

# Service Training

## Vario tractors - fault code tables

**Farmer 400**

**Favorit 700**

**Favorit 900**

**FENDT 700 Vario**

**FENDT 800 Vario**

**FENDT 900 Vario**

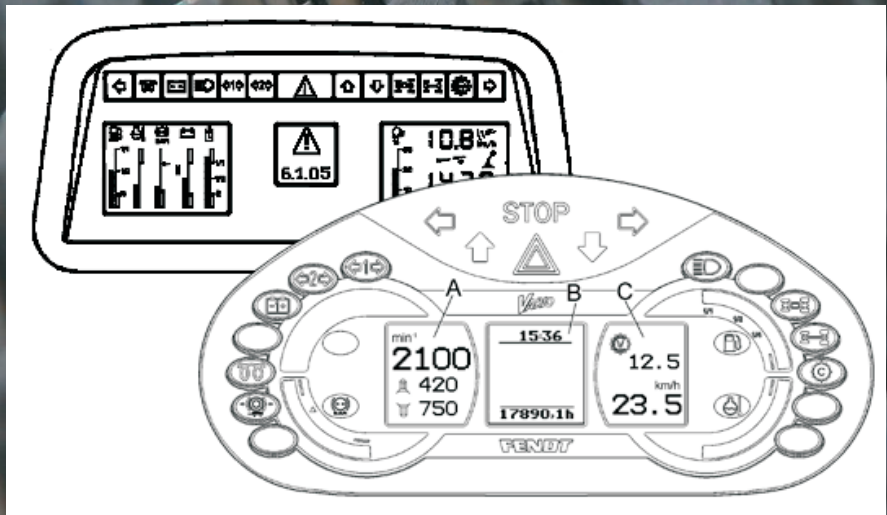
**FENDT 300 Vario (COM III)**

**FENDT 400 Vario (COM III)**

**FENDT 700 Vario (COM III)**

**FENDT 800 Vario (COM III)**

**FENDT 900 Vario (COM III)**



X990.005.448.012 - Englisch



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

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# Storingscodetabel

|                 |                |
|-----------------|----------------|
| FENDT 409 Vario | 409 .. / 1001- |
| FENDT 410 Vario | 410 .. / 1001- |
| FENDT 411 Vario | 411 .. / 1001- |
| FENDT 412 Vario | 412 .. / 1001- |
| FENDT 711 Vario | 711 .. / 1001- |
| FENDT 712 Vario | 712 .. / 1001- |
| FENDT 714 Vario | 714 .. / 1001- |
| FENDT 716 Vario | 716 .. / 1001- |
| FENDT 815 Vario | 715 .. / 1001- |
| FENDT 817 Vario | 717 .. / 1001- |
| FENDT 818 Vario | 718 .. / 1001- |
| FENDT 916 Vario | 916 .. / 1001- |
| FENDT 920 Vario | 920 .. / 1001- |
| FENDT 924 Vario | 924 .. / 1001- |
| FENDT 926 Vario | 926 .. / 1001- |
| FENDT 930 Vario | 930 .. / 1001- |

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



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

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

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

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

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

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

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

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

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

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

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

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

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| Fault code          |  | Id code   | Brief description                                               |                                                                                     |                                                                                                                                                                                                                   |                                                         |                      |
| 1.2.87 (DEU-TZ EMR) |  | A022      | ECU EMR2                                                        | Atmospheric pressure sensor in ECU EMR2 faulty                                      | Error message (disappears when pressure is back in normal range), switch ignition OFF then ON, if error reappears --> replace ECU EMR2                                                                            | see also Chapter 2000 Reg. B - EMR troubleshooting plan | SERDIA diagnostics   |
| 1.2.87 (MAN EDC)    |  | B027      | Water temperature sensor (EDC)                                  | Signal fault                                                                        | Reduced power, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                     | 'EDC control' circuit diagram                           | EDC level converter  |
| 1.2.89              |  | A020      | Pump control unit (injection pump)                              | Electronic volume controller fault                                                  | Engine won't start, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                | 'EDC control' circuit diagram                           |                      |
| 1.2.90              |  | A022      | ECU EMR2                                                        | Incorrect parameter (EEPROM reading, or checksum error)                             | Engine does not start, switch ignition OFF then ON, if error reappears --> replace ECU EMR2                                                                                                                       | see also Chapter 2000 Reg. B - EMR troubleshooting plan | load new data record |
| 1.2.91              |  | B025      | EDC speed sensor                                                | Signal fault                                                                        | Reduced power, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                     | 'EDC control' circuit diagram                           | EDC level converter  |
| 1.2.92              |  | A020 A021 | Engine control module, pump control unit (injection pump) (EDC) | Engine stop via 'Injected volume = 0' faulty, see Chapter 2710 Reg. A 'Engine stop' | Reduced power, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                     | 'EDC control' circuit diagram                           |                      |
| 1.2.93              |  | A022      | ECU EMR2                                                        | internal processing error in ECU EMR2 (batch overflow)                              | <b>Emergency shutoff, engine does not start,</b> switch ignition OFF then ON, if error reappears --> load new data record in ECU EMR2 (important: save old data record!!) if error reappears --> replace ECU EMR2 | see also Chapter 2000 Reg. B - EMR troubleshooting plan | SERDIA diagnostics   |
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| 1.2.94     | A022          | ECU EMR2                                                           | internal processing error in ECU EMR2                                                      | <b>Emergency shutoff, engine does not start</b> , switch ignition OFF then ON, if error reappears --> load new data record in ECU EMR2 (important: save old data record!!) if error reappears --> replace ECU EMR2 | see also Chapter 2000 Reg. B - EMR troubleshooting plan | SERDIA diagnostics  |
| 1.2.96     | A021          | Engine control module monitoring unit (EDC)                        | Fault in EDC control module monitoring unit (A021)                                         | Engine stalls, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                      | 'EDC control' circuit diagram                           |                     |
| 1.2.99     | A020<br>A021  | Engine control module and pump control unit (injection pump) (EDC) | Engine stop via power monitor within EDC control module, Chapter 2710 Reg.A 'Engine Stop'. | Reduced power, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                      | 'EDC control' circuit diagram                           |                     |
| 1.2.9B     | A020,<br>A021 | Engine control module, pump control unit (injection pump) (EDC)    | Engine stop via engine stop solenoid valve, Chapter 2710 Reg.A Engine Stop                 | Reduced power, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                      | 'EDC control' circuit diagram                           |                     |
| 1.2.A2     | K021          | Relay "solenoid valve shut-off" (EDC)                              | Engine stop via relay K021, Chapter 2710 Reg.A Engine Stop                                 | Reduced power, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                      | 'EDC control' circuit diagram                           |                     |
| 1.2.A6     | A021,<br>A020 | Engine control module, pump control unit (injection pump) (EDC)    | Engine stop, fault in signal processing in EDC control module                              | Reduced power, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                      | 'EDC control' circuit diagram                           |                     |
| 1.2.A8     | A021          | Engine control module (EDC)                                        | Fault in barometric pressure sensor                                                        | Chapter 2000 Reg.B (EDC fault)                                                                                                                                                                                     |                                                         | EDC level converter |
| 1.2.A9     | A020          | Pump control unit (injection pump) (EDC)                           | Fault identified during self-diagnostic test                                               | Reduced power, engine won't start, Chapter 2000 Reg.B (EDC fault)                                                                                                                                                  |                                                         |                     |

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

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

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| 1.2.CB                       |  | A021, A020 | Engine control module, pump control unit (injection pump) (EDC) | Fault in CAN communication to pump control unit                                                                              | Engine idling, Chapter 2000 Reg.B (EDC fault)                                  | 'EDC control' circuit diagram                                         |                |
| 1.2.CD                       |  | A021, A020 | Engine control module, pump control unit (injection pump) (EDC) | Fault in propagation time of CAN communication between pump control unit and EDC control module                              | Reduced power, Chapter 2000 Reg.B (EDC fault)                                  |                                                                       |                |
| 1.2.DE                       |  | A002, A021 | Enhanced control module, engine control module (EDC)            | Propagation time of CAN communication missing                                                                                | Restricted operating mode, Chapter 2000 Reg.B (EDC fault)                      |                                                                       |                |
| 1.2.E0                       |  | A021, A002 | Engine control module, enhanced control module (EDC)            | Fault during CAN communication between EDC control module and enhanced control module                                        | Chapter 2000 Reg.B (EDC fault) Chapter 9000 Reg.E (Can Bus)                    | 'EDC engine control', 'transmission bus' circuit diagram              |                |
| 1.2.E1                       |  |            |                                                                 | Fault in speed signal (B014 - sensor, accumulator shaft, B015 - sensor - bevel pinion) or PTO is driving engine (running on) | Fault display, Chapter 2000 Reg.B (EDC fault)                                  |                                                                       |                |
| 2.1.E0                       |  | A002, A034 | ECU, enhanced control Joystick                                  | CAN communication fault between ECU enhanced control and drive switch                                                        | Emergency operation -- check enhanced control bus (Chapter 9000 Reg.E)         |                                                                       |                |
| 2.1.EE                       |  |            | ISO/LBS implement                                               | Fault in LBS ECU                                                                                                             | Mounted implement can no longer be operated via joystick controls or terminal. |                                                                       |                |
| 2.1.EF                       |  |            | ISO/LBS implement                                               |                                                                                                                              | Limited operation of implement, depending on manufacturer                      | For fault description, please see implement manufacturer's literature |                |
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| 3.1.01     | A004       | Control console                                            | Internal RAM, EEPROM faults        | Functions switched off: - button panel, - digital / analogue inputs, - LED actuation | Fit new control console |                                                   |
| 3.1.02     | A004       | Control console                                            | Internal RAM, EEPROM faults        | Functions switched off: - button panel, - digital / analogue inputs, - LED actuation | Fit new control console |                                                   |
| 3.1.03     | A004       | Control console                                            | Internal RAM, EEPROM faults        | Functions switched off: - button panel, - digital / analogue inputs, - LED actuation | Fit new control console |                                                   |
| 3.1.04     | A004       | Control console                                            | Internal RAM, EEPROM faults        | Functions switched off: - button panel, - digital / analogue inputs, - LED actuation | Fit new control console |                                                   |
| 3.1.05     | A004       | Control console                                            | Internal 8.5 V fault, keypad fault | Functions switched off: - button panel, - digital / analogue inputs, - LED actuation | Fit new control console |                                                   |
| 3.1.06     | A004       | Control console                                            | External 8.5 V fault               | Functions switched off: - button panel, - digital / analogue inputs, - LED actuation | Fit new control console |                                                   |
| 4.1.01     | A003, A034 | Acceleration ramp I-IV                                     | Signal fault                       | Continuation in emergency mode possible                                              |                         | TRANSMISSION manu. adjustment                     |
|            |            |                                                            | 8.5 V supply fault                 |                                                                                      | A013 fuse 5             | Joystick                                          |
| 4.1.03     |            | Neumaier reverse drive facility clutch pedal potentiometer | Signal fault                       | Continuation in emergency mode possible                                              |                         | (Neumaier Service Manual) calibration code "4011" |
|            |            |                                                            | 8.5 V supply fault                 |                                                                                      | A013 fuse 9             |                                                   |

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| 12/1999 | f       | 19/58 | 4.1.04                             | B017         | Clutch pedal rotary position sensor                          | Signal fault       | Loss of enhanced control / function in final speed control; cruise control does not function, TMS is switched off | 'Transmission control' circuit diagram | TRANSMISSION, OPERATING RANGE                  |
|         |         |       |                                    |              |                                                              | 8.5 V supply fault |                                                                                                                   | A013 fuse 8                            |                                                |
|         |         |       | 4.1.05                             | B039         | High pressure sensor II (push detection)                     | Signal fault       | Loss of enhanced control functions during drive operation ( no 'active parking function')                         |                                        | TRANSMISSION, TURBOCLUTCH                      |
|         |         |       |                                    |              |                                                              | 12 V supply fault  |                                                                                                                   | A013 fuse 2                            |                                                |
|         |         |       | 4.1.06 (with mech. engine control) | B018         | Target engine speed position sensor                          | Signal fault       | Continuation in emergency mode possible                                                                           | 'Transmission control' circuit diagram | TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL |
|         |         |       |                                    |              |                                                              | 8.5 V supply fault |                                                                                                                   | A013 fuse 14                           |                                                |
|         |         |       | 4.1.06 (for EDC or EMR)            | B029 or B055 | EST foot throttle rotary position sensor (red), combi-sensor | Signal fault       | Restricted operation (no hand throttle, no memory keys)                                                           | 'EDC control' circuit diagram          | TRANSMISSION, AUTOMATIC MAXIMUM OUTPUT CONTROL |
|         |         |       |                                    |              |                                                              | 8.5 V supply fault |                                                                                                                   | A013 fuse 17                           |                                                |
|         |         |       | 4.1.07                             | B008         | Transmission drive pressure high-pressure sensor             | Signal fault       | Shifting from driving mode 1 to 2 not possible, TMS is switched off                                               | 'Transmission control' circuit diagram | TRANSMISSION, TURBOCLUTCH                      |
|         |         |       |                                    |              |                                                              | 8.5 V supply fault |                                                                                                                   | A013 fuse 3                            |                                                |
|         |         |       | 4.1.08                             | B016         | Actual speed range position sensor                           | Signal fault       | Not possible to change between driving modes; current driving mode is maintained                                  | 'Transmission control' circuit diagram | TRANSMISSION, OPERATING RANGE                  |
|         |         |       |                                    |              |                                                              | 8.5 V supply fault |                                                                                                                   | A013 fuse 13                           |                                                |

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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| 12/1999 | f       | 53/58 | A.1.4F     | Y018       | Spool valve fault, valve 4 | Setpoint message is missing or not plausible                                                                 | Valve moves into neutral position |                                  | ELECTRICAL VALVES VALVE 4 / VENDI |
|         |         |       |            |            |                            | Configuration message is missing or not plausible                                                            |                                   |                                  |                                   |
|         |         |       |            |            |                            | Potentiometer or PWM fault                                                                                   |                                   |                                  |                                   |
|         |         |       | A.1.A0     | A002       | E-box                      | EEPROM fault while storing                                                                                   |                                   |                                  |                                   |
|         |         |       | A.1.A1     | A002       | E-box                      | EEPROM fault while loading                                                                                   |                                   |                                  |                                   |
|         |         |       | A.1.A2     |            |                            | More valves connected than registered via end-of-line programming. Program.                                  | Not all valves can be operated    |                                  |                                   |
|         |         |       | A.1.B0     | A003, A034 | Crossgate lever            | Not calibrated                                                                                               | Valves cannot be operated         |                                  | Calibration code '1001'           |
|         |         |       | A.1.B1     | A003, A034 | Crossgate lever            | X-axis signal fault                                                                                          | Valves cannot be operated         | 'Spool valves 1' circuit diagram | SPOOL VALVES OPERATION            |
|         |         |       | A.1.B2     | A003, A034 | Crossgate lever            | Y-axis signal fault                                                                                          | Valves cannot be operated         | 'Spool valves 1' circuit diagram | SPOOL VALVES OPERATION            |
|         |         |       | A.1.B3     | A003, A034 | Crossgate lever            | X and Y axis signal fault; crossgate lever missing                                                           | Valves cannot be operated         | 'Spool valves 1' circuit diagram | SPOOL VALVES OPERATION            |
|         |         |       | A.1.B4     | A003, A034 | Crossgate lever            | Zero position signals of X- and Y-axes are not identical to the 'Rest position' signal (=plausibility check) | Valves cannot be operated         | 'Spool valves 1' circuit diagram | SPOOL VALVES OPERATION            |
|         |         |       | A.1.B5     | A003, A034 | Crossgate lever            | 'Rest position' signal fault                                                                                 | Valves cannot be operated         | 'Spool valves 1' circuit diagram | SPOOL VALVES OPERATION            |
|         |         |       | A.1.C0     | A004       | Control console            | Not available or bus not connected                                                                           |                                   |                                  |                                   |

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

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

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| Vario Tractors - Fault Codes |                          |   |

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| 12/1999 | f       | 56/58 |                              |  |  | 0000    | B     | 000001   |

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

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

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

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| FENDT 412 | Vario COM III | 401 .. / 1001- |
| FENDT 413 | Vario COM III | 402 .. / 1001- |
| FENDT 414 | Vario COM III | 403 .. / 1001- |
| FENDT 415 | Vario COM III | 404 .. / 1001- |
| FENDT 712 | Vario COM III | 724 .. / 1001- |
| FENDT 714 | Vario COM III | 725 .. / 1001- |
| FENDT 716 | Vario COM III | 726 .. / 1001- |
| FENDT 718 | Vario COM III | 727 .. / 1001- |
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Tableau de codes défauts  
Tabella codici disturbi  
Tabla códigos averías  
Storingscodetabel



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

OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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

OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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



OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

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



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**Fault code table COM III**

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

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**Fault code table COM III**

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

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

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**B**

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

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



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

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

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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



OVERALL SYSTEM/TRACTOR  
Fault code table COM III

B

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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

OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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



OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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

OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

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

731 .. 1001-

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**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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OVERALL SYSTEM/TRACTOR  
Fault code table COM III

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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



OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

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403 .. 1001-  
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724 .. 1001-  
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726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-



OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
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403 .. 1001-  
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725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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

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

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



OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

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402 .. 1001-  
403 .. 1001-  
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725 .. 1001-  
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729 .. 1001-

731 .. 1001-

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Fault code table COM III

**B**

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

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403 .. 1001-  
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725 .. 1001-  
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727 .. 1001-  
729 .. 1001-

731 .. 1001-

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**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

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

731 .. 1001-

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**Fault code table COM III**

**B**

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

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

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



OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

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

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



OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

FENDT 400 Vario COM III, FENDT 700 Vario COM III, FENDT 800 Vario COM III

Faults

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
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724 .. 1001-  
725 .. 1001-  
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| Fault code | DIN brief description                                                                               | Cause                                                                    | Consequences                                             | Reference                    | FENDIAS / Note |
|------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------|------------------------------|----------------|
| A.1.67     | <b>Y087</b> - Steering valve block, Autoguide                                                       | Steering valve monitoring error message                                  |                                                          |                              |                |
| A.1.68     | <b>Y087</b> - Steering valve block, Autoguide                                                       | Steering valve status message not received within the specified time     | CAN bus fault in the transmission bus                    | Wiring diagram Sheet 39      |                |
| A.1.69     | <b>Y087</b> - Steering valve block, Autoguide                                                       | Supply voltage > 32 V                                                    |                                                          | Wiring diagram Sheet 39      |                |
| A.1.6A     | <b>Y087</b> - Steering valve block, Autoguide                                                       | Supply voltage < 10 V                                                    |                                                          | Wiring diagram Sheet 39      |                |
| A.1.6B     | <b>Y087</b> - Steering valve block, Autoguide                                                       | Steering actuator cannot reach neutral (during operation)                | Mechanical fault on steering actuator or position sensor |                              |                |
| A.1.6C     | <b>Y087</b> - Steering valve block, Autoguide                                                       | Actuator not in neutral during "RUNUP" (same at switch on)               | Mechanical fault on steering actuator or position sensor |                              |                |
| A.1.6D     | <b>Y087</b> - Steering valve block, Autoguide                                                       | Actuator position greater than reference position                        | Mechanical fault on steering actuator or position sensor |                              |                |
| A.1.70     | <b>B094</b> - Sensor, steering angle (4WD differential lock)                                        | Break in steering sensor signal line                                     | Check signal line                                        | Wiring diagram Sheet 33 / 39 |                |
| A.1.71     | <b>A057</b> - ECU, steering controller (Autoguide)<br><b>Y087</b> - Steering valve block, Autoguide | Break in the steering valve electrical supply line                       | Check the steering valve electrical supply line          | Wiring diagram Sheet 38 / 39 |                |
| A.1.72     | <b>Y099</b> - Solenoid valve, pilot pressure (Autoguide)                                            | Break in the electrical supply line to the pilot pressure solenoid valve |                                                          | Wiring diagram Sheet 39      |                |
| A.1.74     | <b>S088</b> - Switch, Autoguide pressure                                                            | Break in the pressure switch signal line                                 |                                                          | Wiring diagram Sheet 39      |                |
| A.1.80     | <b>B094</b> - Sensor, steering angle (4WD differential lock)                                        | Short circuit in steering angle sensor supply                            |                                                          | Wiring diagram Sheet 33 / 39 |                |



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**Fault code table COM III**

**B**

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

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402 .. 1001-  
403 .. 1001-  
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725 .. 1001-  
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**Fault code table COM III**

**B**

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

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401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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OVERALL SYSTEM/TRACTOR  
**Fault code table COM III**

**B**

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

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**Fault code table COM III**

**B**

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

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402 .. 1001-  
403 .. 1001-  
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**Fault code table COM III**

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

400 .. 1001-  
401 .. 1001-  
402 .. 1001-  
403 .. 1001-  
404 .. 1001-

724 .. 1001-  
725 .. 1001-  
726 .. 1001-  
727 .. 1001-  
729 .. 1001-

731 .. 1001-

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



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**Fault code table COM III**

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| Fault code | DIN brief description                 | Cause                                   | Consequences | Reference | FENDIAS / Note  |
|------------|---------------------------------------|-----------------------------------------|--------------|-----------|-----------------|
| F1.B0      | <b>A034</b> - Driving switch, CAN bus | GD routing data incorrect               |              |           | EOL programming |
| F1.F0      | <b>A034</b> - Driving switch, CAN bus | Diagnostics/filter data check-sum error |              |           | EOL programming |
| F1.FF      | <b>A034</b> - Driving switch, CAN bus | Byte address checksum error             |              |           | EOL programming |



# Störrecode tabelle

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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|            |         |       |            |         |                                                    |                                                                                |                                                                                      |                                        |                                                               |
| 12.06.2006 | b       | 17/21 | 1E.1.24    | Y006    | Engine brake flap valve                            | Valve faulty                                                                   |                                                                                      | Circuit diagram 'Deutz engine control' | SERDIA (clear fault)<br>FC:004A                               |
|            |         |       | 1E.1.25    | Y006    | Engine brake flap valve                            | Cable break or short circuit                                                   |                                                                                      | Circuit diagram 'Deutz engine control' | SERDIA (clear fault)<br>FC:0052                               |
|            |         |       | 1E.1.26    | Y024    | Air-conditioning compressor magnetic clutch        | Cable break or short circuit                                                   |                                                                                      | Circuit diagram 'Deutz engine control' | SERDIA (clear fault)<br>FC:0053                               |
|            |         |       | 1E.1.27    | G001    | Battery                                            | Short circuit to battery or short to ground                                    | Starting not possible                                                                |                                        | SERDIA (clear fault)<br>FC:00B6, 00B7, 00BA, 00BC             |
|            |         |       | 1E.1.2C    | K065    | Start relay                                        | Cable break or short circuit                                                   | Starting not possible                                                                |                                        | SERDIA (clear fault)<br>FC:00DF, 00E0                         |
|            |         |       | 1E.1.30    | B004    | Air filter                                         | Pressure loss above target range                                               | Clean/change air filter                                                              | Circuit diagram'EDC control'           | SERDIA (clear fault)<br>FC:000B, 00F2                         |
|            |         |       | 1E.1.34    | S034    | Switch, coolant level                              | Coolant outside of specified range                                             | Check coolant level                                                                  | Circuit diagram'EDC control'           | SERDIA (clear fault)<br>FC:0025                               |
|            |         |       | 1E.1.37    | A051    | ECU, engine control unit (EDC7)                    | Fan speed outside of specified range                                           | Clean/change air filter                                                              | Circuit diagram'EDC control'           | SERDIA (clear fault)                                          |
|            |         |       | 1E.1.3A    | A051    | ECU, engine control unit (EDC7)                    | Misfire                                                                        |                                                                                      |                                        | SERDIA (clear fault)<br>FC:002F                               |
|            |         |       | 1E.1.50    | A091    | Metering unit                                      | Metering unit valve not connected, short circuit to battery or short to ground | Error message appears stating that the engine will stop in approx. 5 minutes         | Circuit diagram'EDC control'           | SERDIA (clear fault)<br>FC:00B0, 00B1, 00B2, 00B3             |
|            |         |       | 1E.1.51    | B086    | Rail pressure sensor, rail pressure limiting valve | Rail pressure limiting valve opening failure.                                  | an error message is displayed stating that the engine will stop in approx. 5 minutes |                                        | SERDIA (clear fault)<br>FC:00D0, 00EC                         |
|            |         |       | 1E.1.52    | B086    | Rail pressure sensor                               | Cable break or short circuit                                                   | an error message is displayed stating that the engine will stop in approx. 5 minutes | Circuit diagram 'Deutz engine control' | SERDIA (clear fault)<br>FC:00D1, 00D2                         |
|            |         |       | 1E.1.53    | B086    | Rail pressure sensor                               | Rail pressure outside target range                                             | Error message appears stating that the engine will stop in 4 minutes                 | Circuit diagram 'Deutz engine control' | SERDIA (clear fault)<br>FC:00D3, 00D4, 00D5, 00D6, 00D7, 00D8 |

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

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

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

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

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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

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**Fault Code Table FENDT 900 Vario – COM III**

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

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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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

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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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

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**Fault Code Table FENDT 900 Vario – COM III**

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

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**Fault Code Table FENDT 900 Vario – COM III**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

Faults

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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

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922 .. 1001-  
925 .. 1001-  
928 .. 1001-  
931 .. 1001-

934 .. 1001-

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

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928 .. 1001-  
931 .. 1001-

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**Fault Code Table FENDT 900 Vario – COM III**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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

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

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| Fault code | DIN brief description                                           | Cause                                                                       | Consequences                                           | Reference                   | FENDIAS/Note               |
|------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------|----------------------------|
|            |                                                                 | 12 V supply fault                                                           |                                                        |                             |                            |
| 071.09     | <b>A039</b> - MFA, multifunction armrest Button, auto front PTO | Sensor faulty,<br>Signal fault                                              |                                                        |                             |                            |
| 071.10     | <b>B002</b> - Sensor, front PTO speed                           | Overspeed warning                                                           |                                                        | Circuit diagram<br>Sheet 10 |                            |
| 071.41     | <b>A039</b> - MFA, multifunction armrest Front PTO "ON" button  | Plausibility error, button has been pressed for more than 30 seconds        | Front PTO inoperable                                   |                             | FRONT PTO ENHANCED CONTROL |
| 071.81     | <b>A039</b> - MFA, multifunction armrest Cab button, FRONT PTO  | Counter error                                                               |                                                        |                             |                            |
| 071.A1     | <b>A039</b> - MFA, multifunction armrest Cab button, FRONT PTO  | Communication fault                                                         |                                                        |                             |                            |
| 071.B0     | <b>A050</b> - ECU, basic control unit                           | Communication driver initialisation error; CAN bus communication restricted | CAN bus communication restricted                       |                             |                            |
| 071.C1     | <b>B015</b> - Sensor, bevel pinion                              | Switch-on speed not reached for PTO/power lift auto mode                    |                                                        | Circuit diagram<br>Sheet 6  |                            |
| 071.E1     | <b>A050</b> - ECU, basic control unit                           | Checksum error, front PTO parameterisation                                  | Use default values                                     |                             | EOL programming            |
| 071.E2     | <b>A050</b> - ECU, basic control unit                           | Error in checksum PW rise of front PTO                                      | Use default values                                     |                             | EOL programming            |
| 071.E3     | <b>A050</b> - ECU, basic control unit                           | Checksum error, PW of front PTO                                             | Use default values                                     |                             | EOL programming            |
| 071.E4     | <b>A050</b> - ECU, basic control unit                           | Checksum error, over/under step counter of front PTO                        | Use default values                                     |                             | EOL programming            |
| 08.1.22    | <b>B030</b> - Sensor, rear power lift position                  | Sensor faulty,<br>Signal fault                                              | No control possible, operable via external button only | Circuit diagram<br>Sheet 7  |                            |



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



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



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



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

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

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



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

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

934 .. 1001-

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Version 3  
21/09/2007



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



OVERALL SYSTEM/TRACTOR  
**Fault Code Table FENDT 900 Vario – COM III**

**B**

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

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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**Fault Code Table FENDT 900 Vario – COM III**

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

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

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



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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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

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| Fault code | DIN brief description                         | Cause                                                              | Consequences                      | Reference | FENDIAS/Note |
|------------|-----------------------------------------------|--------------------------------------------------------------------|-----------------------------------|-----------|--------------|
| 18.1.2C    | <b>B081</b> - Steering wheel sensor (360°)    | Invalid calibration values for steering wheel sensor in EEPROM     |                                   |           |              |
| 18.1.30    | <b>Y087</b> - Steering valve block, Autoguide | Unknown error from steering valve                                  |                                   |           |              |
| 18.1.31    | <b>Y087</b> - Steering valve block, Autoguide | Error with supply voltage from steering valve                      |                                   |           |              |
| 18.1.32    | <b>Y087</b> - Steering valve block, Autoguide | Warning for steering valve actuator position                       |                                   |           |              |
| 18.1.33    | <b>Y087</b> - Steering valve block, Autoguide | Error with steering valve actuator position                        |                                   |           |              |
| 18.1.34    | <b>Y087</b> - Steering valve block, Autoguide | Error with steering valve actuation                                |                                   |           |              |
| 18.1.35    | <b>Y087</b> - Steering valve block, Autoguide | Error with steering valve hardware                                 |                                   |           |              |
| 18.1.36    | <b>Y087</b> - Steering valve block, Autoguide | Warning for steering valve FLASH, E <sup>2</sup> PROM and software |                                   |           |              |
| 18.1.37    | <b>Y087</b> - Steering valve block, Autoguide | Error with steering valve FLASH, E <sup>2</sup> PROM and software  |                                   |           |              |
| 18.1.3A    | <b>Y087</b> - Steering valve block, Autoguide | No response from valve                                             |                                   |           |              |
| 18.1.3B    | <b>Y087</b> - Steering valve block, Autoguide | Steering valve does not return to neutral on switch-off            |                                   |           |              |
| 18.1.3C    | <b>Y087</b> - Steering valve block, Autoguide | Invalid calibration values for steering valve in EEPROM            |                                   |           |              |
| 18.1.4A    | <b>A050</b> - ECU, basic control unit         | Communication with TopDock interrupted                             | Last steering command is retained |           |              |



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**Fault Code Table FENDT 900 Vario – COM III**

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

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**Fault Code Table FENDT 900 Vario – COM III**

**B**

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



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



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



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

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

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



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



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

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