

Tracked & Wheeled Excavators				Extracted from Version 145	No of Error Codes in list 978
J1939 SA (hex)	In Use?	Reviewed/ Added @Version	Diagnostic Trouble Code	Machine Reaction	Extended Fault Text (Data Logger/Diagnostic Tools)
0x00	Y	55	P0001	Torque Reduction	IMV driver fault is detected
0x00	Y	55	P0002	Torque Reduction	Rail Pressure Negative Control Error During 'IMV-Only' control. PID controller not able to stabilise the RPC value
0x00	Y	55	P0002	Torque Reduction	Rail pressure control error (pressure error too high).
0x00	Y	55	P0002	Delayed Engine Stop	Rail Pressure Positive Control Error During 'IMV-Only' control. PID controller not able to stabilise the RPC value
0x00	Y	55	P0002	Torque Reduction	Rail pressure control error (pressure error too low).
0x00	Y	55	P0003		Rail pressure control feedback low error
0x00	Y	55	P0003	Torque Reduction	IMV driver fault is detected
0x00	Y	55	P0004	Torque Reduction	IMV driver fault is detected
0x00	Y	55	P0004	Torque Reduction	Rail pressure control feedback high error
0x00	Y	124	P0016		Cam Sensor Phase Shift
0x00	Y	124	P0045		VNT Control Fault
0x00	Y	124	P0045		Turbo EVRV Fault
0x3D	Y	114	P0070-81		CAN bus message error from engine ECU
0x3D	Y	114	P0070-87		CAN bus message error from engine ECU
0x3D	Y	114	P0071-87		CAN bus message error for environment temperature from engine ECU
0x00	Y	55	P007A	Torque Reduction	TMAP (Intake Manifold 1 temp) Temperature Element sensor fault (ADC)
0x00	Y	55	P007C	Torque Reduction	TMAP (Intake Manifold 1 temp) Temperature Element sensor low fault
0x00	Y	55	P007D	Torque Reduction	TMAP (Intake Manifold 1 temp) Temperature Element sensor high fault
0x00	Y	55	P007E	Torque Reduction	TMAP (Intake Manifold 1 temp) Temperature Element sensor noise fault
0x00	Y	114	P0087	Torque Reduction	Rail Pressure Control Error Positive
0x00	Y	55	P0087		Rail Pressure build low fault
0x00	Y	114	P0087		Rail Pressure build normal fault
0x00	Y	114	P0087	Torque Reduction ,Delayed Engine Stop	RPC Variable Limit Capacity (VLC) Torque reduction clamped
0x00	Y	124	P0087	Torque Reduction ,Delayed Engine Stop	Pressure Limiter Open
0x00	Y	114	P0087	Torque Reduction	RPC Variable Limit Capacity (VLC) Torque reduction above its threshold
0x00	Y	114	P0088	Torque Reduction	Rail pressure control error during HPV control (over max calibrated system pressure)
0x00	Y	114	P0088	Torque Reduction	Rail pressure control error during IMV control (over max calibrated system pressure)
0x00	Y	55	P0088	Torque Reduction	Rail pressure control undefined error (over max calibrated system pressure)
0x00	Y	114	P0088		Rail Pressure Control Error Negative
0x00	Y	124	P0088	Torque Reduction	C/Rail pressure exceeds hi upper limit3
0x00	Y	114	P0088		Rail Pressure overpressure timeout
0x00	Y	124	P0088	Torque Reduction	Common Rail Pressure Rise (1st Stage)
0x00	Y	114	P0089		Rail Pressure control error
0x00	Y	114	P0089		Rail Pressure Negative Control Error During 'HPV-Only' control. PID controller not able to stabilise the RPC value
0x00	Y	114	P0089		Rail Pressure Positive Control Error During 'HPV-Only' control. PID controller not able to stabilise the RPC value
0x00	Y	55	P0089		Rail Pressure Negative Control Error During 'IC & HMV' control. PID controller not able to stabilise the RPC value
0x00	Y	114	P0089		Rail Pressure Positive Control Error During 'IC & HMV' control. PID controller not able to stabilise the RPC value
0x00	Y	114	P0089	Torque Reduction	Rail Pressure Negative Control Error During 'RVD-Only' control. PID controller not able to stabilise the RPC value
0x00	Y	114	P0089	Delayed Engine Stop	Rail Pressure Positive Control Error During 'RVD-Only' control. PID controller not able to stabilise the RPC value
0x00	Y	114	P0089	Torque Reduction	Check that HPV is not stuck during IMV regulation.
0x00	Y	114	P0089	Torque Reduction	HPV open loop slope fault detected
0x00	Y	124	P0089		Common Rail Pressure Fault (Excess Feed)
0x00	Y	55	P0090	Torque Reduction	HPV driver in ECU fault detected
0x00	Y	55	P0091	Torque Reduction	Check HPV regulation control trim low
0x00	Y	114	P0091	Torque Reduction	Check HPV hardware current control trim low
0x00	Y	114	P0091	Torque Reduction	HPV current feedback low fault detected
0x00	Y	124	P0091	Torque Reduction	SCV Low Voltage Fault
0x00	Y	114	P0091	Torque Reduction	HPV driver in ECU fault detected
0x00	Y	55	P0092	Torque Reduction	Check HPV regulation control trim high.
0x00	Y	124	P0092	Torque Reduction ,Delayed Engine Stop	SCV High Voltage Fault
0x00	Y	114	P0092	Torque Reduction	Check HPV hardware current control trim high
0x00	Y	114	P0092	Torque Reduction ,Delayed Engine Stop	HPV current feedback high fault detected
0x00	Y	114	P0092	Torque Reduction ,Delayed Engine Stop	HPV driver in ECU fault detected
0x00	Y	124	P0093		Common Rail Pressure Fall (No Feed)
0x00	Y	124	P0093		Common Rail Pressure Fault (Lack of Feed 2)
0x00	Y	55	P0095	Torque Reduction	Intake manifold temperature (M2) signal sensor ADC fault (Intake Manifold 2 temp)
0x00	Y	55	P0096	Torque Reduction	Intake manifold temperature sensor (M2) signal noise fault (Intake Manifold 2 temp)
0x00	Y	55	P0096	Torque Reduction	Intake manifold temperature sensor (M2) signal plausibility fault (Intake Manifold 2 temp)
0x00	Y	55	P0097	Torque Reduction	Intake manifold temperature sensor (M2) signal low fault (Intake Manifold 2 temp)
0x00	Y	55	P0098	Torque Reduction	Intake manifold temperature sensor (M2) signal high signal fault (Intake Manifold 2 temp)
0x3D	Y	114	P0087-87	T4F Inducement	CAN bus message error for coolant sensor from engine ECU
0x00	Y	55	P0100	Torque Reduction	AMF High Side Driver fault Short Circuit To Ground (SC2G)
0x00	Y	114	P0100	Torque Reduction	AMF fault (global). Set if plu, grad or electrical flt is present
0x00	Y	114	P0100	Torque Reduction	AMF High Side Driver fault (Global)
0x00	Y	114	P0100	Torque Reduction	AMF High Side Driver fault Open Circuit (OC) Or Short Circuit to Battery (SC2VBAT)
0x00	Y	114	P0100	Torque Reduction	AMF High Side Driver fault Short Circuit (SC)
0x00	Y	114	P0100	Torque Reduction	AMF electrical sensor fault (ADC)
0x00	Y	124	P0101		MAF Sensor Fault
0x00	Y	124	P0102	Torque Reduction	MAF Low Voltage Fault
0x00	Y	55	P0102	Torque Reduction	AMF electrical sensor low fault
0x00	Y	124	P0103	Torque Reduction	MAF High Voltage Fault
0x00	Y	55	P0103	Torque Reduction	AMF electrical sensor high fault
0x00	Y	55	P0105	Torque Reduction	Intake Manifold Absolute Pressure (MAP) sensor global fault
0x00	Y	55	P0106	Torque Reduction	Intake Manifold Absolute Pressure (MAP) sensor signal drift low fault
0x00	Y	55	P0106	Torque Reduction	Intake Manifold Absolute Pressure (MAP) sensor signal drift high fault
0x00	Y	55	P0106	Torque Reduction	Intake Manifold Absolute Pressure (MAP) sensor signal plausibility fault
0x00	Y	55	P0106	Torque Reduction	Intake Manifold Absolute Pressure (MAP) sensor signal plausibility high fault
0x00	Y	55	P0106	Torque Reduction	Intake Manifold Absolute Pressure (MAP) sensor signal plausibility low fault
0x00	Y	124	P0107		Boost Pressure Sensor Fault (Low Voltage Fault)
0x00	Y	124	P0108		Boost Pressure Sensor Fault (High Voltage Fault)
0x00	Y	55	P0110	Torque Reduction	Inlet Air Temperature (IAT) sensor signal ADC fault detected
0x00	Y	124	P0112	Torque Reduction	Inlet Air Temperature (IAT) sensor signal low fault detected
0x00	Y	124	P0113	Torque Reduction	Inlet Air Temperature (IAT) sensor signal high fault detected
0x00	Y	55	P0115	Torque Reduction	Coolant sensor signal fault
0x00	Y	55	P0116		Coolant sensor fault (plausibility)
0x00	Y	124	P0116	Torque Reduction	Coolant temperature sensor performance invalid
0x00	Y	55	P0117		Coolant sensor signal low fault
0x00	Y	124	P0117		Coolant temperature sensor signal too low
0x00	Y	124	P0118		Coolant sensor signal high fault
0x00	Y	124	P0122		Intake Throttle Position Low Voltage Fault
0x00	Y	124	P0123		Intake Throttle Position High Voltage Fault
0x3D	Y	114	P0129-87		Erroneous signal for Barometric Pressure.
0x3D	Y	114	P0129-87		CAN bus message error for environment pressure from engine ECU
0x00	Y	55	P0133		Wide Range Air Fuel control (WRAF) fault: Response
0x00	Y	55	P0180	Torque Reduction	Fuel temperature ADC fault

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0x00	Y	124	P0181	Torque Reduction	Fuel Temperature Sensor Fault
0x00	Y	55	P0181	Torque Reduction	Fuel temperature sensor gradient fault
0x3D	Y	114	P0181-87		CAN bus message error for fuel temperature from engine ECU
0x00	Y	124	P0182	Torque Reduction	Fuel temperature sensor low fault
0x00	Y	124	P0183	Torque Reduction	Fuel temperature sensor high fault
0x00	Y	55	P0190	Torque Reduction_Limp Home (Idle Only)	Rail Pressure Sensor signal grad fault
0x00	Y	55	P0191	Torque Reduction_Limp Home (Idle Only)	Rail Pressure Sensor fault. Above maximum threshold (out of range at key-on)
0x00	Y	55	P0191	Torque Reduction_Limp Home (Idle Only)	Rail Pressure Sensor fault. Below minimum threshold (out of range at key-on)
0x00	Y	55	P0191	Torque Reduction_Limp Home (Idle Only)	Rail Pressure Sensor fault. Exceeds threshold (out of range at key-on)
0x00	Y	124	P0192	Torque Reduction_Limp Home (Idle Only)	Rail Pressure Sensor signal low fault
0x00	Y	124	P0193	Torque Reduction_Limp Home (Idle Only)	Rail Pressure Sensor signal high fault
0x00	Y	55	P0194	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	Rail Pressure Sensor signal drop fault
0x00	Y	55	P0195	Torque Reduction	Oil temperature sensor signal global fault
0x00	Y	114	P0195	Torque Reduction	Oil temperature sensor signal external voltage (V-Ref) fault
0x00	Y	55	P0196	Torque Reduction	Oil temperature sensor signal plausibility fault
0x00	Y	55	P0196	Torque Reduction	Oil temperature sensor signal gradient fault
0x3D	Y	114	P0196-87		CAN bus message error for oil temperature from engine ECU
0x00	Y	55	P0197	Torque Reduction	Oil temperature sensor signal low fault
0x00	Y	55	P0198	Torque Reduction	Oil temperature sensor signal high fault
0x00	Y	55	P0201		Injector 2 Open Circuit fault (OC)
0x00	Y	55	P0201		Injector in Cylinder 1 Short Circuit HSD to LSD
0x00	Y	124	P0201		Injector in Cylinder 1 Open Circuit fault (OC)
0x00	Y	124	P0202		Injector 1 Open Circuit fault (OC)
0x00	Y	55	P0202		Injector in Cylinder 2 Short Circuit HSD to LSD
0x00	Y	88	P0202		Injector in Cylinder 2 Open Circuit fault (OC)
0x00	Y	124	P0203		Injector 3 Open Circuit fault (OC)
0x00	Y	55	P0203		Injector in Cylinder 3 Short Circuit HSD to LSD
0x00	Y	88	P0203		Injector in Cylinder 3 Open Circuit fault (OC)
0x00	Y	124	P0204		Injector 0 Open Circuit fault (OC)
0x00	Y	55	P0204		Injector in Cylinder 4 Short Circuit HSD to LSD
0x00	Y	88	P0204		Injector in Cylinder 4 Open Circuit fault (OC)
0x00	Y	124	P0205		Injector in Cylinder 5 Open Circuit fault (OC)
0x00	Y	88	P0205		Injector in Cylinder 5 Short Circuit HSD to LSD
0x00	Y	124	P0206		Injector in Cylinder 6 Open Circuit fault (OC)
0x00	Y	88	P0206		Injector in Cylinder 6 Short Circuit HSD to LSD
0x00	Y	124	P0217	Torque Reduction	Coolant temperature exceeds upper limit
0x00	Y	124	P0219	Torque Reduction	Engine overspeed condition
0x00	Y	124	P0234	Torque Reduction	Turbo Over Boost
0x00	Y	55	P0235	Torque Reduction	Boosted air pressure sensor fault: ADC
0x00	Y	55	P0237	Torque Reduction	Boosted air pressure sensor low fault
0x00	Y	55	P0238	Torque Reduction	Boosted air pressure sensor high fault
0x00	Y	55	P0252	Torque Reduction	Rail pressure control error (IMV current trim drift).
0x00	Y	114	P0252	Torque Reduction	Rail pressure control error (IMV current trim drift).
0x00	Y	114	P0252	Torque Reduction	Rail pressure control error (IMV current trim drift).
0x00	Y	114	P0252	Torque Reduction	Rail pressure control error (IMV current trim drift).
0x00	Y	114	P0252	Torque Reduction	Rail pressure control error (IMV current trim drift).
0x00	Y	55	P0253	Torque Reduction_Delayed Engine Stop	Rail pressure control by the IMV. Occurs at high fuel delivery for low (negative) current trim
0x00	Y	55	P0254	Torque Reduction_Delayed Engine Stop	Rail pressure control fault by the IMV. Occurs at high fuel delivery for high (positive) current trim
0x00	Y	55	P0261	Torque Reduction	Injector and wiring harness resistance too high/low (inj 2)
0x00	Y	55	P0261	Torque Reduction	Injector and wiring harness resistance too high/low (inj 2)
0x00	Y	55	P0262	Torque Reduction	Injector and wiring harness resistance drop (Inj 2)
0x00	Y	55	P0262	Torque Reduction	Injector and wiring harness resistance drop (Inj 2)
0x00	Y	55	P0263	Torque Reduction	Cylinder balancing fault injector 2 stuck closed
0x00	Y	55	P0264	Torque Reduction	Injector and wiring harness resistance too high/low (inj 1)
0x00	Y	55	P0264	Torque Reduction	Injector and wiring harness resistance too high/low (inj 1)
0x00	Y	55	P0265	Torque Reduction	Injector and wiring harness resistance drop (Inj 1)
0x00	Y	55	P0265	Torque Reduction	Injector and wiring harness resistance drop (Inj 1)
0x00	Y	55	P0266	Torque Reduction	Cylinder balancing fault injector 1 stuck closed
0x00	Y	55	P0267	Torque Reduction	Injector and wiring harness resistance too high/low (inj 3)
0x00	Y	55	P0267	Torque Reduction	Injector and wiring harness resistance too high/low (inj 3)
0x00	Y	55	P0268	Torque Reduction	Injector and wiring harness resistance drop (Inj 3)
0x00	Y	55	P0268	Torque Reduction	Injector and wiring harness resistance drop (Inj 3)
0x00	Y	55	P0269	Torque Reduction	Cylinder balancing fault injector 3 stuck closed
0x00	Y	55	P0270	Torque Reduction	Injector drift fault detection on Injector 2. Fault which is set when the Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at low rail pressure
0x00	Y	55	P0270	Torque Reduction	Injector drift fault detection on Injector 2. Fault which is set when Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at medium rail pressure
0x00	Y	55	P0271	Torque Reduction	Injector and wiring harness resistance drop (Inj 0)
0x00	Y	55	P0271	Torque Reduction	Injector and wiring harness resistance drop (Inj 0)
0x00	Y	55	P0272	Torque Reduction	Cylinder balancing fault injector 0 stuck closed
0x00	Y	88	P0273		Injector and wiring harness resistance too high/low (inj 1)
0x00	Y	88	P0273		Injector and wiring harness resistance too high/low (inj 1)
0x00	Y	88	P0274		Injector and wiring harness resistance drop (Inj 1)
0x00	Y	88	P0274		Injector and wiring harness resistance drop (Inj 1)
0x00	Y	88	P0275		Cylinder balancing fault injector 1 stuck closed
0x00	Y	88	P0276		Injector and wiring harness resistance too high/low (inj 3)
0x00	Y	88	P0276		Injector and wiring harness resistance too high/low (inj 3)
0x00	Y	88	P0277		Injector and wiring harness resistance drop (Inj 3)
0x00	Y	88	P0277		Injector and wiring harness resistance drop (Inj 3)
0x00	Y	88	P0278		Cylinder balancing fault injector 3 stuck closed
0x00	Y	124	P0299	Torque Reduction	Turbo Low Boost
0x00	Y	55	P029A		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Maximum APC raw trim at high rail pressure
0x00	Y	55	P029A		Injector drift fault detection on Injector 2. Fault which is set when the Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at low rail pressure
0x00	Y	55	P029A		Injector drift fault detection on Injector 2. Fault which is set when Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at medium rail pressure
0x00	Y	55	P029B		Fault which is set when the Injector 3 absolute MDP value is below a calibrated threshold
0x00	Y	55	P029B		Injector drift fault detection on Injector 2. Fault which is set when Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at high rail pressure
0x00	Y	55	P029B		Injector drift fault detection on Injector 2. Fault which is set when Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at low rail pressure
0x00	Y	55	P029B		Injector drift fault detection on Injector 2. Fault which is set when Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at medium rail pressure

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0x00	Y	55	P029E		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Maximum APC raw trim at high rail pressure
0x00	Y	55	P029E		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at low rail pressure
0x00	Y	55	P029E		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at medium rail pressure
0x00	Y	55	P029F		Fault which is set when the Injector 2 absolute MDP value is below a calibrated threshold
0x00	Y	55	P029F		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at high rail pressure
0x00	Y	55	P029F		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at low rail pressure
0x00	Y	55	P029F		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at medium rail pressure
0x00	Y	55	P02A2		Injector drift fault detection on Injector 2. Fault which is set when the Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Maximum APC raw trim at high rail pressure
0x00	Y	55	P02A2		Injector drift fault detection on Injector 2. Fault which is set when the Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at low rail pressure
0x00	Y	55	P02A2		Injector drift fault detection on Injector 2. Fault which is set when the Injector 2 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at medium rail pressure
0x00	Y	55	P02A3		Fault which is set when the Injector 4 absolute MDP value is below a calibrated threshold
0x00	Y	55	P02A3		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at high rail pressure
0x00	Y	55	P02A3		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at low rail pressure
0x00	Y	55	P02A3		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at medium rail pressure
0x00	Y	55	P02A6		Injector drift fault detection on Injector 0. Fault which is set when the Injector 0 MDP trim exceeds the maximum calibrated threshold limit. Maximum APC raw trim at high rail pressure
0x00	Y	55	P02A6		Injector drift fault detection on Injector 0. Fault which is set when the Injector 0 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at low rail pressure
0x00	Y	55	P02A6		Injector drift fault detection on Injector 0. Fault which is set when the Injector 0 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at medium rail pressure
0x00	Y	55	P02A7		Fault which is set when the Injector 1 absolute MDP value is below a calibrated threshold
0x00	Y	55	P02A7		Injector drift fault detection on Injector 0. Fault which is set when the Injector 0 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at high rail pressure
0x00	Y	55	P02A7		Injector drift fault detection on Injector 0. Fault which is set when the Injector 0 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at low rail pressure
0x00	Y	55	P02A7		Injector drift fault detection on Injector 0. Fault which is set when the Injector 0 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at medium rail pressure
0x00	Y	88	P02AA		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Maximum APC raw trim at high rail pressure
0x00	Y	88	P02AA		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at low rail pressure
0x00	Y	88	P02AA		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at medium rail pressure
0x00	Y	88	P02AB		Fault which is set when the Injector 1 absolute MDP value is below a calibrated threshold
0x00	Y	88	P02AB		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at high rail pressure
0x00	Y	88	P02AB		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at low rail pressure
0x00	Y	88	P02AB		Injector drift fault detection on Injector 1. Fault which is set when the Injector 1 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at medium rail pressure
0x00	Y	88	P02AE		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Maximum APC raw trim at high rail pressure
0x00	Y	88	P02AE		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at low rail pressure
0x00	Y	88	P02AE		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Max APC raw trim at medium rail pressure
0x00	Y	88	P02AF		Fault which is set when the Injector 3 absolute MDP value is below a calibrated threshold
0x00	Y	88	P02AF		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at high rail pressure
0x00	Y	88	P02AF		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at low rail pressure
0x00	Y	88	P02AF		Injector drift fault detection on Injector 3. Fault which is set when the Injector 3 MDP trim exceeds the maximum calibrated threshold limit. Min APC raw trim at medium rail pressure
0x3D	Y	114	P0321-87		CAN bus message error for engine speed from engine ECU
0x00	Y	55	P0325		Accelerometer fault (signal/noise ratio too low in idle)
0x00	Y	94	P0330		Knock Sensor 1 Circuit
0x00	Y	124	P0335		Crank Sensor Fault (No Signal)
0x00	Y	55	P0335		Crankshaft Position Sensor "A" Circuit
0x00	Y	114	P0335		Crank signal overspeed fault
0x00	Y	124	P0336	Torque Reduction	Crank Sensor Fault (Signal Fault)
0x00	Y	55	P0340	Torque Reduction	Cam signal last learnt value is outside of limits

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0x00	Y	124	P0340	Torque Reduction	G Sensor Fault (No Signal)
0x00	Y	55	P0341	Torque Reduction	Cam signal drift higher than threshold
0x00	Y	124	P0341	Torque Reduction	G Sensor Fault (Abnormal Signal)
0x00	Y	55	P0341		Camshaft Position Sensor A Circuit Range / Performance
0x00	Y	55	P0341	Torque Reduction	Cam signal lost (no Cam signal seen in 2 Crank rotations)
0x00	Y	55	P0341	Torque Reduction	Cam signal fault (missing event within the expected window)
0x00	Y	55	P0341		Cam signal fault (overspeed detected)
0x3D	Y	114	P0350-02		Error monitoring for system protection based on ignition switch input
0x00	Y	55	P0371	Torque Reduction	Crank signal is too close to the previous one
0x00	Y	55	P0372	Torque Reduction	Elapsed time between CPS events is too high
0x00	Y	55	P0374	Torque Reduction	Crank signal lost (no CPS signal seen in 1 Cam rotation)
0x00	Y	124	P0380		Glow Plug/Heater Circuit "A"
0x00	Y	55	P0380		Glow Plug/Heater Circuit "A"
0x00	Y	124	P0381		Glow Plug Fault
0x00	Y	55	P0383		Glow Plug Control Module Control Circuit Low
0x00	Y	55	P0384		Glow Plug Control Module Control Circuit High
0x00	Y	55	P0400	Torque Reduction / T4F Inducement	EGR flow reached its limit
0x00	Y	124	P0401		EGR Gas flow Fault
0x00	Y	124	P0404		EGR Valve Control Fault
0x00	Y	124	P0404		EGR Open Defective
0x00	Y	94	P0404		Exhaust Gas Recirculation "A" Control Circuit Range/Performance
0x00	Y	55	P0405		Exhaust Gas Recirculation Sensor "A" Circuit Low
0x00	Y	55	P0406		Exhaust Gas Recirculation Sensor "A" Circuit High
0x00	Y	124	P0409		EGR Position Sensor Fault (Brushless Specification)
0x00	Y	124	P041C		Manifold Temperature Sensor Fault (High Voltage Fault)
0x00	Y	124	P041D		Manifold Temperature Sensor Fault (Low Voltage Fault)
0x00	Y	124	P0426		DPF Exhaust Temperature 1 High
0x00	Y	124	P0426		DPF Exhaust Temperature 1 Low
0x00	Y	124	P0427		Exhaust Temperature Sensor 1 Low Voltage Fault
0x00	Y	124	P0428		Exhaust Temperature Sensor 1 High Voltage Fault
0x00	Y	124	P042B		DPF Exhaust Temperature 2 High
0x00	Y	124	P042B		DPF Exhaust Temperature 2 Low
0x00	Y	124	P042C		Exhaust Temperature Sensor 2 Low Voltage Fault
0x00	Y	124	P042D		Exhaust Temperature Sensor 2 High Voltage Fault
0x00	Y	94	P046D		Exhaust Gas Recirculation Sensor "A" Circuit Intermittent/Erratic
0x00	Y	55	P0470	Torque Reduction	Exhaust manifold pressure (P3) signal ADC fault
0x00	Y	55	P0472	Torque Reduction	Exhaust manifold pressure (P3) signal low fault
0x00	Y	55	P0472	Torque Reduction	Exhaust manifold pressure (P3) signal drifted low
0x00	Y	55	P0473	Torque Reduction	Exhaust manifold pressure (P3) signal high fault
0x00	Y	55	P0473	Torque Reduction	Exhaust manifold pressure (P3) signal drifted high
0x00	Y	124	P0512		Starter Switch Fault
0x00	Y	55	P0520		Low oil pressure Lamp/Gauge drive open circuit (OC)
0x00	Y	55	P0520		Low oil pressure Lamp/Gauge drive short circuit (SC)
0x00	Y	55	P0520		Low oil pressure Lamp/Gauge drive short circuit to ground (SC2GND)
0x00	Y	55	P0520		Low oil pressure Lamp/Gauge drive short circuit to battery voltage (SC2VBATT)
0x00	Y	55	P0521		Oil pressure sensor signal global fault
0x00	Y	124	P0522	None	Engine Oil Pressure Sensor Fault (Low Voltage Fault)
0x00	Y	88	P0522	Torque Reduction	Oil Pressure Signal Out of Range High
0x00	Y	55	P0522		High Oil Pressure During Engine Running
0x00	Y	55	P0523		Low Oil Pressure During Engine Running
0x27	Y	91	P0523		Low Oil Pressure During Engine Running
0x00	Y	124	P0523		Engine Oil Pressure Sensor Fault (High Voltage Fault)
0x00	Y	88	P0523	Torque Reduction	Oil Pressure Signal Out of Range Low
0x00	Y	88	P0523		Low Oil Pressure During Engine Running
0x00	Y	55	P0544	Torque Reduction	Turbo in temperature fault
0x00	Y	55	P0545	Torque Reduction	Turbo in temperature count low fault
0x00	Y	55	P0546	Torque Reduction	Turbo in temperature count high fault
0x00	Y	124	P0560		12V Power Supply Voltage Fault
0x00	Y	55	P0562	Torque Reduction	Battery voltage monitoring signal low fault
0x00	Y	124	P0562	Torque Reduction	System Power Supply Low Voltage Fault
0x3D	Y	114	P0562-16		Low battery voltage
0x3D	Y	114	P0562-02		Fault due to low or high battery voltage supply to DCU
0x00	Y	55	P0563	Torque Reduction	Battery voltage monitoring signal high fault
0x00	Y	124	P0563	Torque Reduction	System Power Supply High Voltage Fault
0x3D	Y	114	P0563-17		High battery voltage
0x00	Y	124	P0601	Torque Reduction	ROM Fault
0x00	Y	124	P0602	Limp Home (Idle Only)	QR Code Error
0x00	Y	114	P0602	Limp Home (Idle Only)	C21 data not programmed
0x00	Y	55	P0602	Limp Home (Idle Only)	C21 data not programmed
0x00	Y	114	P0602	Limp Home (Idle Only)	C21 data not programmed
0x00	Y	114	P0602	Limp Home (Idle Only)	C21 data not programmed
0x00	Y	114	P0602	Limp Home (Idle Only) Engine Stop	RAM corruption affecting Injector C21 data
0x00	Y	114	P0602		Functional Safety Fault
0x00	Y	55	P0602	Limp Home (Idle Only)	Functional Safety Fault
0x00	Y	55	P0603	Engine Stop	ECU memory integrity fault (data / cal integrity)
0x00	Y	55	P0604	Engine Stop	ECU memory integrity fault (RAM integrity)
0x00	Y	124	P0604	Engine Stop	RAM Fault
0x00	Y	55	P0605	Engine Stop	ECU memory integrity fault (code integrity)
0x00	Y	55	P0606	Engine Stop	Functional Safety Fault
0x00	Y	55	P0606	Engine Stop	Functional Safety Fault
0x00	Y	55	P0606	Engine Stop	Functional Safety Fault
0x00	Y	55	P0606	Engine Stop	Functional Safety Fault
0x00	Y	55	P0606	Engine Stop	Functional Safety Fault
0x00	Y	55	P0606	Engine Stop	Functional Safety Fault
0x00	Y	124	P0606	Engine Stop	CPU Fault
0x00	Y	124	P0606	Engine Stop	CPU Monitoring IC Fault
0x00	Y	55	P0606	Engine Stop	Functional Safety Fault
0x3D	Y	114	P0606-02		Peripheral monitoring error on DCU
0x00	Y	55	P0607	Engine Stop	Functional Safety Fault
0x00	Y	55	P0607	Torque Reduction	Throttle H-Bridge driver in ECU fault: Over temperature
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x00	Y	55	P060A	Engine Stop	Functional Safety Fault
0x3D	Y	114	P060A-00		Monitoring error on DCU
0x00	Y	124	P060B		A/D Conversion Fault
0x00	Y	55	P060B	Limp Home (Idle Only) Engine Stop	ADC circuit fault (Global)
0x00	Y	55	P060B	Torque Reduction	HPV current feedback ADC fault detected
0x00	Y	55	P060B		Internal Control Module A/D Processing Performance
0x00	Y	55	P060B	Torque Reduction	Functional Safety Fault

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J1939 SA (hex)	In Use?	Reviewed/ Added @Version	Diagnostic Trouble Code	Machine Reaction	Extended Fault Text (Data Logger/Diagnostic Tools)
0x00	Y	55	P060B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P060B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x00	Y	55	P060C	Engine Stop	Functional Safety Fault
0x3D	Y	114	P060C-00		DCU software reset performed
0x3D	Y	114	P060C-41	T4F Inducement	DCU software reset performed
0x3D	Y	114	P060C-94		DCU software reset performed
0x3D	Y	114	P060C-68		DCU software reset performed
0x00	Y	55	P060D	Engine Stop	Functional Safety Fault
0x00	Y	55	P060D	Engine Stop	Functional Safety Fault
0x00	Y	55	P060D	Torque Reduction	Functional Safety Fault
0x00	Y	55	P060D	Torque Reduction	Functional Safety Fault
0x00	Y	55	P060E	Torque Reduction	Functional Safety Fault
0x00	Y	55	P0612		Fuel Injector Control Module Relay Control
0x00	Y	55	P0612		Fuel Injector Control Module Relay Control
0x00	Y	55	P0612		Fuel Injector Control Module Relay Control
0x00	Y	55	P0612		Fuel Injector Control Module Relay Control
0x00	Y	124	P0615		Starter Relay Circuit
0x00	Y	55	P061A		Functional Safety Fault
0x00	Y	55	P061B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P061C		Functional Safety Fault
0x00	Y	55	P061E		Functional Safety Fault
0x00	Y	55	P061E		Functional Safety Fault
0x00	Y	55	P0627	Torque Reduction	Lift pump global fault
0x00	Y	55	P0628	Torque Reduction	Lift pump global fault
0x00	Y	55	P0629	Torque Reduction	Lift pump global fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062B	Torque Reduction	Functional Safety Fault
0x00	Y	55	P062D	Delayed Engine Stop	Injector Bank 0 fault shorted to ground (SC2VBAT)
0x00	Y	55	P062D	Delayed Engine Stop	Injector Bank 0 fault shorted to ground (SC2GND)
0x00	Y	55	P062E	Delayed Engine Stop	Injector Bank 1 fault shorted to ground (SC2VBAT)
0x00	Y	55	P062E	Delayed Engine Stop	Injector Bank 1 fault shorted to ground (SC2GND)
0x00	Y	55	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault
0x00	Y	114	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault (C2I, MDP)
0x00	Y	114	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault (RP, PL, STE)
0x00	Y	114	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault (WDOG)
0x00	Y	114	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault (CAN, KW)
0x00	Y	114	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault (SMC)
0x00	Y	114	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault (ICV, Inj Cnt)
0x00	Y	114	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault (FM)
0x00	Y	114	P062F	Torque Reduction_Limp Home (Idle Only)	ECU non volatile memory fault (APP)
0x00	Y	55	P0630		VIN Not Programmed or Incompatible - ECM/PCM
0x00	Y	124	P0638		Intake Throttle Fault
0x00	Y	55	P0641	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	ECU Internal 5V Supply 1 fault
0x00	Y	124	P0641	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	5V Power Supply-1, Supply-6 Voltage Fault
0x00	Y	55	P0641	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	ECU Internal 5V Supply 1 fault
0x00	Y	124	P0650		Check Engine Lamp Fault
0x00	Y	55	P0651	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	ECU Internal 5V Supply 2 fault
0x00	Y	124	P0651	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	5V Power Supply-2 Voltage Fault
0x00	Y	124	P0651	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	5V Power Supply-5 Voltage Fault
0x00	Y	55	P0651	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	ECU Internal 5V Supply 2 fault
0x3D	Y	114	P0658-14		Short circuit to ground of actuator relay 1
0x3D	Y	114	P0659-12		Short circuit to battery of actuator relay 1
0x00	Y	55	P0668	Torque Reduction	ECU internal temperature sensor low fault
0x00	Y	55	P0669	Torque Reduction	ECU internal temperature sensor high fault
0x00	Y	55	P0685		Main ECU relay stuck
0x00	Y	55	P0685		Main relay unexpected low state
0x00	Y	124	P0685		Main Relay System Fault (Open)
0x00	Y	124	P0687		Main Relay System Fault (Close)
0x00	Y	55	P0697		Sensor Reference Voltage "C" Circuit/Open
0x00	Y	124	P0697		5V Power Supply-3 Voltage Fault
0x00	Y	55	P0697	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	ECU Internal 5V Supply 2 auxillary fault
0x00	Y	55	P0697	Torque Reduction_Limp Home (Idle Only)_Delayed Engine Stop	ECU Internal 5V Supply 2 auxillary fault
0x3D	Y	114	P06A7-00	T4F Inducement	Sensor supply monitoring error through DCU
0x17	Y	55	P06B8	None	Data logger memory full
0x00	Y	124	P1062		PCV 1 Feedback Fault
0x00	Y	124	P1063		PCV 2 Feedback Fault
0x00	Y	124	P1093		Common Rail Pressure Fault (Lack of Feed)
0x00	Y	124	P1093		Common Rail Pressure Fault (Lack of Feed 1)
0x00	Y	55	P1101		Rail Pressure Control Error Positive fault
0x00	Y	55	P1102		Rail Pressure Control Error Negative fault
0x00	Y	55	P1103		Rail Pressure Fault detected - not able to maintain pressure after a stop and start request
0x00	Y	55	P1104	Torque Reduction	Fault which is set when no MDP updates occur on Injector 3 due to environmental conditions (as defined by the update strategy)
0x00	Y	55	P1105	Torque Reduction	Fault which is set when no MDP updates occur on Injector 3 due to a fault within the update strategy

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J1939 SA (hex)	In Use?	Reviewed/ Added @Version	Diagnostic Trouble Code	Machine Reaction	Extended Fault Text (Datalogger/Diagnostic Tools)
0x00	Y	55	P1106	Torque Reduction	Fault which is set when no MDP updates occur on Injector 2 due to environmental conditions (as defined by the update strategy)
0x00	Y	55	P1107	Torque Reduction	Fault which is set when no MDP updates occur on Injector 2 due to a fault within the update strategy
0x00	Y	55	P1108	Torque Reduction	Fault which is set when no MDP updates occur on Injector 4 due to environmental conditions (as defined by the update strategy)
0x00	Y	55	P1109	Torque Reduction	Fault which is set when no MDP updates occur on Injector 4 due to a fault within the update strategy
0x00	Y	55	P110A	Torque Reduction	Fault which is set when no MDP updates occur on Injector 1 due to environmental conditions (as defined by the update strategy)
0x00	Y	55	P110B	Torque Reduction	Fault which is set when no MDP updates occur on Injector 1 due to a fault within the update strategy
0x12	Y	81	P110C	Throttle Response may be slow	Throttle Actuator Temperature Warning
0x12	Y	81	P110D	Engine will only idle	Throttle Actuator Hardware Fault
0x12	Y	81	P110E	Engine my stay at existing speed or idle	Throttle Actuator Obstruction Fault
0x12	Y	81	P110F	Engine will only idle	Throttle Actuator Calibration Fault
0x00	Y	124	P1112		Boost Temperature Sensor Fault (Low Voltage Fault)
0x00	Y	124	P1113		Boost Temperature Sensor Fault (High Voltage Fault)
0x00	Y	124	P1261		Charge Circuit Fault (Bank 1)
0x00	Y	124	P1262		Charge Circuit Fault (Bank 2)
0x00	Y	124	P1293		Fuel Filter Clogging Sensor Fault (Low Voltage Fault)
0x00	Y	124	P1294		Fuel Filter Clogging Sensor Fault (High Voltage Fault)
0x3D	Y	114	P1400-00		Erroneous signal from override switch
0x3D	Y	114	P1401-00		CAN bus message error from override switch
0x3D	Y	114	P1402-00		CAN bus off error from override switch
0x00	Y	124	P1404		EGR Close Defective
0x00	Y	124	P1404		EGR Zero Position Fault
0x00	Y	124	P140A		EGR 2 Valve Control Fault
0x00	Y	124	P140B		EGR 2 Position Sensor Fault
0x00	Y	124	P140C		EGR 2 Zero Position Fault
0x00	Y	124	P1455		DPF PM Over 2
0x00	Y	124	P1471		DPF Regeneration Defective
0x00	Y	124	P1500	Torque Reduction_Limp Home (Idle Only)	Starter Deterioration Warning
0x00	Y	55	P1509		CAN communication Error on TSC
0x00	Y	55	P1603		Functional Safety Fault
0x00	Y	55	P1604		Functional Safety Fault
0x00	Y	55	P1605		Functional Safety Fault
0x00	Y	55	P1606		Functional Safety Fault
0x00	Y	124	P1621		EEPROM Fault, HDEEPROM Fault
0x00	Y	124	P1655		5V Power Supply-4 Voltage Fault
0x00	Y	124	P1669		DPF Lamp Fault
0x3D	Y	114	P2000-00	T4F Inducement	Actual average conversion efficiency is below the threshold
0x3D	Y	114	P2000-02	T4F Inducement	Actual average conversion efficiency is below the threshold
0x3D	Y	114	P2000-04	T4F Inducement	Actual average conversion efficiency is below the threshold
0x3D	Y	114	P2000-06		Actual average conversion efficiency is below the threshold
0x3D	Y	114	P202A-13		Open load error of DEF tank heater actuator powerstage
0x3D	Y	114	P202B-14		Error for short to ground of DEF tank heater actuator powerstage
0x3D	Y	114	P202C-15		Error for short to battery of DEF tank heater actuator powerstage
0x3D	Y	114	P202E-00	T4F Inducement	Error on dosing valve short circuit
0x3D	Y	114	P202E-02	T4F Inducement	Error on dosing valve plausibility
0x3D	Y	114	P202E-16	T4F Inducement	Error on dosing valve plausibility at low voltage
0x3D	Y	114	P202E-4B	T4F Inducement	Error on dosing valve driver overtemperature
0x3D	Y	114	P202E-12	T4F Inducement	Error on dosing valve short circuit to battery
0x3D	Y	114	P202E-13	T4F Inducement	Error on dosing valve short circuit to battery on high side or open load
0x3D	Y	114	P202E-14	T4F Inducement	Error on dosing valve short to ground or open circuit
0x00	Y	124	P2032		EGR Gas Temperature Sensor Low Voltage Fault
0x00	Y	124	P2033		EGR Gas Temperature Sensor High Voltage Fault
0x3D	Y	114	P203B-81	T4F Inducement	CAN bus message error from headunit
0x3D	Y	114	P203B-87	T4F Inducement	CAN bus off error from headunit
0x3D	Y	114	P203B-86		CAN bus message error for tank level from head unit
0x3D	Y	114	P203B-16		Error on tank level plausibility
0x3D	Y	114	P203B-00		Tank level signal error
0x3D	Y	114	P203B-15		DEF tank level signal is above maximum voltage limit
0x3D	Y	114	P203B-14		DEF tank level signal is below minimum voltage limit
0x3D	Y	114	P203B-22	T4F Inducement	Tank head unit level physical signal above maximum limit
0x3D	Y	114	P203F-7B		DEF tank level low and empty
0x3D	Y	114	P203F-68		DEF tank level low and below warning threshold
0x3D	Y	114	P203F-21	T4F Inducement	DEF tank head unit level physical signal below minimum limit
0x3D	Y	114	P2043-81		CAN bus message error from head unit
0x3D	Y	114	P2043-87		CAN bus off error from head unit
0x3D	Y	114	P2043-86		DEF temperature message error from head unit
0x3D	Y	114	P204B-29	T4F Inducement	Error on pressure line & dosing valve while monitoring for blockage
0x3D	Y	114	P204B-02	T4F Inducement	Error while monitoring the stabilisation of pressure
0x3D	Y	114	P204B-00	T4F Inducement	Error while monitoring of pressure buildup
0x3D	Y	114	P204B-61	T4F Inducement	Error on rate of pressure reduction
0x3D	Y	114	P204B-26		Measured value of pressure sensor above the tolerable limit
0x3D	Y	114	P204B-17		Measured value of pressure sensor below the tolerable limit
0x3D	Y	114	P204B-16		Pump pressure signal below the minimum voltage limit
0x3D	Y	114	P204C-16	T4F Inducement	Pump pressure signal below the minimum voltage limit
0x3D	Y	114	P204C-21		Error for pump pressure physical signal below lower limit
0x3D	Y	114	P204D-17	T4F Inducement	Pump pressure signal above the maximum voltage limit
0x3D	Y	114	P204F-06		Error to detect the clogged filter
0x3D	Y	114	P204F-7A	T4F Inducement	Error to detect leakage during no dose
0x00	Y	140	P204F		Inducement Repeat Offence Active
0x3D	Y	114	P205B-00	T4F Inducement	Error to indicate overheating of DEF tank
0x3D	Y	114	P205B-06	T4F Inducement	Error in increase of DEF tank temperature
0x3D	Y	114	P205B-17	T4F Inducement	DEF tank head unit temperature physical signal above maximum limit
0x3D	Y	114	P205B-16		DEF tank head unit temperature physical signal below minimum limit
0x3D	Y	114	P205B-24	T4F Inducement	Error on tank temperature sensor plausibility exceeds maximum threshold
0x3D	Y	114	P205B-23	T4F Inducement	Error on tank temperature sensor plausibility below minimum threshold
0x3D	Y	114	P205C-16		DEF tank temperature signal voltage below minimum limit
0x3D	Y	114	P205D-17		DEF tank temperature signal voltage above maximum limit
0x3D	Y	114	P205E-87		CAN bus message error for DEF tank temperature from head unit
0x3D	Y	114	P205E-81	T4F Inducement	DEF tank temperature signal error on CAN
0x3D	Y	114	P207F-87	T4F Inducement	DEF quality message error from head unit
0x3D	Y	114	P207F-86		DEF concentration message error from head unit
0x3D	Y	114	P207F-00		DEF quality error during refill condition
0x00	Y	55	P2080	Torque Reduction	Turbo in temperature count noise fault
0x3D	Y	114	P208A-31		Supply module pump feedback error
0x3D	Y	114	P208A-13	T4F Inducement	Open load error of supply module pump motor
0x3D	Y	114	P208B-61		Error on supply module pump speed deviation
0x3D	Y	114	P208B-02	T4F Inducement	Error on supply module pump speed permanent deviation
0x3D	Y	114	P208B-4B	T4F Inducement	Over temperature error of supply module pump motor
0x3D	Y	114	P208B-22	T4F Inducement	Supply module internal duty cycle in invalid range

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J1939 SA (hex)	In Use?	Reviewed/ Added @Version	Diagnostic Trouble Code	Machine Reaction	Extended Fault Text (Data Logger/Diagnostic Tools)
0x3D	Y	114	P208B-21	T4F Inducement	Supply module internal duty cycle below min range
0x3D	Y	114	P208B-85	T4F Inducement	Supply module motor speed duty cycle above maximum range
0x3D	Y	114	P208B-84	T4F Inducement	Supply module motor speed duty cycle below minimum range
0x3D	Y	114	P208C-14	T4F Inducement	Short circuit to ground error of supply module pump motor
0x3D	Y	114	P208D-13	T4F Inducement	Short circuit to battery error of supply module pump motor
0x3D	Y	114	P209F-4B		Error for overtemperature of DEF tank heater actuator powerstage
0x3D	Y	114	P20A0-13		Open load error of backflow pump actuator powerstage
0x3D	Y	114	P20A1-4B		Error for over temperature of backflow pump actuator powerstage
0x3D	Y	114	P20A2-14		Error for short to ground of backflow pump actuator powerstage
0x3D	Y	114	P20A3-13		Error for short to battery of backflow pump actuator powerstage
0x3D	Y	114	P20AD-06		Error on supply module temperature
0x3D	Y	114	P20AD-92	T4F Inducement	Error on supply module temperature cold start
0x3D	Y	114	P20AD-22	T4F Inducement	Supply module temperature duty cycle above maximum range
0x3D	Y	114	P20AD-21	T4F Inducement	Supply module temperature duty cycle below minimum range
0x3D	Y	114	P20B5-13		Open load error of supply module heater actuator powerstage
0x3D	Y	114	P20B6-4B		Error for overtemperature of supply module heater actuator powerstage
0x3D	Y	114	P20B6-22	T4F Inducement	Supply module heater temperature duty cycle above maximum range
0x3D	Y	114	P20B6-21	T4F Inducement	Supply module heater temperature duty cycle below minimum range
0x3D	Y	114	P20B7-14		Error for short to ground of supply module heater actuator powerstage
0x3D	Y	114	P20B8-15		Error for short to battery of supply module heater actuator powerstage
0x3D	Y	114	P20B9-00		Error for open load on heater relay of backflow line
0x3D	Y	114	P20B9-13		Open load error of DEF backflowline heater actuator powerstage
0x3D	Y	114	P20BA-4B		Error for overtemperature of DEF backflowline heater actuator powerstage
0x3D	Y	114	P20BB-00		Error for short to ground or open load on heater relay of backflow line
0x3D	Y	114	P20BB-14		Error for short to ground of DEF backflowline heater actuator powerstage
0x3D	Y	114	P20BC-15		Error for short to battery of DEF backflowline heater actuator powerstage
0x3D	Y	114	P20BD-00		Error for open load on heater relay of pressure line
0x3D	Y	114	P20BD-13		Error for open load on heater relay of pressure line
0x3D	Y	114	P20BE-00	T4F Inducement	Error on supply module heater
0x3D	Y	114	P20BE-02	T4F Inducement	Error on supply module heater temperature sensor
0x3D	Y	114	P20BE-05		Error on supply module heater temperature cold start
0x3D	Y	114	P20BE-93	T4F Inducement	Error on pressure line to perform afterturn
0x3D	Y	114	P20BE-13		Error on reals for short to battery
0x3D	Y	114	P20BE-4B		Error for overtemperature of DEF pressureline heater actuator powerstage
0x3D	Y	114	P20BF-00		Error for short to ground or open load on heater relay of pressure line
0x3D	Y	114	P20BF-14		Error for short to ground of DEF pressureline heater actuator powerstage
0x3D	Y	114	P20C0-15		Error for short to battery of DEF pressureline heater actuator powerstage
0x3D	Y	114	P20C1-00		Error for open load on heater relay of suction line
0x3D	Y	114	P20C1-13		Error for open load on heater relay of suction line
0x3D	Y	114	P20C2-4B		Error for overtemperature of DEF suctionline heater actuator powerstage
0x3D	Y	114	P20C3-00		Error for short to ground or open load on heater relay of suction line
0x3D	Y	114	P20C3-14		Error for short to ground or open load on heater relay of suction line
0x3D	Y	114	P20C4-15		Error for short to battery of DEF suctionline heater actuator powerstage
0x3D	Y	114	P20E8-84	T4F Inducement	Underpressure error in metering control state
0x3D	Y	114	P20E9-85		Overpressure error in metering control state
0x3D	Y	114	P20E9-00	T4F Inducement	Overpressure error regardless of supply module state
0x3D	Y	114	P20EA-72		DCU relay early opening
0x3D	Y	114	P20EB-71		DCU relay stuck
0x00	Y	55	P2100	Torque Reduction / T4F Inducement	Throttle H-Bridge driver in ECU fault: OC
0x00	Y	55	P2100	Torque Reduction / T4F Inducement	Throttle H-Bridge driver in ECU fault: Undervoltage
0x00	Y	55	P2101	Torque Reduction	Throttle H-Bridge driver in ECU fault: Current limited
0x00	Y	55	P2101	Torque Reduction	Throttle H-Bridge driver in ECU fault: Current reduced
0x00	Y	55	P2101	Torque Reduction	Throttle H-Bridge driver in ECU fault: SC
0x00	Y	55	P2102	Torque Reduction / T4F Inducement	Throttle H-Bridge driver in ECU fault: SC2G
0x00	Y	55	P2103	Torque Reduction / T4F Inducement	Throttle H-Bridge driver in ECU fault: SC2VBATT
0x00	Y	55	P2119	Torque Reduction	Throttle learning position fault S0
0x00	Y	55	P2119	Torque Reduction	Throttle learning position fault S1
0x00	Y	55	P2119	Torque Reduction	Throttle learning position fault S2
0x00	Y	55	P2119	Torque Reduction	Throttle learning position fault S3
0x00	Y	124	P2122		Accelerator Sensor 1 Fault (Low Voltage Fault)
0x00	Y	124	P2123		Accelerator Sensor 1 Fault (High Voltage Fault)
0x00	Y	124	P2127		Accelerator Sensor 2 Fault (Low Voltage Fault)
0x00	Y	124	P2128		Accelerator Sensor 2 Fault (High Voltage Fault)
0x00	Y	124	P2138	Torque Reduction_Limp Home (Idle Only)	Hand pedal signal correlation fault
0x00	Y	55	P2146		injector supply voltage faulty
0x00	Y	124	P2146		Injection Nozzle Common 1 Drive System Fault
0x00	Y	55	P2147		injector supply voltage faulty
0x00	Y	124	P2149		Injection Nozzle Common 2 Drive System Fault
0x3D	Y	114	P219D-13		Open load error of DEF heater relay actuator powerstage
0x3D	Y	114	P219D-4B		Error for overtemperature of DEF heater relay actuator powerstage
0x3D	Y	114	P219E-13		Error for short to battery of DEF heater relay actuator powerstage
0x3D	Y	114	P219F-14		Error for short to ground of DEF heater relay actuator powerstage
0x3D	Y	114	P21A9-12		Short circuit to battery of actuator relay 4
0x3D	Y	114	P21AB-14	T4F Inducement	Short circuit to ground of actuator relay 4
0x3D	Y	114	P2200-13		Upstream NOx sensor open circuit
0x3D	Y	114	P2200-94		Upstream NOx sensor self diagnostic abort
0x3D	Y	114	P2200-05		Upstream NOx sensor self diagnostic
0x3D	Y	114	P2200-63		Upstream NOx sensor self diagnostic timeout
0x3D	Y	114	P2200-02		Upstream NOx sensor short circuit to gnd or batt
0x3D	Y	114	P2200-61		Invalid signal from upstream NOx sensor after heater release
0x3D	Y	114	P2200-12		Lambda signal above maximum limit for upstream NOx sensor
0x3D	Y	114	P2200-11		Lambda signal below minimum for upstream NOx sensor
0x3D	Y	114	P2200-00		Upstream NOx sensor wire diagnosis-error in voltage supply
0x3D	Y	114	P2201-13		Downstream NOx sensor open circuit
0x3D	Y	114	P2201-97		Downstream NOx sensor self diagnostic abort
0x3D	Y	114	P2201-06		Downstream NOx sensor self diagnostic
0x3D	Y	114	P2201-63		Downstream NOx sensor self diagnostic timeout
0x3D	Y	114	P2201-1C		Downstream NOx sensor short circuit to gnd or batt
0x3D	Y	114	P2201-61		Invalid signal from downstream NOx sensor after heater release
0x3D	Y	114	P2201-12		Lambda signal above maximum limit for downstream NOx sensor
0x3D	Y	114	P2201-11		Lambda signal below minimum limit for downstream NOx sensor
0x3D	Y	114	P2201-00		Downstream NOx sensor wire diagnosis-error in voltage supply
0x3D	Y	114	P2201-17		Downstream NOx offset max error detection
0x3D	Y	114	P2201-16		Downstream NOx offset min error detection
0x3D	Y	114	P2202-00		Upstream NOx sensor reading below minimum threshold
0x3D	Y	114	P2202-16		Downstream NOx sensor reading below minimum threshold
0x3D	Y	114	P2203-00		Upstream NOx sensor reading exceeds above maximum threshold
0x3D	Y	114	P2203-17		Downstream NOx sensor reading exceeds above maximum threshold
0x3D	Y	114	P2208-00		Downstream NOx sensor heater not available
0x3D	Y	114	P2208-02		Downstream NOx sensor heater not heated quickly
0x3D	Y	114	P2209-00		Upstream NOx sensor heater not available
0x3D	Y	114	P2209-02		Upstream NOx sensor heater not heated quickly
0x00	Y	124	P2227-00		Baro Sensor Fault

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J1939 SA (hex)	In Use?	Reviewed/ Added @Version	Diagnostic Trouble Code	Machine Reaction	Extended Fault Text (Datalogger/Diagnostic Tools)
0x00	Y	124	P2228	Torque Reduction	Atmosp sensor low fault
0x00	Y	124	P2229	Torque Reduction	Atmosp sensor high fault
0x00	Y	55	P2264	Torque Reduction	Water in fuel sensor feedback signal ADC fault
0x17	Y	55	P2264	Torque Reduction	Water in fuel sensor feedback signal ADC fault
0x00	Y	55	P2265	Torque Reduction	Water in fuel sensor feedback signal 1 plausability fault
0x00	Y	114	P2265	Torque Reduction	Water in fuel sensor feedback signal 2 plausability fault
0x00	Y	55	P2266	Torque Reduction	Water in fuel sensor feedback signal low fault
0x00	Y	55	P2267	Torque Reduction	Water in fuel sensor feedback signal high fault
0x00	Y	55	P2269	Torque Reduction	Water in fuel sensor feedback signal setting fault
0x27	Y	55	P2280	Loss of Power	ENGINE AIR FILTER BLOCKED [C027-SENSOR: AIR FILTER RESTRICTION]
0x00	Y	124	P2295		PCV 2 Drive System Open Circuit or Grand Short Circuit
0x00	Y	124	P2296		PCV 2 Drive System +B Short Circuit
0x3D	Y	114	P2413-87	T4F Inducement	Impeded egr fault data or bus off for egr faults from engine ECU
0x3D	Y	114	P2413-86		CAN bus message error from engine ECU
0x3D	Y	114	P2413-81		CAN bus message error for EGR faults from engine
0x00	Y	55	P2428		Exhaust Gas Temperature Too High
0x3D	Y	114	P2428-17		Exhaust catalyst temperature T4 physical signal above maximum limit
0x3D	Y	114	P242B-17		Error on catalyst temperature sensor plausability above max threshold
0x3D	Y	114	P242B-16		Error on catalyst temperature sensor plausability below min threshold
0x3D	Y	114	P242B-00	T4F Inducement	Error on SCR catalyst upstream temperature sensor static plausability
0x3D	Y	114	P242B-23		Exhaust catalyst temperature T4 physical signal below minimum limit
0x3D	Y	114	P242C-16	T4F Inducement	Exhaust catalyst temperature T4 voltage signal below minimum limit
0x3D	Y	114	P242D-17		Exhaust catalyst temperature T4 voltage signal above maximum limit
0x00	Y	124	P242F		DPF PM Over
0x00	Y	124	P2452		DPF Differential Pressure Low
0x00	Y	124	P2453		DPF Differential Pressure High
0x00	Y	124	P2454		Differential Pressure Sensor Low Voltage Fault
0x00	Y	124	P2455		Differential Pressure Sensor High Voltage Fault
0x00	Y	124	P2456		Differential Pressure Sensor Zero Position Learning Fault
0x00	Y	124	P2458		DPF Regeneration Timeout Excess Frequency
0x3D	Y	114	P2502-87		CAN bus message error for power management from engine ECU
0x00	Y	55	P250B	Engine will only idle	Engine Oil Level Low at Key On
0x00	Y	114	P250B		Oil level sensor signal global fault
0x00	Y	124	P2527		EVRV Vacuum Sensor Low Voltage Fault
0x00	Y	124	P2528		EVRV Vacuum Sensor High Voltage Fault
0x00	Y	55	P256A		Engine Idle Speed Selector Sensor/Switch Circuit/Open
0x00	Y	124	P256A		Idle Speed Up-Down Switch Fault
0x00	Y	55	P256B		Engine Idle Speed Selector Sensor/Switch Range/Performance
0x00	Y	55	P256B		Engine Idle Speed Selector Sensor/Switch Range/Performance
0x00	Y	55	P256B		Engine Idle Speed Selector Sensor/Switch Range/Performance
0x00	Y	55	P256B		Engine Idle Speed Selector Sensor/Switch Range/Performance
0x00	Y	55	P256B		Engine Idle Speed Selector Sensor/Switch Range/Performance
0x00	Y	55	P256C		Engine Idle Speed Selector Sensor/Switch Circuit Low
0x00	Y	55	P256D		Engine Idle Speed Selector Sensor/Switch Circuit High
0x3D	Y	114	P2670-14	T4F Inducement	Short circuit to ground of actuator relay 2
0x3D	Y	114	P2671-12		Short circuit to battery of actuator relay 2
0x3D	Y	114	P2685-14	T4F Inducement	Short circuit to ground of actuator relay 3
0x3D	Y	114	P2686-12		Short circuit to battery of actuator relay 3
0x3D	Y	114	P2A00-00		Upstream NOx sensor not mounted or loose
0x3D	Y	114	P2A01-00		Downstream NOx sensor not mounted or loose
0x00	Y	114	P2BA7-7B	0x7B - Low Fluid Level	Level Warning Requested
0x00	Y	114	P2BA7-94	0x94 - Unexpected Operation	Level Level1 Requested
0x00	Y	114	P2BA7-92	0x92 - Performance Or Incorrect Operation	Level Level1 Enacted
0x00	Y	114	P2BA7-F0	0xF0 - Unallocated (JCB Controlled)	Level Level2 Requested
0x00	Y	114	P2BA7-68	0x68 - Event Information	Level Level2 Enacted
0x00	Y	114	P2BA7-F1	0xF1 - Unallocated (JCB Controlled)	Level Level3 Requested
0x00	Y	114	P2BA7-9A	0x9A - Component Or System Operating Conditions	Level Level3 Enacted
0x00	Y	114	P2BA8-00	0x00 - No Sub Type Information	Interruption Warning Requested
0x00	Y	114	P2BA8-94	0x94 - Unexpected Operation	Interruption Level1 Requested
0x00	Y	114	P2BA8-92	0x92 - Performance Or Incorrect Operation	Interruption Level1 Enacted
0x00	Y	114	P2BA8-F0	0xF0 - Unallocated (JCB Controlled)	Interruption Level2 Requested
0x00	Y	114	P2BA8-68	0x68 - Event Information	Interruption Level2 Enacted
0x00	Y	114	P2BA8-F1	0xF1 - Unallocated (JCB Controlled)	Interruption Level3 Requested
0x00	Y	114	P2BA8-9A	0x9A - Component Or System Operating Conditions	Interruption Level3 Enacted
0x00	Y	114	P2BA9-00	0x00 - No Sub Type Information	Quality Warning Requested
0x00	Y	114	P2BA9-94	0x94 - Unexpected Operation	Quality Level1 Requested
0x00	Y	114	P2BA9-92	0x92 - Performance Or Incorrect Operation	Quality Level1 Enacted
0x00	Y	114	P2BA9-F0	0xF0 - Unallocated (JCB Controlled)	Quality Level2 Requested
0x00	Y	114	P2BA9-68	0x68 - Event Information	Quality Level2 Enacted
0x00	Y	114	P2BA9-F1	0xF1 - Unallocated (JCB Controlled)	Quality Level3 Requested
0x00	Y	114	P2BA9-9A	0x9A - Component Or System Operating Conditions	Quality Level3 Enacted
0x00	Y	114	P2BAA-00	0x00 - No Sub Type Information	Consumption Warning Requested
0x00	Y	114	P2BAA-94	0x94 - Unexpected Operation	Consumption Level1 Requested
0x00	Y	114	P2BAA-92	0x92 - Performance Or Incorrect Operation	Consumption Level1 Enacted
0x00	Y	114	P2BAA-F0	0xF0 - Unallocated (JCB Controlled)	Consumption Level2 Requested
0x00	Y	114	P2BAA-68	0x68 - Event Information	Consumption Level2 Enacted
0x00	Y	114	P2BAA-F1	0xF1 - Unallocated (JCB Controlled)	Consumption Level3 Requested
0x00	Y	114	P2BAA-9A	0x9A - Component Or System Operating Conditions	Consumption Level3 Enacted
0x00	Y	114	P2BAB-00	0x00 - No Sub Type Information	EGR Warning Requested
0x00	Y	114	P2BAB-94	0x94 - Unexpected Operation	EGR Level1 Requested
0x00	Y	114	P2BAB-92	0x92 - Performance Or Incorrect Operation	EGR Level1 Enacted
0x00	Y	114	P2BAB-F0	0xF0 - Unallocated (JCB Controlled)	EGR Level2 Requested
0x00	Y	114	P2BAB-68	0x68 - Event Information	EGR Level2 Enacted
0x00	Y	114	P2BAB-F1	0xF1 - Unallocated (JCB Controlled)	EGR Level3 Requested
0x00	Y	114	P2BAB-9A	0x9A - Component Or System Operating Conditions	EGR Level3 Enacted
0x3D	Y	114	P2BAD-17		Exceeded the limit value of long term adaptation factor
0x3D	Y	114	P2BAD-16		Undershoot the limit value of long term adaptation factor
0x3D	Y	114	P2BAD-00		Inducement override active
0x3D	Y	114	P2BAD-92		Inducement level 1 is active due to repeat offense error
0x3D	Y	114	P2BAD-68		Inducement level 2 is active due to repeat offense error
0x3D	Y	114	P2BAD-9A		Inducement level 3 is active due to repeat offense error
0x00	Y	114	P2BAE-00	0x00 - No Sub Type Information	Driver Warning for System tampering
0x00	Y	114	P2BAE-94	0x94 - Unexpected Operation	System Tampering Level 1 Requested
0x00	Y	114	P2BAE-92	0x92 - Performance Or Incorrect Operation	System Tampering Level 1 Enacted
0x00	Y	114	P2BAE-F0	0xF0 - Unallocated (JCB Controlled)	System Tampering Level 2 Requested
0x00	Y	114	P2BAE-68	0x68 - Event Information	System Tampering Level 2 Enacted
0x00	Y	114	P2BAE-F1	0xF1 - Unallocated (JCB Controlled)	System Tampering Level 3 Requested
0x00	Y	114	P2BAE-9A	0x9A - Component Or System Operating Conditions	System Tampering Level 3 Enacted
0x27	Y	91	P3300	Engine will not Crank	Starter Motor Engagement Protection
0x27	Y	91	P3301	Engine will not Crank	Starter Motor Overheat Protection
0x27	Y	91	P3302	Engine will not Crank	Starter Motor Overrun Protection
0x3D	Y	114	P3401-87		Excessive ambient/operating temperature error for aftertreatment 1 SCR catalyst DEF property
0x3D	Y	114	P3402-87		Concentration too high for aftertreatment 1 SCR catalyst DEF properties

Tracked & Wheeled Excavators				Extracted from Version 145	No of Error Codes in list 978
J1939 SA (hex)	In Use?	Reviewed/ Added @Version	Diagnostic Trouble Code	Machine Reaction	Extended Fault Text (Data Logger/Diagnostic Tools)
0x3D	Y	114	P3403-87		Concentration too low for aftertreatment 1 SCR catalyst DEF properties
0x3D	Y	114	P3404-87		Excessive ambient/operating temperature error for aftertreatment 1 SCR catalyst DEF property
0x3D	Y	114	P3405-87		Temperature too high for aftertreatment 1 SCR catalyst DEF properties
0x3D	Y	114	P3406-87		Temperature too low for aftertreatment 1 SCR catalyst DEF properties
0x3D	Y	114	P3407-87		Sensor open circuit error aftertreatment1 SCR catalyst DEF temperature
0x3D	Y	114	P3408-87		Sensor short circuit error aftertreatment1 SCR catalyst DEF temperature
0x3D	Y	114	P3409-87		Excessive ambient/operating level error for aftertreatment 1 SCR catalyst DEF property
0x3D	Y	114	P3410-87		Level too high for aftertreatment 1 SCR catalyst DEF properties
0x3D	Y	114	P3411-87		Level too low for aftertreatment 1 SCR catalyst DEF properties
0x3D	Y	114	P3412-87		Tank level open circuit error aftertreatment1 SCR catalyst DEF temperature
0x3D	Y	114	P3413-87		Tank level short circuit error aftertreatment1 SCR catalyst DEF temperature
0x3D	Y	114	P3414-87		Erroneous signal for engine boost pressure
0x3D	Y	114	P3415-87		Data length error for IC1 frame
0x3D	Y	114	P3416-87		Time out error for IC1 frame
0x3D	Y	114	P3417-87		Erroneous signal for intake manifold temperature
0x3D	Y	114	P3418-87		Erroneous signal for operating mode request
0x3D	Y	114	P3419-87		Error for particulate inlet pressure
0x3D	Y	114	P3420-87		Data length error for PROSCR3 frame received for regeneration
0x3D	Y	114	P3421-87		Timeout error for PROSCR3 frame received for regeneration
0x3D	Y	114	P3422-87		Erroneous signal for soot load message
0x3D	Y	114	P3423-87		Erroneous signal for engine exhaust gas temperature.
0x00	Y	140	P3424		SCR partially blocked (overloaded)
0x00	Y	140	P3425	T4F Inducement	SCR fully blocked (plugged)
0x32	Y	66	B0300	Low Flow Proportional Hydraulics inhibited	The HECU has determined that there is a Low Flow thumbwheel voltage high fault condition;
0x32	Y	66	B0301	Low Flow Proportional Hydraulics inhibited	The HECU has determined that there is a High Flow thumbwheel voltage low fault condition,
0x32	Y	66	B0302	Low Flow Proportional Hydraulics inhibited	The HECU has determined that there is a High Flow thumbwheel voltage high fault condition,
0x32	Y	66	B0303	Low Flow Proportional Hydraulics inhibited	The HECU has determined that there is a High Flow thumbwheel voltage low fault condition,
0x17	Y	66	B1002	None	Alternator Not Charging
0x17	Y	66	B1002	None	Alternator Excitation Open Circuit
0x27	Y	66	B105A	Machine Impaired Function - Loss of Throttle Control	SENSOR VOLTAGE HIGH [C015-ECU: MACHINE CONTROL (MECU)]
0x27	Y	66	B105B	Machine Impaired Function - Loss of Throttle Control	SENSOR VOLTAGE HIGH [C015-ECU: MACHINE CONTROL (MECU)]
0x32	Y	66	B105C	Machine Impaired Function - Loss of Auxiliary Control	SENSOR VOLTAGE HIGH [C153-ECU: HYDRAULIC CONTROL (HECU)]
0x32	Y	66	B105D	Machine Impaired Function - Loss of Auxiliary Control	SENSOR VOLTAGE LOW [C153-ECU: HYDRAULIC CONTROL (HECU)]
0x27	Y	66	B1300	Idle Speed only until Key Cycle	Voltage Above Normal [C094-POTENTIOMETER - POWER BAND SELECT]
0x27	Y	66	B1301	Idle Speed only until Key Cycle	Voltage Below Normal [C094-POTENTIOMETER - POWER BAND SELECT]
0x27	Y	66	B1302	Machine Controls Isolated	FAULT CONDITION [C122-SWITCH: CONTROLS ENABLE]
0x27	Y	122	B1303	Machine will Crank but not run	Fuel Lift Pump Relay Short Circuit
0x27	Y	122	B1304	Machine will Crank but not run	Fuel Lift Pump Relay Open Circuit
0x27	Y	66	B1307	NO ACTION	SHORT CIRCUIT [C059-LIGHT: INTERIOR ILLUMINATION]
0x27	Y	66	B1308	NO ACTION	OPEN CIRCUIT/BULB FAIL [C059-LIGHT: INTERIOR ILLUMINATION]
0x28	Y	66	B1309	NO ACTION	Service Interval Due/Elapsed
0x28	Y	66	B130A	NO ACTION	Supplementary Service Interval Due/Elapsed
0x27	Y	66	B1543	Engine will de-rate	Coolant Temperature High (Critical Level)
0x27	Y	66	B1546	No Effect	Coolant Temperature High (Operator Level)
0x32	Y	66	C0300	Low Flow Proportional Hydraulics inhibited	The HECU has determined that there is a short circuit fault condition for the Low Flow A Solenoid
0x32	Y	66	C0301	Low Flow Proportional Hydraulics inhibited	The HECU has determined that there is an open circuit fault condition for the Low Flow A Solenoid
0x32	Y	66	C0302	Low Flow Proportional Hydraulics inhibited	The HECU has determined that there is a short circuit fault condition for the Low Flow B Solenoid
0x32	Y	66	C0303	Low Flow Proportional Hydraulics inhibited	The HECU has determined that there is an open circuit fault condition for the Low Flow B Solenoid
0x32	Y	66	C0304	High Flow Proportional Hydraulics inhibited	The HECU has determined that there is a short circuit fault condition for the High Flow A Solenoid
0x32	Y	66	C0305	High Flow Proportional Hydraulics inhibited	The HECU has determined that there is an open circuit fault condition for the High Flow A Solenoid
0x32	Y	66	C0306	High Flow Proportional Hydraulics inhibited	The HECU has determined that there is a short circuit fault condition for the High Flow B Solenoid
0x32	Y	66	C0307	High Flow Proportional Hydraulics inhibited	The HECU has determined that there is an open circuit fault condition for the High Flow B Solenoid
0x32	Y	66	C0308	Quick Hitch Operation Inhibited	The HECU has determined that there is a short circuit fault condition for the Quick Hitch solenoid
0x32	Y	66	C0309	Quick Hitch Operation Inhibited	The HECU has determined that there is an open circuit fault condition for the Quick Hitch solenoid
0x32	Y	66	C030A	Quick Hitch Operation Inhibited	The HECU has determined that there is a short circuit fault condition for the Quick Hitch Boom Warning Lamp
0x32	Y	66	C030B	Quick Hitch Operation Inhibited	The HECU has determined that there is an open circuit fault condition for the Quick Hitch Boom Warning Lamp
0x32	Y	66	C030C	Super High Flow Operation Inhibited	The HECU has determined that there is a short circuit fault condition for the Merge Flow A solenoid
0x32	Y	66	C030D	Super High Flow Operation Inhibited	The HECU has determined that there is an open circuit fault condition for the Merge Flow A solenoid
0x32	Y	66	C030E	Super High Flow Operation Inhibited	The HECU has determined that there is a short circuit fault condition for the Merge Flow B solenoid
0x32	Y	66	C030F	Super High Flow Operation Inhibited	The HECU has determined that there is an open circuit fault condition for the Merge Flow B solenoid
0x32	Y	97	C0310	Advanced Tool Select Inhibited	The HECU has determined that there is a short circuit fault condition for the Low Flow ARV proportional solenoid
0x32	Y	97	C0311	Advanced Tool Select Inhibited	The HECU has determined that there is an open circuit fault condition for the Low Flow ARV proportional solenoid
0x32	Y	97	C0312	Advanced Tool Select Inhibited	The HECU has determined that there is a short circuit fault condition for the High Flow ARV proportional solenoid
0x32	Y	97	C0313	Advanced Tool Select Inhibited	The HECU has determined that there is an open circuit fault condition for the High Flow ARV proportional solenoid
0x27	Y	66	C0314	2 Direction Hi-Flow Auxiliary Hydraulics Inhibited	The MECU has determined that there is a short circuit fault condition for the Auxiliary Mode changeover solenoid
0x27	Y	66	C0315	2 Direction Hi-Flow Auxiliary Hydraulics Inhibited	The MECU has determined that there is an open circuit fault condition for the Auxiliary Mode changeover solenoid
0x32	Y	66	C0316	Machine will operate in ISO Control Pattern Only	The HECU has determined that there is a short circuit fault condition for the ISO Controls changeover output
0x32	Y	66	C0317	Machine will operate in ISO Control Pattern Only	The HECU has determined that there is an open circuit fault condition for the ISO Controls changeover output
0x32	Y	66	C0318	Arm Limiter Function will not work	The HECU has determined that there is a short circuit fault condition for the Arm Limiter Solenoid output
0x32	Y	66	C0319	Arm Limiter Function will not work	The HECU has determined that there is an open circuit fault condition for the Arm Limiter Solenoid output
0x32	Y	105	C031A	Low Flow Proportional Hydraulics inhibited	The HECU is unable to achieve target current/pressure when operating the Low Flow A Solenoid
0x32	Y	105	C031B	Low Flow Proportional Hydraulics inhibited	The HECU is unable to achieve target current/pressure when operating the Low Flow B Solenoid
0x32	Y	105	C031C	High Flow Proportional Hydraulics inhibited	The HECU is unable to achieve target current/pressure when operating the High Flow A Solenoid
0x32	Y	105	C031D	High Flow Proportional Hydraulics inhibited	The HECU is unable to achieve target current/pressure when operating the High Flow B Solenoid
0x32	Y	105	C031E	Low Flow Proportional Hydraulics inhibited	The Low Flow Pressure Transducer output is Out of Range Low
0x32	Y	105	C031F	Low Flow Proportional Hydraulics inhibited	The Low Flow Pressure Transducer output is Out of Range High
0x32	Y	105	C0320	High Flow Proportional Hydraulics inhibited	The High Flow Pressure Transducer output is Out of Range Low
0x32	Y	105	C0321	High Flow Proportional Hydraulics inhibited	The High Flow Pressure Transducer output is Out of Range High
0x32	Y	105	C0322	Low Flow Proportional Hydraulics inhibited	The Low Flow Pilot Pressure Transducer output is Out of Range Low
0x32	Y	105	C0323	Low Flow Proportional Hydraulics inhibited	The Low Flow Pilot Pressure Transducer output is Out of Range High

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J1939 SA (hex)	In Use?	Reviewed/ Added @Version	Diagnostic Trouble Code	Machine Reaction	Extended Fault Text (Datalogger/Diagnostic Tools)
0x32	Y	105	C0324	High Flow Proportional Hydraulics inhibited	The High Flow Pilot Pressure Transducer output is Out of Range Low
0x32	Y	105	C0325	High Flow Proportional Hydraulics inhibited	The High Flow Pilot Pressure Transducer output is Out of Range High
0x32	Y	107	C0326	Hammer Operation inhibited	The HECU has determined that there is a short circuit fault condition for the Hammer Speed Regulator Solenoid
0x32	Y	107	C0327	Hammer Operation inhibited	The HECU has determined that there is an open circuit fault condition for the Hammer Speed Regulator Solenoid
0x27	Y	66	C101D	No Effect on Performance	Fuel Level Low Alarm
0x27	Y	66	C101E	No Effect on Performance	Fuel Level Empty Alarm
0x27	Y	66	C101F	No Effect on Performance	Fuel Level Sensor Short Circuit
0x27	Y	66	C1020	No Effect on Performance	Fuel Level Sensor Open Circuit
0x27	Y	66	C1021	No Effect on Performance	Engine Coolant Level Low
0x27	Y	66	C1023	Machine will de-rate	Hydraulic Oil Temperature High Alarm
0x27	Y	66	C1024	No Effect on Performance	Hydraulic Oil Temperature Sensor Open Circuit
0x27	Y	66	C1025	T4F Inducement	Battery Voltage High Fault Condition
0x27	Y	66	C1026	T4F Inducement	Battery Voltage Low Fault Condition
0x27	Y	66	C1027		Alternator Voltage High Fault Condition
0x27	Y	66	C1028		Alternator Voltage Low Fault Condition
0x27	Y	66	C1029	No Effect on Performance	Ambient Air Temperature Sensor Short Circuit
0x27	Y	66	C102A	No Effect on Performance	Ambient Air Temperature Sensor Open Circuit
0x27	Y	66	C102B	Fan will run at 100%	Cooling Fan Solenoid Fault Condition
0x27	Y	66	C102C	Fan will run at 100%	Cooling Fan Solenoid Short Circuit
0x27	Y	66	C102D	Fan will run at 100%	Cooling Fan Solenoid Open Circuit
0x27	Y	66	C1032	Machine will de-rate	Hydraulic Oil Temperature Critical Alarm
0x27	Y	66	C1035	No Effect on Performance	Hydraulic Oil Temperature Sensor Short Circuit
0x27	Y	66	C1300	Feature will not work as intended	SHORT CIRCUIT [C052-SOLENOID: 2 STAGE MRV]
0x27	Y	66	C1301	Feature will not work as intended	OPEN CIRCUIT [C052-SOLENOID: 2 STAGE MRV]
0x27	Y	66	C1303	Machine will be limited to 1 Speed	SHORT CIRCUIT [C048-SOLENOID: TRAVEL SPEED]
0x27	Y	66	C1304	Machine will be limited to 1 Speed	OPEN CIRCUIT [C048-SOLENOID: TRAVEL SPEED]
0x27	Y	66	C1305	Feature will not work as intended	SHORT CIRCUIT [C047-SOLENOID: MAX FLOW CONTROL]
0x27	Y	66	C1306	Feature will not work as intended	OPEN CIRCUIT [C047-SOLENOID: MAX FLOW CONTROL]
0x27	Y	97	C1307	Machine Controls will be Isolated	OPEN CIRCUIT [C051-SOLENOID: CONTROLS ENABLE]
0x27	Y	97	C1308	Machine Controls will be Isolated	SHORT CIRCUIT [C051-SOLENOID: CONTROLS ENABLE]
0x27	Y	66	C1309	Swing will be locked in position at moment of failure	SHORT CIRCUIT [C050-SOLENOID: SWING LOCK]
0x27	Y	66	C130A	Swing will be locked in position at moment of failure	OPEN CIRCUIT [C050-SOLENOID: SWING LOCK]
0x27	Y	66	C130B	Swing will be locked in position at moment of failure	SHORT CIRCUIT [C053-SOLENOID: SWING PARK BRAKE]
0x27	Y	66	C130C	Swing will be locked in position at moment of failure	OPEN CIRCUIT [C053-SOLENOID: SWING PARK BRAKE]
0x27	Y	66	C130D	Swing will be locked in position at moment of failure	SHORT CIRCUIT [C049-SOLENOID: SWING SHUT-OFF]
0x27	Y	66	C130E	Swing will be locked in position at moment of failure	OPEN CIRCUIT [C049-SOLENOID: SWING SHUT-OFF]
0x27	Y	66	C130F	Feature will not work as intended	SHORT CIRCUIT [C091-SOLENOID: BOOM PRIORITY]
0x27	Y	66	C1310	Feature will not work as intended	OPEN CIRCUIT [C091-SOLENOID: BOOM PRIORITY]
0x27	Y	66	C1311	Feature will not work as intended	SHORT CIRCUIT [C041-ALARM: TRAVEL]
0x27	Y	66	C1312	Feature will not work as intended	OPEN CIRCUIT [C041-ALARM: TRAVEL]
0x27	Y	66	C1313	Feature will not work as intended	SHORT CIRCUIT [C100-R5 REFUELLING PUMP RELAY]
0x27	Y	66	C1314	Feature will not work as intended	OPEN CIRCUIT [C100-R5 REFUELLING PUMP RELAY]
0x27	Y	79	C1316	Machine Controls will be Isolated	Pilot Pressure Transducer Voltage above Normal
0x27	Y	79	C1317	Machine Controls will be Isolated	Pilot Pressure Transducer Voltage below Normal
0x27	Y	97	C1318	Warning Only	Controls Enable Pressure Out of Range
0x27	Y	79	C131A	Machine Controls will be Isolated	Lever Lock Switches Plausibility Error
0x31	Y	88	C1321	Foot Brake performance reduced	Brake Accumulator Pressure Low
0x31	Y	74	C1322	Transmission Drive Isolated	Both forward & reverse inputs are active
0x31	Y	74	C1323	No Action	Vref shorted to battery
0x31	Y	74	C1324	No Action	Vref shorted to ground
0x31	Y	74	C1325	Brake Accumulator Low Warning Permanently ON	Brake accumulator sensor shorted to battery
0x31	Y	74	C1326	Brake Accumulator Low Warning Permanently ON	Brake accumulator sensor shorted to ground
0x31	Y	74	C1327	Highway Mode not available	Swing rotation sensor shorted to battery
0x31	Y	74	C1328	Highway Mode not available	Swing rotation sensor shorted to ground
0x31	Y	74	C1329	Only Reverse direction available	Forward drive output open-circuited
0x31	Y	74	C132A	Only Reverse direction available	Forward drive output short-circuited
0x31	Y	74	C132B	Only Forward direction available	Reverse drive output open-circuited
0x31	Y	74	C132C	Only Forward direction available	Reverse drive output short-circuited
0x31	Y	74	C132D	No LH Turn Signals	Left turn indicator output open-circuited
0x31	Y	74	C132E	No LH Turn Signals	Left turn indicator output short-circuited
0x31	Y	74	C132F	No RH Turn Signals	Right turn indicator output open-circuited
0x31	Y	74	C1330	No RH Turn Signals	Right turn indicator output short-circuited
0x31	Y	74	C1331	No Rear Fog Lights	Rear fog lights output open-circuited
0x31	Y	74	C1332	No Rear Fog Lights	Rear fog lights output short-circuited
0x31	Y	74	C1333	No Reverse Lights	Reverse lights output open-circuited
0x31	Y	74	C1334	No Reverse Lights	Reverse lights output short-circuited
0x31	Y	74	C1335	Creep Speed unavailable	Pump 1 output open-circuited
0x31	Y	74	C1336	Creep Speed unavailable	Pump 1 output short-circuited
0x31	Y	74	C1339	Front LH stabilizer/dozer will stay in current position	Front LH stabilizer/dozer output open-circuited
0x31	Y	74	C133A	Front LH stabilizer/dozer will stay in current position	Front LH stabilizer/dozer output short-circuited
0x31	Y	74	C133B	Front RH stabilizer will stay in current position	Front RH stabilizer output open-circuited
0x31	Y	74	C133C	Front RH stabilizer will stay in current position	Front RH stabilizer output short-circuited
0x31	Y	74	C133D	Rear LH stabilizer/dozer will stay in current position	Rear LH stabilizer/dozer output open-circuited
0x31	Y	74	C133E	Rear LH stabilizer/dozer will stay in current position	Rear LH stabilizer/dozer output short-circuited
0x31	Y	74	C133F	Rear RH stabilizer will stay in current position	Rear RH stabilizer output open-circuited
0x31	Y	74	C1340	Rear RH stabilizer will stay in current position	Rear RH stabilizer output short-circuited
0x31	Y	74	C1341	No Switch Warning for Hazard Sw	Hazard LED output open-circuited
0x31	Y	74	C1342	No Switch Warning for Hazard Sw	Hazard LED output short-circuited
0x31	Y	74	C1343	High speed not available	M1 output open-circuited
0x31	Y	74	C1344	High speed not available	M1 output short-circuited
0x31	Y	74	C1345	Creep and Mid Speed not available	M2 output open-circuited
0x31	Y	74	C1346	Creep and Mid Speed not available	M2 output short-circuited
0x31	Y	74	C1347	No Brake Lights	Brake light output open-circuited
0x31	Y	74	C1348	No Brake Lights	Brake light output short-circuited
0x31	Y	74	C1349	Axle will not oscillate and remain in place	Axle lock output open-circuited
0x31	Y	74	C134A	Axle will not oscillate and remain in place	Axle lock output short-circuited
0x31	Y	74	C134B	Dig End will be isolated	Dig end enable output open-circuited
0x31	Y	74	C134C	Dig End will be isolated	Dig end enable output short-circuited
0x31	Y	74	C134D	Machine will not drive	Drive enable output open-circuited
0x31	Y	74	C134E	Machine will not drive	Drive enable output short-circuited
0x31	Y	74	C134F	Warning Only	Revolver no longer aligned (when in travel mode)
0x31	Y	74	C1350	Creep speed disabled due to transmission output fault.	Creep speed disabled due to transmission output fault.
0x31	Y	74	C1351	Slow speed disabled due to transmission output fault.	Slow speed disabled due to transmission output fault.
0x31	Y	74	C1352	Fast speed disabled due to transmission output fault.	Fast speed disabled due to transmission output fault.
0x31	Y	74	C1353	Travel speed disabled due to transmission output fault.	Travel speed disabled due to transmission output fault.
0x31	Y	92	C1354	Brake System Charging before drive	Brake Accumulator Pressure Low at Key On
0x31	Y	93	C1355	None	Door Open while Cab Raised
0x27	Y	122	C1356	Load assist during Regen not active	Regen Load Assist Solenoid Short Circuit
0x27	Y	122	C1357	Load assist during Regen not active	Regen Load Assist Solenoid Open Circuit
0x00	Y	124	U0002		ISO-CAN Bus Fault
0x3D	Y	114	U0029-88		CAN bus off error 250kbps

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J1939 SA (hex)	In Use?	Reviewed/ Added @Version	Diagnostic Trouble Code	Machine Reaction	Extended Fault Text (Datalogger/Diagnostic Tools)
0x3D	Y	114	U0029-87		CAN bus off error 250kbps
0x00	Y	124	U0073		CAN Bus Fault
0x00	Y	124	U0101		CAN Timeout Fault
0x3D	Y	114	U0105-87		CAN bus message error for fuel qnty from engine ECU
0x00	Y	66	U010A	Torque Reduction	Lost Communication With Exhaust Gas Recirculation Control Module "A"
0x00	Y	66	U010C		Lost Communication With Turbocharger/Supercharger Control Module "A"
0x00	Y	114	U0110	T4F Inducement	Inducement BAM TO
0x00	Y	114	U0110	T4F Inducement	Engine rating TO
0x00	Y	124	U0110		VNT Timeout Fault
0x3D	Y	114	U0401-86	T4F Inducement	CAN bus message error from engine ECU
0x3D	Y	114	U0401-81	T4F Inducement	CAN bus message error from engine ECU
0x3D	Y	114	U0401-87	T4F Inducement	CAN bus off error from engine ECU
0x3D	Y	114	U0401-81	T4F Inducement	CAN bus message error from engine ECU
0x3D	Y	114	U0401-87	T4F Inducement	CAN bus off error from engine ECU
0x3D	Y	114	U0401-81	T4F Inducement	CAN bus message error from engine ECU
0x3D	Y	114	U0401-87	T4F Inducement	CANbus off error from engine ECU
0x3D	Y	114	U0401-61		CAN bus message error for modelled NOx from engine ECU
0x3D	Y	114	U0401-81	T4F Inducement	CAN bus message error from engine ECU
0x3D	Y	114	U0401-87	T4F Inducement	CAN bus off error from engine ECU
0x00	Y	94	U040B		Invalid Data Received From Exhaust Gas Recirculation Control Module "A"
0x00	Y	94	U040B		Invalid Data Received From Exhaust Gas Recirculation Control Module "A"
0x00	Y	94	U040B		Invalid Data Received From Exhaust Gas Recirculation Control Module "A"
0x00	Y	94	U040B		Invalid Data Received From Exhaust Gas Recirculation Control Module "A"
0x00	Y	94	U040B	Torque Reduction	Invalid Data Received From Exhaust Gas Recirculation Control Module "A"
0x00	Y	94	U040B	Torque Reduction / T4F Inducement	CAN communication error: EGR overtemperature
0x00	Y	94	U040B	Torque Reduction / T4F Inducement	CAN communication error: EGR overtemperature
0x00	Y	94	U040D		Invalid Data Received From Turbocharger/Supercharger Control Module "A"
0x00	Y	94	U040D	Torque Reduction / T4F Inducement	Invalid Data Received From Turbocharger/Supercharger Control Module "A"
0x00	Y	94	U040D		Invalid Data Received From Turbocharger/Supercharger Control Module "A"
0x00	Y	94	U040D	Torque Reduction / T4F Inducement	Invalid Data Received From Turbocharger/Supercharger Control Module "A"
0x00	Y	94	U040D		Invalid Data Received From Turbocharger/Supercharger Control Module "A"
0x00	Y	94	U040D	Torque Reduction / T4F Inducement	Invalid Data Received From Turbocharger/Supercharger Control Module "A"
0x00	Y	140	U040F	T4F Inducement	Invalid Data Received From Turbocharger/Supercharger Control Module "A"
0x00	Y	124	U0410		Engine rating mismatch
0x3D	Y	114	U059E-81	T4F Inducement	VNT Communication Fault
0x3D	Y	114	U059E-87	T4F Inducement	CAN bus message error from upstream NOx sensor
0x3D	Y	114	U059E-29		CAN bus off error from upstream NOx sensor
0x3D	Y	114	U059E-86		CAN bus message error from upstream NOx sensor
0x3D	Y	114	U059E-9A		CAN bus message error for heater ratio from upstream NOx sensor
0x3D	Y	114	U059E-62		CAN bus message error for NH3 level from upstream NOx sensor
0x3D	Y	114	U059E-02		CAN bus message error for NO2 level from upstream NOx sensor
0x3D	Y	114	U059E-93		CAN bus message error for NOx level from upstream NOx sensor
0x3D	Y	114	U059E-94		CAN bus message error for O2 level from upstream NOx sensor
0x3D	Y	114	U059E-97		CAN bus message error for NOx signal status from upstream NOx sensor
0x3D	Y	114	U059E-08		CAN bus message error for O2 signal status from upstream NOx sensor
0x3D	Y	114	U059E-84		CAN bus message error for power signal status from upstream NOx sensor
0x3D	Y	114	U059E-00		CAN bus message error for temp signal status from downstream NOx sensor
0x3D	Y	114	U059F-81	T4F Inducement	CAN bus message error from downstream NOx sensor
0x3D	Y	114	U059F-87	T4F Inducement	CAN bus off error from downstream NOx sensor
0x3D	Y	114	U059F-29		CAN bus message error from downstream NOx sensor
0x3D	Y	114	U059F-86		CAN bus message error from downstream NOx sensor
0x3D	Y	114	U059F-9A		CAN bus message error for heater ratio from downstream NOx sensor
0x3D	Y	114	U059F-62		CAN bus message error for NH3 level from downstream NOx sensor
0x3D	Y	114	U059F-02		CAN bus message error for NO2 level from downstream NOx sensor
0x3D	Y	114	U059F-93		CAN bus message error for NOx level from downstream NOx sensor
0x3D	Y	114	U059F-94		CAN bus message error for O2 level from downstream NOx sensor
0x3D	Y	114	U059F-97		CAN bus message error for NOx signal status from downstream NOx sensor
0x3D	Y	114	U059F-08		CAN bus message error for O2 signal status from downstream NOx sensor
0x3D	Y	114	U059F-84		CAN bus message error for power signal status from downstream NOx sensor
0x3D	Y	114	U059F-00		CAN bus message error for temp signal status from upstream NOx sensor
0x32	Y	66	U1100	NONE	DATALOGS FULL
0x27	Y	66	U1300	Machine Immobilised	ECU BINDING FAULT
0x12	Y	79	U1308	Engine Idle	MECU has lost CAN Communication with Throttle Actuator
0x82	Y	66	U1800	Machine Immobilised	ECU BINDING FAULT
0x4A	Y	88	U1900	N/A	LiveLink - Vehicle Battery Voltage Below Normal
0x4A	Y	88	U1901	N/A	LiveLink - Internal Voltage Below Normal
0x4A	Y	88	U1904	N/A	LiveLink - ECU Above Temperature Threshold
0x4A	Y	88	U1905	N/A	LiveLink - ECU Below Temperature Threshold
0x4A	Y	88	U1906	N/A	LiveLink - Accelerometer Internal Failure
0x4A	Y	88	U1907	N/A	LiveLink - Modem Jammed
0x4A	Y	88	U1908	N/A	LiveLink - GPS Antenna Not OK
0x4A	Y	88	U1909	N/A	LiveLink - No Comms with GPS Module
0x4A	Y	88	U190A	N/A	LiveLink - SIM Card Failure
0x4A	Y	88	U190B	N/A	LiveLink - No Comms with GSM Module
0x4A	Y	88	U190C	N/A	LiveLink - GSM Network Registration Failure
0x00	Y	124	U2106		CAN Timeout Fault