

## A00 - Engine Control Unit Diagnostic Trouble Codes

### Control Unit SPN FMI Pri. Description

A00 91 09 3 Throttle input not valid or not received

A00 94 01 1 Fuel pressure too low - less than 80kPa / 11.6 PSI (9540)

A00 94 03 1 Fuel Pressure Sensor (cc# 131) voltage out of range high - greater than 4 V DC (9640, 9560, 9660, 9580, 9680)

A00 94 04 1 Fuel Pressure Sensor (cc# 131) voltage out of range low. (9640, 9560, 9660, 9580, 9680)

A00 94 10 2 The rail pressure drops too fast when the engine is motoring and the high pressure pump is off. (9640, 9560, 9660, 9580, 9680)

A00 94 13 1 Fuel Pressure Sensor reading is incorrect. (9640, 9560, 9660, 9580, 9680)

A00 94 17 2 During starting, rail pressure is not developed after a short time cranking. (9640, 9560, 9660, 9580, 9680)

A00 94 18 2 Fuel pressure too low - less than 100 kPa / 14.7 PSI at low idle (9540)

A00 97 03 2 Water in Fuel Sensor (cc# 136) voltage out of range high (9640, 9560-Engine Type B, 9660, 9580, 9680)

A00 97 04 2 Water in Fuel Sensor (cc# 136) voltage out of range low (9640, 9560-Engine Type B, 9660, 9580, 9680)

A00 97 31 2 Water is detected in fuel. (9640, 9560-Engine Type B, 9660, 9580, 9680)

A00 100 01 1 Oil Pressure Sensor is open after engine rpm is above cranking speed

A00 100 04 2 Oil Pressure Sensor is closed when engine is not running (9640, 9560, 9660, 9580, 9680)

A00 105 00 1 Engine Manifold Air Temperature Sensor is above 100°C (9560-Engine Type C only)

A00 105 03 2 Engine Manifold Air Temperature Sensor voltage is out of range high. The device or wiring is faulty. (9640, 9560, 9660, 9580, 9680)

A00 105 04 2 Engine Manifold Air Temperature Sensor voltage is out of range low. The device or wiring is faulty. (9640, 9560, 9660, 9580, 9680)

A00 105 16 2 Engine Manifold Air temperature above 88°C / 190°F (moderately severe level). Maximum power level is derated. Power boost is disabled.

A00 107 00 2 Air Filter Restricted Switch indicates a plugged air filter.

A00 110 00 1 Engine coolant temperature above 115°C / 240°F (most severe level). Maximum power level is derated. Power boost is disabled.

A00 110 03 2 Engine Coolant Temperature Sensor voltage is out of range high. The device or wiring is faulty.

A00 110 04 2 Engine Coolant Temperature Sensor voltage is out of range low. The device or wiring is faulty.

A00 110 15 2 Engine Coolant Temperature is above 105°C. (9560-Engine Type C)

A00 110 16 2 Engine coolant temperature above 110°C / 230°F for 9640, 9560, 9660, 9580 and 9680 or above 100°C / 212°F for 9540. Maximum power level is derated. Power boost is disabled.

A00 111 01 1 Coolant level low. Engine coolant temperature above 125°C / 257°F. Maximum power level is derated. Power boost is disabled.

A00 158 17 2 Controller not powered down properly. (9640, 9560, 9660, 9580, 9680)

A00 174 00 2 Engine fuel temperature is too high (greater than 75°C / 167°F). Injector pump may be damaged because hot fuel loses its lubrication properties. (9540)

A00 174 03 2 Engine Fuel Temperature Sensor voltage is out of range high. The device or wiring is faulty. Injector pump may be damaged because hot fuel loses its lubrication properties. (9640, 9560, 9660, 9580, 9680)

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A00 174 04 2 Engine Fuel Temperature Sensor voltage is out of range low. The device or wiring is faulty. Injector pump may be damaged because hot fuel loses its lubrication properties. (9640, 9560, 9660, 9580, 9680)

A00 174 15 2 Engine fuel temperature above normal range (greater than 65°C / 149°F). Maximum power level and power boost are derated. (9540)

A00 174 16 2 Engine fuel temperature above normal range (greater than 65°C / 149°F for 9640, 9560, 9660, 9580, 9680 or greater than 73°C / 163°F for 9540). Maximum power level and power boost are derated.

A00 174 31 2 Engine Fuel Temperature Sensor is out of range. Maximum power level and power boost are derated. (9540)

A00 189 00 3 Low fuel pressure (9540)

A00 190 00 1 Engine over-speed (greater than 2800 rpm). (9540)

A00 190 16 3 Engine speed too high (greater than 2800 rpm). Engine Control Unit reduce fuel flow until speed is below 2200 rpm (9540)

A00 611 03 1 The injector driver has detected a short to battery in the injector wiring. (9640, 9560, 9660, 9580, 9680)

A00 611 04 1 The injector driver has detected a short to ground in the injector wiring. (9640, 9560, 9660, 9580, 9680)

A00 627 01 2 All injector currents are out of specification. The injector pull-in current is too low or the injector hold-in current is incorrect. (9640, 9560, 9660, 9580, 9680)

A00 627 04 2 Engine Control Unit Power (cc# 042) missing at Engine Control Unit while Electronic Power (cc# 021) is on. (9540)

A00 629 19 2 Engine Control Unit not receiving messages from Pump. (9540)

A00 632 02 2 Fuel shutoff error condition detected. (9540)

A00 632 05 2 The Engine Control Unit does not detect a change in engine speed after the Key Switch is turned off. Fuel shutoff not functioning correctly. (9540)

A00 636 02 2 Electrical noise detected on Pump Position Sensor + (cc# 172) and/or Pump Position Sensor - (cc# 173)

A00 636 08 2 Pump Position Sensor signal is missing

A00 636 10 2 Pump Position Sensor signal has incorrect pulse pattern

A00 637 02 2 Electrical noise detected on Pump Position Sensor + (cc# 174) and/or Pump Position Sensor - (cc# 175)

A00 637 07 2 Position relationship between Engine Speed Sensor and Pump Position Sensor not correct (9640, 9560, 9660, 9580, 9680)

A00 637 08 2 Engine Speed Sensor signal is missing

A00 637 10 2 Engine Speed Sensor signal has incorrect pulse pattern

A00 651 05 2 The current to Injector #1 is less than expected. (9640, 9560, 9660, 9580, 9680)

A00 651 06 2 The current to Injector #1 increases too rapidly. (9640, 9560, 9660, 9580, 9680)

A00 651 07 2 The fuel flow to cylinder #1 is lower than expected. (9640, 9560-Engine Type B, 9660, 9580)

A00 652 05 2 The current to Injector #2 is less than expected. (9640, 9560, 9660, 9580, 9680)

A00 652 06 2 The current to Injector #2 increases too rapidly. (9640, 9560, 9660, 9580, 9680)

A00 652 07 2 The fuel flow to cylinder #2 is lower than expected. (9640, 9560-Engine Type B, 9660, 9580, 9680)

A00 653 05 2 The current to Injector #3 is less than expected. (9640, 9560, 9660, 9580, 9680)

A00 653 06 2 The current to Injector #3 increases too rapidly. (9640, 9560, 9660, 9580, 9680)

A00 653 07 2 The fuel flow to cylinder #3 is lower than expected. (9640, 9560-Engine Type B, 9660, 9580, 9680)

A00 654 05 2 The current to Injector #4 is less than expected. (9640, 9560, 9660, 9580, 9680)

A00 654 06 2 The current to Injector #4 increases too rapidly. (9640, 9560, 9660, 9580, 9680)

A00 654 07 2 The fuel flow to cylinder #4 is lower than expected. (9640, 9560-Engine Type B, 9660, 9580, 9680)

A00 655 05 2 The current to Injector #5 is less than expected. (9640, 9560, 9660, 9580, 9680)

A00 655 06 2 The current to Injector #5 increases too rapidly. (9640, 9560, 9660, 9580, 9680)

A00 655 07 2 The fuel flow to cylinder #5 is lower than expected. (9640, 9560-Engine Type B, 9660, 9580, 9680)

A00 656 05 2 The current to Injector #6 is less than expected. (9640, 9560, 9660, 9580, 9680)

A00 656 06 2 The current to Injector #6 increases too rapidly. (9640, 9560, 9660, 9580, 9680)

A00 656 07 2 The fuel flow to cylinder #6 is lower than expected. (9640, 9560-Engine Type B, 9660, 9580)

A00 676 03 2 The Glow Plug Relay output is on when the relay is not energized by the Engine Control Unit. (9560-Engine Type C)

A00 676 05 2 The Glow Plug Relay output is off when the relay is energized by the Engine Control Unit. (9560-Engine Type C)

A00 729 03 2 Inlet Air Heater Relay Output (cc# 189) is high when Engine Control Unit is not energizing the Glow Plug Relay. (9540)  
A00 729 05 2 Inlet Air Heater Relay Output (cc# 189) is low when Engine Control Unit is energizing the Inlet Air Heater Relay. (9540)  
A00 1076 02 2 The High Pressure Solenoid within the pump is continuously energized, the Pump Control Unit is unable to detect closure of the High Pressure Solenoid Valve or the internal pump speed sensor is broken. (9540)  
A00 1077 07 2 The High Pressure Solenoid Valve is closed when the Engine Control Unit is commanding the Pump Control Unit to stop delivering fuel. (9540)  
A00 1077 11 2 The Pump Control Unit senses an abnormal voltage on Pump Power (cc# 061). (9540)  
A00 1077 12 2 The Pump Control Unit detects an error during a self test. (9540)  
A00 1077 19 2 The Pump Control Unit is not receiving any ECU/CAN messages while detecting a signal on Crank Speed Out (cc# 187). (9540)  
A00 1077 31 1 Injection Pump initiated engine protection due to Diagnostic Trouble Code 174.31, 1076.02, 1077.12, 1078.07 or 1078.31. Engine will derate. (9540)  
A00 1078 07 2 The Pump Control Unit receives a crank signal from the Engine Control Unit that is moderately different than the internal timing within the Pump. Engine will be derated. (9540)  
A00 1078 11 2 The Engine Control Unit detects a difference between the internal pump timing and engine speed. (9540)  
A00 1078 31 2 The Pump Control Unit receives a crank signal from the Engine Control Unit that is extremely different than the internal timing within the Pump. Engine will be derated. (9540)  
A00 1079 03 2 Sensor Supply Voltage 1 (cc# 131) too high (greater than 4.95 V DC). (9540)  
A00 1079 04 3 Sensor Supply Voltage 1 (cc# 131) too low (less than 4.0 V DC). (9540)  
A00 1080 03 1 Rail Pressure Sensor Power (cc# 721) voltage too high. (9640, 9560, 9660, 9580, 9680)  
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A00 1080 04 1 Rail Pressure Sensor Power (cc# 721) voltage too low. (9640, 9560, 9660, 9580, 9680)  
A00 1080 04 3 Rail Pressure Sensor Power (cc# 721) voltage too low. (9540)  
A00 1347 03 1 CC# 178 Shorted to power. (9560-Engine Type C)  
A00 1347 05 2 Driver detects problem in circuit to Pump Solenoid 1 Low (cc# 178). (9640, 9560, 9660, 9580, 9680)  
A00 1347 07 2 Rail Pressure Control is unable to match required rail pressure. It may be too high or too low. (9640, 9560, 9660, 9580, 9680)  
A00 1347 10 2 Pump Solenoid 1 is not delivering expected fuel flow. (9640, 9560-Engine Type B, 9660, 9580, 9680)  
A00 1348 05 2 Driver detects problem in circuit to Pump Solenoid 2 Low (cc# 179). (9640, 9560-Engine Type B, 9660, 9580, 9680)  
A00 1348 10 2 Pump Solenoid 2 is not delivering expected fuel flow. (9640, 9560-Engine Type B, 9660, 9580, 9680)  
A00 1485 02 2 Pump Power (cc# 061) is powered when Engine Control Unit is off. (9540)  
A00 1569 31 2 Engine protection - power derated due to other faults. This code occurs in conjunction with 105.16, 110.00, 110.03, 110.04, and 110.16. (9640, 9560, 9660, 9580, 9680)  
A00 2000 13 1 Engine Control Unit security violation.

#### C00 - Armrest Control Unit Diagnostic Trouble Codes

C00 158 04 3 Control Circuit Power (cc# 023) is below 10.5 V DC.  
C00 170 03 3 CLIMATRAK Cab Air Temperature Sensor voltage too high - greater than 4.8 V DC. Indicates that the sensor resistance is greater than 60K? (-22°F or -30°C).  
C00 170 04 3 CLIMATRAK Cab Air Temperature Sensor voltage too low - less than 0.1 V DC. Indicates that the sensor resistance is less than 50? (293°F or 145°C).  
C00 172 03 3 CLIMATRAK Outside Air Temperature Sensor voltage too high - greater than 4.8 V DC. Indicates that the sensor resistance is greater than 60K? (-22°F or -30°C).  
C00 172 04 3 CLIMATRAK Outside Air Temperature Sensor voltage too low - less than 0.1 V DC. Indicates that the sensor resistance is less than 50? (293°F or 145°C).  
C00 190 09 3 CAN Bus message missing from Engine Control Unit - Engine Speed

C00 605 04 3 CLIMATRAK Lo Pressure Switch (cc#914) is 12 V DC. A CAN Bus message from the Left Control Unit indicates that the CLIMATRAK Hi Pressure Switch (cc#915) is 0 V DC. The CLIMATRAK Hi Pressure Switch is open or there is a harness problem.

C00 627 03 1 Delayed Power (cc# 006) voltage is above 16 V DC. High voltage situation must be resolved.

C00 627 04 3 Delayed Power (cc# 006) is below 10.5 V DC.

C00 628 12 1 Controller cannot exit boot block program. Disconnect Armrest Control Unit connectors X653 and X654. Reconnect connectors. Replace Armrest Control Unit if condition persists.

C00 630 11 1 Controller failed EEPROM test at power-up. Replace Armrest Control Unit if condition persists.

C00 639 19 3 CAN Bus messages are not being transmitted or received correctly. Possible effects are none, slow response, or machine down.

C00 875 04 3 CAN Bus message from Left Control Unit indicates that CLIMATRAK Clutch Signal (cc# 913) is 12 V DC. CLIMATRAK Lo Pressure Switch (cc# 914) is 0 V DC. The CLIMATRAK Lo Pressure Switch is open or there is a harness problem.

C00 1490 08 2 Backshaft speed unknown. Damage could occur to feeder house if reverser is engaged while backshaft is rotating in forward direction.

C00 1498 11 3 The header engage output transistor detects an open, short, over voltage, or over temperature condition. The Armrest Control Unit will disengage the header. The fault condition must be removed before the header can be engaged.

C00 1499 11 3 The separator engage output transistor detects an open, short, over voltage, or over temperature condition. The Armrest Control Unit will disengage the separator. The fault condition must be removed before the separator can be engaged.

C00 1499 12 2 The Separator Engage fault detection circuit indicates a failure. This is an important disengagement override system. Replace the Armrest Control Unit if condition persists.

C00 1504 11 1 The Seat Switch has been closed continuously for 6 hours. The switch or the wiring harness is shorted. The header will not disengage when the operator has left the seat. This must be corrected.

C00 1505 03 3 HEADERTRAK Sensitivity Adjust voltage is too high - greater than 4.5 V DC. The device or wiring is faulty.

C00 1505 04 3 HEADERTRAK Sensitivity Adjust voltage is too low - less than 0.5 V DC. The device or wiring is faulty.

C00 1506 03 3 HEADERTRAK Rate Adjust voltage is too high - greater than 4.5 V DC. The device or wiring is faulty.

C00 1506 04 3 HEADERTRAK Rate Adjust voltage is too low - less than 0.5 V DC. The device or wiring is faulty.

C00 1505 10 3 HEADERTRAK Rate Adjust calibration fault: The potentiometer was calibrated in the wrong direction or the difference between the two calibration endpoints is less than 2.00 volts. This diagnostic trouble code is only displayed during a calibration fault and is not stored.

C00 1547 03 3 CLIMATRAK Core Temperature Sensor voltage too high - greater than 4.47 V DC. Indicates that the sensor resistance is greater than 101K? (-4°F or -20°C).

C00 1547 04 3 CLIMATRAK Core Temperature Sensor voltage too low - less than 0.1 V DC. Indicates that the sensor resistance is less than 52? (356°F or 180°C).

C00 1548 03 3 CLIMATRAK Outlet Air Temperature Sensor voltage too high - greater than 4.8 V DC. Indicates that the sensor resistance is greater than 60K? (-22°F or -30°C).

C00 1548 04 3 CLIMATRAK Outlet Air Temperature Sensor voltage too low - less than 0.1 V DC. Indicates that the sensor resistance is less than 50? (293°F or 145°C).

C00 1549 07 3 CLIMATRAK Water Valve position is greater than 30% different than the commanded position.

C00 200011 03 3 CLIMATRAK Solar Sensor voltage is too high - greater than 4.8 V DC. The device or wiring is faulty.

C00 200011 04 3 CLIMATRAK Solar Sensor voltage is too low - less than 1.5 V DC. The device or wiring is faulty.

C00 200017 09 3 CAN Bus message(s) missing from Cornerpost Control Unit.

C00 200018 09 3 CAN Bus message(s) missing from Left Control Unit.

C00 200201 11 3 Separator Engage Switch inputs are incorrect.

C00 200202 11 3 Header Engage Switch inputs are incorrect.

C03 96 09 3 CAN Bus message missing from Right Control Unit - Fuel Level.  
C03 110 09 3 CAN Bus message missing from Engine Control Unit - Engine Coolant Temperature  
C03 190 09 3 CAN Bus message missing from Engine Control Unit - Engine Speed  
C03 627 03 3 Delayed Power (cc# 006) voltage out of range high - greater than 16 V DC.  
C03 628 12 1 Controller cannot exit boot block program. Disconnect Cornerpost Control Unit connector X500. Reconnect connector. Replace Cornerpost Control Unit if condition persists.  
C03 630 11 1 EEPROM failed test at power up. Replace Cornerpost Control Unit if condition persists.  
C03 639 19 3 CAN Bus messages are not being transmitted or received correctly. Possible effects are none, slow response, or machine down.  
C03 1079 03 3 Concave Position Sensor supply voltage high - greater than 5.5 V DC.  
C03 1079 04 3 Concave Position Sensor supply voltage low - less than 4.5 V DC.  
C03 1486 03 3 Concave Position Sensor voltage is too high - greater than 4.5 V DC. The device or wiring is faulty.  
C03 1486 04 3 Concave Position Sensor voltage is too low - less than 0.5 V DC. The device or wiring is faulty.  
C03 1487 03 3 Dimmer voltage is too high - greater than 4.5 V DC. The device or wiring is faulty.  
C03 1487 04 3 Dimmer voltage is too low - less than 0.5 V DC. The device or wiring is faulty.  
C03 1492 08 3 Cab interior backlighting output transistor detects an open, short, over voltage, or over temperature condition. The Cornerpost Control Unit will turn off the backlighting. The fault condition must be removed before the backlighting can be turned on.  
C03 1493 09 3 CAN Bus message missing from Master Tailings Sensor - Tailings Volume  
C03 1500 11 3 A switch on Cornerpost Display Unit 1 is closed for longer than 30 Seconds.  
C03 1501 11 3 A switch on Cornerpost Display Unit 2 is closed for longer than 30 Seconds.  
C03 1502 11 3 A switch on Cornerpost Display Unit 3 is closed for longer than 30 Seconds.  
C03 1503 09 3 CAN Bus message missing from Armrest Control Unit - Armrest Switch Status  
C03 1510 09 3 CAN Bus message missing from Right Control Unit - Combine Temperatures  
C03 1511 09 3 CAN Bus message missing from Right Control Unit - Grain Loss  
C03 1515 09 3 CAN Bus message missing from Header Control Unit - Header Data  
C03 1552 03 3 CLIMATRAK Temperature Setpoint Adjust voltage too high - greater than 4.5 V DC. Device or wiring is faulty.  
C03 1552 04 3 CLIMATRAK Temperature Setpoint Adjust voltage too low - less than 0.5 V DC. Device or wiring is faulty.  
C03 1552 13 3 CLIMATRAK Temperature Setpoint Adjust not calibrated. Refer to Diagnostic Address C03-135 for calibration.  
C03 1553 03 3 CLIMATRAK Fan Speed Adjust voltage too high - greater than 4.5 V DC. Device or wiring is faulty.  
C03 1553 04 3 CLIMATRAK Fan Speed Adjust voltage too low - less than 0.5 V DC. Device or wiring is faulty.  
C03 1553 13 3 CLIMATRAK Fan Speed Adjust not calibrated. Refer to Diagnostic Address C03-134 for calibration.  
C03 1565 09 3 CAN Bus message missing from Armrest Control Unit - Separator and Header Engage Status  
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C03 1567 09 3 CAN Bus message missing from Header Control Unit - Control Mode  
C03 100100 09 3 CAN Bus message missing from Left Control Unit - System Data  
C03 100101 09 3 CAN Bus message missing from Left Control Unit 2 - System Data  
C03 100106 11 3 A switch on Cornerpost Display Unit 4 is closed for longer than 30 Seconds.

## E00 - Tailings Control Unit Diagnostic Trouble Codes

### Control Unit SPN FMI Pri. Description

E00 190 09 3 CAN Bus message missing from Engine Control Unit - Engine Speed  
E00 628 12 2 Controller cannot exit boot block program. Turn Key Switch to the OFF position. Wait 30 seconds. Replace Master Tailings Sensor if condition persists.

E00 630 11 2 EEPROM failed test at power up. Replace the Master Tailings Sensor if condition persists.

E00 639 09 3 CAN Bus messages are not received by the Tailings Control Unit in a timely manner. Possible effects are none, slow response, or machine down. Other Diagnostic Trouble Codes will indicate the lost message.

E00 639 19 3 CAN Bus messages are not being transmitted or received correctly. Possible effects are none, slow response, or machine down.

E00 1493 11 3 Tailings system failure. Cause unknown.

E00 1493 15 3 Tailings system calibration is out of range high (sensor detectors are receiving too little light). Recalibrate. If situation persists, possible dirty sensor or failed sensor.

E00 1493 17 3 Tailings system calibration is out of range low (sensor detectors are receiving too much light). Recalibrate. If situation persists, possible missing elevator paddle or failed sensor.

E00 1494 08 3 Stuck photo receiver detected in Master Tailings Sensor. Clean master tailings sensor. If condition persists, replace sensor.

E00 1494 11 3 Master Tailings Sensor failure. Cause unknown.

E00 1495 08 3 Stuck photo receiver detected in Slave Tailings Sensor. Clean Slave Tailings Sensor. If condition continues, replace sensor.

E00 1495 11 3 Slave Tailings Sensor failure. Cause unknown.

E00 1496 07 3 Tailings elevator paddle missing

E00 1511 09 3 CAN Bus message missing from Right Control Unit - Seed Size

## E01 - Header Control Unit Diagnostic Trouble Codes

E01 84 09 3 CAN Bus message missing from Cornerpost Control Unit - Wheel Speed

E01 190 09 3 CAN Bus message missing from Engine Control Unit - Engine Speed

E01 627 03 1 Controller Supply voltage out of range high - greater than 16 V DC.

E01 628 12 1 Controller cannot exit boot block program. Disconnect Header Control Unit connector X205. Reconnect connector. Replace Header Control Unit if condition persists.

E01 630 11 3 System not calibrated or EEPROM failed test at power up. Calibrate header. Replace the Header Control Unit if condition persists.

E01 639 13 3 Multiple CAN Bus messages have not been received by the Header Control Unit in a timely manner. Possible effects are no effect, slowed response, or no response.

E01 1079 03 2 Height Sensor Power (cc# 481) voltage is too high - greater than 5.25 V DC. Height Sensor Power is used to power the Return To Cut Sensor, Reel Fore/Aft Position Sensor, Deck Plate Position Sensor, Right HEADERTRAK Sensor, Center HEADERTRAK Sensor and Left HEADERTRAK Sensor. The voltage regulator of the Header Control Unit is bad or there is a short in the wiring.

E01 1079 04 2 Height Sensor Power (cc# 481) voltage is too low - less than 4.75 V DC. Height Sensor Power is used to power the Return To Cut Sensor, Reel Fore/Aft Position Sensor, Deck Plate Position Sensor, Right HEADERTRAK Sensor, Center HEADERTRAK Sensor and Left HEADERTRAK Sensor. The voltage regulator of the Header Control Unit is bad or there is a short in the wiring.

E01 1080 03 2 Height Sensor Power 2 (cc# 471) voltage is too high - greater than 5.25 V DC. Height Sensor Power 2 is used to power the HEADERTRAK Angle Sensor and the Header Raise Pressure Sensor. The voltage regulator of the Header Control Unit is bad or there is a short in the wiring.

E01 1080 04 2 Height Sensor Power 2 (cc# 471) voltage is too low - less than 4.75 V DC. Height Sensor Power 2 is used to power the HEADERTRAK Angle Sensor and the Header Raise Pressure Sensor. The voltage regulator of the Header Control Unit is bad or there is a short in the wiring.

E01 1515 13 2 HEADERTRAK system not calibrated for currently attached header. Perform the calibration procedure.

E01 1516 13 2 HEADERTRAK - Ground Pressure system not calibrated for currently attached header. Perform the calibration procedure.

E01 1517 04 2 Header Raise Pressure (cc# 706) voltage is too low - less than 0.25 V DC.

E01 1518 02 3 Circuit codes 436, 487, 488, and 489 changed while the HEADERTRAK was in the automatic mode. These are the header select lines that identify the type of header on the combine.

E01 1518 07 3 Header not connected or invalid connection. Circuit codes 436, 487, 488, and 489 are the header select lines that identify the type of header on the combine.

E01 1518 14 3 Cannot activate HEADERTRAK Stubble Height or HEADERTRAK Tilt Header sensors are not available.

E01 1519 11 2 Header raise valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Header Raise Valve until the fault condition is removed.

E01 1520 11 2 Header lower valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Header Lower Valve until the fault condition is removed.

E01 1521 11 2 Tilt left valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the HEADERTRAK Tilt Left Valve until the fault condition is removed.

E00 1565 09 3 CAN Bus message missing from Armrest Control Unit - Header and Separator Engaged

E01 1522 11 2 Tilt right valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the HEADERTRAK Tilt Right Valve until the fault condition is removed.

E01 1524 11 3 Reel forward valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Reel Forward Valve until the fault condition is removed.

E01 1525 11 3 Reel Aft valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Reel Aft Valve until the fault condition is removed.

E01 1526 11 3 Reel Raise valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Reel Raise Valve until the fault condition is removed.

E01 1527 11 3 Reel Lower valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Reel Lower Valve until the fault condition is removed.

E01 1528 11 3 Drop Rate valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Drop Rate Valve until the fault condition is removed.

E01 1529 11 3 Accumulator Shutoff valve driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Accumulator Shutoff Valve until the fault condition is removed.

E01 1531 06 2 Reel Speed Increase driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Reel Speed Actuator in the increase speed mode until the fault condition is removed

E01 1532 06 2 Reel Speed Decrease driver detects an open, short, over voltage, or over temperature condition. The Header Control Unit will not actuate the Reel Speed Actuator in the decrease speed mode until the fault condition is removed

E01 1533 03 2 HEADERTRAK - Return to Cut Sensor (cc# 828) voltage is too high - greater than 4.5 V DC. Faulty device or wiring.

E01 1533 04 2 HEADERTRAK - Return to Cut Sensor (cc# 828) voltage is too low - less than 0.5 V DC. Faulty device or wiring.

E01 1534 03 2 Left HEADERTRAK Sensor (cc# 412) voltage is too high - greater than 4.5 V DC. Faulty device or wiring.

E01 1534 04 2 Left HEADERTRAK Sensor (cc# 412) voltage is too low less than 0.5 V DC. Faulty device or wiring.

E01 1535 03 2 Right HEADERTRAK Sensor (cc# 454) voltage is too high - greater than 4.5 V DC. Faulty device or wiring.

E01 1535 04 2 Right HEADERTRAK Sensor (cc# 454) voltage is too low - less than 0.5 V DC. Faulty device or wiring.

E01 1536 03 2 Center HEADERTRAK Sensor (cc# 414) voltage is too high - greater than 4.5 V DC. Faulty device or wiring.

E01 1536 04 2 Center HEADERTRAK Sensor (cc# 414) voltage is too low - less than 0.5 V DC. Faulty device or wiring.

E01 1537 03 3 Reel Fore/Aft Position Sensor or Deck Plate Position Sensor (cc# 834) voltage too high - greater than 4.5 V DC. Faulty device or wiring.

E01 1537 04 3 Reel Fore/Aft Position Sensor or Deck Plate Position Sensor (cc# 834) voltage too low - less than 0.5 V DC. Faulty device or wiring.

E01 1538 03 3 Reel Height Sensor (cc# 835) voltage too high - greater than 4.5 V DC. Faulty device or wiring.

E01 1538 04 3 Reel Height Sensor (cc# 835) voltage too low - less than 0.5 V DC. Faulty device or wiring.

E01 1539 03 3 HEADERTRAK Angle Sensor (cc# 833) voltage too high - greater than 4.5 V DC. Faulty device or wiring.

E01 1539 04 3 HEADERTRAK Angle Sensor (cc# 833) voltage too low - less than 0.5 V DC. Faulty device or wiring.

E01 1541 02 2 Reel speed unknown.

E01 1544 09 3 CAN Bus message missing from Armrest Control Unit - Multifunction Lever Switch Status

## E02 - Right Control Unit Diagnostic Trouble Codes

E02 96 03 3 Fuel Level Signal (cc# 652) voltage is too high - greater than 1.96 V DC. The device or wiring is faulty.

E02 96 04 3 Fuel Level Signal (cc# 652) voltage is too low - less than 0.12 V DC. The device or wiring is faulty.

E02 627 03 1 Electronic Power (cc# 021) voltage is too high - greater than 16 V DC.

E02 628 12 1 Controller cannot exit boot block program. Turn Key Switch to the OFF position. Wait for 30 seconds. Replace Right Control Unit if condition persists.

E02 630 11 2 EEPROM failed test on power up. Replace the Right Control Unit if condition persists.

E02 639 09 3 CAN Bus messages are not received by the Right Control Unit in a timely manner. Possible effects are none, slow response, or machine down. Other Diagnostic Trouble Codes will indicate the lost message

E02 639 19 2 CAN Bus messages are not being transmitted or received correctly. Possible effects are none, slow response, or machine down.

E02 1498 09 3 CAN Bus message missing from Armrest Control Unit - Header Engage Status

E02 1500 09 3 CAN Bus message missing from Cornerpost Control Unit - Machine Configuration

E02 1500 11 3 CAN Bus message from Cornerpost Control Unit invalid - Machine Configuration

E02 1508 03 2 Hydraulic Oil Temperature Sensor (cc# 775) voltage is too high - greater than 4.97 V DC. The device or wiring is faulty.

E02 1508 04 2 Hydraulic Oil Temperature Sensor (cc# 775) voltage is too low - less than 0.29 V DC. The device or wiring is faulty.

E02 1509 03 2 Main Gearcase Oil Temperature Sensor (cc# 774) voltage is too high - greater than 4.97 V DC. The device or wiring is faulty.

E02 1509 04 2 Main Gearcase Oil Temperature Sensor (cc# 774) voltage is too low - less than 0.29 V DC. The device or wiring is faulty.

E02 1510 03 3 Chopper Vane Angle Sensor (cc# 781) voltage is too high (above 4.97 V DC). The device or wiring is faulty.

E02 1510 13 3 Chopper Vane Angle Sensor out of calibration. Perform the calibration procedure.

E02 1565 09 3 CAN Bus message missing from Armrest Control Unit - Discrete Input Status

## E03 - Left Control Unit Diagnostic Trouble Codes

E03 190 09 3 CAN Bus message(s) missing from Engine Control Unit - Engine Speed

E03 627 03 1 Electronic Power (cc# 021) voltage is too high - greater than 15.5 V DC.

E03 628 12 1 Controller cannot exit boot block program. Disconnect Left Control Unit connector X213.

Reconnect connector. Replace Left Control Unit if condition persists.

E03 630 11 3 EEPROM failed test on power up. Replace the Left Control Unit if condition persists.

E03 639 19 3 CAN Bus messages are not being transmitted or received correctly. Possible effects are none, slow response, or machine down.

E03 876 11 2 The CLIMATRAK Compressor driver detects an open, short, over voltage, or over temperature condition.

E03 1497 11 3 Unloading Auger Engage driver detects an open, short, over voltage, or over temperature condition. The Left Control Unit cannot engage the auger until the fault condition is removed.

E03 1500 09 3 CAN Bus message(s) missing from Cornerpost Control Unit - Ground Speed and/or Machine Configuration.

E03 1503 09 3 CAN Bus message(s) missing from Armrest Control Unit

E03 1515 09 3 CAN Bus message(s) missing from Header Control Unit

E03 200112 03 2 12 V DC is detected at the output of Grain Tank Cover Fold relay (K7) of the Control Relay Board when it is not energized. Indicates possible problem with K7 or Control Power (cc# 016) short circuit to 12 V DC.

E03 200112 04 2 12 V DC is not detected at the output of Grain Tank Cover Fold relay (K7) of the Control Relay Board when it is energized. Indicates possible problem with K7 or Control Power (cc# 016).



E03 200126 11 3 The Unloading Auger Swing In driver or the Unloading Auger Swing Out driver detects an open, short, over voltage, or over temperature condition. The Left Control Unit cannot swing the auger until the fault condition is removed.

E03 200128 03 1 HILLMASTER II Engage is not ON, but 12 V DC is detected on the Hillmaster Engage Signal (cc# 447) of the Left Control Unit. Possible problem with Left Control Unit or Hillmaster Engage Signal (cc# 447) shorted to 12 V DC

E03 200128 04 1 Hillmaster Engage Signal (cc# 447) is not 12 V DC when ON. Possible problem with Left Control Unit or Hillmaster Engage Signal (cc# 447) wiring. When HILLMASTER II is disengaged, the Diagnostic Trouble Code becomes a stored code.

E03 200129 11 3 The Combine Lower driver detects an open, short, over voltage, or over temperature condition. The Left Control Unit cannot engage Combine Lower until the fault condition is removed.

E03 200132 11 1 The Left Brake Light driver detects an open, short, over voltage, or over temperature condition. Only active in the ROAD mode.

E03 200133 11 1 The Right Brake Light driver detects an open, short, over voltage, or over temperature condition. Only active in the ROAD mode.

E03 200134 11 1 The Left Marker Light driver detects an open, short, over voltage, or over temperature condition. Only active in the ROAD mode.

E03 200135 11 1 The Right Marker Light driver detects an open, short, over voltage, or over temperature condition. Only active in the ROAD mode.

E03 200137 11 2 The Feeder House Reverser driver detects an open, short, over voltage, or over temperature condition.

E03 200140 03 2 12 V DC detected on Ground (cc# 010) of Control Relay Board. Indicates problem with ground connections

E03 200141 04 2 12 V DC not detected on Unswitched Electronic Power (cc# 022) of Control Relay Board. Indicates problem with Unswitched Electronic Power connection, wiring or Fuse F20 of the Engine Compartment Relay Panel.

E03 200142 04 2 12 V DC not detected on Light Power (cc# 014) of Control Relay Board. Indicates problem with Light Power connection, wiring or Fuse F18 of the Engine Compartment Relay Panel.

E03 200143 04 2 12 V DC not detected on Control Power (cc# 016) of Control Relay Board. Indicates problem with Control Power connection, wiring, Fuse F8 or Relay K4 of the Engine Compartment Relay Panel.

E03 200144 04 2 12 V DC not detected on Light Power 2 (cc# 046) of Control Relay Board. Indicates problem with Light Power 2 connection, wiring or Fuse F5 of the Engine Compartment Relay Panel.

E03 200145 04 2 12 V DC not detected on Light Power 3 (cc# 047) of Control Relay Board. Indicates problem with Light Power 3 connection, wiring or Fuse F3 of the Engine Compartment Relay Panel.

E03 200146 04 3 12 V DC not detected on Light Power 4 (cc# 048) of Control Relay Board. Indicates problem with Light Power 4 connection, wiring or Fuse F4 of the Engine Compartment Relay Panel.

E03 200147 04 2 12 V DC not detected on Fan Speed Adjust Power (cc# 051) of Control Relay Board. Indicates problem with Fan Speed Adjust Power connection, wiring or Fuse F11 or Relay K5 of the Engine Compartment Relay Panel.

E03 200148 04 2 12 V DC not detected on Light Power 5 (cc# 049) of Control Relay Board. Indicates problem with Light Power 5 connection, wiring or Fuse F9 of the Engine Compartment Relay Panel.

E03 200149 11 2 Indicates a problem in the serial communication link between the Left Control Unit and the Control Relay Board.