0C	**E065** - Rear direction indicator, right	Function non-operable		Circuit diagram Wiper/work lights	
0F.1.10	**M003** - Wiper pump, front	Function non-operable		Circuit diagram Work lights/	
0F.1.11	**M005** - Wiper pump, rear	Function non-operable		Circuit diagram Work lights/	
0F.1.13	**A038** - ECU, central electrical system	Right or left side lights or licence plate lighting faulty			
0F.1.15	**A036** - Control panel, dashboard right/left	Left-hand side not working			
0F.1.16	**A036** - Control panel, dashboard right/left	Right-hand side not working			
0F.1.17	**E066** - Brake and tail light left	Function non-operable	Tail lamp, left switched for day driving	Circuit diagram Vehicle licensing regulations/corner light Vehicle licensing regulations/work lights	
0F.1.18	**E067** - Brake and tail light right	Function non-operable	Tail lamp, right switched for day driving	Circuit diagram Vehicle licensing regulations/corner light Vehicle licensing regulations/work lights	
0F.1.19	**A038** - ECU, central electrical system	Sensor supply voltage too high or too low	Wiper, water valve, fan, primary fan, work lights, hydraulic relay circuits 3 and 4, rear window heater, reverse operation and tank pump not working		
0F.1.1A	**A038** - ECU, central electrical system	Main supply voltage too high (>18V and 5 minutes)			
0F.1.1B	**A038** - ECU, central electrical system	Processor supply voltage too high or too low			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0F.1.1D	**M002** - Front wiper motor	Function non-operable		Circuit diagram Wiper/work lights	
0F.1.1E	**M004** - Rear wiper motor	Function non-operable		Circuit diagram Wiper/work lights	
0F.1.1F	**M010** - Fuel pump	Function non-operable		Circuit diagram Work lights/	
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			
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, theoretical speed, reverse operation)			
0F.1.24	**A050** - ECU, basic control unit	Communication problem: no information from enhanced controls (brake)			
0F.1.25	**A039** - MFA, multifunction armrest **A050** - ECU, basic control unit	Communication problem: No information from MFA (3rd and 4th hydr. circuit buttons)			
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 EEPROM 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			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
0F.1.2B	**A038** - ECU, central electrical system	Mirror heater faulty			
0F.1.2C	**A038** - ECU, central electrical system	Left reverse operation support valve inoperable			
0F.1.2D	**A038** - ECU, central electrical system	Right reverse operation support valve 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 **X018** - Rear socket	Trailer socket for left indicator faulty			
0F.2.0E	**A038** - ECU, central electrical system **X018** - Rear socket	Trailer socket for right indicator faulty			
0F.2.0F	**A038** - ECU, central electrical system **X018** - Rear socket	Trailer socket, terminal 54 faulty			
0F.2.14	**A038** - ECU, central electrical system **X018** - Rear socket	Left trailer socket, terminal 58 faulty			
0F.2.1C	**A038** - ECU, central electrical system **X018** - Rear socket	Right trailer socket, terminal 58 faulty			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
10.1.31	**M015** - Actuator motor, top/middle air flap	Function non-operable		Circuit diagram Air conditioning/mirror/	
10.1.32	**M016** - Servomotor, bottom air valve	Function non-operable		Circuit diagram Air conditioning/mirror/	
10.1.33	**B074** - Sensor, internal temperature	Function non-operable		Circuit diagram Vehicle licensing regulations/work lights	
10.1.34	**Y024** - Magnetic clutch, air conditioning compressor	Function non-operable			
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 Vehicle licensing regulations/work lights	
10.1.38	**A053** - ECU, air conditioning control Evaporator temperature sensor	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 Vehicle licensing regulations/work lights	
10.1.3A	**A038** - ECU, central electrical system	Checksum error, air conditioning	Default parameters are read from flash		EOL programming
10.1.3B	**A038** - ECU, central electrical system **A053** - ECU, air conditioning controlEvaporator temperature sensor	Overheating protection or anti-blocking mechanism faulty			
10.1.3C	**B073** - Sensor, solar (irradiation)	Function non-operable	Default parameters are used	Circuit diagram Vehicle licensing regulations/work lights	
10.1.3D	**A038** - ECU, central electrical system **A053** - ECU, air conditioning control	Water valve stepper motor not working			
10.1.3E	**A038** - ECU, central electrical system **S035** - Switch, high-pressure/low-pressure (air conditioning system)	Malfunction			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
15.1.62	**Y065** - Raise suspension solenoid valve	Function non-operable		Circuit diagram Suspension/Auto-Guide	
15.1.63	**Y064** - Suspension load pressure/lowering solenoid valve	Function non-operable		Circuit diagram Suspension/Auto-Guide	
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** - Oil pre-heater/load suspension solenoid valve	Function non-operable		Circuit diagram Hydraulics	
15.1.67	**B066** - Sensor, wheel position (left)	Sensor faulty, Signal fault		Circuit diagram Suspension/Auto-Guide	
		8.5 V supply	A013, fuse 17		
15.1.68	**B068** - Sensor, wheel position (right)	Sensor faulty, Signal fault		Circuit diagram Suspension/Auto-Guide	
		8.5 V supply	A013, fuse 09		
15.1.69	**Y063** - Wobble stabiliser solenoid valve	Function non-operable		Circuit diagram Suspension/Auto-Guide	
15.1.6A	**Y067** - Lock suspension solenoid valve	Solenoid valve faulty, actuation fault		Circuit diagram Suspension/Auto-Guide	
15.1.6B	**Y067** - Lock suspension solenoid valve	Solenoid valve faulty, Actuation fault		Circuit diagram Suspension/Auto-Guide	

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
15.1.6C	**B066** - Sensor, wheel position (left) **B068** - Sensor, wheel position (right)	Position sensor not calibrated		Calibration code "7666"	
15.1.6D	**A050** - ECU, basic control unit	Checksum error, suspension			EOL programming
15.1.6E	**B066** - Sensor, wheel position (left) **B068** - Sensor, wheel position (right)	Plausibility error		Circuit diagram Suspension/Auto-Guide	

18 Fault code 18.1.00 -

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
18.1.01	**A039** - MFA, multifunction armrest Auto-Guide partial activation button	Partial activation button in MFA faulty, Signal fault			
18.1.02	**A039** - MFA, multifunction armrest Auto-Guide full activation button	Full activation button in MFA faulty, Signal fault			
18.1.03	**A039** - MFA, multifunction armrest	MFA fails to report			
18.1.06	**A039** - MFA, multifunction armrest Seat switch	Seat switch faulty, Signal fault			
18.1.07	**Y085** - Pilot pressure/switch-off solenoid valve (Auto-Guide)	Steering wheel shut off valve faulty, Signal fault		Circuit diagram Suspension/Auto-Guide	
18.1.08	**Y086** - Solenoid valve, steering disconnect (Auto-Guide)	Pilot pressure valve faulty, Signal fault		Circuit diagram Suspension/Auto-Guide	
18.1.1A	**B067** - Sensor, steering angle	Steering angle sensor faulty, Signal fault			
18.1.1C	**B067** - Sensor, steering angle	Invalid calibration values for steering angle sensor in EEPROM		Calibration code "2401" Calibration code "2403"	
18.1.2A	**B081** - Steering wheel sensor (360°)	Steering wheel sensor faulty, Signal value faulty			
		12 V supply	A013, fuse 29		
18.1.2C	**B081** - Steering wheel sensor (360°)	Invalid calibration values for steering wheel sensor in EEPROM			
18.1.30	**Y087** - Steering valve block, Auto-Guide	Unknown error from steering valve			
18.1.31	**Y087** - Steering valve block, Auto-Guide	Error with supply voltage from steering valve			
18.1.32	**Y087** - Steering valve block, Auto-Guide	Warning for steering valve actuator position			
18.1.33	**Y087** - Steering valve block, Auto-Guide	Error with steering valve actuator position			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
18.1.34	**Y087** - Steering valve block, Auto-Guide	Error with steering valve actuation			
18.1.35	**Y087** - Steering valve block, Auto-Guide	Error with steering valve hardware			
18.1.36	**Y087** - Steering valve block, Auto-Guide	Warning regarding FLASH, EEPROM and software for steering valve			
18.1.37	**Y087** - Steering valve block, Auto-Guide	Error regarding FLASH, EEPROM and software for steering valve			
18.1.3A	**Y087** - Steering valve block, Auto-Guide	No response from valve			
18.1.3B	**Y087** - Steering valve block, Auto-Guide	Steering valve does not return to neutral on switch-off			
18.1.3C	**Y087** - Steering valve block, Auto-Guide	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		
18.1.5C	**A050** - ECU, basic control unit	Invalid parameters for controller in EEPROM			EOL programming
18.1.66	**Y087** - Steering valve block, Auto-Guide	Wire for flow measurement broken or short circuited			
18.1.69	**Y087** - Steering valve block, Auto-Guide	Supply voltage > 32 V			
18.1.6A	**Y087** - Steering valve block, Auto-Guide	Supply voltage < 10 V			
18.1.6B	**Y087** - Steering valve block, Auto-Guide	Actuator cannot reach neutral			
18.1.6C	**Y087** - Steering valve block, Auto-Guide	Actuator not in neutral during "RUNUP"			
18.1.6D	**Y087** - Steering valve block, Auto-Guide	Actuator position greater than reference position			
18.1.7F	**Y087** - Steering valve block, Auto-Guide	EHL system error			

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
18.2.05	**A039** - MFA, multifunction armrest Seat switch	Seat not "loaded" when steering is activated			
18.2.40	**A050** - ECU, basic control unit	Warning message when attempting full activation — no connection			
18.2.70	**Y087** - Steering valve block, Auto-Guide	Warning message when ISO is inactive			

19 Fault code 1E.1.00 -

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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)**
1E.1.01	**G001** - Battery 1	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	Cable break or short circuit. Boost pressure outside setpoint range	Reduced power	Circuit diagram KHD engine control	SERDIA (delete error) FC:0020, 0021
1E.1.03	**B092** - Sensor, charge air pressure/temperature	Cable break or short circuit. Charge air temperature above setpoint value	Reduced power	Circuit diagram KHD engine control	SERDIA (delete error) FC:0095, 0096
1E.1.04	**B089** - Engine temperature sensor (Deutz)	Coolant temperature sensor: break in wiring or short circuit. Coolant temperature outside setpoint area		Circuit diagram KHD engine control	SERDIA (delete error) FC:0037, 0038
1E.1.06	**B085** - Camshaft speed sensor **B088** - Crankshaft speed sensor	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 KHD engine control	SERDIA (delete error) 004B, 004C, 004D, 004E, FC:004F, 0050
1E.1.07	**B091** - Sensor, water in fuel	Cable break or short circuit Water level above setpoint range	Drain water from fuel filter	Circuit diagram KHD engine control	SERDIA (delete error) FC:0057, 0059
1E.1.08	**B087** - Fuel low pressure sensor	Cable break or short circuit Fuel low pressure outside setpoint rage	Check fuel system, possible air in system or fuel filter clogged	Circuit diagram KHD engine control	SERDIA (delete error) FC:005A, 005B, 005E
1E.1.0A	**A039** - MFA, multifunction armrest Potentiometer, hand throttle	Cable break or short circuit Idle sensor signal not plausible			SERDIA (delete error) FC:008A
1E.1.0E	**B090** - Sensor, oil pressure	Cable break or short circuit. Oil pressure outside of setpoint range		Circuit diagram KHD engine control	SERDIA (delete error) FC:00C4, 00C5, 00C6, 00C7

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.12	**S002** - Switch, ignition	Pin 50, Ignition starter switch sticking		Circuit diagram EDC engine control	SERDIA (delete error) 00E3, 00E4
1E.1.14	**B055** - Sensor, foot throttle	Cable break or short circuit Signal does not match idle sensor signal	Speed maintained, can be used by hand throttle by increasing speed briefly	Circuit diagram EDC engine control	SERDIA (delete error) FC:000C, 000E, 000F
1E.1.21	**K063** - Heater flange relay	Cable break or short circuit	Pre-heater inoperable	Circuit diagram KHD engine control	SERDIA (delete error) FC:0021
1E.1.22	**K063** - Heater flange relay	Break in wiring or incorrectly connected	Pre-heater inoperable	Circuit diagram KHD engine control	SERDIA (delete error) FC:0013,0014
1E.1.23	**S047** - Switch, engine brake	Cable break or short circuit		Circuit diagram EDC engine control	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	Cable break or short circuit			SERDIA (delete error) FC:0052
1E.1.26	**A051** - ECU, engine control unit (EDC 7). **B077** - Engine fan (speed sensor/magnetic clutch)	Cable break or short circuit		Circuit diagram EDC engine control	SERDIA (delete error) FC:0053
1E.1.27	**A051** - ECU, engine control unit (EDC 7). **B077** - Engine fan (speed sensor/magnetic clutch) **Y091** - Dispensing unit (fuel)	Cable break, short circuit or internal fault in engine control unit between engine control unit and dispensing unit	Start not possible	Circuit diagram KHD engine control	SERDIA (delete error) FC:00B6, 00B7, 00BA, 00BC
1E.1.2C	**K065** - Starter relay	Cable break or short circuit	Start not possible	Circuit diagram EDC engine control	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 EDC engine control	SERDIA (delete error) FC:000B, 00F2

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.34	**S034** - Switch, coolant level	Coolant outside of setpoint level	Check coolant level	Circuit diagram EDC engine control	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 KHD engine control	SERDIA (delete error) FC:00B0, 00B1, 00B2, 00B3
1E.1.51	**B086** - Rail pressure sensor Mechanical rail pressure limiting valve	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	Cable break or short circuit	Message that the engine stops after approx. 5 minutes appears	Circuit diagram KHD engine control	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 KHD engine control	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
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

919 .. 0101-1000
919 .. 1001-
922 .. 0101-1000
922 .. 1001-
925 .. 0101-1000
925 .. 1001-
928 .. 0101-1000
928 .. 1001-
931 .. 0101-1000
931 .. 1001-
934 .. 0101-1000
934 .. 1001-

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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
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

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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 EDC engine control	SERDIA (delete error) FC:005E
1E.1.B1	**A051** - ECU, engine control unit (EDC 7).	CAN message, no control function mode		Circuit diagram EDC engine control	SERDIA (delete error) FC:005F

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.B2	**A051** - ECU, engine control unit (EDC 7).	CAN message, no engine protection mechanism		Circuit diagram EDC engine control	SERDIA (delete error) FC:006A
1E.1.B3	**A051** - ECU, engine control unit (EDC 7).	CAN message, no pre-heater or engine command		Circuit diagram EDC engine control	SERDIA (delete error) FC:006E
1E.1.B5	**A051** - ECU, engine control unit (EDC 7).	No engine temperature CAN message		Circuit diagram EDC engine control	SERDIA (delete error) FC:0071
1E.1.B6	**A051** - ECU, engine control unit (EDC 7).	No switch outputs CAN message		Circuit diagram EDC engine control	SERDIA (delete error) FC:0075
1E.1.B8	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:0078
1E.1.B9	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:0079
1E.1.BA	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:007A
1E.1.BB	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:007B
1E.1.BC	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:007C
1E.1.BD	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:007D
1E.1.BE	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:007E
1E.1.BF	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:007F

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
1E.1.C0	**A051** - ECU, engine control unit (EDC 7).	CAN-message missing		Circuit diagram EDC engine control	SERDIA (delete error) FC:0080
1E.1.C1	**A051** - ECU, engine control unit (EDC 7).	CAN bus times out with at least one sent message		Circuit diagram EDC engine control	SERDIA (delete error) FC:0083
1E.1.C2	**A051** - ECU, engine control unit (EDC 7).	CAN bus A, cable break or short circuit	Driving with foot throttle possible	Circuit diagram EDC engine control	SERDIA (delete error) FC:00C0
1E.1.C3	**A051** - ECU, engine control unit (EDC 7).	CAN bus B, cable break or short circuit	Driving with foot throttle possible	Circuit diagram EDC engine control	SERDIA (delete error) FC:00C1
1E.1.C4	**A051** - ECU, engine control unit (EDC 7).	CAN bus C, cable break or short circuit	Driving with foot throttle possible	Circuit diagram EDC engine control	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 Possible cause of fault: **S092** - Battery disconnect switch Activated too early		Load new operating software Wait at least 45 sec.	SERDIA (delete error) FC:008E
1E.1.D3	**A051** - ECU, engine control unit (EDC 7).	High current output injector A (High)		If error cannot be deleted, replace control unit	SERDIA (delete error) FC:009D
1E.1.D4	**A051** - ECU, engine control unit (EDC 7).	High current output injector B (High)		If error cannot be deleted, replace control unit	SERDIA (delete error) FC:009E
1E.1.D5	**A051** - ECU, engine control unit (EDC 7).	Faulty engine control			SERDIA (delete error) FC:00B8

Fault code	DIN brief description	Cause	Consequences	Reference	FENDIAS/Note
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 (Supply from: B090, B092)		Check the supply and signal of the sensors	SERDIA (delete error) FC:00DB
1E.1.D8	**A051** - ECU, engine control unit (EDC 7).	Incorrect voltage for internal 5 V reference source 2 (Supply from: B055, B077, B087)		Check the supply and signal of the sensors	SERDIA (delete error) FC:00DD
1E.1.D9	**A051** - ECU, engine control unit (EDC 7).	Incorrect voltage for internal 5 V reference source 3 (Supply from: B055, B086)		Check the supply and signal of the sensors	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

20 Calibration fault codes

Fault code during calibration on FENDT 900 Vario COM III

*Calibration code 1001 (**A039** - MFA, multifunction armrest crossgate lever)*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Calibrated values are faulty
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with "ESC"

*Calibration code 1003 (**A039** - MFA, multifunction armrest linear module 1 (internal))*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Calibrated values are faulty
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with "ESC"

*Calibration code 1004 (**A039** - MFA, multifunction armrest linear module 2)*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Calibrated values are faulty
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with "ESC"

*Calibration code 1005 (**A039** - MFA, multifunction armrest linear module 3)*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Calibrated values are faulty
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with "ESC"

*Calibration code 1006 (**A039** - MFA, multifunction armrest linear module 4 (external))*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Calibrated values are faulty
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with "ESC"

*Calibration code 2401 (**B067** - Sensor, steering angle)*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with "ESC"
F10	Plausibility of "centre position" calibration value
F11	Plausibility of "left stop" calibration value
F12	Plausibility of "right stop" calibration value
F13	Plausibility of calibration values with each other

*Calibration code 2403 (**Y087** - Steering valve block, Auto-Guide)*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Front wheels are not straight
F03	Manual steering wheel actuation during calibration
F06	No movement in direction "steering to left"
F07	No movement in direction "steering to right"
F08	Calibration taking too long
F09	User terminated calibration with ESC
F11	Plausibility: Signal in direction "steering to left"
F12	Plausibility: Signal in direction "steering to right"

*Calibration code 4001 (**B017** - Sensor, clutch pedal)*

Fault code	Cause
F01	User terminated calibration with "ESC"
F02	Pedal in rest position: Signal greater than allowed (22 mA)
F03	Pedal in rest position: Signal smaller than allowed (2 mA)
F04	Pedal fully depressed: Signal greater than allowed (22 mA)
F05	Pedal fully depressed: Signal smaller than allowed (2 mA)
F06	Calibrated min. and max. values are too close together Minimum difference of 10 mA necessary
F07	Calibration taking too long (more than 30 seconds)

*Calibration code 4002 (**A039** - MFA, multifunction armrest)*

Fault code	Cause
F02	Calibrated values are faulty
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with "ESC"

*Calibration code 4003 (**B016** - Sensor, travel range detection)*

Fault code	Cause
F01	User terminated calibration with "ESC"
F02	Speed above 0,1 Km/h
F03	Engine speed below 600 rpm
F04	Engine speed above 900 rpm
F05	Transmission not in neutral
F06	Clutch not depressed
F07	**B015** - Sensor, bevel pinion faulty
F08	**B014** - Sensor, collecting shaft faulty
F09	**B010** - Sensor, engine speed faulty
F10	Neutral switch, driving switch faulty (**A039** - MFA, multifunction armrest)
F11	**B016** - Sensor, travel range detection faulty
F12	**Y002** - Solenoid valve, travel range I faulty
F13	**Y003** - Solenoid valve, travel range II faulty
F20	Calibrated values for neutral position incorrect
F21	Calibrated values for travel range I incorrect
F22	Calibrated values for travel range II incorrect
F23	Calibrated values do not match
F30	Error reading from EEPROM (**A050** - ECU, basic control unit)
F31	Error while writing to EEPROM (**A050** - ECU, basic control unit)

*Calibration code 4005 (**B055** - Sensor, foot throttle)*

Fault code	Cause
F21	Transmission in "ACTIVE STATIONARY". (Remedy: Put transmission into neutral)
F22	Signal smaller than 3 mA
F23	Signal larger than 21 mA
F24	Rotation angle of **B055** - Sensor, foot throttle is too great (more than 250 steps)
F25	Distance between idle and full throttle too short (smaller than 12 mA) or **B055** - Sensor, foot throttle incorrectly calibrated
F26	Distance between idle and full throttle too short (less than 70%) or **B055** - Sensor, foot throttle incorrectly calibrated
F27	Time for a calibration increment exceeded (longer than 60 seconds)
F28	Internal error in the **A050** - ECU, basic control unit. Error while saving the calibrated value in the EEPROM (EOL reprogramming may be necessary)

*Calibration code 4007 (**A009** - Actuator unit)*

Fault code	Cause
F02	**A009** - Actuator unit reporting a fault Frequent cause of fault: During previous fault-generated calibration exit, no "Key reset (ignition OFF/ON)" was carried out
F03	**A009** - Actuator unit fails to control the specified value exactly. Check that the transmission adjustment is smooth.
F04	Transmission ratio adjustment not effected within 8 sec. Check that the transmission adjustment is smooth.
F05	Step 1 = **A009** - Actuator unit does not find neutral point 0 in forwards direction. Step 2 = **A009** - Actuator unit does not find neutral point 0 in reverse direction. Check connection of **A009** - Actuator unit to actuator shaft.
F06	See under error message F05
F07	Step 2: The neutral points of the transmission control system for forwards and reverse travel are too far apart, more than 8°. Check connection of **A009** - Actuator unit to actuator shaft.
F08	Step 3: Max. transmission ratio forward point not found. Specified value min. 155°, max. 187° Step 4: Max. transmission ratio reverse point not found. Specified value min. 136°, max. 165° Check connection of **A009** - Actuator unit to actuator shaft.
F09	Step 3: Forward actuator shaft adjustment greater than 155°. but transmission adjustment reacts less than 155° Step 4: Reverse actuator shaft adjustment greater than 135°. but transmission adjustment reacts below 135° Check connection of **A009** - Actuator unit to actuator shaft.
F10	Transmission ratio characteristic not logical, e.g. shifted forward and reverse detected. Repeat calibration. See also error message F 2. Check rotational direction signal from **B014** - Sensor, collecting shaft
F11/12	Step 7: check Step 1 to Step 6 values. ML transmission ratio not OK. Repeat calibration. See also error message F 2. Then check hydrostatic power branch, e.g. via emergency operation.
F13	1. EOL programmed incorrectly (prior to Step 1) 2. Values stored in the **A050** - ECU, basic control unit are illogical Remedy: 1. Reprogram EOL. 2. See 1. Replace **A050** - ECU, basic control unit if necessary
F14	See F 11/F 12
F15	Maximum forward and/or reverse transmission ratio not achieved. Remedy: Repeat calibration (see also F2). Then check hydraulic power distribution system if necessary, e.g. via emergency mode.
F50	User interrupted with "ESC"
F51	Speed above 0,1 km/h
F52	Engine speed below 1400 rpm
F53	Handbrake not applied
F54	Faulty speed signal from **B015** - Sensor, bevel pinion
F55	Faulty speed signal from **B014** - Sensor, collecting shaft
F56	Faulty speed signal from **B010** - Sensor, engine speed
F57	Clutch pedal depressed
F58	**B017** - Sensor, clutch pedal faulty
F59	Travel range I button was actuated
F60	Travel range I button faulty
F61	Travel range II button was actuated

Fault code	Cause
F62	Travel range II button faulty
F63	Range control I/II is not in neutral - Range selector in neutral (normal after calibration of the travel range selector (code 4003)) - Manually set the transmission to neutral via the emergency operation if necessary
F64	Electrical fault in **Y005** - Solenoid valve, speed governor

*Calibration code 4009 (**Y004** - Solenoid valve, turbo-clutch)*

Fault code	Cause
F01	User terminated calibration with ESC
F02	Calibration in emergency mode not possible
F03	Internal error in the **A050** - ECU, basic control unit: Error while saving the calibrated value in the EEPROM (EOL reprogramming may be necessary)
F04	Road speed greater than 0.1 [km/h].
F05	Engine speed too low when starting calibration Nominal engine speed = 1100 +/- 40 rpm
F06	Engine speed too low during calibration Nominal engine speed = 1100 +/- 400 rpm
F07	**B010** - Sensor, engine speed faulty
F08	Driving range II not engaged
F09	**B016** - Sensor, travel range detection faulty
F10	Transmission not in neutral
F11	Neutral button faulty (**A039** - MFA, multifunction armrest)
F12	Clutch pedal depressed
F13	**B017** - Sensor, clutch pedal faulty
F14	Transmission pressure too high when starting calibration (above 100 [bar])
F15	Transmission pressure too high when starting calibration (above 200 [bar])
F16	**B008** - Sensor, high-pressure 1 faulty
F17	**S015** - Switch, hand brake faulty
F18	Handbrake not applied
F19	Fault in **A009** - Actuator unit
F20	Fault in **Y004** - Solenoid valve, turbo-clutch
F21	Plausibility error: Power consumption of **Y004** - Solenoid valve, turbo-clutch to transmission high pressure illogical
F22	Error in transmission ratio
F23	Plausibility error: Power consumption of **Y004** - Solenoid valve, turbo-clutch illogical (e.g. short circuit)

*Calibration code 4010 (**A039** - MFA, multifunction armrest)*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Calibrated value of the current actuator position is invalid
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with ESC

*Calibration code 7666 (**B066** - Sensor, wheel position (left) **B068** - Sensor, wheel position (right))*

Fault code	Cause
F01	User terminated calibration with ESC
F02	Raising the suspension takes too long (longer than 40 seconds)
F03	Lowering the suspension takes too long (longer than 40 seconds)
F04	Calibrated min. and max. values are too close together
F05	Internal error in the **A050** - ECU, basic control unit:Error while saving calibrated values in EEPROM (EOL reprogramming may be necessary)
F06	Engine speed too low
F07	Road speed too high (more than 0.1 [km/h])

*Calibration code 8001 (**A039** - MFA, multifunction armrest)*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Calibrated values are invalid
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration takes too long (more than 60 seconds)
F09	User terminated calibration with "ESC"

*Calibration code 9001 (**A039** - MFA, multifunction armrest)*

Fault code	Cause
F01	Preliminary conditions for calibration not satisfied
F02	Calibrated values are invalid
F03	**A039** - MFA, multifunction armrest not responding
F08	Calibration taking too long (more than 30 seconds)
F09	User terminated calibration with "ESC"

Calibration of tyre circumference

Fault code	Cause
F01	Calculated tyre circumference is too small
F02	Calculated tyre circumference is too large
F03	Calculated impulse total per metre of travelling distance too small for radar sensor
F04	Calculated impulse total per metre of travelling distance too large for radar sensor
F06	Internal error in the **A050** - ECU, basic control unit: Error while saving the calibrated value in the EEPROM (EOL reprogramming may be necessary)

Check Chassis Range!