CASE IH & NEW HOLLAND Tractor Fault Codes DTC

TMF 3 Hitch Raise Solenoid High Side Driver shorted to 12 volts. TMF 4 Hitch Raise Solenoid Failed Open or Shorted to Ground. TMF 5 Hitch Lower Solenoid Shorted to 12 volts. TMF 6 Hitch Lower Solenoid High Side Driver circuit short to 12 volts. TMF 7 Hitch Raise/Lower Solenoids Open or short to ground. TMF 11 Communications Lost with Data Bus and ALL other controllers TMF 12 Communication lost with the armrest controller TMF 14 5 Volt Sensor Supply voltage is too high TMF 15 5 Volt Sensor Supply voltage is too low TMF 17 Hitch Position Command potentiometer failed in the Armrest controller TMF 18 Hitch Rockshaft Position potentiometer is outside normal operating range. TMF 19 Hitch Upper Limit potentiometer is failed in the Armrest Controller TMF 21 Hitch Load Command potentiometer is failed in the Armrest Controller TMF 22 Single draft pin sensor failed when configured for one draft pin sensor. TMF 23 Two draft pin sensors failed when configured for two draft pins. TMF 24 Communications Lost with Instrumentation Controller TMF 25 Hitch Up/Down Switch failed in the Armrest controller TMF 26 Fender UP and DOWN switch failure or both switches simultaneously pressed TMF 28 Hitch Travel potentiometer is failed in the Armrest Controller TMF 29 Hitch Drop Rate potentiometer is failed in the Armrest Controller TMF 30 Right Draft Pin voltage is outside the normal operating range. TMF 31 Left Draft Pin voltage is outside the normal operating range. TMF 32 Ground Speed Signal is failed in the Instrumentation Controller TMF 33 Hitch Slip Set Switch failed in the Armrest controller TMF 34 Hitch Slip Select Switch failed in the Armrest controller TMF 35 Slip Sensor (radar or wheel speed) is failed in the Instrumentation Controller TMF 37 The ARU reports EDC Transport Lock is faulty or not available. TMF 41 Draft pin(s) detected but the Armrest controller specified tractor without draft control. TMF 42 Engine speed must be set above 1600 rpm during calibration of lower valve. TMF 43 No Draft pin(s) detected but the Armrest controller specified tractor with draft control. TMF 44 Hitch calibration aborted due to tractor movement. TMF 45 Hitch calibration attempted when the engine is not running or engine speed signal is failed. TMF 47 Raise Valve calibration value is too high. (valve problem) TMF 48 Raise Valve calibration value is too low. (valve problem) TMF 50 Hitch position at top of travel is not within specification during calibration TMF 51 Lower Valve calibration value is too high. (valve problem) TMF 52 Lower Valve calibration value is too low. (valve problem) TMF 53 The time allowed for hitch calibration has expired TMF 54 Hitch position at bottom of travel is not within specification during calibration TMF 55 Hitch position range from top to bottom is not within spec during calibration TMF 56 Hitch position range to position command range ratio is not within spec during calibration. TMF 57 Right Draft Pin voltage is not within spec for \tilde{A} no load \tilde{A} condition during calibration TMF 58 Left Draft Pin voltage is not within spec for \tilde{A} no load \tilde{A} condition during calibration TMF 59 Both Draft Pin voltages are not within spec for \tilde{A} no load \tilde{A} condition during calibration TMF 60 Draft pin connected to left vs right for single pin setup during calibration TMF 61 The Hitch Calibration procedure must be performed.

TMF 62 Communications Lost with Performance Monitor Function



TMF 63 Controller 8 volt reference is too high (above 8.8 volts). TMF 64 Controller 8 volt reference is too low (below 7.2 volts). TMF 65 Battery Voltage is too Low TMF 66 Battery Voltage is too Low TMF 80 MFD fault condition in software. TMF 81 MFD Solenoid is failed Open or Short Circuit TMF 82 Differential Lock Solenoid is failed Open or Short Circuit TMF 83 Brake Lamp Relay Solenoid is failed Open or Short Circuit TMF 86 Wheel Slip Signal is failed in the Instrumentation Controller TMF 87 Ground Speed Signal is failed in the Instrumentation Controller TMF 88 Differential Lock Switch is failed in the Armrest Controller TMF 89 Differential Lock Switch is failed in the Armrest Controller TMF 90 Differential Lock Switch is failed in the Armrest Controller TMF 92 MFD Switch is failed in the Armrest Controller TMF 93 MFD Switch is failed in the Armrest Controller TMF 94 Differential Lockout fault condition in software. TMF 95 The steering angle sensor is above the expected operating range TMF 96 The steering angle sensor is below the expected operating range TMF 98 Battery Voltage is too Low TMF 99 Battery Voltage is too Low TMF 106 Aux 5th remote valve control switch (Extend) is failed in the Armrest Controller TMF 107 Aux 5th remote valve control switch (Retract) is failed in the Armrest Controller TMF 108 Aux 1st remote valve LEVER potentiometer is failed in the Armrest Controller TMF 109 Aux 2nd remote valve LEVER potentiometer is failed in the Armrest Controller TMF 110 Aux 3rd remote valve LEVER potentiometer is failed in the Armrest Controller TMF 111 Aux 4th remote valve LEVER potentiometer is failed in the Armrest Controller TMF 112 Aux 1st remote valve FLOW potentiometer is failed in the Armrest Controller TMF 113 Aux 2nd remote valve FLOW potentiometer is failed in the Armrest Controller TMF 114 Aux 3rd remote valve FLOW potentiometer is failed in the Armrest Controller TMF 115 Aux 4th remote valve FLOW potentiometer is failed in the Armrest Controller TMF 116 Aux 5th remote valve FLOW potentiometer is failed in the Armrest Controller TMF 120 Electro Hydraulic Remote top link switch is stuck on. TMF 123 Aux 1st Lower Coil solenoid shorted to 12 volts. TMF 124 Aux 1st Lower solenoid failed open or short circuit. TMF 125 Aux 1st Raise Coil solenoid shorted to 12 volts. TMF 126 Aux 1st Raise solenoid failed open or short circuit. TMF 127 Aux 2nd Lower Coil solenoid shorted to 12 volts. TMF 128 Aux 2nd Lower solenoid failed open or short circuit. TMF 129 Aux 2nd Raise Coil solenoid shorted to 12 volts. TMF 130 Aux 2nd Raise solenoid failed open or short circuit. TMF 131 Aux 3rd Lower Coil solenoid shorted to 12 volts. TMF 132 Aux 3rd Lower solenoid failed open or short circuit. TMF 133 Aux 3rd Raise Coil solenoid shorted to 12 volts. TMF 134 Aux 3rd Raise solenoid failed open or short circuit. TMF 135 Aux 4th Lower Coil solenoid shorted to 12 volts. TMF 136 Aux 4th Lower solenoid failed open or short circuit. TMF 137 Aux 4th Raise Coil solenoid shorted to 12 volts. TMF 138 Aux 4th Raise solenoid failed open or short circuit. TMF 139 Aux 5th Lower Coil solenoid shorted to 12 volts. TMF 141 Aux 5th Raise Coil solenoid shorted to 12 volts. TMF 142 Aux 5th Raise solenoid failed open or short circuit. TMF 147 Implement feedback #1 out of range High



TMF 148 Implement feedback #1 out of range Low TMF 149 Implement feedback #2 out of range High TMF 150 Implement feedback #2 out of range Low TMF 151 Communications Lost with Transmission Controller TMF 152 Electro Hydraulic Remote top link switch voltage is short circuit. TMF 153 Electro Hydraulic Remote top link switch data invalid TMF 154 PTO switch interlock - Cab Switch and Fender switch on at the same time. TMF 155 Auto PTO switch data failed in the Armrest controller. TMF 156 Auto PTO switch stuck ON in Armrest Controller. TMF 157 PTO remote fender switch short circuit. TMF 158 PTO remote fender switch open circuit TMF 159 PTO remote fender switch stuck ON. TMF 160 PTO Clutch is Slipping Too Much TMF 162 Engine Stalled when the PTO was running. TMF 163 PTO Shaft rotation is detected when the PTO clutch is OFF. TMF 164 PTO shaft speed has not been detected within 3.6 seconds of being turned ON. TMF 165 PTO Shaft rotation is detected when the Engine is OFF. TMF 166 PTO Driver is on and no current is sensed. TMF 167 Current sensed when the PTO driver is off. TMF 168 PTO ON/OFF switch is failed in the Armrest Controller TMF 169 PTO ON/OFF switch is failed in the Armrest Controller TMF 170 PTO ON/OFF switch is failed in the Armrest Controller TMF 171 PTO software fault condition detected. TMF 172 PTO Solenoid Circuit is failed shorted to 12 Volts when PTO is in the off state. TMF 173 PTO Solenoid Circuit is failed shorted to ground when PTO is in the off state. TMF 174 Current flowing in the PTO sense resistor when the high side is off. TMF 175 PTO Clutch has not reached lock up speed within 6 seconds of being turned ON TMF 178 PTO speed sensor has been changed. TMF 179 The PTO is receiving no frequency from the Shaft Size Sensor on a two speed PTO TMF 180 The PTO is receiving signals from the Shaft Size Sensor on a single speed PTO configuration. INST 1015 Seat Switch may be stuck closed. INST 1024 Trans oil filter switch shorted to ground on power up. INST 1034 Hydraulic oil filter switch shorted to ground on power up. INST 3010 PTO Shaft Speed sensor is failed in PTO Controller INST 3020 Engine Speed sensor is failed in the Engine Controller INST 3022 Engine Overspeed Error INST 5010 Engine Oil Pressure sensor is failed in the Engine Controller INST 5011 Engine Oil Pressure sensor voltage is too low (open circuit, short to ground) INST 7024 Reversible Fan Control open circuit or shorted to ground. INST 10031 Controller Memory Error - Loss of Engine Hours information INST 10032 Controller Memory Error - Loss of Vehicle Configuration information INST 10033 Controller Memory Error - Loss of Customer Configuration information INST 10034 Controller Memory Error: Loss of valid fuel table information. INST 10035 Controller Memory Error - Loss of Valid Radar Configuration information. INST 10036 Controller Memory Error - Loss of Displayed Performance information INST 10037 Controller Memory Error - Loss of Implement Width information INST 10038 Controller Memory Error - Loss of Valid Remote Timer information. INST 11011 Fuel Level Sensor voltage is too low (open circuit, short to ground) INST 12011 Communications Lost with Armrest Controller INST 12021 Communications Lost with Auxiliary Controller

INST 12031 Communications Lost with Hitch Controller

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INST 12043 Communications Lost with Data Bus 1 and ALL other controllers INST 12051 Communications Lost with PTO Controller INST 12053 Communications Lost with Vehicle Data Bus 2. INST 12071 Communications Lost with Transmission Controller INST 12091 Communications Lost with Engine Controller INST 12101 Communications Lost with Tractor ECU (Gateway) Controller INST 12111 Communications Lost with Automatic Temperature Controller INST 12121 Communications Lost with Color Perfomance Monitor INST 13010 Engine Coolant Temperature sensor is failed in the Engine Controller INST 13011 Engine Coolant Temperature sensor voltage is too low (short to ground) INST 13012 Engine Coolant Temperature sensor voltage is too high (open circuit, short to +V) INST 13021 Transmission Oil Temperature sensor voltage is too low (short to ground) INST 13022 Transmission Oil Temperature sensor voltage is too high (open circuit, short to +V) INST 13031 Hydraulic Oil Temperature sensor voltage is too low (short to ground) INST 13032 Hydraulic Oil Temperature sensor voltage is too high (open circuit, short to +V) INST 13040 Air to Air Intake Temperature sensor is failed in the Engine Controller INST 13044 When fuel shut off relay is latched, short is detected (mechanical engine tractors only) INST 13051 Air to Air Intake Temperature sensor voltage is too low (short to ground) INST 13052 Air to Air Intake Temperature sensor voltage is too high (open circuit, short to +V) INST 53001 Instrumentation Controller Configuration is Incorrect INST 53002 Air to Air Intake sensor does not match Tractor Model Configuration INST 53005 Engine Shutdown activated by Instrument Controller INST 65535 NO ERROR. Errors have not been cleared from factory. ATC 111 Cab sensor open or shorted to power ATC 112 Cab sensor shorted to ground ATC 115 Evaporator sensor open or shorted to power ATC 116 Evaporator sensor shorted to ground ATC 120 Blower speed select pot open/shorted to power ATC 121 Temperature select pot open/shorted to power ATC 122 Mode Select Pot Open Or Shorted To Power ATC 125 High pressure switch (+) input shorted to power ATC 126 High pressure switch (+) input shorted to ground ATC 127 High pressure switch (-) input shorted to power ATC 128 High pressure switch (-) input shorted to ground ATC 129 High pressure cycling error (2 in 1 minute) ATC 130 Low pressure switch (+) input shorted to power ATC 131 Low pressure switch (+) input shorted to ground ATC 132 Low pressure switch (-) input shorted to power ATC 133 Low pressure switch (-) input shorted to ground ATC 134 Low pressure switch open for > 1 minute ATC 113 Outlet sensor open or shorted to power ATC 114 Outlet sensor shorted to ground ATC 117 Outside air sensor open or shorted to power ATC 118 Outside air sensor shorted to ground Hitch 1002 Raise hitch valve coil short to 12 volts or raise hitch valve coil circuit failure. Hitch 1003 Open or Short to Ground raise hitch valve coil circuit failure. Hitch 1004 Lower hitch valve coil short to 12 volts or lower hitch valve coil circuit failure. Hitch 1005 Open or short to ground lower hitch valve coils. Hitch 1006 EDC Low Side Driver stuck on failure. Hitch 1007 Low side driver watchdog test failed. Hitch 1008 Low side of raise solenoid connected permanently to GND



Hitch 1009 Low side of lower solenoid connected permanently to GND

Hitch 1011 TCU (Tractor Controller Unit) is disconnected from the CAN bus.

Hitch 1012 No communication with the ACM (Armrest Controller Module).

Hitch 1013 No communication with the ICP (Instrument Cluster Panel).

Hitch 1014 Five-volt reference is above the upper voltage limit.

Hitch 1015 Five-volt reference is below the lower voltage limit.

Hitch 1016 Not implemented

Hitch 1017 Position Command value received over the CAN data bus from the Armrest indicates Position Command potentiometer failed.

Hitch 1018 Hitch rockshaft position potentiometer open/short/misadjust or circuit failure.

Hitch 1019 Upper Limit value received from CAN data bus indicates failure condition.

Hitch 1021 Load Command value received from CAN data bus indicates failure condition.

Hitch 1022 Single draft pin sensor failed when configured for one draft pin sensor.(CCH Only)

Hitch 1023 Two draft pin sensors failed when configured for two draft pins.(CCH Only)

Hitch 1024 ICU CAN data bus signal lost.

Hitch 1025 Up/Down/Down Momentary switch value received from CAN data bus indicates switch failure.

Hitch 1026 Up/Down remote fender switch failure.

Hitch 1027 Not implemented

Hitch 1028 Travel Range potentiometer value received from CAN data bus indicates failure condition.

Hitch 1029 Drop Rate value received from CAN data bus indicates potentiometer failure condition.

Hitch 1030 Right draft pin voltage is outside the normal operating range.(CCH Only)

Hitch 1031 Left draft pin voltage is outside the normal operating range.(CCH Only)

Hitch 1032 Ground speed failure-value received from CAN data bus indicates failure condition.

Hitch 1033 Slip Limit Set Point received from CAN data bus indicates failure condition.

Hitch 1034 Slip Enable switch received from CAN data bus indicates failure condition.

Hitch 1035 The Percent slip received from ETC indicates failure condition.

Hitch 1036 The ARU reports EDC Inching Up switch faulty or not available.

Hitch 1037 The ARU reports EDC Inching Down switch faulty or not available.

Hitch 1065 The ARU specified tractor without draft control (position only hitch) but detected presence of draft pin(s).

Trans 2009 Seat switch open circuit

Trans 2010 Seat switch is shorted to the supply voltage B+ or 5 volt reference

Trans 2011 Clutch Pot Open Circuit or short to ground

Trans 2012 Clutch Potentiometer Short to +12 Volts or short to 5 Volt reference.

Trans 2024 none of the Transmission clutches are calibrated. This will be the condition when a new controller is installed on the tractor.

Trans 2037 Bottom of Clutch pedal switch open circuit or bottom of clutch relay is stuck open Trans 2047 Clutch pedal bottom of clutch switch misadjusted.

Trans 2048 Bottom of Clutch pedal switch or the bottom of clutch relay are short circuit

Trans 2049 Trans

Trans 2054 5 volt reference voltage too low.

Trans 2055 No signal from wheel speed sensor.

Trans 2056 5 volt internal reference voltage too high.

Trans 2057 5 volt internal reference voltage too low.

Trans 2059 1) Switch inputs indicate shuttle lever is in both forward and neutral 2) Switch inputs indicate shuttle lever is in both reverse and neutral3) Switch inputs indicate shuttle lever is in both forward and reverse. Cycle the shuttle lever which may free up stuck switches, or try driving the opposite direction.

Trans 2071 Forward switch input from the FNRP Pod is shorted to ground or is open circuit.



Trans 2072 Reverse switch input from the FNRP Pod is shorted to +12 Volts or the FNRP pod 5 Volt Reference. Trans 2073 Reverse switch input from the FNRP Pod is shorted to ground or open circuit. Trans 2074 FNR Not Park Switch low voltage fault Trans 2075 FNR Not Park Switch high Voltage fault Trans 2110 FNR Neutral Switch Low Voltage fault Trans 2111 FNR Neutral Switch high Voltage fault Trans 2326 The Engine RPM sourced from the alternator measured by the controller is excessively high. Trans 2327 No engine RPM Trans 2330 The Transmission output RPM speed, sourced from the sensor, measured by the controller is too high for the desired gear Trans 2331 The transmission clutches are slipping Trans 2342 Clutch Odd solenoid open circuit or short to ground. Trans 2343 Clutch Even solenoid open circuit or short to ground.C33 Trans 2344 Clutch C1-2 solenoid open circuit or short to ground. Trans 2345 Clutch C3-4 solenoid open circuit or short to ground. Trans 2346 Clutch 5-6 solenoid open circuit or short to ground. Trans 2374 Master Clutch solenoid open circuit or short to ground. Trans 2347 Clutch Low Range solenoid open circuit or short to ground. Trans 2348 110 Clutch Mid Range solenoid open circuit or short to ground. Trans 2349 Clutch High Range solenoid open circuit or short to ground. Trans 2350 Clutch reverse solenoid open circuit or short to ground. Trans 2351 The creeper clutch solenoid is open circuit or short to ground Trans 2353 Even Clutch Solenoid is shorted to +12 Volts, current sensed while driver is off. Trans 2352 Odd Clutch Solenoid is shorted to +12 Volts, current sensed while driver is off. Trans 2354 C1-2 Clutch Solenoid is shorted to +12 Volts, current sensed while driver is off.. Trans 2355 C3-4 Clutch Solenoid is shorted to +12 Volts, Current sensed while driver is off. Trans 2356 C5-6 clutch Solenoid is shorted to +12 Volts, current sensed while driver isoff. Trans 2357 Low clutch Solenoid is shorted to +12 Volts, current sensed while driver is off. Trans 2358 Mid Clutch Solenoid is shorted to +12 Volts, Current sensed while driver is off. Trans 2359 High Clutch Solenoid is shorted to +12 Volts, current sensed while driver is off. Trans 2360 Reverse Clutch Solenoid is shorted to +12 Volts, current sensed while driver is off. Trans 2361 The creeper clutch solenoid is shorted to +12 Volts, current sensed while the driver is off Trans 2362 Master Clutch Solenoid is shorted to +12 Volts, current sensed while driver is off. Trans 2363 The Odd Clutch is not calibrated Trans 2364 Even Clutch not calibrated Trans 2365 C1-2 Clutch not calibrated Trans 2366 C3-4 Clutch not calibrated Trans 2367 C5-6 Clutch not calibrated Trans 2368 Low Range Clutch not calibrated Trans 2369 Mid Range Clutch not calibrated Trans 2370 High Clutch not calibrated Trans 2371 Reverse Clutch not calibrated Trans 2372 Creep Clutch is not calibrated Trans 2373 Master Clutch not calibrated Trans 2800 Auto Guidance Isolation valve driver Fault Trans 2805 System pressure valve solenoid circuit is open circuit or shorted to ground Trans 2806 System pressure solenoid is shorted to B+ Trans 2807 Transmission output rpm over speed Trans 2809 The battery voltage is too low to permit operation of the clutch solenoids.



Trans 2811 Transmission Oil Temperature Hot Trans 2812 Transmission Oil Temperature sensor short to B+ or open circuit Trans 2813 Transmission oil temperature Sensor Short to Ground Trans 2814 Integrated Control Panel off line Trans 2815 Governor Engine RPM alternator engine RPM mismatch Trans 2816 Transmission regulated pressure accumulator is flat Trans 2817 Governor is offline CAN bus Trans 2818 Communication lost with the Armrest Control Module(ACM) Trans 2819 Communication lost with the instrumentation controller. Trans 2820 System pressure low possible System pressure hydraulic pump failure or leak Trans 2821 System Pressure Low fault Trans 2850 The Park Brake is stuck on by no electrical power supplied when commanded on Trans 2851 The Park Brake Driver has detected an over current or an open circuit condition Trans 2852 The Park Brake is stuck on by no electrical power supplied to the solenoid when driver is commanded on. Possible service brake bottom brake switches open. Trans 2055 No signal from wheel speed sensor. Trans 2873 Software is out of the calibration mode and the park brake request is still active. If this fault is detected there is a bug in the software Trans 2874 The park brakes commanded on and gear is engaged and there is no park brake request from calibration. If this fault is detected there is a bug in the software Trans 2900 Torque sensor Gap is on the larger end of the tolerance (CCH Only) Trans 2901 Signal received from the torque sensor is not in any fault range or normal range tolerance (CCH Only) Trans 2902 Torque sensor has declared an internal fault tolerance (CCH Only) Trans 2903 Torque sensor supply voltage below 4.8 volts tolerance (CCH Only) Trans 2910 12VF1voltage supply is low. (possible blown fuse*) Trans 2911 12VT1voltage supply is low. (possible blown fuse*) Trans 2912 12VF2voltage supply is low. (possible blown fuse*) Trans 2913 12VHvoltage supply is low. (possible blown fuse*) Trans 2914 12VF3voltage supply is low. (possible blown fuse*) Trans 2915 12VS1voltage supply is low. (possible blown fuse*) Engine 3000 Unknown ECM Error Code Received Engine 3999 Unknown ECM Error Code Received Engine 3001 Foot Throttle Sensor -Signal Not Plausible Engine 3002 Foot Throttle Sensor -Signal Above Range Max. Engine 3003 Foot Throttle Sensor -Signal Below Range Min. Engine 3004 Foot Throttle Sensor -No Signal -Error Engine 3006 Coolant Temperature Sensor -Signal Not Plausible(Compared with Engine Oil Temperature) Engine 3007 Coolant Temperature Sensor -Signal Above Range Max. Engine 3008 Coolant Temperature Sensor -Signal Below Range Min. Engine 3009 Coolant Temperature Sensor -(via CAN) No Signal Engine 3010 Air Intake Temperature Sensor -Signal Above Range Max. Engine 3011 Air Intake Temperature Sensor -Signal Above Range Min. Engine 3012 Air Intake Temperature Sensor -(via CAN) No Signal Engine 3015 Fuel Temperature Signal -Signal Above Range Max. Engine 3016 Fuel Temperature Signal -Signal Below Range Min. Engine 3019 Boost Pressure Sensor -Signal Above Range Max. Engine 3021 Boost Pressure Sensor -(via CAN) No Signal Engine 3022 Boost Pressure Sensor -Signal Not Plausible Engine 3023 Atmospheric Pressure Sensor -Signal Not Plausible Compared with Boost Pressure Engine 3024 Atmospheric Pressure Sensor -Signal Above Range Max.

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Engine 3025 Atmospheric Pressure Sensor -Signal Below Range Min. Engine 3028 Oil Pressure Too Low Engine 3029 Oil Pressure Sensor Short circuit to Battery Engine 3030 Oil Pressure Sensor Short circuit to Ground Engine 3031 Oil Pressure Sensor -Hardware Error Engine 3032 Oil Pressure Sensor -Value Too High Engine 3033 Oil Temperature Sensor -Signal Not Plausible (Compared with Coolant Temperature) Engine 3034 Oil Temperature Sensor -Signal Above Range Max. Engine 3035 Oil Temperature Sensor -Signal Below Range Min. Engine 3036 Oil Temperature Sensor -(via CAN) No Signal Engine 3037 Boost Pressure Sensor -Signal Low Engine 3038 Constant Engine RPM Activate / Select Switch Short circuit to Ground Engine 3039 Cruise Control Actuating Device - Evaluation Error Engine 3043 Vehicle Speed Sensing -Hardware Conversion Error Engine 3044 Vehicle Speed Sensing -Signal Above Range Max. Engine 3045 Vehicle Speed Sensing -Signal Below Range Min. Engine 3046 Vehicle Speed Sensing -Signal Not Plausible Engine 3047 Main Relay 2 Failure Short circuit to Battery Engine 3048 Main Relay 2 Failure Short circuit to Ground Engine 3051 Battery Voltage to ECM too High Engine 3052 Battery Voltage to ECM too Low Engine 3053 Vehicle Speed Sensing (Tacho) - PWM Frequency Too High Engine 3054 Vehicle Speed Sensing (Tacho) -PWM Average Frequency Above Limit Engine 3055 Vehicle Speed Sensing (Tacho) - PWM Average Frequency Below Limit Engine 3056 Vehicle Speed Sensing (Tacho) -Not Plausible Engine 3057 Timeout of CAN Message High Resolution Wheel Speed Engine 3058 Timeout of CAN Message Vehicle Dynamics Control Unit Engine 3059 ECM After run was Interrupted Engine 3060 Cylinder1 -Unclassifiable Error in Injector Engine 3061 Cylinder1 -Injector Cable Short circuit (Low Side to Battery) Engine 3062 Cylinder1 - Application Dependent Engine 3063 Cylinder1 -Injector Cable Short circuit (High Side to Ground) Engine 3064 Cylinder5 -Unclassifiable Error in Injector Engine 3065 Cylinder5 -Injector Cable Short circuit (Low Side to Battery) Engine 3066 Cylinder5 - Application Dependent Engine 3067 Cylinder5 - Injector Cable Short circuit (High Side to Ground) Engine 3068 Cylinder3 -Unclassifiable Error in Injector Engine 3069 Cylinder3 -Injector Cable Short circuit (Low Side to Battery) Engine 3070 Cylinder3 - Application Dependent Engine 3071 Cylinder3 - Injector Cable Short circuit (High Side to Ground) Engine 3072 Cylinder6 -Unclassifiable Error in Injector Engine 3073 Cylinder6 - Injector Cable Short circuit (Low Side to Battery) Engine 3074 Cylinder6 - Application Dependent Engine 3075 Cylinder6 - Injector Cable Short circuit (High Side to Ground) Engine 3076 Cylinder2 -Unclassifiable Error in Injector Engine 3077 Cylinder2 -Injector Cable Short circuit (Low Side to Battery) Engine 3078 Cylinder2 - Application Dependent Engine 3079 Cylinder2 - Injector Cable Short circuit (High Side to Ground) Engine 3080 Cylinder4 -Unclassifiable Error in Injector Engine 3081 Cylinder4 - Injector Cable Short circuit (Low Side to Battery) Engine 3082 Cylinder4 - Application Dependent



Engine 3083 Cylinder4 - Injector Cable Short circuit (High Side to Ground) Engine 3088 Crankshaft Sensor - No Signal Engine 3089 Crankshaft Sensor -Invalid Signal Engine 3090 Camshaft Sensor - No Signal Engine 3091 Camshaft Sensor -Invalid Signal Engine 3092 Offset Between Camshaft and Crankshaft -Not Plausible Engine 3093 Offset Between Camshaft and Crankshaft -Outside Boundaries Engine 3095 Operating with Camshaft Sensor Only -Backup Mode Engine 3096 Tier 3: ECM Bus Off on CAN A Tier 4a: ECM Bus Off on Vehicle CAN Engine 3097 ECM Bus Off on Engine private CAN Engine 3098 Timeout of CAN Message TSC1-TE (When Active) Engine 3099 Timeout of CAN Message TSC1-TE (When Inactive) Engine 3100 Timeout of CAN Message TSC1-AE (When Active) Engine 3101 Timeout of CAN Message TSC1-AE (When Inactive) Engine 3102 Rail Pressure Sensor CP3 -Signal Below Range Min. Engine 3104 Rail Pressure Relief Valve - Open Engine 3105 Rail Pressure Relief Valve -Pressure Shock Requested Engine 3106 Rail Pressure Relief Valve -Did Not Open After Pressure Shock Engine 3107 Metering Unit Short circuit to Battery Engine 3108 Metering Unit Short circuit to Ground Engine 3110 Rail Pressure Sensor Offset Monitoring -Value above Limit Engine 3111 Rail Pressure Sensor Offset Monitoring -Value below Limit Engine 3112 Rail Pressure Sensor CP3 - Signal Above Range Max. Engine 3113 Main Relay 1 (High Pressure Pump -power supply to the fuel metering unit) -Short to Battery Engine 3114 Main Relay 1 (High Pressure Pump -power supply to the fuel metering unit) Short to Ground Engine 3117 PTO Twist Sensor -Out of Range Engine 3118 ECM 12V Sensor Supply Voltage High Engine 3119 ECM 12V Sensor Supply Voltage Low Engine 3120 PTO Twist Sensor -Not Plausible Engine 3121 PTO Twist Sensor -Open Circuit Engine 3122 PTO Twist Sensor Short circuit to Ground Engine 3123 PTO Twist Sensor -Not Calibrated Engine 3124 Hand Throttle -Channel 2 Above Range Max. Engine 3125 Hand Throttle -Channel 2 Below Range Min. Engine 3126 Hand Throttle -Channel 1 Signal Above Range Max. Engine 3127 Hand Throttle -Channel 1 Signal Below Range Min. Engine 3128 Hand Throttle -Channel Difference Error Engine 3129 Hand Throttle -Idle Switch Closed Circuit Engine 3130 Hand Throttle -Idle Switch Open Circuit Engine 3131 Grid Heater Always Switched On Engine 3133 Cold Start Lamp -No Load Engine 3134 Cold Start Lamp Short circuit to Battery Engine 3135 Cold Start Lamp Short circuit to Ground Engine 3136 Cold Start Lamp - Excessive Temperature Engine 3137 Metering Unit -Open Load Engine 3138 Metering Unit -Temperature Too High Engine 3139 Metering Unit Signal Range Check -Signal Too High Engine 3140 Metering Unit Signal Range Check -Signal Too Low Engine 3141 Fuel Flow Set point Too Low Engine 3142 High Pressure Test -Test Active

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Engine 3143 Grid Heater Switch Off Test (Voltage Drop Too High) Engine 3144 Grid Heater Switch Off Test (Voltage Drop Too Low) Engine 3145 Terminal 15 -No Signal Engine 3146 Water Detected In Fuel Engine 3147 Oil Temperature Too High Engine 3148 Coolant Temperature Sensor Dynamic Test -Failure (Minimum Temperature Raise Not Reached) Engine 3149 Coolant Temperature Sensor Test -Failure (Minimum Temperature Not Reached) Engine 3150 System/Amber Warning Lamp Short circuit to Battery Engine 3151 System/Amber Warning Lamp Short circuit to Ground Engine 3152 System/Amber Warning Lamp -No Load Engine 3153 System/Amber Warning Lamp -Excessive Temperature Engine 3154 Grid Heater Relay _Short circuit to Battery Engine 3155 Grid Heater Relay Short circuit to Ground Engine 3156 Grid Heater Relay -No Load Engine 3157 ECM Not Detected on CAN bus Engine 3158 Invalid ECM Checksum Engine 3159 Invalid Engine Reference Torque Engine 3160 Fan Actuator Short circuit to Battery Engine 3161 Fan Actuator Short circuit to Ground Engine 3162 Fan Actuator - Open Load Engine 3163 Fan Actuator - Temperature Too High Engine 3164 Fan Speed Sensor Signal High Engine 3165 Fan Speed Sensor -Signal Low Engine 3166 Fuel Filter Heater Relay Short circuit to Battery Engine 3167 Fuel Filter Heater Relay Short circuit to Ground Engine 3168 Fuel Filter Heater Relay -Open Load Engine 3169 Fuel Filter Heater Relay -Signal Not Plausible Engine 3176 Set point of Metering Unit Not Plausible in Overrun Engine 3177 Engine Over speed Detected Engine 3178 Timeout of CAN Message BC2EDC1 Engine 3179 Timeout of CAN Message BC2EDC2 Engine 3180 Timeout of CAN Message VCM2EDC Engine 3181 Rail Pressure Positive Deviation Too High Concerning Set point Engine 3182 Timeout of CAN Message RxCCVS Engine 3183 Timeout of CAN Message TSC1-VR (When Active) Engine 3184 Timeout of CAN Message TSC1-VR (When Inactive) Engine 3185 Timeout of CAN message TF Engine 3186 Cylinder1 Warning -Fast Decay Error Engine 3187 Cylinder1 Warning - Application Dependent Engine 3188 Cylinder1 Warning -Injector Circuit Low Engine 3189 Cylinder1 Warning -Current Level Error Engine 3190 Cylinder2 Warning -Fast Decay Error Engine 3191 Cylinder2Warning -Application Dependent Engine 3192 Cylinder2 Warning -Open Load Engine 3193 Cylinder2 Warning -Current Level Error Engine 3194 Cylinder3 Warning -Fast Decay Error Engine 3195 Cylinder3 Warning - Application Dependent Engine 3196 Cylinder3 Warning -Open Load Engine 3197 Cylinder3 Warning -Current Level Error Engine 3198 Cylinder4 Warning -Fast Decay Error Engine 3199 Cylinder4 Warning - Application Dependent

Engine 3200 Cylinder4 Warning -Open Load Engine 3201 Cylinder4 Warning -Current Level Error Engine 3202 Cylinder5 Warning -Fast Decay Error Engine 3203 Cylinder5 Warning -Application Dependent Engine 3204 Cylinder5 Warning -Open Load Engine 3205 Cylinder5 Warning -Current Level Error Engine 3206 Cylinder6 Warning -Fast Decay Error Engine 3207 Cylinder6 Warning - Application Dependent Engine 3208 Cylinder6 Warning -Open Load Engine 3209 Cylinder6 Warning -Current Level Error Engine 3210 Bank1 -General Short circuit on Injection Cable Engine 3211 Bank1 -Injection Cable Short circuit Low Side to Ground Engine 3212 Bank1 - Application Dependent Engine 3213 Bank1 -Unclassifiable Error Engine 3214 Bank1 Warning -Application Dependent Engine 3215 Bank1 Warning - Application Dependent Engine 3216 Bank1 Warning -Open Load Engine 3217 Bank1 Warning -Unclassifiable Error Engine 3218 Bank2-General Short circuit on Injection Cable Engine 3219 Bank2 -Injection Cable Short circuit Low Side to Ground Engine 3220 Bank2 - Application Dependent Engine 3221 Bank2 -Unclassifiable Error Engine 3222 Bank2 Warning -Application Dependent Engine 3223 Bank2 Warning -Application Dependent Engine 3224 Bank2 Warning -Open Load Engine 3225 Bank2 Warning -Unclassifiable Error Engine 3226 Messages SRA2EDC Engine 3227 Injection Processor (CY33X) Error -Internal Reset / Clock Loss / Voltage Too Low Engine 3228 Injection Processor (CY33X) Error -Unlocked / Initialization Failure Engine 3229 Injection Processor (CY33X) Error -Injections Limited By Software Engine 3230 Injection Processor (CY33X) Error -SPI Communication Failure Engine 3231 Injection Processor Error -Internal Reset / Clock Loss / Voltage Too Low Engine 3232 Injection Processor Error -Unlocked / Initialization Failure Engine 3233 Injection Processor Error -Test Mode Engine 3234 Injection Processor Error -SPI Communication Failure Engine 3235 Number of Injections Limited -by Charge Balance Engine 3236 Number of Injections Limited -by Quantity Balance Engine 3237 Number of Injections Limited -by Software Engine 3238 ECM Internal SPI Communication Error -CJ940 Engine 3239 ECM EEPROM -Read Operation Failure Engine 3240 ECM EEPROM -Write Operation Failure Engine 3241 ECM EEPROM -Default Value Used Engine 3242 ECM (Locked) Recovery Occurred Engine 3243 ECM (Suppressed) -Recovery Occurred Engine 3244 ECU Recovery (Visible) -Recovery Occurred Engine 3245 ECM Processor -Watchdog Not Plausible Engine 3246 Shutoff Paths During Initialization - Watchdog Engine 3247 Shutoff Paths During Initialization -Supply Voltage Too High Engine 3248 Shutoff Paths During Initialization -Supply Voltage Too Low Engine 3249 TPU Monitoring -Time Deviation between TPU and System Not Plausible Engine 3250 Dataset -Variant Defect Engine 3251 Dataset -Requested Variant Could Not Be Set

Engine 3252 Controller Watchdog -SPI Communication Failure Engine 3253 ADC Monitoring -Reference Voltage Too High Engine 3254 ADC Monitoring -Reference Voltage Too Low Engine 3255 ADC Monitoring -Test Impulse Error Engine 3256 ADC Monitoring -Queue Error Engine 3257 Turbine Speed and Air Pressure Too High Engine 3258 High Side Power -Short circuit to Battery Engine 3259 High Side Power Short circuit to Ground Engine 3260 Low Side Power -Open Load Engine 3261 Low Side Power -Short circuit to Battery of Excess Temperature Engine 3262 Low Side Power Short circuit to Ground Engine 3263 ECM Bus Off on CAN C Engine 3264 Immobilizer -Injection Disabled Engine 3265 Overrun Monitoring -Injection Time Too Long Engine 3266 Redundant Engine Speed in Overrun Monitoring -Speed Signal Not Plausible Engine 3267 Main relay 3 Short circuit to Battery Engine 3268 Main relay 3 Short circuit to Ground Engine 3269 Grid Heater Switch On Test -Voltage Drop Too High Engine 3270 Grid Heater Switch On Test -Voltage Drop Too Low Engine 3271 Fuel Low Pressure Sensor -(via CAN) No Signal Engine 3272 Fuel Low Pressure Sensor -Signal Above Range Max. Engine 3273 Fuel Low Pressure Sensor -Signal Below Range Min. Engine 3274 Fuel Low Pressure Sensor Dynamic Plausibility Test - Above Map Engine 3275 Fuel Low Pressure Sensor Dynamic Plausibility Test -Below Map Engine 3276 MIL Visualization Not Available for BC2EDC1 Engine 3277 Timeout of CAN Message Dashboard Display Engine 3278 ECM Internal Supply Voltage Too High -CJ940 Above Limit Engine 3279 ECM Internal Supply Voltage Too Low -CJ940 Below Limit Engine 3280 Sensor Supply Voltage 1 -High Engine 3281 Sensor Supply Voltage 1 - Low Engine 3282 Timeout of CAN Message WSI (Wheel Speed Info) Engine 3283 Sensor Supply Voltage 2 -High Engine 3284 Sensor Supply Voltage 2 - Low Engine 3285 Sensor Supply Voltage 3 -High Engine 3286 Sensor Supply Voltage 3 - Low Engine 3287 Turbo Compound Monitoring -No Signal Engine 3288 Turbo Compound Monitoring -Signal High Engine 3289 Turbo Compound Monitoring -Signal Low Engine 3290 Turbo Compound Monitoring -Signal Not Plausible Engine 3291 Cylinder 1 Specific Errors - No Signal Engine 3292 Cylinder 1 Specific Errors -Signal Low Engine 3293 Cylinder 1 BIP Search Failure - Too Many Unsuccessful Searched Engine 3294 Cylinder 1 Specific Errors -Signal Not Plausible Engine 3295 Cylinder 2 Specific Errors - No Signal Engine 3296 Cylinder 2 Specific Errors -Signal Low Engine 3298 Cylinder 2 Specific Errors -Signal Not Plausible Engine 3299 Cylinder 3 Specific Errors - No Signal Engine 3300 Cylinder 3 Specific Errors -Signal Low Engine 3301 Cylinder 3 BIP Search Failure - Too Many Unsuccessful Searches - Rail Pressure Negative Deviation too High on Minimum Metering Engine 3302 Cylinder 3 Specific Errors -Signal Not Plausible Engine 3303 Cylinder 4 Specific Errors -No Signal

Engine 3304 Cylinder 4 Specific Errors -Signal Low Engine 3305 Cylinder 4 BIP Search Failure - Too Many Unsuccessful Searches - Rail Pressure below Minimum Limit in Controlled Mode Engine 3306 Cylinder 4 Specific Errors -Signal Not Plausible Engine 3307 Cylinder 5 Specific Errors -No Signal Engine 3308 Cylinder 5 Specific Errors -Signal Low Engine 3309 Cylinder 5 BIP Search Failure - Too Many Unsuccessful Searches - Rail Pressure above Maximum Limit in Controlled Mode Engine 3310 Cylinder 5 Specific Errors -Signal Not Plausible Engine 3311 Cylinder 6 Specific Errors - No Signal Engine 3312 Cylinder 6 Specific Errors -Signal Low Engine 3313 Cylinder 6 BIP Search Failure - Too Many Unsuccessful Searches - Rail Pressure Drop Rate too High Engine 3314 Cylinder 6 Specific Errors -Signal Not Plausible Engine 3315 Minimum Number of Injections Not Reached -Stop Engine Engine 3316 Minimum Number of Injections Not Reached -Stop Engine Engine 3317 Minimum Number of Injections Not Reached -Stop Engine Engine 3318 Minimum Number of Injections Not Reached -Stop Engine Engine 3319 DM1DCU SPN2 message -Error in DCU active Engine 3320 DM1DCU SPN3 message -Error in DCU active Engine 3321 Timeout of CAN Message DM1DCU SPN4 Engine 3322 Timeout of CAN Message ERC1DR Engine 3323 Timeout of CAN Message RxAMCONIv (Ambient Conditions) Engine 3324 Timeout of CAN Message EBC1 (Electronic Brake Switch) Engine 3325 Timeout of CAN Message ETC1 (Transmission) Engine 3326 Timeout of CAN Message ETC2 (Transmission) Engine 3327 Timeout of CAN Message TCO1 (Tachograph) Engine 3328 Timeout of CAN Message TSC1-AR (When Inactive) Engine 3329 Timeout of CAN Message TSC1-AR (When Active) Engine 3330 Timeout of CAN Message TSC1-DE (When Inactive) Engine 3331 Timeout of CAN Message TSC1-DE (When Active) Engine 3332 Timeout of CAN Message TSC1-DR (When Inactive) Engine 3333 Timeout of CAN Message TSC1-DR (When Active) Engine 3334 Timeout of CAN message TSC1-PE Torque (When Active) Engine 3335 Timeout of CAN message TSC1-PE Torque (When Inactive) Engine 3336 Timeout of CAN Message TSC1-TR (When Inactive) Engine 3337 Timeout of CAN Message TSC1-TR (When Active) Engine 3338 Timeout of CAN message TSC1-VE Speed (When Inactive) Engine 3339 Timeout of CAN message TSC1-VE Speed (When Active) Engine 3340 Timeout of CAN Message Time Date Engine 3341 Timeout of CAN Message HRVD (High Resolution Vehicle Distance) Engine 3342 Power Stage Air Heater 2 Actuator - No Signal Engine 3343 Power Stage Air Heater 2 Actuator -Signal High Engine 3344 Power Stage Air Heater 2 Actuator -Signal Low Engine 3345 Total Throttle Failure (Only applies to Dual Throttle Vehicles) Engine 3346 Multiple State Switch Engine 3347 Multiple State Switch Engine 3348 Multiple State Switch Engine 3349 Multiple State Switch Engine 3350 Terminal 50 - Always On Engine 3351 Engine Brake Decompression Valve -Open Load Engine 3352 Engine Brake Decompression Valve Short circuit to Battery

Engine 3353 Engine Brake Decompression Valve _Short circuit to Ground

Engine 3354 Main Relay 4 (Engine Brake Exhaust Valve) Short circuit to Ground

Engine 3355 Main Relay 4 (Engine Brake Exhaust Valve) -Short to Battery or open load

Engine 3356 Cylinder Shutoff (Cylinder Balancing Disabled) -Shutoff Active

Engine 3357 Misfire in Multiple Cylinders - Too Many Misfires

Engine 3358 CAN Transmit Timeout

Engine 3359 TSC Demand Physically Implausible

Engine 3360 Driving Dynamic Control -Not Plausible

Engine 3361 ECM EEPROM -General Error

Engine 3362 Torque to Quantity Map -Not Plausible

Engine 3363 Atmospheric Pressure Sensor -Processed via ADC (no CAN Plausibility Performed)

Engine 3364 Foot Pedal 2 -Signal Too High

Engine 3365 Foot Pedal 2 -Signal Too Low

Engine 3366 Foot Pedal 2 -Signal Not Plausible Compared to Foot Pedal 1

Engine 3367 Coolant Temperature Test Failure

Engine 3368 Info: Torque Limitation due to OBD Performance Limiter by Legislation

Engine 3369 Torque Reduction due to Smoke Limitation

Engine 3370 Info: Torque Limitation due to Engine Protection (against Excessive Torque, Engine Over speed and Overheat)

Engine 3371 Info: Torque Limitation due to Fuel Quantity Limitation because of Injection System Errors

Engine 3372 Injection Quantity Adjustment failure -Invalid Adjustment Value

Engine 3373 Injection Quantity Adjustment failure -EEPROM Adjustment Value Not Readable Engine 3374 Injection Quantity Adjustment failure -Invalid EEPROM Adjustment Value Checksum

Engine 3375 Constant Engine RPM Increase / Decrease Switch Short circuit to Battery

Engine 3376 Engine Controller Software Does Not Support Power Management (Engine Power

Management Option Enabled, but Engine Software Not Compatible)

Engine 3377 Constant Engine RPM Switch Detected but Option Not Enabled.

Engine 3380 Engine Fan Increase Speed Error (open or short circuit)

Engine 3381 Engine Fan Decrease Speed Error (open or short circuit)

Engine 3382 Fan Control Solenoid Short To 12Vr

Engine 3383 Fan Control Solenoid Open Or Short To GND

Engine 3384 Vistronic Engine Cooling Fan driver open or short circuit

Engine 3399 Engine Fuel Lift Pump relay driver over current fault

Engine 3513 SCR Catalyst not present _Relation of temperature behavior between both Catalyst Temperatures not plausible

Engine 3517 Ambient Air Temperature Sensor failure (of Humidity Sensor) -Signal too high

Engine 3518 Ambient Air Temperature Sensor failure (of Humidity Sensor) -Signal too low

Engine 3519 Ambient Air Temperature Sensor failure (of Humidity Sensor) -CAN Signal failure

Engine 3521 NOx Estimation failure -Estimated Nox signal not reliable

Engine 3528 NOx Sensor Plausibility failure -Signal not plausible

Engine 3529 NOx Sensor Failure -Open Load

Engine 3530 NOx Sensor Failure -Short Circuit

Engine 3532 NOx Sensor Failure -Sensor not ready in time

Engine 3533 CAN Message timeout Nox (from Nox Sensor) -CAN timeout

Engine 3537 CAN Message timeout DM1DCU (from DCU) -CAN timeout

Engine 3541 CAN Message timeout SCR1 (from DCU) -CAN timeout

Engine 3545 Info: SCR Dosing Valve Overheat Protection -Torque Limitation Level2 for SCR Protection active

Engine 3546 Info: SCR Dosing Valve Overheat Protection -Torque Limitation Level1 for SCR Protection active Engine 3549 Humidity Sensor Signal Ratio failure -Signal Ratio above Limit Engine 3550 Humidity Sensor Signal Ratio failure -Signal Ratio below Limit Engine 3555 CAN Message timeout SCR2 (from DCU)-CAN timeout Engine 3557 Info: Humidity Sensor possibly saturated with water droplets -Signal Ratio above Limit Engine 3558 Info: Humidity Sensor possibly saturated with water droplets -Signal Ratio below Limit Engine 3561 NOx value not plausible (After treatment plausibility) Engine 3565 Urea quality and urea warning level 1 Engine 3569 urea quality and urea warning level 2 Engine 3573 urea quality and urea warning level 3 Engine 3577 DM1DCU SPN1 message -Error in DCU active Engine 3581 Performance limit active due to either stage -Performance Limitation active EHR 4135 Rear Remote No.3 -Spool Deflection Excessive EHR 4136 Rear Remote No.3 -Open Center Position Not Reached EHR 4137 Rear Remote No.3 - Manual Operation EHR 4138 Rear Remote No.3 -Output Stage Faulty EHR 4139 Rear Remote No.3 - Position Transducer Faulty EHR 4140 Rear Remote No.3 -Spool Cannot be Brought Back to Neutral EHR 4141 Rear Remote No.3 -Spool Not in Neutral When Switched On EHR 4142 Rear Remote No.4 - No EHR Control Messages EHR 4143 Rear Remote No.4 -Implausible EHR Control Messages EHR 4144 Rear Remote No.4 -Checksum Verification Failure EHR 4145 Rear Remote No.4 -Neutral Set point EHR 4146 Rear Remote No.4 -Under Voltage EHR 4147 Rear Remote No.4 -Over Voltage EHR 4148 Rear Remote No.4 -Spool Deflection Too Short EHR 4149 Rear Remote No.4 -Spool Deflection Excessive EHR 4150 Rear Remote No.4 -Open Center Position Not Reached EHR 4151 Rear Remote No.4 - Manual Operation EHR 4152 Rear Remote No.4 -Output Stage Faulty EHR 4153 Rear Remote No.4 -Position Transducer Faulty EHR 4154 Rear Remote No.4 -Spool Cannot be Brought Back to Neutral EHR 4155 Rear Remote No.4 -Spool Not in Neutral When Switched On EHR 4156 Rear Remote No.5 -No EHR Control Messages EHR 4157 Rear Remote No.5 - Implausible EHR Control Messages EHR 4158 Rear Remote No.5 - Checksum Verification Failure EHR 4159 Rear Remote No.5 -Neutral Set point EHR 4160 Rear Remote No.5 -Under Voltage EHR 4161 Rear Remote No.5 Over Voltage EHR 4162 Rear Remote No.5 -Spool Deflection Too Short EHR 4163 Rear Remote No.5 -Spool Deflection Excessive EHR 4164 Rear Remote No.5 -Open Center Position Not Reached EHR 4165 Rear Remote No.5 - Manual Operation EHR 4166 Rear Remote No.5 -Output Stage Faulty EHR 4167 Rear Remote No.5 -Position Transducer Faulty EHR 4168 Rear Remote No.5 -Spool Cannot be Brought Back to Neutral EHR 4169 Rear Remote No.5 -Spool Not in Neutral When Switched On EHR 4170 Rear Remote No.1 Lever Not Calibrated EHR 4173 Rear Remote No.2 -Lever Not Calibrated

EHR 4177 Rear Remote No.3 -Lever Not Calibrated EHR 4180 Rear Remote No.4 -Lever Not Calibrated EHR 4190 EHR 1 Offline Err EHR 4191 EHR 2 Offline Err EHR 4192 EHR 3 Offline Err EHR 4193 EHR 4 Offline Err EHR 4198 EHR 5 Offline Err EHR 4216 Rear Remote No.1 -Valve Spool Not Calibrated EHR 4217 Rear Remote No.2 -Valve Spool Not Calibrated EHR 4218 Rear Remote No.3 -Valve Spool Not Calibrated EHR 4219 Rear Remote No.4 -Valve Spool Not Calibrated EHR 4220 Rear Remote No.5 -Valve Spool Not Calibrated EHR 4301 Rear Remote No.6 - No EHR Control Messages EHR 4302 Rear Remote No.6 -Implausible EHR Control Messages EHR 4303 Rear Remote No.6 -Checksum Verification Failure EHR 4304 Rear Remote No.6 -Neutral Set point EHR 4305 Rear Remote No.6 -Under Voltage EHR 4306 Rear Remote No.6 -Over Voltage EHR 4307 Rear Remote No.6 -Spool Deflection Too Short EHR 4308 Rear Remote No.6 -Spool Deflection Excessive EHR 4309 Rear Remote No.6 -Open Center Position Not Reached EHR 4310 Rear Remote No.6 - Manual Operation EHR 4311 Rear Remote No.6 -Output Stage Faulty EHR 4312 Rear Remote No.6 -Position Transducer Faulty EHR 4313 Rear Remote No.6 -Spool Cannot be Brought Back to Neutral EHR 4314 Rear Remote No.6 -Spool Not in Neutral When Switched On EHR 4315 Rear Remote No.7 - No EHR Control Messages EHR 4316 Rear Remote No.7 -Implausible EHR Control Messages EHR 4317 Rear Remote No.7 - Checksum Verification Failure EHR 4318 Rear Remote No.7 -Neutral Set point EHR 4319 Rear Remote No.7 -Under Voltage EHR 4320 Rear Remote No.7 -Over Voltage EHR 4321 Rear Remote No.7 -Spool Deflection Too Short EHR 4322 Rear Remote No.7 -Spool Deflection Excessive EHR 4323 Rear Remote No.7 - Open Center Position Not Reached EHR 4324 Rear Remote No.7 - Manual Operation EHR 4325 Rear Remote No.7 -Output Stage Faulty EHR 4326 Rear Remote No.7 - Position Transducer Faulty EHR 4327 Rear Remote No.7 -Spool Cannot be Brought Back to Neutral EHR 4328 Rear Remote No.7 -Spool Not in Neutral When Switched On EHR 4329 Rear Remote No.8 - No EHR Control Messages EHR 4330 Rear Remote No.8 -Implausible EHR Control Messages EHR 4331 Rear Remote No.8 -Checksum Verification Failure EHR 4332 Rear Remote No.8 -Neutral Set point EHR 4333 Rear Remote No.8 - Under Voltage EHR 4334 Rear Remote No.8 -Over Voltage EHR 4335 Rear Remote No.8 -Spool Deflection Too Short EHR 4336 Rear Remote No.8 -Spool Deflection Excessive EHR 4337 Rear Remote No.8 - Open Center Position Not Reached EHR 4338 Rear Remote No.8 - Manual Operation EHR 4339 Rear Remote No.8 -Output Stage Faulty EHR 4330 Rear Remote No.8 -Position Transducer Faulty

EHR 4341 Rear Remote No.8 -Spool Cannot be Brought Back to Neutral

EHR 4342 Rear Remote No.8 -Spool Not in Neutral When Switched On

EHR 4343 Rear Remote No.5 -Lever Not Calibrated

EHR 4344 Rear Remote No.6 -Lever Not Calibrated

EHR 4345 Rear Remote No.7 -Lever Not Calibrated

EHR 4346 Rear Remote No.8 -Lever Not Calibrated

EHR 4347 EHR 6 Offline Err

EHR 4348 EHR 7 Offline Err

EHR 4349 EHR 8 Offline Err

EHR 4350 Rear Remote No.6 -Valve Spool Not Calibrated

EHR 4351 Rear Remote No.7 -Valve Spool Not Calibrated

EHR 4352 Rear Remote No.8 -Valve Spool Not Calibrated

EHR 4353 EHR FB 1High Err

EHR 4354 EHR FB 1 Low Err

EHR 4355 EHR FB 3 High Err

EHR 4356 EHR FB 3 Low Err

EHR 4357 EHR Implement Lower Error

EHR 4358 EHR Implement Raise Error

Rear PTO 5001 PTO cab switch, or Auto PTO switch, or PTO remote fender switch is on during tractor power up.

Rear PTO 5002 PTO switch interlock

Rear PTO 5003 Auto PTO switch data is set to the error state(CCH Only)

Rear PTO 5004 Auto PTO switch stuck on condition(CCH Only)

Rear PTO 5005 PTO remote fender switch short(CCH Only)

Rear PTO 5006 PTO remote fender switch open(CCH Only)

Rear PTO 5007 PTO remote fender switch stuck on(CCH Only)

Rear PTO 5008 Both PTO On and Off switches are simultaneously on. One of the PTO switches is short to 12 volts.

Rear PTO 5009 PTO solenoid open circuit or shorted to ground or AD12vs2 voltage is low.

Rear PTO 5010 PTO solenoid circuit shorted to B+ when PTO is in the off state.

Rear PTO 5011 Driver is on and no current is sensed.

Rear PTO 5012 PTO clutch is slipping excessively for the duration of 5 seconds or longer.

Rear PTO 5013 Engine speed is too low for the PTO to be in the \tilde{A} on \tilde{A} state.

Rear PTO 5014 PTO is commanded off but the PTO speed greater than zero.

Rear PTO 5015 The software has not detected PTO shaft speed for greater than 3 seconds since the PTO initial fill vale was commanded

Rear PTO 5016 PTO speed is detected when the PTO is in the off state without engine RPM.

Rear PTO 5017 PTO clutch did not lock up after 6 seconds of clutch motion.

Rear PTO 5018 PTO speed sensors wiring swapped (CCH Only)

Rear PTO 5019 PTO is configured as a two speed and no shaft size frequency was detected when the PTO was switched on. (CCH Only)

Rear PTO 5020 PTO is configured as a single speed and the shaft size frequency was detected when the PTO was switched on. Shaft size frequency input is only used for two speeds PTO.(CCH Only)

Rear PTO 5021 Auto PTO disabled(CCH Only)

Rear PTO 5022 PTO switch is in the on position when the engine is off.

Rear PTO 5023 PTO clutch lube solenoid circuit shorted to B+ when PTO is in the off state.(4WD Only)

Rear PTO 5024 PTO clutch lube solenoid open circuit or shorted to ground or +12 VF3 voltage is low.(4WD Only)

Rear PTO 5025 Rear PTO

Rear PTO 5027 Low side of PTO solenoid connected permanently to GND

Rear PTO 5028 Clutch speed sensor open or short to Vbat

Rear PTO 5029 Clutch speed sensor short to GND

Rear PTO 5030 Shaft size speed sensor open or short to Vbat(CCH Only)

Rear PTO 5031 Shaft size speed sensor short to GND(CCH Only)

Rear PTO 5032 12VF3voltage supply is low. (possible blown fuse*)

MFD/Diff Lock 6001 MFD (CCH) or Front Diff Lock (4WD) solenoid failed. Possible Failure modes: 1. Solenoid coil failed 2. Damaged wiring 3. Loose connector or bent pin 4. TCU Internal failure

MFD/Diff Lock 6002 Rear Diff Lock solenoid failed. Possible Failure modes: 1. Diff Lock solenoid coil failed 2. Damaged wiring 3. Loose connector or bent pin 4. TCU Internal failure MFD/Diff Lock 6003 Brake light relay fault. 1. Short to 12 volts 2. Open circuit or short to ground.

MFD/Diff Lock 6004 CAN-BUS indicating Rear Diff Lock Switch failed in the armrest. Possible failure modes: 1. Rear Diff Lock Switch failed in Armrest2. Auto Diff Lock Switch failed in Armrest (CCH Only) 3. Communication problems between the TCU controller and the Armrest controller

MFD/Diff Lock 6005 Rear Differential Lock and Auto Differential Lock (Only CCH):1. Diff Lock On and Auto Diff Lock switches are both active

MFD/Diff Lock 6006 CAN-BUS indicating MFD (CCH) or Front Diff Lock (4WD)Switch failed in the armrest. Possible failure modes: 1. MFD (CCH) or Front Diff Lock (4WD)failed in Armrest2. Auto MFD Switch failed in Armrest, (CCH). 3. Communication problems between the TCU controller and the Armrest

MFD/Diff Lock 6007 Both MFD and Auto MFD switches active fault

MFD/Diff Lock 6008 Steering angle sensor above maximum voltage limit.

MFD/Diff Lock 6009 Steering angle sensor below minimum voltage limit.

MFD/Diff Lock 6010 12VS1voltage supply is low. (possible blown fuse*)

MFD/Diff Lock 6011 12VS2 voltage supply is low. (possible blown fuse*)

Front PTO 8001 Front PTO cab switch is on during tractor power up.

Front PTO 8002 Front PTO cab switch open

Front PTO 8003 Front PTO cab switch short

Front PTO 8004 Front PTO solenoid open circuit or shorted to ground or AD12VU2 voltage is low.

Front PTO 8005 Front PTO solenoid circuit shorted to B+ when Front PTO is in the off state.

Front PTO 8006 Low side driver is stuck on and no current is sensed.

Front PTO 8007 Front PTO switch is in the on position when the engine is off.

Front PTO 8010 12VU2voltage supply is low. (possible blown fuse*)

Front Suspension 10001 Front suspension Pump Not tank Valve solenoid is open circuit or shorted to ground

Front Suspension 10002 Front suspension rod Side Valve solenoid is open circuit or shorted to ground

Front Suspension 10003 Front suspension piston Side Valve solenoid is open circuit or shorted to ground

Front Suspension 10004 Front Suspension Position sensor out of Range High Error

Front Suspension 10005 Front Suspension Position sensor out of Range Low Error

Front Suspension 10006 Front suspension will not raise error

Front Suspension 10007 Front Suspension will not Lower error

Front Suspension 10008 Front Suspension Piston Pressure transducer range high error

Front Suspension 10009 Front Suspension Piston Pressure transducer range lower error

Front Suspension 10010 Front Suspension Rod Pressure transducer range high error

Front Suspension 10011 Front Suspension Rod Pressure transducer range lower error

Front Suspension 10012 Front suspension Rod side pressure will not raise error

Front Suspension 10013 Front suspension piston side pressure will not raise error

Front Suspension 10014 Front Suspension Not calibrated error

Front Suspension 10015 Front suspension Lock Valve Solenoid is open circuit or is shorted to ground.

Front Suspension 10016 FSUS_ENABLE_SW_ERR 10016

Front Suspension 10017 FSUS_ENABLE_SW_NA_ERR10017

Front Suspension 10018 Front Suspension Pump not tank Solenoid over current

Front Suspension 10019 Front Suspension rod Side Solenoid over current

Front Suspension 10020 Front Suspension piston Solenoid over current

Front Suspension 10021 Front Suspension lock out Solenoid over current

Front Suspension 10022 12VM voltage supply is low. (possible blown fuse*)

Front Suspension 10023 12VF3 voltage supply is low. (possible blown fuse*)

Front Suspension 10024 12VF1 voltage supply is low. (possible blown fuse*)

ICU 14002 Trans oil filter switch closed to ground on power up.

ICU 14003 Hyd oil filter switch closed to ground on power up.

ICU 14005 PTO shaft speed data is _ERROR_ or _NOT AVAILABLE_ state from PTO.

ICU 14006 GOV ENGINE speed data is _ERROR_ or _NOT AVAILABLE_ state from GOV.

ICU 14007 Engine Over speeding

ICU 14008 ENGINE oil pressure data is _ERROR_ or _NOT AVAILABLE_ state from GOV.

ICU 14009 Loss of valid ENGINE Hours

ICU 14010 PTO controller off line

ICU 14011 Communications Lost with Vehicle Data Bus 1 and ALL other controllers

ICU 14013 TRANSMISSION Off Line

ICU 14014 ENGINE coolant temperature data is _ERROR_ or _NOT AVAILABLE_ state from GOV.

ICU 14015 Engine Intake Air Temperature data is _ERROR|| or _NOT AVAILABLE|| state from GOV.

ICU 14016 Engine shutdown activated

ICU 14017 Fuel Level Sensor voltage out of range low.

ICU 14018 GOV Off Line

ICU 14019 ATC Off Line

Armrest 18001 Hand throttle #1 -voltage too low (New Holland Only)

Armrest 18002 Hand throttle #1 -voltage too high (New Holland Only)

Armrest 18003 Hand throttle #2 -voltage too low

Armrest 18004 Hand throttle #2 -voltage too high

Armrest 18005 Engine droop control -voltage too low

Armrest 18006 Engine droop control -voltage too high

Armrest 18007 Multi-function handle -switch error

Armrest 18008 Multi-function handle -voltage too low

Armrest 18009 Multi-function handle -voltage too high

Armrest 18010 Powershift throttle -voltage too low (Case IH)

Armrest 18011 Powershift throttle -voltage too high (Case IH)

Armrest 18012 CVT mode switch error

Armrest 18013 Multi-function handle -encoder position error

Armrest 18014 Rear hitch position control potentiometer -voltage too low

Armrest 18015 Rear hitch position control potentiometer -voltage too high

Armrest 18016 Rear hitch draft control potentiometer -voltage too low

Armrest 18017 Rear hitch draft control potentiometer -voltage too high

Armrest 18018 Rear hitch height limit potentiometer -voltage too low

Armrest 18019 Rear hitch height limit potentiometer -voltage too high

Armrest 18020 Rear hitch drop rate potentiometer -voltage too low

Armrest 18021 Rear hitch drop rate potentiometer -voltage too high

Armrest 18022 Rear hitch sensitivity control potentiometer -voltage too low

Armrest 18023 Rear hitch sensitivity control potentiometer -voltage too high Armrest 18024 EHR flow encoder position error Armrest 18025 Rear hitch slip control potentiometer -voltage too low Armrest 18026 Rear hitch slip control potentiometer -voltage too high Armrest 18027 EHR 5 lever position -voltage too low (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18028 EHR 5 lever position -voltage too high (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18029 EHR 6 lever position -voltage too low (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18030 EHR 6 lever position -voltage too high (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18031 Front hitch position / pressure control potentiometer -voltage too high Armrest 18032 Front hitch position / pressure control potentiometer -voltage too low Armrest 18033 Front hitch position / pressure mix potentiometer -voltage too high Armrest 18034 Front hitch position / pressure mix potentiometer -voltage too low Armrest 18035 Front hitch position height limit potentiometer -voltage too high Armrest 18036 Front hitch position height limit potentiometer -voltage too low Armrest 18037 Front hitch height limit enable switch error Armrest 18038 Front hitch position drop rate potentiometer -voltage too high Armrest 18039 Front hitch position drop rate potentiometer -voltage too low Armrest 18040 EHR 1 lever position -voltage too low Armrest 18041 EHR 1 lever position -voltage too high Armrest 18042 EHR 2 lever position -voltage too low Armrest 18043 EHR 2 lever position -voltage too high Armrest 18044 EHR 3 lever position -voltage too low Armrest 18045 EHR 3 lever position -voltage too high Armrest 18046 EHR float control switch error Armrest 18047 EHR 4 lever position -voltage too low Armrest 18048 EHR 4 lever position -voltage too high Armrest 18049 Joystick 1 X-axis position -voltage too low Armrest 18050 Joystick 1 X-axis position -voltage too high Armrest 18051 Joystick 1 Y-axis position -voltage too low Armrest 18052 Joystick 1 Y-axis position -voltage too high Armrest 18053 Joystick 1 proportional rocker switch -voltage too low Armrest 18054 Joystick 1 proportional rocker switch -voltage too high Armrest 18055 Joystick 2 X-axis position -voltage too low (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18056 Joystick 2 X-axis position -voltage too high (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18057 Joystick 2 Y-axis position -voltage too low (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18058 Joystick 2 Y-axis position -voltage too high (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18059 Joystick 2 proportional rocker switch -voltage too low (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18060 Joystick 2 proportional rocker switch -voltage too high (not applicable to CCM/APH it may indicate incorrect configuration of the ACM) Armrest 18061 Reference voltage short circuit to 0V Armrest 18062 Reference voltage short circuit to 12V Armrest 18063 EEPROM fault Armrest 18064 MFH communication error

Armrest 18065 MFH basic assurance test error

Armrest 18066 EHR 1 lever implausibility error

Armrest 18067 EHR 2 lever implausibility error

Armrest 18068 EHR 3 lever implausibility error

Armrest 18069 EHR 4 lever implausibility error

Armrest 18070 EHR 5 lever implausibility error (not applicable to CCM/APH _it may indicate incorrect configuration of the ACM)

Armrest 18071 EHR 6 lever implausibility error (not applicable to CCM/APH _it may indicate incorrect configuration of the ACM)

Armrest 18072 EDC mouse raise/work switch fault (NH Only)

DCU 19001 Battery voltage sensing (electrical) _signal high _P0563 Battery voltage evaluation above upper limit

DCU 19002 Battery voltage sensing (electrical) |□ signal low |□P0562 Battery voltage evaluation below lower limit

DCU 19010 Temperature sensor after catalyst (electrical) _signal high _P042D Catalyst Temperature Sensor Circuit High

DCU 19011 Temperature sensor after catalyst (electrical) |□ signal low |□ P042C Catalyst Temperature Sensor Circuit Low

DCU 19019 Temperature sensor before catalyst (electrical) _signal high _P0428 Catalyst Temperature Sensor Circuit High

DCU 19020 Temperature sensor before catalyst (electrical) |□ signal low |□ P0427 Catalyst Temperature Sensor Circuit Low

DCU 19037 Sensor supply 2 (5V internal; for UREA pressure sensors) _Supply Voltage too high _P204D Reagent -pressure sensor -short circuit high

DCU 19038 Sensor supply 2 (5V internal; for UREA pressure sensors) | Supply voltage too low | P204C Reagent -pressure sensor -short circuit low

DCU 19046 UREA pressure sensor in box (electrical) | supply voltage error | P204A Reagent - pressure sensor -open circuit

DCU 19047 UREA pressure sensor in box (electrical) _signal high _P204D Reagent -pressure sensor -short circuit high

DCU 19048 UREA pressure sensor in box (electrical) | signal low | P204C Reagent -pressure sensor -short circuit low

DCU 19055 UREA Temperature sensor in box (electrical) _high signal _P2045 Reagent - temperature sensor of pump module -short circuit high

DCU 19056 UREA Temperature sensor in box (electrical) | signal low | P2044 Reagent - temperature sensor of pump module -short circuit low

DCU 19064 Voltage supply internal heaters 1 (UB1) electrical |□Open circuit to UB1 |□P20C5 Pump module - Internal heating -open circuit

DCU 19065 Voltage supply internal heaters 1 (UB1) electrical |□ Short to bat at UB1 with Key 15 off |□ P20C8 Pump module -Internal heating -short circuit high

DCU 19073 Voltage supply 2 -tube heaters (UB2) electrical $|\Box$ Short to bat at UB2 with Key 15 off $|\Box$ P20C4 Reagent -suction tube heating -short circuit high

DCU 19074 Voltage supply 2 -tube heaters (UB2) electrical |□ Open circuit to UB2 |□ P20C1 Reagent -suction tube heating -open circuit

DCU 19075 Voltage supply 2 -tube heaters (UB2) electrical |□ Short circuit to Ground UB2 |□P20C3 Reagent - suction tube heating -short circuit low

DCU 19082 Voltage supply 3 -Coolant control valve and reverting valve (UB3) electrical |□Short to bat at UB3 with Key 15 off |□P20A3 Vent valve (Reductant Purge Control Valve) - short circuit high

DCU 19083 Voltage supply 3 -Coolant control valve and reverting valve (UB3) electrical |□Open circuit to UB3 |□P20A0 Vent valve (Reductant Purge Control Valve) -open circuit DCU 19084 Voltage supply 3 -Coolant control valve and reverting valve (UB3) electrical |□Short circuit to Ground UB3 |□P20A2 Vent valve (Reductant Purge Control Valve) -short circuit low

DCU 19091 Monitoring VDD11 voltage -Dosing valve | supply voltage low | P0658 12 Volt supply for dosing module -below lower limit

DCU 19092 Monitoring VDD11 voltage-Dosing valve _supply voltage high _P0659 12 Volt supply for dosing module -above upper limit

DCU 19100 UREA level sensor (electrical) | supply voltage error | P203E Reductant Level Sensor -Circuit Intermittent/Erratic

DCU 19101 UREA level sensor (electrical) _signal high _P203D Reagent -tank level sensor - short circuit high

DCU 19102 UREA level sensor (electrical) | signal low | P203C Reagent -tank level sensor - short circuit low

DCU 19109 UREA Temperature sensor in Tank (electrical) _signal high _P205D Reagent -tank temperature sensor (temperature of the Reagent -solution in the tank) -short circuit high

DCU 19110 UREA Temperature sensor in Tank (electrical) $|\Box$ signal low $|\Box$ P205C Reagent - tank temperature sensor (temperature of the Reagent -solution in the tank) -short circuit low DCU 19145 Dosing Valve (electrical) $|\Box$ short circuit to batt + $|\Box$ P2049 Reductant Injector - circuit high

DCU 19146 Dosing Valve (electrical) | short circuit to ground | P2048 Reductant Injector - circuit low

DCU 18147 Dosing Valve (electrical) $|\Box$ open load $|\Box$ P2047 Reductant Injector -circuit open DCU 19148 Dosing Valve (electrical) $|\Box$ Dosing valve permanent $\tilde{A}\pm ON\tilde{A}$ ® (detection via fast decay) $|\Box$ P209B Reagent-dosing nozzle pressure too high

DCU 19154 UREA Pump speed | pump motor unplugged | P208B Reagent-pump not delivering

DCU 19155 UREA Pump speed _pump motor blocked _P208A Reagent-pump

DCU 19156 UREA Pump speed |□pump overspeed |□P208D Reagent-pump over speed

DCU 19157 UREA Pump speed | Hall sensors defect | P208B Reagent-pump not delivering

DCU 19163 Cooling control valve short circuit to UBat or open load | short circuit to battery | P20A3 Vent valve (Reductant Purge Control Valve) -short circuit high

DCU 19164 Cooling control valve short circuit to UBat or open load | Open load | P20A0 Vent valve (Reductant Purge Control Valve) -open circuit

DCU 19172 Cooling control valve short circuit to ground |□ short circuit to ground |□ P20A2 Vent valve (Reductant Purge Control Valve) -short circuit low

DCU 19181 Reverting valve (4-2way valve?) electrically |□ Short circuit to battery |□ P20A3 Vent valve (Reductant Purge Control Valve) -short circuit high

DCU 19182 Reverting valve (4-2way valve?) electrically |□ Short circuit to ground |□P20A2 Vent valve (Reductant Purge Control Valve) -short circuit low

DCU 19183 Reverting valve (4-2way valve?) electrically |□ Open load |□ P20A0 Vent valve (Reductant Purge Control Valve) -open circuit

DCU 19262 Tank heating Valve | Short circuit to battery | P20B4 Reagent -tank heating valve -short circuit high

DCU 19263 Tank heating Valve | Short circuit to ground | P20B3 Reagent -tank heating valve -short circuit low

DCU 19264 Tank heating Valve |
Open load |
P20B1 Reagent -tank heating valve -open circuit

DCU 19289 Temperature after catalyst too low |□Downstream catalyst temp -physical (Catalyst heating time failed) |□P042B Catalyst Temperature Sensor Circuit Range/Performance

DCU 19298 UREA pressure too low at system start |□UREA pressure too low at system start |□P208B Reagent pump not delivering

DCU 19307 UREA pressure too high |□Urea pressure not plausible (urea pressure too high) |□P204B Reagent -pressure above threshold

DCU 19316 UREA Temperature in Pump Module out of range |□Urea temperature box - physical (Urea Box Temp NOT OK: outside range) |□P2043 Reagent-temperature sensor of pump module out of range

DCU 19325 UREA Temperature in Tank out of range |□Urea temperature tank -physical (Urea Tank Temp NOT OK: outside range) |□P205B Reagent -tank temperature sensor (temperature of the Reagent -solution in the tank) out of range

DCU 19334 System frozen and not free in time _Defreezing Mode and Detection Errors (Inlet line defreezing failed) _P20C2 Reagent -suction tube heating -detection mode of heating DCU 19335 System frozen and not free in time |□Defreezing Mode and Detection Errors (pressure line defreezing failed) |□P20BE Reagent -pressure tube heating -detection mode of heating

DCU 19336 System frozen and not free in time | Defreezing Mode and Detection Errors (pressure build-up in detection mode failed) | P20C5 Pump module -Internal heating -open circuit

DCU 19337 System frozen and not free in time | Defreezing Mode and Detection Errors (Backflow line defreezing failed) | P20B9 Reagent -backflow tube heating -open circuit

DCU 19343 Coolant control valve mechanically | mechanical defective blocked open | P20A3 Vent valve (Reductant Purge Control Valve) -short circuit high

DCU 19344 Coolant control valve mechanically _mechanical defective blocked closed _P20A0 Vent valve (Reductant Purge Control Valve) -open circuit

DCU 19352 Reverting valve (4-2way valve?) mechanically |□valve does not open |□P20A0 Vent valve (Reductant Purge Control Valve) -open circuit

DCU 19361 Battery Voltage (actual value) | High battery voltage | P0562 Battery voltage evaluation -below lower limit

DCU 19362 Battery Voltage (actual value) _Low battery voltage _P0563 Battery voltage evaluation -above upper limit

DCU 19370 UREA pressure too low (in ñcommissioningî status) |□Pump motor error during commissioning (pump not delivering) |□P208B Reagent-pump not delivering DCU 19379 UREA Temperature too low during commissioning |□Temperatures not plausible during commissioning.

DCU 19415 Empty UREA Tank _urea tank empty _P203F Reagent -fluid level in tank -too low DCU 19532 Back flow line clogged |□P2063 Reagent -dosing valve -short circuit low

DCU 19541 Coolant control valve mechanically | Blocked closed | P20A1 Vent valve test plausibility test (startup)

DCU 19550 Pressure line blocked $|\Box$ pressure line blocked $|\Box$ P209B Reagent -dosing nozzle - pressure too high

DCU 19559 Low UREA level 1 (warning) -UREA level below Limit 1 -P203F Reagent -fluid level in tank -too low

DCU 19568 Low UREA level 2 (warning) -UREA level below Limit 2 -P203F Reagent -fluid level in tank -too low

DCU 19577 CAN receive frame E2SCR (Dosing, Exh gas flow, Exh gas temp, Error Suppression, Heater, Long Term failure) | SAE J1939 Check for CAN receive signal : (UREA quantity not in range) | P0600

DCU 19578 CAN receive frame E2SCR (Dosing, Exh gas flow, Exh gas temp, Error Suppression, Heater, Long Term failure) | SAE J1939 Check for CAN receive signal : (Dosing status not in range) | P0600 Serial Communication Link

DCU 19579 CAN receive frame E2SCR (Dosing, Exh gas flow, Exh gas temp, Error Suppression, Heater, Long Term failure) _timeout _P0600 Serial Communication Link

DCU 19580 CAN receive frame E2SCR (Dosing, Exh gas flow, Exh gas temp, Error Suppression, Heater, Long Term failure) |□ too many CAN messages |□P0600 Serial Communication Link

DCU 19581 CAN receive frame E2SCR (Dosing, Exh gas flow, Exh gas temp, Error Suppression, Heater, Long Term failure) _SAE J1939 Check for CAN receive signal _P0600 Serial Communication Link

DCU 19595 CAN receive frame EEC1 (Driver demand, eng speed, eng torque) |□SAE J1939 Check for CAN receive signal : (Engine torque not in range) |□P0600 Serial Communication Link

DCU 19596 CAN receive frame EEC1 (Driver demand, eng speed, eng torque) |□SAE J1939 Check for CAN receive signal : (Engine speed not in range) |□P0600 Serial Communication Link

DCU 19597 CAN receive frame EEC1 (Driver demand, eng speed, eng torque) _timeout _P0600 Serial Communication Link

DCU 19598 CAN receive frame EEC1 (Driver demand, eng speed, eng torque) $|\Box$ too many CAN messages _ \tilde{A}^{-} P0600 Serial Communication Link

DCU 19599 CAN receive frame EEC1 (Driver demand, eng speed, eng torque) |□SAE J1939 Check for CAN receive signal : (Torque driver demand not in range) |□P0600 Serial Communication Link

DCU 19604 CAN receive frame ET1 (Oil and Water temp engine) |□SAE J1939 Check for CAN receive signal : (Oil temperature not in range) |□P0600 Serial Communication Link DCU 19605 CAN receive frame ET1 (Oil and Water temp engine) _timeout _P0600 Serial Communication Link

DCU 19606 CAN receive frame ET1 (Oil and Water temp engine) |□too many CAN messages |□P0600 Serial Communication Link

DCU 19607 CAN receive frame ET1 (Oil and Water temp engine) |□ SAE J1939 Check for CAN receive signal : (Water temperature not in range) |□ P0600 Serial Communication Link DCU 19649 UREA Tank level error (CAN message or electrical with real sensor) |□ Level over CAN: SAE J1939 no Signal available Level sensor connected directly: Sensor Supply error |□ P203A Reagent -tank level sensor -open circuit

DCU 19650 UREA Tank level error (CAN message or electrical with real sensor) _Level over CAN: SAE J1939 Signal Not in Range Level sensor connected directly: SRC high _P203D Reagent -tank level sensor -short circuit high

DCU 19651 UREA Tank level error (CAN message or electrical with real sensor) |□Level over CAN: SAE J1939 Erroneous Signal Level sensor connected directly: SRC low |□P203C Reagent -tank level sensor - short circuit low

DCU 19676 Ambient Temperature: SAE J1939 Check for CAN receive signal : (Signal Range Check: Signal not in range / Erroneous Signal / Signal not available) |□SAE J1939 Check for CAN receive signal : (Ambient air temperature not in range) |□P0600 Serial Communication Link

DCU 19677 Ambient Temperature: SAE J1939 Check for CAN receive signal : (Signal Range Check: Signal not in range / Erroneous Signal / Signal not available) _timeout _P0071 Ambient Air Temperature Sensor Range/Performance

DCU 19678 Ambient Temperature: SAE J1939 Check for CAN receive signal : (Signal Range Check: Signal notin range / Erroneous Signal / Signal not available) |□too many CAN messages |□P0071 Ambient Air Temperature Sensor Range/Performance

DCU 19679 Ambient Temperature: SAE J1939 Check for CAN receive signal : (Signal Range Check: Signal not in range / Erroneous Signal / Signal not available) |□SAE J1939 Check for CAN receive signal : (Barometric pressure not in range) |□P0071 Ambient Air Temperature Sensor Range/Performance

DCU 19721 EEPROM / Checksum failures | EEPROM write error | P062F Internal Control Module EEPROM Error

DCU 19722 EEPROM / Checksum failures | No corresponding variant number error | P062F Internal Control Module EEPROM Error

DCU 19723 EEPROM / Checksum failures |□EEPROM communication error |□P062F Internal Control Module EEPROM Error

DCU 19724 EEPROM / Checksum failures _EEPROM Detection error OR A Codierwort error |□P062F Internal Control Module EEPROM Error

DCU 19725 EEPROM / Checksum failures | Wrong EEPROM size | P062F Internal Control Module EEPROM Error

DCU 19730 Ignition $\tilde{A}\pm on\tilde{A}$ ® signal K15 | \Box digital input ignition ON not sensed during initialization | \Box P2530 Ignition switch -plausibility error

DCU 19739 Main Relay opens too early / too late | main relay shut off too late | P0687 ECM/PCM Power Relay Control Circuit High

DCU 19740 Main Relay opens too early / too late | main relay short circuit | P0685 ECM/PCM Power Relay Control Circuit /Open

DCU 19741 Main Relay opens too early / too late |□main relay open circuit |□P0687 ECM/PCM Power Relay Control Circuit High

DCU 19742 Main Relay opens too early / too late _main relay shut off too early (before EEPROM update) P0685 ECM/PCM Power Relay Control Circuit /Open

DCU 19748 Too high UREA Temperature in Pump module or Leakage test failed (Emergency shut off) _over temperature detection (urea temp. in pump module) _P2043 Reagent - temperature sensor of pump module -Out of range

DCU 19749 Too high UREA Temperature in Pump module or Leakage test failed (Emergency shut off) |□urea leakage detection (static or dynamic) |□P202D Dynamic urea leakage test - Leakage detected

DCU 19757 Group error path UREA injection control _Error belonging to group UREA Injection control _ P208B Reagent-pump -Not delivering

DCU 19766 Group error path Air control _Error belonging to group air control _P20A7 Compressed air regulation valve

DCU 19775 Group error path catalyst temperature _Error belonging to group catalyst temperature out of range _P0426 Plausibility of catalyst temperature sensors -Plausibility error (static)

DCU 19784 Group error path NOx exceeded _Error belonging to group NOx exceeded active P2000 Nox Trap Efficiency Below Threshold

DCU 19793 Group error path UREA Tank empty _Error belonging to group UREA tank empty active _P203F Reagent -fluid level in tank -Too low

DCU 19999 Unknown DCU15 fault code

NEW HOLLAND ERROR CODES

NH 1002 Radar disconnected

NH 1003 Speed sensor error

NH 1004 Speed sensor signal too High

NH 1005 Speed sensor signal too High

NH 1006 Slip control potentiometer signal too low

NH 1007 Slip control potentiometer signal too High

NH 1008 Raise / work switch failure

NH 1009 Both external switches operated at the same time

NH 1010 Height limit potentiometer signal too low

NH 1011 Height limit potentiometer signal too high

NH 1012 Drop rate potentiometer signal too low

NH 1013 Drop rate potentiometer signal too high

NH 1014 R/H load sensing pin signal too low

NH 1015 R/H load sensing pin signal too high

NH 1016 L/H load sensing pin signal too low

NH 1017 L/H load sensing pin signal too high NH 1018 Both load sensing pin disconnected NH 1019 Load sensing pin voltage too low NH 1020 Load sensing pin voltage too high NH 1021 Position / draft control potentiometer too low NH 1022 Position / draft control potentiometer too high NH 1023 Control panel disconnected NH 1024 Perform Hydraulic Lift Autocalibration NH 1025 Mouse lift lever potentiometer signal too low NH 1026 Mouse lift lever potentiometer signal too high NH 1027 Maximum Lift arm position potentiometer too low NH 1028 Maximum Lift arm position potentiometer too high NH 1029 Hydraulic Control valve disconnected NH 1030 Ground signal open circuit (not used) NH 1031 Chassis Harness Disconnected NH 1032 Draft Load potentiometer shorted to +12v NH 1033 Draft Load potentiometer open circuit NH 1049 Wheel speed sensor open circuit NH 1053 5 volt reference Short to +12v NH 1054 5 volt reference Short to ground. NH 1057 Module Failure (not used) NH 1059 5 volt reference Open circuit (not used) NH 1063 Lower solenoid open circuit NH 1064 Raise solenoid open circuit NH 1065 lower solenoid short circuit NH 1066 Raise solenoid short circuit NH 1067 EDC Hydraulic Valve supply too low NH 1068 Height limit Calibration Error NH 2001 'N' - Shuttle too fast error NH 2002 Flash N error NH 2003 'CP' - Clutch pedal required NH 2004 'P' - Handbrake error NH 2005 Creeper selection error NH 2011 Clutch Pedal Potentiometer Signal too Low NH 2012 Clutch Pedal Potentiometer Signal too High NH 2013 Up and Down buttons at same time NH 2014 Switch 4 / 5 error (not used) NH 2015 HI / LO shift lever switches both closed NH 2016 Creeper Solenoid Short circuit NH 2021 Chassis Harness Error NH 2024 Synchro clutches not calibrated NH 2026 Engine speed too high NH 2027 Engine speed too low NH 2035 Dump solenoid circuit fault NH 2036 Dump solenoid open circuit NH 2037 Clutch Pedal switch open circuit NH 2038 Clutch 4 solenoid short circuit NH 2039 Clutch 4 solenoid open circuit NH 2040 Clutch 3 solenoid short circuit NH 2041 Clutch 3 solenoid open circuit NH 2042 Clutch 2 solenoid short circuit NH 2043 Clutch 2 solenoid open circuit

NH 2044 Clutch 1 solenoid short circuit NH 2045 Clutch 1 solenoid open circuit NH 2046 Fuse 12 open circuit (not used) NH 2047 Clutch pedal switch set too High NH 2048 Clutch pedal switch set too Low NH 2049 Wheel speed sensor short or open NH 2051 Oil temperature sensor open circuit NH 2052 Oil temperature sensor short circuit NH 2053 5 Volt Potentiometer Supply too High NH 2054 5 Volt Potentiometer Supply too Low NH 2055 No signal from wheel speed sensor NH 2056 Low Range switch open NH 2057 High Range switch open NH 2058 Seat switch closed for 25 hours NH 2059 Shuttle Lever switch disagree NH 2060 Synchro Fwd no longer engaged NH 2061 F/R Synchro Potentiometer signal too high NH 2062 F/R Synchro Potentiometer signal too low NH 2063 Synchro not moving to forward NH 2064 Synchro not moving to reverse NH 2065 Forward solenoid open circuit NH 2066 Reverse solenoid open circuit NH 2067 Forward solenoid circuit fault NH 2068 Reverse solenoid circuit fault NH 2069 Synchro reverse no longer engaged NH 2070 Voltage with lever in forward too high NH 2071 Voltage with lever in forward too low NH 2072 Voltage with lever in reverse too high NH 2073 Voltage with lever in reverse too low NH 2075 Flywheel Speed Sensor Frequency is too high NH 2075 Any period is too short, under 400 microseconds NH 2075 Any short period is longer than the corresponding long period NH 2075 Damper angle is below 50 degrees or above 85 degrees NH 2075 Calculated torque exceeds calibrated peak torque by more than 25% NH 2075 No usable signals from the flywheel sensor, and ERPM is greater than 300 NH 2076 Flywheel Speed Sensor open circuit NH 2077 Flywheel Speed Sensor short circuit NH 2080 Synchro 4 no longer engaged NH 2081 4/5 Synchro Potentiometer signal too high NH 2082 4/5 Synchro Potentiometer signal too low NH 2083 Synchro 4 engaged error NH 2084 Synchro 5 engaged error NH 2085 Synchro 4 solenoid open circuit NH 2086 Synchro 5 solenoid open circuit NH 2087 Synchro 4 solenoid short to 12v NH 2088 Synchro 5 solenoid short to 12v NH 2089 Synchro 5 no longer engaged NH 2090 Output speed too high in creeper NH 2091 C3 Clutch not calibrated NH 2092 C4 Clutch not calibrated NH 2093 High Clutch not calibrated NH 2094 Low Clutch not calibrated

NH 2095 C1 Clutch not calibrated NH 2096 C2 Clutch not calibrated NH 2097 Clutch 5 not calibrated NH 2098 C5 solenoid short to 12v NH 2099 C5 open circuit NH 2100 C5 dump solenoid short to 12v NH 2101 C5 dump solenoid open circuit NH 2124 Flywheel Torque Sensor not calibrated NH 2199 Creeper option not enabled NH 3001 Accelerator Pedal Signal - NOT PLAUSIBLE NH 3002 Accelerator Pedal Signal - SOURCE HIGH NH 3003 Accelerator Pedal Signal - SOURCE LOW NH 3004 Accelerator Pedal Signal - NO SIGNAL NH 3005 Accelerator Pedal Signal - ALL OTHER FAULTS NH 3006 Coolant Temperature Signal - ABOVE NORMAL NH 3007 Coolant Temperature Signal - SOURCE HIGH NH 3008 Coolant Temperature Signal - SOURCE LOW NH 3009 Coolant Temperature Signal - NO SIGNAL NH 3010 Air (boost) Temperature Signal - SOURCE HIGH NH 3011 Air (boost) Temperature Signal - SOURCE LOW NH 3012 Air (boost) Temperature Signal - NO SIGNAL NH 3014 Fuel Temperature Signal - ABOVE NORMAL NH 3015 Fuel Temperature Signal - SOURCE HIGH NH 3016 Fuel Temperature Signal - SOURCE LOW NH 3017 Fuel Temperature Signal - NO SIGNAL NH 3018 Boost Pressure Signal - ABOVE NORMAL NH 3019 Boost Pressure Signal - SOURCE HIGH NH 3020 Boost Pressure Signal - SOURCE LOW NH 3021 Boost Pressure Signal - NO SIGNAL NH 3022 Boost Pressure Signal - ALL OTHER FAULTS NH 3023 Atmospheric Pressure Signal - ABOVE NORMAL NH 3024 Atmospheric Pressure Signal - SOURCE HIGH NH 3025 Atmospheric Pressure Signal - SOURCE LOW NH 3026 Atmospheric Pressure Signal - NO SIGNAL NH 3027 Oil Pressure Signal - ABOVE NORMAL NH 3028 Oil Pressure Signal - BELOW NORMAL NH 3029 Oil Pressure Signal - SOURCE HIGH NH 3030 Oil Pressure Signal - SOURCE LOW NH 3031 Oil Pressure Signal - NO SIGNAL NH 3032 Oil Pressure Signal - ALL OTHER FAULTS NH 3033 Oil Temperature Signal - ABOVE NORMAL NH 3034 Oil Temperature Signal - SOURCE HIGH NH 3035 Oil Temperature Signal - SOURCE LOW NH 3036 Oil Temperature Signal - NO SIGNAL NH 3037 Power stage Fuel filter heater - SOURCE HIGH NH 3038 Power stage Fuel filter heater - SOURCE LOW NH 3039 Power stage Fuel filter heater - NO SIGNAL NH 3040 HS Power stage cold start heater relay - SOURCE HIGH NH 3041 HS Power stage cold start heater relay - SOURCE LOW NH 3042 HS Power stage cold start heater relay - NO SIGNAL NH 3043 Adapt.cylinder balancing Cylinder 1 - SOURCE HIGH NH 3044 Adapt.cylinder balancing Cylinder 5 - SOURCE HIGH

NH 3045 Adapt.cylinder balancing Cylinder 3 - SOURCE HIGH NH 3046 Adapt.cylinder balancing Cylinder 6 - SOURCE HIGH NH 3047 Adapt.cylinder balancing Cylinder 2 - SOURCE HIGH NH 3048 Adapt.cylinder balancing Cylinder 4 - SOURCE HIGH NH 3049 Battery voltage signal - ABOVE NORMAL NH 3050 Battery voltage signal - BELOW NORMAL NH 3051 Battery voltage signal - SOURCE HIGH NH 3052 Battery voltage signal - SOURCE LOW NH 3053 LS Power stage cold start lamp - SOURCE HIGH NH 3054 LS Power stage cold start lamp - SOURCE LOW NH 3055 LS Power stage cold start lamp - NO SIGNAL NH 3056 Cold start heater monitoring - BELOW NORMAL NH 3057 Cold start heater monitoring - NOT PLAUSIBLE NH 3058 Cold start heater monitoring - SOURCE LOW NH 3059 Cold start heater monitoring - NO SIGNAL NH 3060 Injector solenoid valve Cylinder 1 - NOT PLAUSIBLE NH 3061 Injector solenoid valve Cylinder 1 - SOURCE HIGH NH 3062 Injector solenoid valve Cylinder 1 - SOURCE LOW NH 3063 Injector solenoid valve Cylinder 1 - NO SIGNAL NH 3064 Injector solenoid valve Cylinder 5 - NOT PLAUSIBLE NH 3065 Injector solenoid valve Cylinder 5 - SOURCE HIGH NH 3066 Injector solenoid valve Cylinder 5 - SOURCE LOW NH 3067 Injector solenoid valve Cylinder 5 - NO SIGNAL NH 3068 Injector solenoid valve Cylinder 3 - NOT PLAUSIBLE NH 3069 Injector solenoid valve Cylinder 3 - SOURCE HIGH NH 3070 Injector solenoid valve Cylinder 3 - SOURCE LOW NH 3071 Injector solenoid valve Cylinder 3 - NO SIGNAL NH 3072 Injector solenoid valve Cylinder 6 - NOT PLAUSIBLE NH 3073 Injector solenoid valve Cylinder 6 - SOURCE HIGH NH 3074 Injector solenoid valve Cylinder 6 - SOURCE LOW NH 3075 Injector solenoid valve Cylinder 6 - NO SIGNAL NH 3076 Injector solenoid valve Cylinder 2 - NOT PLAUSIBLE NH 3077 Injector solenoid valve Cylinder 2 - SOURCE HIGH NH 3078 Injector solenoid valve Cylinder 2 - SOURCE LOW NH 3079 Injector solenoid valve Cylinder 2 - NO SIGNAL NH 3080 Injector solenoid valve Cylinder 4 - NOT PLAUSIBLE NH 3081 Injector solenoid valve Cylinder 4 - SOURCE HIGH NH 3082 Injector solenoid valve Cylinder 4 - SOURCE LOW NH 3083 Injector solenoid valve Cylinder 4 - NO SIGNAL NH 3084 Injector Booster Voltage C1 - SOURCE HIGH NH 3085 Injector Booster Voltage C1 - SOURCE LOW NH 3086 Injector Booster Voltage C2 - SOURCE HIGH NH 3087 Injector Booster Voltage C2 - SOURCE LOW NH 3088 Increment speed signal - NOT PLAUSIBLE NH 3089 Increment speed signal - SOURCE LOW NH 3090 Segment speed signal - NOT PLAUSIBLE NH 3091 Segment speed signal - SOURCE LOW NH 3092 Engine Speed Sensing - NOT PLAUSIBLE NH 3093 Engine Speed Sensing - SOURCE HIGH NH 3094 Engine Speed Sensing - SOURCE LOW NH 3095 Engine Speed Sensing - NO SIGNAL NH 3096 CAN (A) Hardware - NO SIGNAL

NH 3097 CAN (B) Hardware - NO SIGNAL

NH 3098 CAN TSC1 TE Control - SOURCE LOW

NH 3099 CAN TSC1_TE Control - NO SIGNAL - CAN TE and CAN AE (Torque Request) error codes may be generated due to normal shutdown timing differences between the ECU and the XCM. If so, the actual error code 3096 or 3097 should also be displayed.

NH 3100 CAN TSC1 AE Control - SOURCE LOW

NH 3101 CAN TSC1 AE Control - NO SIGNAL

NH 3102 Fuel pressure monitoring CP3 - ALL OTHER FAULTS

NH 3102 Possible Causes: • Low fuel supply to CP3 (filter restriction). • Low output from CP3 •

CP3 PWM fault (Check PWM output in Atlas, min 3% at engine idle, max 24% at full load

Above 24% indicates excessive fuel leakage from the overpressure valve in the rail or Injector/transfer tube (remove the fuel return lines to check).

NH 3103 Fuel pressure signal - ABOVE NORMAL

NH 3104 Fuel pressure signal - SOURCE HIGH

NH 3105 Fuel pressure signal - SOURCE LOW

NH 3106 Fuel pressure signal - NO SIGNAL

NH 3107 CC HS Power stage 1 fuel press. Control - SOURCE HIGH

NH 3108 CC HS Power stage 1 fuel press. Control - SOURCE LOW

NH 3109 CC HS Power stage 1 fuel press. Control - NO SIGNAL

NH 3110 Monitoring of rail pressure relief valve - ABOVE NORMAL

NH 3111 Monitoring of rail pressure relief valve - BELOW NORMAL

NH 3112 Rail pressure Min / Max. error - SOURCE HIGH

NH 3113 Main relay defect - ABOVE NORMAL

NH 3114 Main relay defect - BELOW NORMAL

NH 3115 Main relay defect - NOT PLAUSIBLE

NH 3116 Main relay defect - SOURCE HIGH

NH 3117 ECU: Self Test Shutoff Paths (Start Up) - NOT PLAUSIBLE. Engine will derate to 1800 rpm.

NH 3117 Possible Causes: • ECU power failed when the engine was running or engine shut down process was incorrect.

NH 3118 Power supply for sensors - NOT PLAUSIBLE

NH 3119 Power supply for sensors - NO SIGNAL

NH 3120 Power supply for sensors - ALL OTHER FAULTS

NH 3121 PTO Torque sensor open circuit

NH 3122 PTO Torque sensor short circuit

NH 3123 PTO Torque not CAL error

NH 3124 Hand Throttle potentiometer 2 high error.

NH 3125 Hand Throttle potentiometer 2 Low error.

NH 3126 Hand Throttle potentiometer 1 high error.

NH 3127 Hand Throttle potentiometer 1 Low error.

NH 3128 Hand Throttle potentiometer diff. error.

NH 3129 Hand Throttle idle switch high error

NH 3130 Hand Throttle idle switch low error

NH 3131 ECU self test shutoff paths (start up)

NH 3132 CRPM Switch short

NH 4001 Signal of Aux-stick (AUX1) out of range low

NH 4002 Signal of Aux-stick (AUX1) out of range high

NH 4003 Signal from Remote Flow potentiometer 1 (AUX 1) out of range.

NH 4005 Signal of Aux-stick (AUX2) out of range low

NH 4006 Signal of Aux-stick (AUX2) out of range high

NH 4007 Signal from Remote Flow potentiometer 2 (AUX 2) out of range.

NH 4008 Signal from Remote valve 2 Timer Pot 1 out of range

NH 4009 Signal of Aux-stick (AUX3) out of range low NH 4010 Signal of Aux-stick (AUX3) out of range high NH 4011 Signal from Remote Flow potentiometer 3 (AUX 3) out of range. NH 4015 Signal from Remote Flow potentiometer 4 (AUX 4) out of range. NH 4016 Signal from Remote valve Timer potentiometer 1 out of range. NH 4040 Supply Voltage too low NH 4041 Supply Voltage too High NH 4042 Arm Rest Module (ARU) CAN 'Bus off'. NH 4043 Controller Fault (Register check) NH 4044 Controller Fault (Flash Memory) NH 4045 Controller Fault (Data Memory) NH 4100 Remote No.1 No control Message Received NH 4101 Remote No.1 Control Message not plausible NH 4102 Remote No.1 EEPROM Error NH 4103 Remote No.1 Switched to failsafe NH 4104 Remote No.1 Under voltage NH 4105 Remote No.1 Over voltage NH 4106 Remote No.1 Spool movement to low NH 4107 Remote No.1 Spool movement to high NH 4108 Remote No.1 Float position not reached NH 4109 Remote No.1 Manually operated NH 4110 Remote No.1 Driver faulty NH 4111 Remote No.1 potentiometer faulty. NH 4112 Remote No.1 Unable to reach neutral NH 4113 Remote No.1 Spool not in neutral at key on NH 4114 Remote No.2 No control Message Received NH 4115 Remote No.2 Control Message not plausible NH 4116 Remote No.2 EEPROM Error NH 4117 Remote No.2 Switched to failsafe NH 4118 Remote No.2 Under voltage NH 4119 Remote No.2 Over voltage NH 4120 Remote No.2 Spool movement to low NH 4121 Remote No.2 Spool movement to high NH 4122 Remote No.2 Float position not reached NH 4123 Remote No.2 Manually operated NH 4124 Remote No.2 Driver faulty NH 4125 Remote No.2 potentiometer faulty NH 4126 Remote No.2 Unable to reach neutral NH 4127 Remote No.2 Spool not in neutral at key on NH 4128 Remote No.3 No control Message Received NH 4129 Remote No.3 Control Message not plausible NH 4130 Remote No.3 EEPROM Error NH 4131 Remote No.3 Switched to failsafe NH 4132 Remote No.3 Under voltage NH 4133 Remote No.3 Over voltage NH 4134 Remote No.3 Spool movement to low NH 4135 Remote No.3 Spool movement to high NH 4136 Remote No.3 Float position not reached NH 4137 Remote No.3 Manually operated NH 4138 Remote No.3 Driver faulty NH 4139 Remote No.3 potentiometer faulty. NH 4140 Remote No.3 Unable to reach neutral

NH 4141 Remote No.3 Spool not in neutral at key on NH 4142 Remote No.4 No control Message Received NH 4143 Remote No.4 Control Message not plausible NH 4144 Remote No.4 EEPROM Error NH 4145 Remote No.4 Switched to failsafe NH 4146 Remote No.4 Under voltage NH 4147 Remote No.4 Over voltage NH 4148 Remote No.4 Spool movement to low NH 4149 Remote No.4 Spool movement to high NH 4150 Remote No.4 Float position not reached NH 4151 Remote No.4 Manually operated NH 4152 Remote No.4 Driver faulty NH 4153 Remote No.4 potentiometer faulty. NH 4154 Remote No.4 Unable to reach neutral NH 4155 Remote No.4 Spool not in neutral at key on NH 4156 Remote No.5 Spare NH 4157 Remote No.5 Spare NH 4158 Remote No.5 Spare NH 4159 Remote No.5 Spare NH 4160 Remote No.5 Spare NH 4161 Remote No.5 Spare NH 4162 Remote No.5 Spare NH 4163 Remote No.5 Spare NH 4164 Remote No.5 Spare NH 4165 Remote No.5 Spare NH 4166 Remote No.5 Spare NH 4167 Remote No.5 Spare NH 4168 Remote No.5 Spare NH 4170 EHR Control No. 1 not calibrated NH 4171 EHR Control No.1 open circuit NH 4172 EHR Control No.1 short circuit NH 4173 EHR Control No. 2 not calibrated NH 4174 EHR Control No.2 open circuit NH 4175 EHR Control No.2 short circuit NH 4176 Timer Switch No.1 / No.2 not connected NH 4177 EHR Control No. 3 not calibrated NH 4178 EHR Control No.3 open circuit NH 4179 EHR Control No.3 short circuit NH 4180 EHR Control No. 4 not calibrated NH 4181 EHR Control No.4 open circuit NH 4182 EHR Control No.4 short circuit NH 4183 Timer Switch No.3 / No.4 not connected NH 4184 EHR Joystick potentiometer X open circuit. NH 4185 EHR Joystick potentiometer X short circuit. NH 4186 EHR Joystick potentiometer Y open circuit. NH 4187 EHR Joystick potentiometer Y short circuit. NH 4190 No communications from (EHR) No.1. NH 4191 No communications from (EHR) No.2. NH 4192 No communications from (EHR) No.3. NH 4193 No communications from (EHR) No. 4. NH 4194 Motor mode No.1 switch faulty NH 4195 Motor mode No.2 switch faulty

NH 4196 Motor mode No.3 switch faulty NH 4197 Motor mode No. 4 switch faulty NH 5001 Rear PTO Brake Solenoid stuck off NH 5002 Rear PTO Brake Solenoid stuck on NH 5003 Rear PTO Brake output open circuit NH 5004 Rear PTO Brake driver over temperature (not used) NH 5005 Brake switch open circuit NH 5007 Rear PTO Solenoid Stuck off NH 5008 Rear PTO solenoid circuit overcurrent NH 5024 Rear PTO not calibrated NH 5027 Rear PTO speed sensor open circuit (not implemented) NH 5033 Rear PTO cab N/C switch open circuit NH 5034 Rear fender PTO switch open / short to ground. NH 5035 Rear fender PTO switch input short to +12v NH 5036 PTO failure to Start NH 5037 Rear PTO cab N/O switch stuck closed NH 5038 Cab & fender PTO switches operated in 2 sec NH 5039 Incorrect voltage on fender PTO switch NH 5040 Rear fender PTO switches reversed (not used) NH 5041 PTO disengaged due to assuasive load (not used) NH 5042 PTO Management switch shorted NH 5099 Auto PTO mode not enabled NH 6020 FWD switch error NH 6021 FWD Solenoid Stuck on NH 6022 FWD Solenoid Stuck off NH 6023 FWD solenoid open circuit NH 7014 Difflock switch error NH 7015 Difflock Solenoid Stuck off NH 7016 Difflock Solenoid Stuck on NH 7017 Difflock solenoid open circuit NH 7018 Difflock driver over temperature NH 7024 Steering angle sensor not calibrated NH 7031 Steering angle sensor out of Maximum range NH 7032 Steering angle sensor out of Minimum range NH 8007 Front PTO Solenoid Stuck on NH 8008 Front PTO solenoid open circuit NH 8024 Front PTO not calibrated NH 8027 Front PTO speed sensor open circuit NH 8033 Front PTO cab N/C switch open circuit NH 8036 Front PTO failure to Start NH 8037 Front PTO cab N/O switch stuck closed NH 8099 Front PTO option not enabled NH 9001 Front HPL (High Pressure Lift) Potentiometer open circuit. NH 9002 Front HPL (High Pressure Lift) Potentiometer short circuit. NH 10001 Upper lockout Solenoid error NH 10002 Raise Solenoid error NH 10003 Lower Solenoid error NH 10004 Front Axle Potentiometer above threshold NH 10005 Front Axle Potentiometer below threshold NH 10007 Go up error, Suspension Unable to return to set point NH 10008 Go down error, Suspension Unable to return to set point NH 10009 Lower lockout Solenoid Error

NH 10024 Front Suspension not calibrated NH 10099 Front Suspension mode not enabled NH 14001 Rear PTO speed short to VCC or open circuit NH 14002 Rear PTO speed short to Ground NH 14011 Engine speed sensor short to VCC or open circuit NH 14012 Engine speed sensor short to Ground NH 14015 The ADIC 5 volt reference voltage is too low - below 4 volts NH 14016 The ADIC 5 volt reference voltage is too high - above 6 volts NH 14021 Radar Ground speed short to VCC or open circuit NH 14022 Radar Ground speed short to Ground NH 14031 Front PTO speed short to VCC or open circuit NH 14032 Front PTO speed short to Ground NH 14041 Engine coolant temp short to VCC or open circuit NH 14042 Engine coolant temp short to Ground NH 14051 Fuel level sensor short to VCC or open circuit NH 14052 Fuel level sensor short to Ground NH 14061 Air brake pressure short to VCC or option set but sensor not connected NH 14071 Front Hitch Position short to 12 or 5 Volts NH 14072 Front Hitch Position short to Ground or open circuit NH 14081 Engine oil pressure short to 12 or 5 Volts NH 14082 Engine oil pressure short to Ground or open circuit NH 14091 Transmission output speed short to VCC or open circuit NH 14092 Transmission output speed short to Ground NH 14100 Air brake pressure not configured NH 14101 Fuel contaminated sensor Not connected NH 14200 EEPROM error NH 14900 Transmission module missing (DA/DB/DE/DF). NH 14901 Engine controller not present (EDC7) NH 14902 Auxiliry (optional) Controller Module missing (DD/DH). NH 14903 SCM controller missing (GA 12x12 only). NH 14904 Arm Rest Module (ARU) missing. (Steyr 16x16 only) NH 14905 KEYPAD missing NH 14906 Fast Steer Controller (KA) missing. NH 14907 DOG (Display Of Gears) missing. NH 15001 Exceeding safe operating wheel speed (10 km/h) with system still enabled or still active. Error code not active fast steer lamp flashes instead. NH 15002 Steering wheel control proximity sensor open circuit. NH 15003 Steering wheel control proximity sensor short circuit. NH 15006 Split valve LVDT open circuit. NH 15007 Split valve LVDT short circuit. NH 15008 Change valve Solenoid open circuit NH 15009 Change valve Solenoid short circuit across NH 15010 Safety switch Fail NH 15011 Maximum engagement time (5 minutes) elapsed. NH 15012 Split Valve spool stuck open NH 15013 Change valve or Split valve spools Stuck closed. NH 15014 Split Valve spool stuck in transition zone cant identify which steering mode the tractor is definitely in. NH 15015 Cold oil, temperature below 5 degrees C. Error code not active fast steer lamp flashes instead. NH 15024 System not calibrated.