

SS 1033423 : J-1939 Fault Code Source Address (SA), Suspect Parameter Number (SPN), and Failure Mode Indicator (FMI) Descriptions

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This solution helps explain the underlying meaning of the numerical components which build a fault code.

- This is not a comprehensive list, or an alternative to the standard fault diagnostic process and only serves as a supplemental reference -
- For a complete reference see SAE documentation regarding Serial Control and Communications Heavy Duty Vehicle Network -

Applicable Vehicles

Any - This solution is intended as supplemental reference information to be used in a general context to assist in troubleshooting.

Where Used

When Fault Code Descriptions do not provide the level of detail needed to diagnose an issue i.e. "too vague". This may also be useful in cases where multiple codes have identical fault descriptions.

How to Use

For example using slash notation (SA/SPN/FMI)

Fault: **11/1049/3 - Pressure Sensor 1 / Analog input 1**

SA - 11 = Brakes - System Controller (ABS)

SPN - 1049 = Brake Pressure Sensing Axle 1

FMI - 3 = Voltage above normal, or shorted to high source

In this instance breaking down the code may help explain what's happening behind the scenes and identify the problem.

Source Address	Address Description
0	Primary Engine Controller (CPC, ECM)
1	Secondary Engine Controller (MCM, ECM #2)
3	Primary Transmission Controller (TCM)
11	Brakes - System Controller (ABS)
17	Cruise Control (IPM, PCC)
18	Fuel System (CNG Controller)
19	Steering Controller (SAS)
23	Instrument Cluster (ICU, RX)
25	Climate Control #1 (FCU)
33	Body Controller (SSAM, SAM-CAB, BHM)
37	Off Vehicle Gateway (CGW)
42	Headway Controller (RDF, OnGuard)
47	Suspension - System Controller (ECAS)
49	Cab Controller - Primary (MSF, SHM, ECC)
51	Tire Pressure Controller (TPMS)
58	Climate Control #2 (ParkSmart)
61	Exhaust Emission Controller (ACM)
69	Auxiliary Heater (ACU)
71	Chassis Controller (CHM, SAM-Chassis)
74	Communications Unit, Cellular (CTP, VT)
83	Safety Restraint System (Air Bag)
127	Multi-Purpose Camera (MPC)
128	Switch Expansion Module (SEM #1)
139	J1939 - 139
160	J1939 - 160 (OnGuard Display)
184	Trailer #3 Bridge
192	Trailer #2 Bridge
200	Trailer #1 Bridge
209	J1939 - 209 (Bendix Camera)
232	Forward Road Image Processor (VRDU)
236	Door Controller #1 (DCMD)
237	Door Controller #2 (DCMP)
238	Tachograph (TCO)
247	Auxiliary Power Unit (APU)

SPN	SPN Name
16	Engine Fuel Filter Differential Pressure (see also SPN 1382)
18	Engine Fuel Pressure (Extended Range)
19	Engine Oil Pressure (Extended Range)
20	Engine Coolant Pressure 1 (Extended Range)
21	Engine ECU Temperature (use SPN 1136)
22	Engine Extended Crankcase Blow-by Pressure
23	Generator Oil Pressure
24	Generator Coolant Temperature
27	Engine Exhaust Gas Recirculation 1 Valve Position
28	Accelerator Pedal Position 3
29	Accelerator Pedal Position 2
30	Engine Crankcase Blowby Pressure
31	Transmission Range Position
32	Transmission Splitter Position
33	Clutch Cylinder Position
36	Clutch Plates
37	Transmission Air Tank Pressure
38	Fuel Level 2
39	Tire Pressure Check Interval
46	Pneumatic Supply Pressure
48	Barometric Pressure (Extended Range)
51	Engine Throttle Valve 1 Position 1
52	Engine Intercooler Temperature
53	Transmission Synchronizer Clutch Value
54	Transmission Synchronizer Brake Value
59	Transmission Shift Finger Gear Position
60	Transmission Shift Finger Rail Position
64	Transmission #2 Oil Temperature
69	Two Speed Axle Switch
70	Parking Brake Switch
72	Engine Blower Bypass Valve Position
73	Auxiliary Pump Pressure
74	Maximum Vehicle Speed Limit
75	Steering Axle Temperature
76	Axle Lift Air Pressure
77	Forward Rear Drive Axle Temperature
78	Rear Rear Drive Axle Temperature
79	Road Surface Temperature
80	Washer Fluid Level
81	Aftertreatment 1 Diesel Particulate Filter Intake Pressure (use SPN 3609)
82	Engine Air Start Pressure
84	Wheel-Based Vehicle Speed
86	Cruise Control Set Speed

87	Cruise Control High Set Limit Speed
88	Cruise Control Low Set Limit Speed
90	Power Takeoff Oil Temperature
91	Accelerator Pedal Position 1
92	Engine Percent Load At Current Speed
93	Engine Net Brake Torque
94	Engine Fuel Delivery Pressure
95	Engine Fuel Filter Differential Pressure
96	Fuel Level 1
97	Water In Fuel Indicator 1
98	Engine Oil Level
99	Engine Oil Filter Differential Pressure
100	Engine Oil Pressure
101	Engine Crankcase Pressure 1
102	Engine Intake Manifold #1 Pressure
103	Engine Turbocharger 1 Speed
104	Engine Turbocharger Lube Oil Pressure 1
105	Engine Intake Manifold 1 Temperature
106	Engine Intake Air Pressure
107	Engine Air Filter 1 Differential Pressure
108	Barometric Pressure
109	Engine Coolant Pressure 1
110	Engine Coolant Temperature
111	Engine Coolant Level 1
112	Engine Coolant Filter Differential Pressure
113	Engine Governor Droop
114	SLI Battery 1 Net Current
115	Alternator Current
116	Brake Application Pressure
117	Brake Primary Pressure
118	Brake Secondary Pressure
119	Hydraulic Retarder Pressure
120	Hydraulic Retarder Oil Temperature
122	Engine Retarder Percent
123	Clutch Pressure
124	Transmission Oil Level 1
126	Transmission Filter Differential Pressure
127	Transmission Oil Pressure
129	Engine Fuel 1 Injector Metering Rail 2 Pressure (duplicate, use SPN 1349)
130	Engine Power Specific Fuel Economy
131	Engine Exhaust Pressure (duplicate, use SPN 1209)
132	Engine Intake Air Mass Flow Rate
133	Engine Average Fuel Rate
135	Engine Fuel Delivery Pressure (Absolute)

136	Auxiliary Vacuum Pressure Reading
137	Auxiliary Gage Pressure Reading 1
138	Auxiliary Absolute Pressure Reading
141	Trailer, Tag Or Push Channel Tire Pressure Target
142	Drive Channel Tire Pressure Target
143	Steer Channel Tire Pressure Target
144	Trailer, Tag Or Push Channel Tire Pressure
145	Drive Channel Tire Pressure
146	Steer Channel Tire Pressure
147	Engine Average Fuel Economy (Gaseous)
148	Engine Instantaneous Fuel Economy (Gaseous)
149	Engine Mass Flow Rate (Gaseous) - (Obsolete - Use SPN 1241)
152	Number Of ECU Resets
153	Engine Crankcase Pressure (High Resolution)
156	Engine Fuel 1 Injector Timing Rail 1 Pressure
157	Engine Fuel 1 Injector Metering Rail 1 Pressure
158	Key Switch Battery Potential
159	Engine Gaseous Fuel Supply Pressure 1
160	Transmission Intermediate Shaft Speed
161	Transmission Input Shaft Speed
162	Transmission Requested Range
163	Transmission Current Range
164	Engine Fuel Injection Control Pressure
165	Compass Bearing
166	Engine Rated Power
167	Charging System Potential (Voltage)
168	Battery Potential / Power Input 1
169	Cargo Ambient Temperature
170	Cab Interior Temperature
171	Ambient Air Temperature
172	Engine Intake 1 Air Temperature
173	Engine Exhaust Temperature
174	Engine Fuel 1 Temperature 1
175	Engine Oil Temperature 1
176	Engine Turbocharger 1 Oil Temperature
177	Transmission Oil Temperature 1
178	Front Axle Weight
179	Rear Axle Weight
180	Trailer Weight
181	Cargo Weight
182	Engine Trip Fuel
183	Engine Fuel Rate
184	Engine Instantaneous Fuel Economy
185	Engine Average Fuel Economy

186	Power Takeoff Speed
187	Power Takeoff Set Speed
188	Engine Speed At Idle, Point 1
189	Engine Rated Speed
190	Engine Speed
191	Transmission Output Shaft Speed
228	Speed Sensor Calibration
229	Total Fuel Used (Gaseous) (duplicate, use SPN 1040)
230	Total Idle Fuel Used (Gaseous) (duplicate, use SPN 1010)
231	Trip Fuel (Gaseous) (duplicate, use SPN 1039)
232	DGPS Differential Correction
233	Unit Number (Power Unit)
234	Software Identification
235	Engine Total Idle Hours
236	Engine Total Idle Fuel Used
237	Vehicle Identification Number
238	Velocity Vector
241	Tire Pressure
242	Tire Temperature
244	Trip Distance
245	Total Vehicle Distance
246	Total Vehicle Hours
247	Engine Total Hours of Operation
248	Total Power Takeoff Hours
249	Engine Total Revolutions
250	Engine Total Fuel Used
251	Time
252	Date
257	Cold Restart Of Specific Component
258	Warm Restart Of Specific Component
259	Acknowledgement Of Warm Or Cold Restart
354	Relative Humidity
355	Engine Oil Life
378	Fare Collection Unit Status
380	Articulation Angle
383	Vehicle Acceleration
407	Axle Group Full Weight Calibration
408	Axle Group Empty Weight Calibration
409	Axle Group Weight
411	Engine Exhaust Gas Recirculation 1 Differential Pressure
412	Engine Exhaust Gas Recirculation 1 Temperature
413	Net Vehicle Weight Change
417	Gross Combination Weight
430	Engine Starter Solenoid Voltage

441	Auxiliary Temperature 1
442	Auxiliary Temperature 2
443	Auxiliary Gage Pressure Reading 2
444	Battery Potential / Power Input 2
445	Engine Bank 2 Cylinder Head Temperature
446	Engine Bank 1 Cylinder Head Temperature
447	Passenger Counter
501	Signage Message
502	Fare Collection Unit - Point Of Sale
503	Fare Collection Unit - Service Detail
504	Annunciator Voice Message
505	Vehicle Control Head Keyboard Message
506	Vehicle Control Head Display Message
507	Driver Identification
508	Transit Route Identification
509	Milepost Identification
512	Driver's Demand Engine - Percent Torque
513	Actual Engine - Percent Torque
514	Nominal Friction - Percent Torque
515	Engine's Desired Operating Speed
516	Ground-Based Vehicle Speed
517	Navigation-Based Vehicle Speed
518	Engine Requested Torque/Torque Limit
519	Engine's Desired Operating Speed Asymmetry Adjustment
520	Actual Retarder - Percent Torque
521	Brake Pedal Position
522	Percent Clutch Slip
523	Transmission Current Gear
524	Transmission Selected Gear
525	Transmission Requested Gear
526	Transmission Actual Gear Ratio
527	Cruise Control States
528	Engine Speed At Point 2
529	Engine Speed At Point 3
530	Engine Speed At Point 4
531	Engine Speed At Point 5
532	Engine Speed At High Idle, Point 6
533	Engine Maximum Momentary Override Speed, Point 7
534	Engine Maximum Momentary Override Time Limit
535	Engine Requested Speed Control Range Lower Limit
536	Engine Requested Speed Control Range Upper Limit
537	Engine Requested Torque Control Range Lower Limit
538	Engine Requested Torque Control Range Upper Limit
539	Engine Percent Torque At Idle, Point 1

540	Engine Percent Torque At Point 2
541	Engine Percent Torque At Point 3
542	Engine Percent Torque At Point 4
543	Engine Percent Torque At Point 5
544	Engine Reference Torque
545	Engine Gain (Kp) Of The Endspped Governor
546	Retarder Speed At Idle, Point 1
547	Retarder Speed At Peak Torque, Point 5
548	Maximum Retarder Speed, Point 2
549	Retarder Speed At Point 3
550	Retarder Speed At Point 4
551	Retarder Percent Torque At Idle, Point 1
552	Retarder Percent Torque At Maximum Speed, Point 2
553	Retarder Percent Torque At Point 3
554	Retarder Percent Torque At Point 4
555	Retarder Percent Torque At Peak Torque, Point 5
556	Retarder Reference Torque
557	Retarder Control Method
558	Accelerator Pedal 1 Low Idle Switch
559	Accelerator Pedal Kickdown Switch
560	Transmission Driveline Engaged
561	ASR Engine Control Active
562	ASR Brake Control Active
563	Anti-Lock Braking (ABS) Active
564	Differential Lock State - Central
565	Differential Lock State - Central Front
566	Differential Lock State - Central Rear
567	Differential Lock State - Front Axle 1
568	Differential Lock State - Front Axle 2
569	Differential Lock State - Rear Axle 1
570	Differential Lock State - Rear Axle 2
571	Retarder Enable - Brake Assist Switch
572	Retarder Enable - Shift Assist Switch
573	Transmission Torque Converter Lockup Engaged
574	Transmission Shift In Process
575	ABS Off-road Switch
576	ASR Off-road Switch
577	ASR "Hill Holder" Switch
578	Drive Axle Temperature
579	Drive Axle Lift Air Pressure
580	Altitude
581	Transmission Gear Ratio
582	Axle Weight
583	Pitch

584	Latitude
585	Longitude
586	Make
587	Model
588	Serial Number
589	Alternator Speed
590	Engine Idle Shutdown Timer State
591	Engine Idle Shutdown Timer Function
592	Engine Idle Shutdown Timer Override
593	Engine Idle Shutdown has Shutdown Engine
594	Engine Idle Shutdown Driver Alert Mode
595	Cruise Control Active
596	Cruise Control Enable Switch
597	Brake Switch
598	Clutch Switch
599	Cruise Control Set Switch
600	Cruise Control Coast (Decelerate) Switch
601	Cruise Control Resume Switch
602	Cruise Control Accelerate Switch
603	Brake Pedal Switch 2
604	Transmission Neutral Switch
605	Refrigerant High Pressure Switch
606	Engine Momentary Overspeed Enable
607	Progressive Shift Disable
608	J1587
609	Controller #2
610	Power Connect Device
611	System Diagnostic Code #1
612	System Diagnostic Code #2
613	System Diagnostic Code #3
614	System Diagnostic Code #4
615	System Diagnostic Code #5
616	Auxiliary Analog Input #1
617	Parking Brake On Actuator
618	Parking Brake Off Actuator
619	Parking Brake Actuator
620	5 Volts DC Supply (Obsolete)
621	Antenna Electronics
622	J1922
623	Red Stop Lamp
624	Amber Warning Lamp
625	Proprietary Network #1
626	Engine Start Enable Device 1
627	Power Supply (Obsolete)

628	Program Memory
629	Controller #1
630	Calibration Memory
631	Calibration Module
632	Engine Fuel Shutoff 1 Control
633	Engine Fuel Actuator 1 Control Command
634	Engine Throttle Bypass Valve
635	Engine Timing Actuator 1
636	Engine Position Sensor
637	Engine Timing Sensor
638	Engine Fuel Rack 1 Actuator
639	J1939 Network #1, Primary Vehicle Network
640	Engine External Protection Input
641	Engine Variable Geometry Turbocharger Actuator #1
642	Engine Turbocharger Variable Geometry Actuator #2
643	Engine External Fuel Command Input
644	Engine External Speed Command Input
645	Engine Tachometer Signal Output
646	Engine Turbocharger 1 Wastegate Drive
647	Engine Fan Clutch 1 Output Driver
648	Engine Exhaust Pressure Sensor (duplicate, use SPN 1209)
649	Engine Exhaust Bank 1 Pressure Regulator Control Command
650	Electronic Drive Unit Power Relay
651	Engine Fuel 1 Injector Cylinder 1
652	Engine Fuel 1 Injector Cylinder 2
653	Engine Fuel 1 Injector Cylinder 3
654	Engine Fuel 1 Injector Cylinder 4
655	Engine Fuel 1 Injector Cylinder 5
656	Engine Fuel 1 Injector Cylinder 6
657	Engine Fuel 1 Injector Cylinder 7
658	Engine Fuel 1 Injector Cylinder 8
659	Engine Fuel 1 Injector Cylinder 9
660	Engine Fuel 1 Injector Cylinder 10
661	Engine Fuel 1 Injector Cylinder 11
662	Engine Fuel 1 Injector Cylinder 12
663	Engine Fuel 1 Injector Cylinder 13
664	Engine Fuel 1 Injector Cylinder 14
665	Engine Fuel 1 Injector Cylinder 15
666	Engine Fuel 1 Injector Cylinder 16
667	Engine Fuel 1 Injector Cylinder 17
668	Engine Fuel 1 Injector Cylinder 18
669	Engine Fuel 1 Injector Cylinder 19
670	Engine Fuel 1 Injector Cylinder 20
671	Engine Fuel 1 Injector Cylinder 21

672	Engine Fuel 1 Injector Cylinder 22
673	Engine Fuel 1 Injector Cylinder 23
674	Engine Fuel 1 Injector Cylinder 24
675	Engine Glow Plug Lamp
676	Engine Glow Plug Relay
677	Engine Starter Motor Relay
678	ECU 8 Volts DC Supply
679	Engine Fuel Injection Control Pressure Regulator
680	Engine Valve Variable Swirl System
681	Transmission Gear Shift Inhibit Request
682	Transmission Torque Converter Lockup Request
683	Disengage Driveline Request
684	Requested Percent Clutch Slip
685	Disengage Differential Lock Request - Front Axle 1
686	Disengage Differential Lock Request - Front Axle 2
687	Disengage Differential Lock Request - Rear Axle 1
688	Disengage Differential Lock Request - Rear Axle 2
689	Disengage Differential Lock Request - Central
690	Disengage Differential Lock Request - Central Front
691	Disengage Differential Lock Request - Central Rear
692	ABS Offroad Switch Request
693	ASR Offroad Switch Request
694	ASR "Hill Holder" Switch Request
695	Engine Override Control Mode
696	Engine Requested Speed Control Conditions
697	Auxiliary PWM Driver #1
698	Auxiliary PWM Driver #2
699	Auxiliary PWM Driver #3
700	Auxiliary PWM Driver #4
701	Auxiliary I/O #01
702	Auxiliary I/O #02
703	Auxiliary I/O #03
704	Auxiliary I/O #04
705	Auxiliary I/O #05
706	Auxiliary I/O #06
707	Auxiliary I/O #07
708	Auxiliary I/O #08
709	Auxiliary I/O #09
710	Auxiliary I/O #10
711	Auxiliary I/O #11
712	Auxiliary I/O #12
713	Auxiliary I/O #13
714	Auxiliary I/O #14
715	Auxiliary I/O #15

716	Auxiliary I/O #16
717	Autoshift High Gear Actuator
718	Autoshift Low Gear Actuator
719	Autoshift Neutral Actuator
720	Autoshift Common Low Side (Return)
721	Prestroke Sensor
722	Prestroke Actuator
723	Engine Speed 2
724	O2 Sensor
725	Engine Ignition Control Mode Signal
726	Engine Ignition Control Timing Signal
727	Engine Turbocharger Secondary Intake Pressure
728	Engine Oil Cooler Coolant Outlet Temperature
729	Engine Intake Air Heater Driver #1
730	Engine Intake Air Heater Driver #2
731	Engine Knock 1
732	Engine Gas Metering Valve
733	Engine Rack Position Sensor
734	Transmission Range Clutch C1 Solenoid
735	Transmission Range Clutch C2 Solenoid
736	Transmission Range Clutch C3 Solenoid
737	Transmission Range Clutch C4 Solenoid
738	Transmission Range Clutch C5 Solenoid
739	Transmission Range Clutch C6 Solenoid
740	Transmission Torque Converter Lockup Clutch Actuator
741	Transmission 1 Forward Solenoid Valve
742	Transmission Low Signal Solenoid Valve
743	Retarder Enable Solenoid Valve
744	Retarder Modulation Solenoid Valve
745	Retarder Response Solenoid Valve
746	Differential Lock Solenoid Valve #1
747	Engine/Transmission Match
748	Transmission Output Retarder
749	Transmission Neutral Start Output
750	Transmission Turbine Speed Sensor
751	Transmission Primary Shift Selector
752	Transmission Secondary Shift Selector
753	Transmission Special Function Inputs
754	Transmission Range C1 Clutch Pressure Indicator
755	Transmission Range C2 Clutch Pressure Indicator
756	Transmission Range C3 Clutch Pressure Indicator
757	Transmission Range C4 Clutch Pressure Indicator
758	Transmission Range C5 Clutch Pressure Indicator
759	Transmission Range C6 Clutch Pressure Indicator

760	Transmission Lockup Clutch Pressure Indicator (Obsolete - Use SPN 3184)
761	Transmission Forward Range Pressure Indicator
762	Transmission Neutral Range Pressure Indicator
763	Transmission Reverse Range Pressure Indicator
764	Retarder Response System Pressure Indicator
765	Differential Lock Clutch Pressure Indicator
766	Transmission Multiple Pressure Indicators
767	Transmission Reverse Direction Switch
768	Transmission Range High Actuator
769	Transmission Range Low Actuator
770	Transmission Splitter Direct Actuator
771	Transmission Splitter Indirect Actuator
772	Transmission Shift Finger Rail Actuator 1
773	Transmission Shift Finger Gear Actuator 1
774	Transmission Upshift Request Switch
775	Transmission Downshift Request Switch
776	Torque Converter Interrupt Actuator
777	Torque Converter Lockup Actuator (Obsolete - Use 740)
778	Transmission High Range Sense Switch
779	Transmission Low Range Sense Switch
780	Transmission Shift Finger Neutral Indicator
781	Transmission Shift Finger Engagement Indicator
782	Transmission Shift Finger Center Rail Indicator
783	Transmission Shift Finger Rail Actuator 2
784	Transmission Shift Finger Gear Actuator 2
785	Transmission Hydraulic System
786	Transmission Defuel Actuator
787	Transmission Inertia Brake Actuator
788	Transmission Clutch Actuator
789	Wheel Sensor ABS Axle 1 Left
790	Wheel Sensor ABS Axle 1 Right
791	Wheel Sensor ABS Axle 2 Left
792	Wheel Sensor ABS Axle 2 Right
793	Wheel Sensor ABS Axle 3 Left
794	Wheel Sensor ABS Axle 3 Right
795	Pressure Modulation Valve ABS Axle 1 Left
796	Pressure Modulation Valve ABS Axle 1 Right
797	Pressure Modulation Valve ABS Axle 2 Left
798	Pressure Modulation Valve ABS Axle 2 Right
799	Pressure Modulation Valve ABS Axle 3 Left
800	Pressure Modulation Valve ABS Axle 3 Right
801	Retarder Control Relay
802	Relay Diagonal 1
803	Relay Diagonal 2

804	Mode Switch ABS
805	Mode Switch ASR
806	Dif 1 - ASR Valve
807	Dif 2 - ASR Valve
808	Pneumatic Engine Control
809	Electronic Engine Control (Servomotor)
810	Speed Signal Input
811	Warning Light Bulb
812	ASR Light Bulb
813	Wheel Sensor ABS Axle 1 Average
814	Wheel Sensor ABS Axle 2 Average
815	Wheel Sensor ABS Axle 3 Average
816	Pressure Modulator, Drive Axle Relay Valve
817	Pressure Transducer, Drive Axle Relay Valve
818	Master Control Relay
819	Trailer Brake Slack Out Of Adjustment Forward Axle Left
820	Trailer Brake Slack Out Of Adjustment Forward Axle Right
821	Trailer Brake Slack Out Of Adjustment Rear Axle Left
822	Trailer Brake Slack Out Of Adjustment Rear Axle Right
823	Tractor Brake Slack Out Of Adjustment Axle 1 Left
824	Tractor Brake Slack Out Of Adjustment Axle 1 Right
825	Tractor Brake Slack Out Of Adjustment Axle 2 Left
826	Tractor Brake Slack Out Of Adjustment Axle 2 Right
827	Tractor Brake Slack Out Of Adjustment Axle 3 Left
828	Tractor Brake Slack Out Of Adjustment Axle 3 Right
829	Left Fuel Level Sensor
830	Right Fuel Level Sensor
831	Engine Fuel Feed Rate Sensor
832	Engine Fuel Return Rate Sensor
833	Fuel Rack Position Sensor
834	Fuel Rack Actuator
835	Oil Level Indicator Output
836	Tachometer Drive Output
837	Speedometer Drive Output
838	PWM Input (ABS/ASR)
839	Dead Reckoning Unit
840	Loran Receiver
841	Global Positioning System (GPS)
842	Integrated Navigation Unit
843	Operator Control Panel (OCP)
844	Pneumatic Control Unit (PCU)
845	PCU Steer Solenoid
846	PCU Drive Solenoid
847	PCU Trailer, Tag, Or Push Solenoid

848	PCU Supply Solenoid
849	PCU Control Solenoid
850	PCU Deflate Solenoid
851	Pneumatic - Steer Channel
852	Pneumatic - Drive Channel
853	Pneumatic - Trailer, Tag Or Push Channel
854	Heater Circuit #01
855	Heater Circuit #02
856	Heater Circuit #03
857	Heater Circuit #04
858	Heater Circuit #05
859	Heater Circuit #06
860	Heater Circuit #07
861	Heater Circuit #08
862	Heater Circuit #09
863	Heater Circuit #10
864	Heater Circuit #11
865	Heater Circuit #12
866	Heater Circuit #13
867	Heater Circuit #14
868	Heater Circuit #15
869	Heater Circuit #16
870	Heater Regeneration System
871	Refrigerant Charge
872	Refrigerant Moisture Level
873	Non-Condensable Gas In Refrigerant
874	Refrigerant Flow Control Solenoid
875	Refrigerant Low Pressure Switch
876	Compressor Clutch Circuit
877	Evaporator Thermostat Circuit
878	Clearance, Side Marker, Identification Lamp Circuit (Black)
879	Left Turn Lamp Circuit (Yellow)
880	Stop Lamp Circuit (Red)
881	Right Turn Lamp Circuit (Green)
882	Tail Lamp/License Plate Lamp Circuit (Brown)
883	Auxiliary Lamp Circuit (Blue)
884	Tractor Mounted Rear Axle Slider Control Unit
885	Trailer Mounted Rear Axle Slider Control Unit
886	Headway Controller Forward Antenna
887	Headway Controller Brake Input Monitor
888	Headway Controller Speaker Monitor
889	Headway Controller Steering Sensor Monitor
890	Headway Controller Speedometer Monitor
891	Headway Controller Right Turn Signal Monitor

892	Headway Controller Left Turn Signal Monitor
893	Headway Controller Control Display Unit
894	Headway Controller Right Side Sensor
895	Headway Controller Left Side Sensor
896	Headway Controller Rear Sensor
897	Override Control Mode Priority
898	Engine Requested Speed/Speed Limit
899	Engine Torque Mode
900	Retarder Torque Mode
901	Retarder Type
902	Retarder Location
903	Transmission Forward Direction Switch
904	Front Axle Speed
905	Relative Speed; Front Axle, Left Wheel
906	Relative Speed; Front Axle, Right Wheel
907	Relative Speed; Rear Axle #1, Left Wheel
908	Relative Speed; Rear Axle #1, Right Wheel
909	Relative Speed; Rear Axle #2, Left Wheel
910	Relative Speed; Rear Axle #2, Right Wheel
911	Service Component Identification
912	Service Component Identification
913	Service Component Identification
914	Service Distance
915	Service Delay/Calendar Time Based
916	Service Delay/Operational Time Based
917	Total Vehicle Distance (High Resolution)
918	Trip Distance (High Resolution)
919	Ambient Light Sensor
920	Audible Alarm
921	Green Lamp
922	Ride Height Relay
923	PWM Output
924	Auxiliary Output #1
925	Auxiliary Output #2
926	Auxiliary Output #3
927	Location
928	Axle Location
929	Tire Location
930	Drive Axle Location
931	Engine Fuel Supply Pump Actuator
932	Brake System Hold Modulator Valve Solenoid Axle 1 Left
933	Brake System Hold Modulator Valve Solenoid Axle 1 Right
934	Brake System Hold Modulator Valve Solenoid Axle 2 Left
935	Brake System Hold Modulator Valve Solenoid Axle 2 Right

936	Brake System Hold Modulator Valve Solenoid Axle 3 Left
937	Brake System Hold Modulator Valve Solenoid Axle 3 Right
938	Brake System Dump Modulator Valve Solenoid Axle 1 Left
939	Brake System Dump Modulator Valve Solenoid Axle 1 Right
940	Brake System Dump Modulator Valve Solenoid Axle 2 Left
941	Brake System Dump Modulator Valve Solenoid Axle 2 Right
942	Brake System Dump Modulator Valve Solenoid Axle 3 Left
943	Brake System Dump Modulator Valve Solenoid Axle 3 Right
944	Driver Air Bag Ignitor Loop
945	Passenger Air Bag Ignitor Loop
946	Left Belt Tensioner Ignitor Loop
947	Right Belt Tensioner Ignitor Loop
948	Safety Restraint System Lamp
949	Automotive Seat Occupancy Sensor - passenger side
950	Side Collision Detector - Left
951	Side Bag Ignitor Loop 1 - Left
952	Side Bag Ignitor Loop 2 - Left
953	Side Collision Detector - Right
954	Side Bag Ignitor Loop 1 - Right
955	Side Bag Ignitor Loop 2 - Right
956	Rollover Sensor
957	Number of Forward Gear Ratios
958	Number of Reverse Gear Ratios
959	Seconds
960	Minutes
961	Hours
962	Day
963	Month
964	Year
965	Number of Software Identification Fields
966	Engine Diagnostic Test Mode Switch
967	Engine Idle Decrement Switch
968	Engine Idle Increment Switch
969	Remote Accelerator Enable Switch
970	Engine Auxiliary Shutdown Switch
971	Engine Derate Switch
972	Accelerator Interlock Switch
973	Engine Retarder Selection
974	Remote Accelerator Pedal Position
975	Engine Fan 1 Estimated Percent Speed
976	PTO Governor State
977	Fan Drive State
978	Engine Remote PTO Governor Variable Speed Control Switch
979	Engine Remote PTO Governor Preprogrammed Speed Control Switch

980	Engine PTO Governor Enable Switch
981	Engine PTO Governor Accelerate Switch
982	Engine PTO Governor Resume Switch
983	Engine PTO Governor Coast/Decelerate Switch
984	Engine PTO Governor Set Switch
985	A/C High Pressure Fan Switch
986	Engine Fan 1 Requested Percent Speed
987	Protect Lamp
988	Trip Group 1
989	Trip Group 2 - Proprietary
990	Total Compression Brake Distance
991	Trip Compression Brake Distance
992	Trip Service Brake Distance
993	Trip Service Brake Applications
994	Trip Fan On Time
995	Trip Fan On Time Due to the Engine System
996	Trip Fan On Time Due to a Manual Switch
997	Trip Fan On Time Due to the A/C System
998	Trip Distance on VSL
999	Trip Gear Down Distance
1000	Trip Distance in Top Gear
1001	Trip Drive Fuel Used
1002	Trip PTO Governor Moving Fuel Used
1003	Trip PTO Governor Non-moving Fuel Used
1004	Trip Vehicle Idle Fuel Used
1005	Trip Cruise Fuel Used
1006	Trip Drive Fuel Economy
1007	Trip Drive Fuel Used (Gaseous)
1008	Trip PTO Governor Moving Fuel Used (Gaseous)
1009	Trip PTO Governor Non-moving Fuel Used (Gaseous)
1010	Trip Vehicle Idle Fuel Used (Gaseous)
1011	Trip Cruise Fuel Used (Gaseous)
1012	Trip Drive Fuel Economy (Gaseous)
1013	Trip Maximum Engine Speed
1014	Trip Average Engine Speed
1015	Trip Drive Average Load Factor
1016	Total Drive Average Load Factor
1017	Total Engine Cruise Time
1018	Trip Maximum Vehicle Speed
1019	Trip Cruise Distance
1020	Trip Number of Hot Shutdowns
1021	Trip Number of Idle Shutdowns
1022	Trip Number of Idle Shutdown Overrides
1023	Trip Sudden Decelerations

1024	Trip Time in VSL
1025	Trip Time in Top Gear
1026	Trip Time in Gear Down
1027	Trip Time in Derate by Engine
1028	Total Engine PTO Governor Fuel Used
1029	Trip Average Fuel Rate
1030	Total Engine PTO Governor Fuel Used (Gaseous)
1031	Trip Average Fuel Rate (Gaseous)
1032	Total ECU Distance
1033	Total ECU Run Time
1034	Trip Cruise Time
1035	Trip PTO Governor Time
1036	Trip Engine Running Time
1037	Trip Idle Time
1038	Trip Air Compressor On Time
1039	Trip Fuel (Gaseous)
1040	Total Fuel Used (Gaseous)
1041	Start Signal Indicator
1042	Electronic Tractor/Trailer Interface (ISO 11992)
1043	Internal Sensor Voltage Supply
1044	Hydraulic Pump Motor
1045	Brake Light Switch 1
1046	Brake Light Switch 2
1047	Electronic Pressure Control Axle 1
1048	Pneumatic Back-up Pressure Control Axle 1
1049	Brake Pressure Sensing Axle 1
1050	Electronic Pressure Control Axle 2
1051	Pneumatic Back-up Pressure Control Axle 2
1052	Brake Pressure Sensing Axle 2
1053	Electronic Pressure Control Axle 3
1054	Pneumatic Back-up Pressure Control Axle 3
1055	Brake Pressure Sensing Axle 3
1056	Electronic Pressure Control, Trailer Control
1057	Pneumatic Back-up Pressure Control, Trailer Control
1058	Brake Pressure Sensing, Trailer Control
1059	Axle Load Sensor
1060	Lining Wear Sensor Axle 1 Left
1061	Lining Wear Sensor Axle 1 Right
1062	Lining Wear Sensor Axle 2 Left
1063	Lining Wear Sensor Axle 2 Right
1064	Lining Wear Sensor Axle 3 Left
1065	Lining Wear Sensor Axle 3 Right
1066	Brake Signal Transmitter
1067	Brake Signal Sensor 1

1068	Brake Signal Sensor 2
1069	Tire Dimension Supervision
1070	Vehicle Deceleration Control
1071	Engine Cooling Fan Drive Output
1072	Engine Compression Brake Output #1
1073	Engine Compression Brake Output #2
1074	Engine Exhaust Brake Output
1075	Engine Electric Lift Pump
1076	Engine Fuel Injection Pump 1 Fuel Control Valve
1077	Engine Fuel Injection Pump Controller
1078	Engine Fuel Injection Pump 1 Speed/Position Sensor
1079	Sensor Supply Voltage 1 (+5V DC) (Obsolete)
1080	Sensor Supply Voltage 2 (+5V DC) (Obsolete)
1081	Engine Wait to Start Lamp
1082	Engine Coolant Load Increase
1083	Auxiliary I/O Channel #1
1084	Auxiliary I/O Channel #2
1085	Intended Retarder Percent Torque
1086	Parking and/or Trailer Air Pressure
1087	Service Brake Circuit 1 Air Pressure
1088	Service Brake Circuit 2 Air Pressure
1089	Auxiliary Equipment Supply Pressure
1090	Air Suspension Supply Pressure
1091	Brake Application Pressure High Range, Front Axle, Left Wheel
1092	Brake Application Pressure High Range, Front Axle, Right Wheel
1093	Brake Application Pressure High Range, Rear Axle #1, Left Wheel
1094	Brake Application Pressure High Range, Rear Axle #1, Right Wheel
1095	Brake Application Pressure High Range, Rear Axle #2, Left Wheel
1096	Brake Application Pressure High Range, Rear Axle #2, Right Wheel
1097	Brake Application Pressure High Range, Rear Axle #3, Left Wheel
1098	Brake Application Pressure High Range, Rear Axle #3, Right Wheel
1099	Brake Lining Remaining, Front Axle, Left Wheel
1100	Brake Lining Remaining, Front Axle, Right Wheel
1101	Brake Lining Remaining, Rear Axle #1, Left Wheel
1102	Brake Lining Remaining, Rear Axle #1, Right Wheel
1103	Brake Lining Remaining, Rear Axle #2, Left Wheel
1104	Brake Lining Remaining, Rear Axle #2, Right Wheel
1105	Brake Lining Remaining, Rear Axle #3, Left Wheel
1106	Brake Lining Remaining, Rear Axle #3, Right Wheel
1107	Engine Protection System Timer State
1108	Engine Protection System Timer Override
1109	Engine Protection System Approaching Shutdown
1110	Engine Protection System has Shutdown Engine
1111	Engine Protection System Configuration

1112	Engine Compression Brake Output #3
1113	Recommended Gear
1114	Lowest Possible Gear
1115	Highest Possible Gear
1116	Gaseous Fuel Correction Factor
1117	Engine Desired Rated Exhaust Oxygen
1118	Engine Desired Exhaust Oxygen
1119	Engine Actual Exhaust Oxygen
1120	Articulation Angle
1121	EBS Brake Switch
1122	Engine Alternator Bearing 1 Temperature
1123	Engine Alternator Bearing 2 Temperature
1124	Engine Alternator Winding 1 Temperature
1125	Engine Alternator Winding 2 Temperature
1126	Engine Alternator Winding 3 Temperature
1127	Engine Turbocharger 1 Boost Pressure
1128	Engine Turbocharger 2 Boost Pressure
1129	Engine Turbocharger 3 Boost Pressure
1130	Engine Turbocharger 4 Boost Pressure
1131	Engine Intake Manifold 2 Temperature
1132	Engine Intake Manifold 3 Temperature
1133	Engine Intake Manifold 4 Temperature
1134	Engine Charge Air Cooler Thermostat Opening
1135	Engine Oil Temperature 2
1136	Engine ECU Temperature
1137	Engine Exhaust Gas Port 1 Temperature
1138	Engine Exhaust Gas Port 2 Temperature
1139	Engine Exhaust Gas Port 3 Temperature
1140	Engine Exhaust Gas Port 4 Temperature
1141	Engine Exhaust Gas Port 5 Temperature
1142	Engine Exhaust Gas Port 6 Temperature
1143	Engine Exhaust Gas Port 7 Temperature
1144	Engine Exhaust Gas Port 8 Temperature
1145	Engine Exhaust Gas Port 9 Temperature
1146	Engine Exhaust Gas Port 10 Temperature
1147	Engine Exhaust Gas Port 11 Temperature
1148	Engine Exhaust Gas Port 12 Temperature
1149	Engine Exhaust Gas Port 13 Temperature
1150	Engine Exhaust Gas Port 14 Temperature
1151	Engine Exhaust Gas Port 15 Temperature
1152	Engine Exhaust Gas Port 16 Temperature
1153	Engine Exhaust Gas Port 17 Temperature
1154	Engine Exhaust Gas Port 18 Temperature
1155	Engine Exhaust Gas Port 19 Temperature

1156	Engine Exhaust Gas Port 20 Temperature
1157	Engine Main Bearing 1 Temperature
1158	Engine Main Bearing 2 Temperature
1159	Engine Main Bearing 3 Temperature
1160	Engine Main Bearing 4 Temperature
1161	Engine Main Bearing 5 Temperature
1162	Engine Main Bearing 6 Temperature
1163	Engine Main Bearing 7 Temperature
1164	Engine Main Bearing 8 Temperature
1165	Engine Main Bearing 9 Temperature
1166	Engine Main Bearing 10 Temperature
1167	Engine Main Bearing 11 Temperature
1168	Engine Turbocharger Lube Oil Pressure 2
1169	Engine Turbocharger 2 Speed
1170	Engine Turbocharger 3 Speed
1171	Engine Turbocharger 4 Speed
1172	Engine Turbocharger 1 Compressor Intake Temperature
1173	Engine Turbocharger 2 Compressor Intake Temperature
1174	Engine Turbocharger 3 Compressor Intake Temperature
1175	Engine Turbocharger 4 Compressor Intake Temperature
1176	Engine Turbocharger 1 Compressor Intake Pressure
1177	Engine Turbocharger 2 Compressor Intake Pressure
1178	Engine Turbocharger 3 Compressor Intake Pressure
1179	Engine Turbocharger 4 Compressor Intake Pressure
1180	Engine Turbocharger 1 Turbine Intake Temperature
1181	Engine Turbocharger 2 Turbine Intake Temperature
1182	Engine Turbocharger 3 Turbine Intake Temperature
1183	Engine Turbocharger 4 Turbine Intake Temperature
1184	Engine Turbocharger 1 Turbine Outlet Temperature
1185	Engine Turbocharger 2 Turbine Outlet Temperature
1186	Engine Turbocharger 3 Turbine Outlet Temperature
1187	Engine Turbocharger 4 Turbine Outlet Temperature
1188	Engine Turbocharger Wastegate Actuator 1 Position
1189	Engine Turbocharger Wastegate Actuator 2 Position
1190	Engine Turbocharger Wastegate Actuator 3 Position
1191	Engine Turbocharger Wastegate Actuator 4 Position
1192	Engine Turbocharger Wastegate Actuator Control Air Pressure
1193	Engine Operation Time Since Rebuild
1194	Anti-theft Encryption Seed Present Indicator
1195	Anti-theft Password Valid Indicator
1196	Anti-theft Component Status States
1197	Anti-theft Modify Password States
1198	Anti-theft Random Number
1199	Anti-theft Encryption Indicator States

1200	Anti-theft Desired Exit Mode States
1201	Anti-theft Command States
1202	Anti-theft Password Representation
1203	Engine Auxiliary Coolant Pressure
1204	Electrical Load
1205	Safety Wire Status
1206	Engine Turning Gear Engaged
1207	Engine ECU Temperature (Obsolete - Use SPN 1136)
1208	Engine Oil Filter Intake Pressure
1209	Engine Exhaust Pressure 1
1210	Engine Fuel Rack Position
1211	Engine Build Hours Reset
1212	Engine Auxiliary Coolant Temperature
1213	Malfunction Indicator Lamp
1214	Suspect Parameter Number
1215	Failure Mode Identifier
1216	Occurrence Count
1217	Freeze Frame Length
1218	Active Diagnostic Trouble Code Count
1219	Previously Active Trouble Codes
1220	OBD Compliance
1221	Continuously Monitored Systems Support/Status
1222	Non-continuously Monitored Systems Support
1223	Non-continuously Monitored Systems Status
1224	Test Identifier
1225	Test Type/Component Identifier
1226	Test Value
1227	Test Limit Maximum
1228	Test Limit Minimum
1229	Test Identifiers Supported
1230	Current Data Link
1231	J1939 Network #2
1232	ISO 9141
1233	J1850
1234	Other, Manufacturer Specified Port
1235	J1939 Network #3
1236	Hold Signal
1237	Engine Shutdown Override Switch
1238	Traction Control Override Switch
1239	Engine Fuel Leakage 1
1240	Engine Fuel Leakage 2
1241	Engine Fuel System 1 Gas Mass Flow Rate
1242	Instantaneous Estimated Brake Power
1243	ABS Fully Operational

1244	Engine Fuel Actuator 2 Control Command
1245	Engine Timing Actuator 2
1246	Number of Engine Torque History Records
1247	Engine Power
1248	Engine Peak Torque 1
1249	Engine Peak Torque 2
1250	Calibration Record Start Month
1251	Calibration Record Start Day
1252	Calibration Record Start Year
1253	Calibration Record Duration Time
1254	Torque Limiting Feature Status
1255	Transmission Gear Ratio 1
1256	Engine Torque Limit 1, Transmission
1257	Transmission Gear Ratio 2
1258	Engine Torque Limit 2, Transmission
1259	Transmission Gear Ratio 3
1260	Engine Torque Limit 3, Transmission
1261	Engine Torque Limit 4, Transmission
1262	Engine Torque Limit 5, Switch
1263	Engine Torque Limit 6, Axle Input
1264	Engine Extended Crankcase Blow-by Pressure - duplicate (see SPN 22)
1265	Engine Oil Burn Valve
1266	Engine Oil Replacement Valve
1267	Idle Shutdown Vehicle Accessories Relay Driver Circuit
1268	Engine Ignition Coil #1
1269	Engine Ignition Coil #2
1270	Engine Ignition Coil #3
1271	Engine Ignition Coil #4
1272	Engine Ignition Coil #5
1273	Engine Ignition Coil #6
1274	Engine Ignition Coil #7
1275	Engine Ignition Coil #8
1276	Engine Ignition Coil #9
1277	Engine Ignition Coil #10
1278	Engine Ignition Coil #11
1279	Engine Ignition Coil #12
1280	Engine Ignition Coil #13
1281	Engine Ignition Coil #14
1282	Engine Ignition Coil #15
1283	Engine Ignition Coil #16
1284	Engine Ignition Coil #17
1285	Engine Ignition Coil #18
1286	Engine Ignition Coil #19
1287	Engine Ignition Coil #20

1288	Engine Ignition Coil #21
1289	Engine Ignition Coil #22
1290	Engine Ignition Coil #23
1291	Engine Ignition Coil #24
1292	Engine Ignition Control Module #1
1293	Engine Ignition Control Module #2
1294	Engine Spark Plug 1
1295	Engine Spark Plug 2
1296	Engine Spark Plug 3
1297	Engine Spark Plug 4
1298	Engine Spark Plug 5
1299	Engine Spark Plug 6
1300	Engine Spark Plug 7
1301	Engine Spark Plug 8
1302	Engine Spark Plug 9
1303	Engine Spark Plug 10
1304	Engine Spark Plug 11
1305	Engine Spark Plug 12
1306	Engine Spark Plug 13
1307	Engine Spark Plug 14
1308	Engine Spark Plug 15
1309	Engine Spark Plug 16
1310	Engine Spark Plug 17
1311	Engine Spark Plug 18
1312	Engine Spark Plug 19
1313	Engine Spark Plug 20
1314	Engine Spark Plug 21
1315	Engine Spark Plug 22
1316	Engine Spark Plug 23
1317	Engine Spark Plug 24
1318	Engine Exhaust Temperature Bank Imbalance
1319	Engine Intake Manifold Pressure Bank Imbalance
1320	Engine External Shutdown Air Supply Pressure
1321	Engine Starter Solenoid Lockout Relay Driver Circuit
1322	Engine Misfire for Multiple Cylinders
1323	Engine Misfire Cylinder #1
1324	Engine Misfire Cylinder #2
1325	Engine Misfire Cylinder #3
1326	Engine Misfire Cylinder #4
1327	Engine Misfire Cylinder #5
1328	Engine Misfire Cylinder #6
1329	Engine Misfire Cylinder #7
1330	Engine Misfire Cylinder #8
1331	Engine Misfire Cylinder #9

1332	Engine Misfire Cylinder #10
1333	Engine Misfire Cylinder #11
1334	Engine Misfire Cylinder #12
1335	Engine Misfire Cylinder #13
1336	Engine Misfire Cylinder #14
1337	Engine Misfire Cylinder #15
1338	Engine Misfire Cylinder #16
1339	Engine Misfire Cylinder #17
1340	Engine Misfire Cylinder #18
1341	Engine Misfire Cylinder #19
1342	Engine Misfire Cylinder #20
1343	Engine Misfire Cylinder #21
1344	Engine Misfire Cylinder #22
1345	Engine Misfire Cylinder #23
1346	Engine Misfire Cylinder #24
1347	Engine Fuel Pump Pressurizing Assembly #1
1348	Engine Fuel Pump Pressurizing Assembly #2
1349	Engine Fuel 1 Injector Metering Rail 2 Pressure
1350	Time Since Last Service
1351	Air Compressor Status
1352	Engine Cylinder 1 Knock Level
1353	Engine Cylinder 2 Knock Level
1354	Engine Cylinder 3 Knock Level
1355	Engine Cylinder 4 Knock Level
1356	Engine Cylinder 5 Knock Level
1357	Engine Cylinder 6 Knock Level
1358	Engine Cylinder 7 Knock Level
1359	Engine Cylinder 8 Knock Level
1360	Engine Cylinder 9 Knock Level
1361	Engine Cylinder 10 Knock Level
1362	Engine Cylinder 11 Knock Level
1363	Engine Cylinder 12 Knock Level
1364	Engine Cylinder 13 Knock Level
1365	Engine Cylinder 14 Knock Level
1366	Engine Cylinder 15 Knock Level
1367	Engine Cylinder 16 Knock Level
1368	Engine Cylinder 17 Knock Level
1369	Engine Cylinder 18 Knock Level
1370	Engine Cylinder 19 Knock Level
1371	Engine Cylinder 20 Knock Level
1372	Engine Cylinder 21 Knock Level
1373	Engine Cylinder 22 Knock Level
1374	Engine Cylinder 23 Knock Level
1375	Engine Cylinder 24 Knock Level

1376	Battery 2 Potential (Voltage) (duplicate - see also SPN 444)
1377	Engine Synchronization Switch
1378	Engine Oil Change Interval
1379	Service Component Identification
1380	Engine Oil Level Remote Reservoir
1381	Engine Fuel Supply Pump Intake Absolute Pressure
1382	Engine Fuel Filter (suction side) Differential Pressure
1383	Engine was Shut Down Hot
1384	Engine has Been Shut Down from Data Link Information
1385	Auxiliary Temperature #1 (duplicate see also SPN 441)
1386	Auxiliary Temperature #2 (duplicate see also SPN 442)
1387	Auxiliary Pressure #1
1388	Auxiliary Pressure #2
1389	Engine Fuel Specific Gravity
1390	Engine Fuel Valve 1 Intake Absolute Pressure
1391	Engine Fuel Valve 1 Differential Pressure
1392	Engine Air to Fuel Differential Pressure
1393	Engine Cylinder 1 Ignition Transformer Secondary Output
1394	Engine Cylinder 2 Ignition Transformer Secondary Output
1395	Engine Cylinder 3 Ignition Transformer Secondary Output
1396	Engine Cylinder 4 Ignition Transformer Secondary Output
1397	Engine Cylinder 5 Ignition Transformer Secondary Output
1398	Engine Cylinder 6 Ignition Transformer Secondary Output
1399	Engine Cylinder 7 Ignition Transformer Secondary Output
1400	Engine Cylinder 8 Ignition Transformer Secondary Output
1401	Engine Cylinder 9 Ignition Transformer Secondary Output
1402	Engine Cylinder 10 Ignition Transformer Secondary Output
1403	Engine Cylinder 11 Ignition Transformer Secondary Output
1404	Engine Cylinder 12 Ignition Transformer Secondary Output
1405	Engine Cylinder 13 Ignition Transformer Secondary Output
1406	Engine Cylinder 14 Ignition Transformer Secondary Output
1407	Engine Cylinder 15 Ignition Transformer Secondary Output
1408	Engine Cylinder 16 Ignition Transformer Secondary Output
1409	Engine Cylinder 17 Ignition Transformer Secondary Output
1410	Engine Cylinder 18 Ignition Transformer Secondary Output
1411	Engine Cylinder 19 Ignition Transformer Secondary Output
1412	Engine Cylinder 20 Ignition Transformer Secondary Output
1413	Engine Cylinder 1 Ignition Timing
1414	Engine Cylinder 2 Ignition Timing
1415	Engine Cylinder 3 Ignition Timing
1416	Engine Cylinder 4 Ignition Timing
1417	Engine Cylinder 5 Ignition Timing
1418	Engine Cylinder 6 Ignition Timing
1419	Engine Cylinder 7 Ignition Timing

1420	Engine Cylinder 8 Ignition Timing
1421	Engine Cylinder 9 Ignition Timing
1422	Engine Cylinder 10 Ignition Timing
1423	Engine Cylinder 11 Ignition Timing
1424	Engine Cylinder 12 Ignition Timing
1425	Engine Cylinder 13 Ignition Timing
1426	Engine Cylinder 14 Ignition Timing
1427	Engine Cylinder 15 Ignition Timing
1428	Engine Cylinder 16 Ignition Timing
1429	Engine Cylinder 17 Ignition Timing
1430	Engine Cylinder 18 Ignition Timing
1431	Engine Cylinder 19 Ignition Timing
1432	Engine Cylinder 20 Ignition Timing
1433	Engine Desired Ignition Timing 1
1434	Engine Desired Ignition Timing 2
1435	Engine Desired Ignition Timing 3
1436	Engine Actual Ignition Timing
1437	Road Speed Limit Status
1438	ABS/EBS Amber Warning Signal (Powered Vehicle)
1439	EBS Red Warning Signal
1440	Engine Fuel Flow Rate 1
1441	Engine Fuel Flow Rate 2
1442	Engine Fuel Valve 1 Position
1443	Engine Fuel Valve 2 Position
1444	Engine Cylinder #1 Combustion Time
1445	Engine Cylinder #2 Combustion Time
1446	Engine Cylinder #3 Combustion Time
1447	Engine Cylinder #4 Combustion Time
1448	Engine Cylinder #5 Combustion Time
1449	Engine Cylinder #6 Combustion Time
1450	Engine Cylinder #7 Combustion Time
1451	Engine Cylinder #8 Combustion Time
1452	Engine Cylinder #9 Combustion Time
1453	Engine Cylinder #10 Combustion Time
1454	Engine Cylinder #11 Combustion Time
1455	Engine Cylinder #12 Combustion Time
1456	Engine Cylinder #13 Combustion Time
1457	Engine Cylinder #14 Combustion Time
1458	Engine Cylinder #15 Combustion Time
1459	Engine Cylinder #16 Combustion Time
1460	Engine Cylinder #17 Combustion Time
1461	Engine Cylinder #18 Combustion Time
1462	Engine Cylinder #19 Combustion Time
1463	Engine Cylinder #20 Combustion Time

1464	Engine Desired Combustion Time
1465	Engine Average Combustion Time
1466	Steer Channel Mode
1467	Trailer/tag Channel Mode
1468	Drive Channel Mode
1469	PCU Drive Solenoid Status
1470	PCU Steer Solenoid Status
1471	Tire Pressure Supply Switch Status
1472	PCU Deflate Solenoid Status
1473	PCU Control Solenoid Status
1474	PCU Supply Solenoid Status
1475	PCU Trailer, Tag or Push Solenoid Status
1476	Engine Oil Specific Resistance
1477	Engine Oil Kinematic Viscosity
1478	Engine Oil Relative Dielectricity
1479	Security Entity Type
1480	Source Address of Controlling Device for Retarder Control
1481	Source Address of Controlling Device for Brake Control
1482	Source Address of Controlling Device for Transmission Control
1483	Source Address of Controlling Device for Engine Control
1484	Other ECUs Have Reported Diagnostic Trouble Codes Affecting Operation
1485	ECM Main Relay
1486	Concave Position
1487	Illumination Brightness Percent
1488	Thresher Speed
1489	Cleaning Fan Speed
1490	Header Backshaft Speed
1491	Instrument Panel #1 Backlighting Driver
1492	Instrument Panel #2 Backlighting Driver
1493	Tailings System
1494	Tailings Sensor #1
1495	Tailings Sensor #2
1496	Tailings Elevator Paddles
1497	Unloading Auger Drive
1498	Header Drive
1499	Separator Drive
1500	Tachometer Module Switch Matrix
1501	Grain Loss Module Switch Matrix
1502	Automatic Header Control Switch Matrix
1503	Armrest 1 Switch 1
1504	Operator Seat Switch
1505	Automatic Header Sensitivity Adjustment
1506	Automatic Header Rate Adjustment Input
1507	Discharge Beater Speed Disable Adjustment

1508	Hydraulic Reservoir Temperature
1509	Thresher Separator Hydraulic Drive 1 Temperature
1510	Chopper Vane Angle Adjustment
1511	Right side Cleaning Shoe Relative Grain Loss
1512	Left side Cleaning Shoe Relative Grain Loss
1513	Right side Separator Relative Grain Loss
1514	Left side Separator Relative Grain Loss
1515	Header Height System
1516	Header
1517	Header Lift Cylinder Pressure
1518	Header Sensor Identification
1519	Header Raise Valve Drive
1520	Header Lower Valve Drive
1521	Header Tilt Left Valve Drive
1522	Header Tilt Right Valve Drive
1523	Header Lift Cylinder Pressure Diverted Valve Drive
1524	Reel Position Forward Actuator
1525	Reel Position Aft Actuator
1526	Reel Position Raise Actuator
1527	Reel Position Lower Actuator
1528	Header Drop Rate Control Valve Drive
1529	Header Lift Cylinder Accumulator Shutoff Valve Drive
1530	Unloading auger flow bypass valve drive
1531	Reel Drive Motor Speed Increase Valve Drive
1532	Reel Drive Motor Speed Decrease Valve Drive
1533	Feederhouse Angle
1534	Header Leftmost Height
1535	Header Rightmost Height
1536	Header Center Height
1537	Reel Fore-Aft Position
1538	Reel Up-Down Position
1539	Header Lateral Tilt Angle
1540	Reel Speed Actuator Position
1541	Reel Speed
1542	ECU Power Supply Voltage #2 (Obsolete)
1543	ECU Power Supply Voltage #3 (Obsolete)
1544	Hydro Handle Matrix Switch
1545	SPN Data
1546	HVAC Coolant Valve Position Sensor
1547	A/C Evaporator Temperature
1548	HVAC Duct Temperature
1549	HVAC Water Valve Drive
1550	Estimated Percent Fan 2 Speed
1551	A/C Pressurizer Drive Circuit

1552	Operator Input device for Cab Climate Control
1553	HVAC Blower Motor Speed Adjustment
1554	Clean Grain Elevator Speed
1555	Moisture Sensor Cell Frequency
1556	Datalog Memory Card
1557	Fan 2 Drive State
1558	Programming Error, Device Refused to Enter Programming Mode
1559	Programming Error, Device Timed Out While Entering the Programming Mode
1560	Programming Error, Device Timed Out While Erasing
1561	Programming Error, Device Timed Out While Programming
1562	Programming Error, Device did not Accept Program Line
1563	Incompatible Monitor/Controller
1564	CCD Data Link
1565	Armrest Status
1566	Armrest Rotary Inputs
1567	Header Height Control Mode Selector Switches
1568	Engine Torque Curve Selection
1569	Engine Protection Torque Derate
1570	Implement Disconnected
1571	Display Conflict
1572	Display Overload
1573	LED Display Data #1
1574	Laser Strike Vertical Deviation
1575	Modify Leveling System Set Point
1576	Mast Position
1577	Blade Duration and Direction
1578	Blade Control Mode
1579	Laser Tracer Target Deviation
1580	Laser Tracer Vertical Distance
1581	Laser Tracer Horizontal Deviation
1582	LED Display Data #2
1583	Laser Tracer Information
1584	Service Component Identification
1585	Powered Vehicle Weight
1586	Speed of forward vehicle
1587	Distance to forward vehicle
1588	Adaptive Cruise Control Set Speed
1589	Adaptive cruise control set distance mode
1590	Adaptive Cruise Control Mode
1591	Road curvature
1592	Front Axle, Left Wheel Speed
1593	Front axle, right wheel speed
1594	Rear axle, left wheel speed
1595	Rear axle, right wheel speed

1596	Security Entity Length
1597	Data Security Parameter
1598	Fan 2 Speed
1599	Seed
1600	Engine Fuel Rate (High Resolution)
1601	Local minute offset
1602	Local hour offset
1603	Adjust seconds
1604	Adjust minutes
1605	Adjust hours
1606	Adjust month
1607	Adjust day
1608	Adjust year
1609	Adjust local minute offset
1610	Adjust local hour offset
1611	Vehicle motion
1612	Driver 1 working state
1613	Driver 2 working state
1614	Vehicle Overspeed
1615	Driver card, driver 1
1616	Driver card, driver 2
1617	Driver 1 Time Related States
1618	Driver 2 Time Related States
1619	Direction indicator
1620	Tachograph performance
1621	Handling information
1622	System event
1623	Tachograph output shaft speed
1624	Tachograph vehicle speed
1625	Driver 1 identification
1626	Driver 2 identification
1627	Reserved for Certification agency ID
1628	Reserved for Certification seed/key length
1629	Reserved for Certification signature
1630	Reserved for Certification public key
1631	Reserved for Certification vehicle identification number
1632	Engine Torque Limit Feature
1633	Cruise Control Pause Switch
1634	Calibration Verification Number
1635	Calibration Identification
1636	Engine Intake Manifold 1 Temperature (High Resolution)
1637	Engine Coolant Temperature (High Resolution)
1638	Hydraulic Temperature
1639	Fan Speed

1640	Length/Number Requested
1641	Pointer Type
1642	Command
1643	Pointer Extension
1644	Pointer
1645	Key/User_Level
1646	Status (for DM 15)
1647	EDCP Extension
1648	Error Indicator/EDC Parameter
1649	Length/Number Allowed
1650	Number of Occurrences of Raw Binary Data
1651	Raw Binary Data
1652	Boot Load Data
1653	Vehicle Limiting Speed Governor Enable Switch
1654	Vehicle Limiting Speed Governor Increment Switch
1655	Vehicle Limiting Speed Governor Decrement Switch
1656	Engine Automatic Start Enable Switch
1657	Engine Fuel 1 Injector Needle Lift Sensor 1
1658	Engine Fuel 1 Injector Needle Lift Sensor 2
1659	Engine Coolant System Thermostat 1
1660	Engine Automatic Start Alarm
1661	Engine Automatic Start Lamp
1662	Cab Interior Temperature Thermostat
1663	Engine Automatic Start Safety Interlock Circuit
1664	Engine Automatic Start Failed (Engine)
1665	Engine Turbocharger Oil Level Switch
1666	Automatic Gear Shifting Enable Switch
1667	Retarder Requesting Brake Light
1668	J1939 Network #4
1669	J1939 Network #5
1670	J1939 Network #6
1671	J1939 Network #7
1672	J1939 Network #8
1673	J1939 Network #9
1674	J1939 Network #10
1675	Engine Starter Mode
1676	Auxiliary Heater Water Pump Status
1677	Auxiliary Heater Mode
1678	Cab Ventilation
1679	Engine Heating Zone
1680	Cab Heating Zone
1681	Battery Main Switch Hold State
1682	Battery Main Switch Hold Request
1683	Auxiliary Heater Mode Request

1684	Auxiliary Heater Coolant Pump Request
1685	Request Engine Zone Heating
1686	Request Cab Zone Heating
1687	Auxiliary Heater Output Coolant Temperature
1688	Auxiliary Heater Input Air Temperature
1689	Auxiliary Heater Output Power Percent
1690	Auxiliary Heater Maximum Output Power
1691	Cab Interior Temperature Command
1692	Engine Intake Manifold Desired Absolute Pressure
1693	Engine Turbocharger Wastegate Valve Position
1694	Engine Fuel System Gas Mass Flow Rate Sensor Fueling Correction
1695	Engine Exhaust O2 Sensor Fueling Correction
1696	Engine Exhaust O2 Sensor Closed Loop Operation
1697	Tire Sensor Electrical Fault
1698	Tire Status
1699	Tire Sensor Enable Status
1700	Lane Departure Imminent, Left Side
1701	Lane Departure Imminent, Right Side
1702	Lane Departure Indication Enable Status
1703	Lane Tracking Speaker - Right Side
1704	Lane Tracking Speaker - Left Side
1705	Forward View Imager System
1706	SPN Conversion Method
1707	Hydraulic Fan 2 Motor Pressure
1708	Fan 2 Drive Bypass Command Status
1709	Transmission Controller Power Relay
1710	Lane Tracking Status Left Side
1711	Lane Tracking Status Right Side
1712	Engine Requested Speed Control Range Upper Limit (Extended Range)
1713	Hydraulic Oil Filter Restriction Switch
1714	Operator Seat Direction Switch
1715	Drivers Demand Retarder - Percent Torque
1716	Retarder Selection, non-engine
1717	Actual Maximum Available Retarder - Percent Torque
1718	Damper Stiffness Request Front Axle
1719	Damper Stiffness Request Rear Axle
1720	Damper Stiffness Request Lift / Tag Axle
1721	Relative Level Front Axle Left
1722	Relative Level Front Axle Right
1723	Relative Level Rear Axle Right
1724	Relative Level Rear Axle Left
1725	Bellow Pressure Front Axle Left
1726	Bellow Pressure Front Axle Right
1727	Bellow Pressure Rear Axle Left

1728	Bellow Pressure Rear Axle Right
1729	Damper Stiffness Front Axle
1730	Damper Stiffness Rear Axle
1731	Damper Stiffness Lift / Tag Axle
1732	Level Preset Front Axle Left
1733	Nominal Level Rear Axle
1734	Nominal Level Front Axle
1735	Level Preset Rear Axle Right
1736	Above Nominal Level Rear Axle
1737	Above Nominal Level Front Axle
1738	Below Nominal Level Front Axle
1739	Lifting Control Mode Front Axle
1740	Lowering Control Mode Front Axle
1741	Level Control Mode
1742	Kneeling Information
1743	Lift Axle 1 Position
1744	Door Release
1745	Vehicle Motion Inhibit
1746	Security Device
1747	Kneeling Control Mode Request
1748	Kneeling Request Right Side
1749	Kneeling Request Left Side
1750	Nominal Level Request Rear Axle
1751	Nominal Level Request Front Axle
1752	Lift Axle 1 Position Command
1753	Level Control Mode Request
1754	Below Nominal Level Rear Axle
1755	Lowering Control Mode Rear Axle
1756	Lifting Control Mode Rear Axle
1757	Level Preset Front Axle Right
1758	Level Preset Rear Axle Left
1759	Blade Height Set Point (High Resolution)
1760	Gross Combination Vehicle Weight
1761	Aftertreatment 1 Diesel Exhaust Fluid Tank Volume
1762	Hydraulic Pressure
1763	Engine Hydraulic Pressure Governor Mode Indicator
1764	Engine Hydraulic Pressure Governor Switch
1765	Engine Fuel Valve 1 Commanded Position
1766	Engine Fuel Valve 2 Commanded Position
1767	Specific Heat Ratio
1768	Engine Low Limit Threshold for Maximum RPM from Engine
1769	Engine High Limit Threshold for Minimum Continuous Engine RPM
1770	Engine Low Limit Threshold for Maximum Torque from Engine
1771	Engine High Limit Threshold for Minimum Continuous Torque from Engine

1772	Engine Maximum Continuous RPM
1773	Engine Minimum Continuous RPM
1774	Engine Maximum Continuous Torque
1775	Engine Minimum Continuous Torque
1776	Low Limit Threshold for Maximum RPM from Retarder
1777	High Limit Threshold for Minimum Continuous RPM from Retarder
1778	Low Limit Threshold for Maximum Torque from Retarder
1779	High Limit Threshold for Minimum Continuous Torque from Retarder
1780	Maximum Continuous Retarder Speed
1781	Minimum Continuous Retarder Speed
1782	Maximum Continuous Retarder Torque
1783	Minimum Continuous Retarder Torque
1784	Engine Speed Limit Request - Minimum Continuous
1785	Engine Speed Limit Request - Maximum Continuous
1786	Engine Torque Limit Request - Minimum Continuous
1787	Engine Torque Limit Request - Maximum Continuous
1788	Minimum Continuous Retarder Speed Limit Request
1789	Maximum Continuous Retarder Speed Limit Request
1790	Minimum Continuous Retarder Torque Limit Request
1791	Maximum Continuous Retarder Torque Limit Request
1792	Tractor-Mounted Trailer ABS Warning Signal
1793	ATC/ASR Information Signal
1794	Engine Moment of Inertia
1795	Alternator Current (High Range/Resolution)
1796	ACC Distance Alert Signal
1797	ACC System Shutoff Warning
1798	ACC Target Detected
1799	Requested ACC Distance Mode
1800	SLI Battery 1 Temperature
1801	SLI Battery 2 Temperature
1802	Engine Intake Manifold 5 Temperature
1803	Engine Intake Manifold 6 Temperature
1804	Engine Start Enable Device 2
1805	LED Display Mode Control
1806	LED Display Deadband Control
1807	Steering Wheel Angle
1808	Yaw Rate
1809	Lateral Acceleration
1810	Longitudinal Acceleration
1811	Steering Wheel Turn Counter
1812	Steering Wheel Angle Sensor Type
1813	VDC Information Signal
1814	VDC Fully Operational
1815	VDC brake light request

1816	ROP Engine Control active
1817	YC Engine Control active
1818	ROP Brake Control active
1819	YC Brake Control active
1820	Ramp / Wheel Chair Lift Position
1821	Position of doors
1822	Lift Axle 2 Position
1823	Rear Axle in Bumper Range
1824	Front Axle in Bumper Range
1825	Suspension Remote control 2
1826	Suspension Remote Control 1
1827	Suspension Control Refusal Information
1828	Lift Axle 2 Position Command
1829	Kneeling Command - Rear Axle
1830	Kneeling Command - Front Axle
1831	Electronic Shock Absorber Control Mode - Lift/Tag Axle
1832	Electronic Shock Absorber Control Mode - Rear Axle
1833	Electronic Shock Absorber Control Mode - Front Axle
1834	Engine Total Average Fuel Rate
1835	Engine Total Average Fuel Economy
1836	Trailer ABS Status
1837	Convoy Driving Lamp Select
1838	Convoy Lamp Select
1839	Front Black Out Marker Lamp Select
1840	Rear Black Out Marker Select
1841	Black Out Brake/Stop Lamp Select
1842	Black Out Work Lamp Select
1843	Night Vision Illuminator Select
1844	Operators Black Out Intensity Selection
1845	Transmission Torque Limit
1846	Engine Default Torque Limit
1847	Hill Holder Lamp Command
1848	Hill Holder Lamp Data
1849	Transmission Requested Range Display Flash State
1850	Transmission Requested Range Display Blank State
1851	Transmission Shift Inhibit Indicator
1852	Transmission Mode 1
1853	Transmission Mode 2
1854	Transmission Mode 3
1855	Transmission Mode 4
1856	Seat Belt Switch
1857	Winch Oil Pressure Switch
1858	Intermittent Wiper Control
1859	Ground Based Implement Speed

1860	Ground Based Implement Distance
1861	Ground Based Direction
1862	Wheel Based Speed
1863	Wheel Based Distance
1864	Wheel Based Direction
1865	Key Switch NOT OFF
1866	Maximum Time of Tractor Power
1867	Maintain ECU Power
1868	Maintain Actuator Power
1869	Implement Transport State
1870	Implement Park State
1871	Implement Ready-to-Work State
1872	Front Hitch Position
1873	Rear Hitch Position
1874	Front Hitch Position Command
1875	Rear Hitch Position Command
1876	Front Hitch In-work Indication
1877	Rear Hitch In-work Indication
1878	Front Draft
1879	Rear Draft
1880	Front Nominal Lower Link Force
1881	Rear Nominal Lower Link Force
1882	Front PTO output shaft speed
1883	Rear PTO output shaft speed
1884	Front PTO Output Shaft Speed Set Point
1885	Rear PTO Output Shaft Speed Set Point
1886	Front PTO Output Shaft Speed Set Point Command
1887	Rear PTO Output Shaft Speed Set Point Command
1888	Front Power Take Off Engagement
1889	Front Power Take Off Mode
1890	Rear Power Take Off Mode
1891	Front Power Take Off Economy Mode
1892	Rear Power Take Off Economy Mode
1893	Front Power Take Off Engagement Command
1894	Rear Power Take Off Engagement Command
1895	Front Power Take Off Mode Command
1896	Rear Power Take Off Mode Command
1897	Front Power Take Off Economy Mode Command
1898	Rear Power Take Off Economy Mode Command
1899	Aux Valve 0 Extend Port Measured Flow
1900	Aux Valve 0 Retract Port Measured Flow
1901	Aux Valve 0 Extend Port Estimated Flow
1902	Aux Valve 0 Retract Port Estimated Flow
1903	Aux Valve 0 State

1904	Aux Valve 0 Extend Port Pressure
1905	Aux Valve 0 Retract Port Pressure
1906	Aux Valve 0 Return Port Pressure
1907	Aux Valve 0 Port Flow Command
1908	Aux Valve 0 State Command
1909	Aux Valve 0 Fail Safe Mode Command
1910	Aux Valve 0 Fail Safe Mode
1911	Aux Valve 1 Extend Port Measured Flow
1912	Aux Valve 1 Retract Port Measured Flow
1913	Aux Valve 1 Extend Port Estimated Flow
1914	Aux Valve 1 Retract Port Estimated Flow
1915	Aux Valve 1 State
1916	Aux Valve 1 Extend Port Pressure
1917	Aux Valve 1 Retract Port Pressure
1918	Aux Valve 1 Return Port Pressure
1919	Aux Valve 1 Port Flow Command
1920	Aux Valve 1 State Command
1921	Aux Valve 1 Fail Safe Mode Command
1922	Aux Valve 1 Fail Safe Mode
1923	Aux Valve 2 Extend Port Measured Flow
1924	Aux Valve 2 Retract Port Measured Flow
1925	Aux Valve 2 Extend Port Estimated Flow
1926	Aux Valve 2 Retract Port Estimated Flow
1927	Aux Valve 2 State
1928	Aux Valve 2 Extend Port Pressure
1929	Aux Valve 2 Retract Port Pressure
1930	Aux Valve 2 Return Port Pressure
1931	Aux Valve 2 Port Flow Command
1932	Aux Valve 2 State Command
1933	Aux Valve 2 Fail Safe Mode Command
1934	Aux Valve 2 Fail Safe Mode
1935	Aux Valve 3 Extend Port Measured Flow
1936	Aux Valve 3 Retract Port Measured Flow
1937	Aux Valve 3 Extend Port Estimated Flow
1938	Aux Valve 3 Retract Port Estimated Flow
1939	Aux Valve 3 State
1940	Aux Valve 3 Extend Port Pressure
1941	Aux Valve 3 Retract Port Pressure
1942	Aux Valve 3 Return Port Pressure
1943	Aux Valve 3 Port Flow Command
1944	Aux Valve 3 State Command
1945	Aux Valve 3 Fail Safe Mode Command
1946	Aux Valve 3 Fail Safe Mode
1947	Aux Valve 4 Extend Port Measured Flow

1948	Aux Valve 4 Retract Port Measured Flow
1949	Aux Valve 4 Extend Port Estimated Flow
1950	Aux Valve 4 Retract Port Estimated Flow
1951	Aux Valve 4 State
1952	Aux Valve 4 Extend Port Pressure
1953	Aux Valve 4 Retract Port Pressure
1954	Aux Valve 4 Return Port Pressure
1955	Aux Valve 4 Port Flow Command
1956	Aux Valve 4 State Command
1957	Aux Valve 4 Fail Safe Mode Command
1958	Aux Valve 4 Fail Safe Mode
1959	Aux Valve 5 Extend Port Measured Flow
1960	Aux Valve 5 Retract Port Measured Flow
1961	Aux Valve 5 Extend Port Estimated Flow
1962	Aux Valve 5 Retract Port Estimated Flow
1963	Aux Valve 5 State
1964	Aux Valve 5 Extend Port Pressure
1965	Aux Valve 5 Retract Port Pressure
1966	Aux Valve 5 Return Port Pressure
1967	Aux Valve 5 Port Flow Command
1968	Aux Valve 5 State Command
1969	Aux Valve 5 Fail Safe Mode Command
1970	Aux Valve 5 Fail Safe Mode
1971	Aux Valve 6 Extend Port Measured Flow
1972	Aux Valve 6 Retract Port Measured Flow
1973	Aux Valve 6 Extend Port Estimated Flow
1974	Aux Valve 6 Retract Port Estimated Flow
1975	Aux Valve 6 State
1976	Aux Valve 6 Extend Port Pressure
1977	Aux Valve 6 Retract Port Pressure
1978	Aux Valve 6 Return Port Pressure
1979	Aux Valve 6 Port Flow Command
1980	Aux Valve 6 State Command
1981	Aux Valve 6 Fail Safe Mode Command
1982	Aux Valve 6 Fail Safe Mode
1983	Aux Valve 7 Extend Port Measured Flow
1984	Aux Valve 7 Retract Port Measured Flow
1985	Aux Valve 7 Extend Port Estimated Flow
1986	Aux Valve 7 Retract Port Estimated Flow
1987	Aux Valve 7 State
1988	Aux Valve 7 Extend Port Pressure
1989	Aux Valve 7 Retract Port Pressure
1990	Aux Valve 7 Return Port Pressure
1991	Aux Valve 7 Port Flow Command

1992	Aux Valve 7 State command
1993	Aux Valve 7 Fail Safe Mode Command
1994	Aux Valve 7 Fail Safe Mode
1995	Aux Valve 8 Extend Port Measured Flow
1996	Aux Valve 8 Retract Port Measured Flow
1997	Aux Valve 8 Extend Port Estimated Flow
1998	Aux Valve 8 Retract Port Estimated Flow
1999	Aux Valve 8 State
2000	Source Address 0
2001	Source Address 1
2002	Source Address 2
2003	Source Address 3
2004	Source Address 4
2005	Source Address 5
2006	Source Address 6
2007	Source Address 7
2008	Source Address 8
2009	Source Address 9
2010	Source Address 10
2011	Source Address 11
2012	Source Address 12
2013	Source Address 13
2014	Source Address 14
2015	Source Address 15
2016	Source Address 16
2017	Source Address 17
2018	Source Address 18
2019	Source Address 19
2020	Source Address 20
2021	Source Address 21
2022	Source Address 22
2023	Source Address 23
2024	Source Address 24
2025	Source Address 25
2026	Source Address 26
2027	Source Address 27
2028	Source Address 28
2029	Source Address 29
2030	Source Address 30
2031	Source Address 31
2032	Source Address 32
2033	Source Address 33
2034	Source Address 34
2035	Source Address 35

2036	Source Address 36
2037	Source Address 37
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2040	Source Address 40
2041	Source Address 41
2042	Source Address 42
2043	Source Address 43
2044	Source Address 44
2045	Source Address 45
2046	Source Address 46
2047	Source Address 47
2048	Source Address 48
2049	Source Address 49
2050	Source Address 50
2051	Source Address 51
2052	Source Address 52
2053	Source Address 53
2054	Source Address 54
2055	Source Address 55
2056	Source Address 56
2057	Source Address 57
2058	Source Address 58
2059	Source Address 59
2060	Source Address 60
2061	Source Address 61
2062	Source Address 62
2063	Source Address 63
2064	Source Address 64
2065	Source Address 65
2066	Source Address 66
2067	Source Address 67
2068	Source Address 68
2069	Source Address 69
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2087	Source Address 87
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2089	Source Address 89
2090	Source Address 90
2091	Source Address 91
2092	Source Address 92
2093	Source Address 93
2094	Source Address 94
2095	Source Address 95
2096	Source Address 96
2097	Source Address 97
2098	Source Address 98
2099	Source Address 99
2100	Source Address 100
2101	Source Address 101
2102	Source Address 102
2103	Source Address 103
2104	Source Address 104
2105	Source Address 105
2106	Source Address 106
2107	Source Address 107
2108	Source Address 108
2109	Source Address 109
2110	Source Address 110
2111	Source Address 111
2112	Source Address 112
2113	Source Address 113
2114	Source Address 114
2115	Source Address 115
2116	Source Address 116
2117	Source Address 117
2118	Source Address 118
2119	Source Address 119
2120	Source Address 120
2121	Source Address 121
2122	Source Address 122
2123	Source Address 123

2124	Source Address 124
2125	Source Address 125
2126	Source Address 126
2127	Source Address 127
2128	Source Address 128
2129	Source Address 129
2130	Source Address 130
2131	Source Address 131
2132	Source Address 132
2133	Source Address 133
2134	Source Address 134
2135	Source Address 135
2136	Source Address 136
2137	Source Address 137
2138	Source Address 138
2139	Source Address 139
2140	Source Address 140
2141	Source Address 141
2142	Source Address 142
2143	Source Address 143
2144	Source Address 144
2145	Source Address 145
2146	Source Address 146
2147	Source Address 147
2148	Source Address 148
2149	Source Address 149
2150	Source Address 150
2151	Source Address 151
2152	Source Address 152
2153	Source Address 153
2154	Source Address 154
2155	Source Address 155
2156	Source Address 156
2157	Source Address 157
2158	Source Address 158
2159	Source Address 159
2160	Source Address 160
2161	Source Address 161
2162	Source Address 162
2163	Source Address 163
2164	Source Address 164
2165	Source Address 165
2166	Source Address 166
2167	Source Address 167

2168	Source Address 168
2169	Source Address 169
2170	Source Address 170
2171	Source Address 171
2172	Source Address 172
2173	Source Address 173
2174	Source Address 174
2175	Source Address 175
2176	Source Address 176
2177	Source Address 177
2178	Source Address 178
2179	Source Address 179
2180	Source Address 180
2181	Source Address 181
2182	Source Address 182
2183	Source Address 183
2184	Source Address 184
2185	Source Address 185
2186	Source Address 186
2187	Source Address 187
2188	Source Address 188
2189	Source Address 189
2190	Source Address 190
2191	Source Address 191
2192	Source Address 192
2193	Source Address 193
2194	Source Address 194
2195	Source Address 195
2196	Source Address 196
2197	Source Address 197
2198	Source Address 198
2199	Source Address 199
2200	Source Address 200
2201	Source Address 201
2202	Source Address 202
2203	Source Address 203
2204	Source Address 204
2205	Source Address 205
2206	Source Address 206
2207	Source Address 207
2208	Source Address 208
2209	Source Address 209
2210	Source Address 210
2211	Source Address 211

2212	Source Address 212
2213	Source Address 213
2214	Source Address 214
2215	Source Address 215
2216	Source Address 216
2217	Source Address 217
2218	Source Address 218
2219	Source Address 219
2220	Source Address 220
2221	Source Address 221
2222	Source Address 222
2223	Source Address 223
2224	Source Address 224
2225	Source Address 225
2226	Source Address 226
2227	Source Address 227
2228	Source Address 228
2229	Source Address 229
2230	Source Address 230
2231	Source Address 231
2232	Source Address 232
2233	Source Address 233
2234	Source Address 234
2235	Source Address 235
2236	Source Address 236
2237	Source Address 237
2238	Source Address 238
2239	Source Address 239
2240	Source Address 240
2241	Source Address 241
2242	Source Address 242
2243	Source Address 243
2244	Source Address 244
2245	Source Address 245
2246	Source Address 246
2247	Source Address 247
2248	Source Address 248
2249	Source Address 249
2250	Source Address 250
2251	Source Address 251
2252	Source Address 252
2253	Source Address 253
2254	Source Address 254
2255	Source Address 255

2256	Aux Valve 8 Extend Port Pressure
2257	Aux Valve 8 Retract Port Pressure
2258	Aux Valve 8 Return Port Pressure
2259	Aux Valve 8 Port Flow Command
2260	Aux Valve 8 State Command
2261	Aux Valve 8 Fail Safe Mode Command
2262	Aux Valve 8 Fail Safe Mode
2263	Aux Valve 9 Extend Port Measured Flow
2264	Aux Valve 9 Retract Port Measured Flow
2265	Aux Valve 9 Extend Port Estimated Flow
2266	Aux Valve 9 Retract Port Estimated Flow
2267	Aux Valve 9 State
2268	Aux Valve 9 Extend Port Pressure
2269	Aux Valve 9 Retract Port Pressure
2270	Aux Valve 9 Return Port Pressure
2271	Aux Valve 9 Port Flow Command
2272	Aux Valve 9 State Command
2273	Aux Valve 9 Fail Safe Mode Command
2274	Aux Valve 9 Fail Safe Mode
2275	Aux Valve 10 Extend Port Measured Flow
2276	Aux Valve 10 Retract Port Measured Flow
2277	Aux Valve 10 Extend Port Estimated Flow
2278	Aux Valve 10 Retract Port Estimated Flow
2279	Aux Valve 10 State
2280	Aux Valve 10 Extend Port Pressure
2281	Aux Valve 10 Retract Port Pressure
2282	Aux Valve 10 Return Port Pressure
2283	Aux Valve 10 Port Flow Command
2284	Aux Valve 10 State Command
2285	Aux Valve 10 Fail Safe Mode Command
2286	Aux Valve 10 Fail Safe Mode
2287	Aux Valve 11 Extend Port Measured Flow
2288	Aux Valve 11 Retract Port Measured Flow
2289	Aux Valve 11 Extend Port Estimated Flow
2290	Aux Valve 11 Retract Port Estimated Flow
2291	Aux Valve 11 State
2292	Aux Valve 11 Extend Port Pressure
2293	Aux Valve 11 Retract Port Pressure
2294	Aux Valve 11 Return Port Pressure
2295	Aux Valve 11 Port Flow Command
2296	Aux Valve 11 State Command
2297	Aux Valve 11 Fail Safe Mode Command
2298	Aux Valve 11 Fail Safe Mode
2299	Aux Valve 12 Extend Port Measured Flow

2300	Aux Valve 12 Retract Port Measured Flow
2301	Aux Valve 12 Extend Port Estimated Flow
2302	Aux Valve 12 Retract Port Estimated Flow
2303	Aux Valve 12 State
2304	Aux Valve 12 Extend Port Pressure
2305	Aux Valve 12 Retract Port Pressure
2306	Aux Valve 12 Return Port Pressure
2307	Aux Valve 12 Port Flow Command
2308	Aux Valve 12 State Command
2309	Aux Valve 12 Fail Safe Mode Command
2310	Aux Valve 12 Fail Safe Mode
2311	Aux Valve 13 Extend Port Measured Flow
2312	Aux Valve 13 Retract Port Measured Flow
2313	Aux Valve 13 Extend Port Estimated Flow
2314	Aux Valve 13 Retract Port Estimated Flow
2315	Aux Valve 13 State
2316	Aux Valve 13 Extend Port Pressure
2317	Aux Valve 13 Retract Port Pressure
2318	Aux Valve 13 Return Port Pressure
2319	Aux Valve 13 Port Flow Command
2320	Aux Valve 13 State Command
2321	Aux Valve 13 Fail Safe Mode Command
2322	Aux Valve 13 Fail Safe Mode
2323	Aux Valve 14 Extend Port Measured Flow
2324	Aux Valve 14 Retract Port Measured Flow
2325	Aux Valve 14 Extend Port Estimated Flow
2326	Aux Valve 14 Retract Port Estimated Flow
2327	Aux Valve 14 State
2328	Aux Valve 14 Extend Port Pressure
2329	Aux Valve 14 Retract Port Pressure
2330	Aux Valve 14 Return Port Pressure
2331	Aux Valve 14 Port Flow Command
2332	Aux Valve 14 State Command
2333	Aux Valve 14 Fail Safe Mode Command
2334	Aux Valve 14 Fail Safe Mode
2335	Aux Valve 15 Extend Port Measured Flow
2336	Aux Valve 15 Retract Port Measured Flow
2337	Aux Valve 15 Extend Port Estimated Flow
2338	Aux Valve 15 Retract Port Estimated Flow
2339	Aux Valve 15 State
2340	Aux Valve 15 Extend Port Pressure
2341	Aux Valve 15 Retract Port Pressure
2342	Aux Valve 15 Return Port Pressure
2343	Aux Valve 15 Port Flow Command

2344	Aux Valve 15 State Command
2345	Aux Valve 15 Fail Safe Mode Command
2346	Aux Valve 15 Fail Safe Mode
2347	High Beam Head Light Command
2348	High Beam Head Light Data
2349	Low Beam Head Light Command
2350	Low Beam Head Light Data
2351	Alternate Beam Head Light Command
2352	Alternate Beam Head Light Data
2353	Tractor Front Low Mounted Work Lights Command
2354	Tractor Front Low Mounted Work Lights
2355	Tractor Front High Mounted Work Lights Command
2356	Tractor Front High Mounted Work Lights
2357	Tractor Underside Mounted Work Lights Command
2358	Tractor Underside Mounted Work Lights
2359	Tractor Rear Low Mounted Work Lights Command
2360	Tractor Rear Low Mounted Work Lights
2361	Tractor Rear High Mounted Work Lights Command
2362	Tractor Rear High Mounted Work Lights
2363	Tractor Side Low Mounted Work Lights Command
2364	Tractor Side Low Mounted Work Lights
2365	Tractor Side High Mounted Work Lights Command
2366	Tractor Side High Mounted Work Lights
2367	Left Turn Signal Lights Command
2368	Left Turn Signal Lights
2369	Right Turn Signal Lights Command
2370	Right Turn Signal Lights
2371	Left Stop Light Command
2372	Left Stop Light
2373	Right Stop Light Command
2374	Right Stop Light
2375	Center Stop Light Command
2376	Center Stop Light
2377	Tractor Marker Light Command
2378	Tractor Marker Light
2379	Implement Marker Light Command
2380	Implement Marker Light
2381	Tractor Clearance Light Command
2382	Tractor Clearance Light
2383	Implement Clearance Light Command
2384	Implement Clearance Light
2385	Rotating Beacon Light Command
2386	Rotating Beacon Light
2387	Tractor Front Fog Lights Command

2388	Tractor Front Fog Lights
2389	Rear Fog Light Command
2390	Rear Fog Lights
2391	Back Up Light and Alarm Horn Command
2392	Back Up Light and Alarm Horn
2393	Lighting Data Request Command
2394	Implement Rear Work Light
2395	Implement OEM Option 1 Light Command
2396	Implement OEM Option 1 Light
2397	Implement OEM Option 2 Light Command
2398	Implement OEM Option 2 Light
2399	Implement Left Facing Work Light Command
2400	Implement Left Facing Work Light
2401	Implement Right Forward Work Light Command
2402	Implement Right Forward Work Light
2403	Running Light Command
2404	Running Light
2405	Implement Rear Work Light Command
2406	Implement Right Facing Work Light Command
2407	Implement Right Facing Work Light
2408	Rear Power Take Off Engagement
2409	Number of Members in Working Set
2410	Language Code Command
2411	Decimal Symbol Command
2412	Date Command
2413	Time Command
2414	Distance Unit Command
2415	Area Unit Command
2416	Volume Unit Command
2417	Mass Unit Command
2418	Repetition Rate Parameter
2419	Data Format/Error Condition
2420	Process Data Type
2421	Process Data Modifier
2422	Count Number
2423	Group Number
2424	Element Number
2425	Implement Type
2426	Implement Position
2427	Data Dictionary Row
2428	Data Dictionary Column
2429	Process Variable Value
2430	Engine Coolant Level - Main Radiator
2431	Engine Oil Rail High Pressure Leakage

2432	Engine Demand – Percent Torque
2433	Engine Exhaust Manifold Bank 2 Temperature 1
2434	Engine Exhaust Manifold Bank 1 Temperature 1
2435	Sea Water Pump Outlet Pressure
2436	Generator Average AC Frequency
2437	Generator Phase A AC Frequency
2438	Generator Phase B AC Frequency
2439	Generator Phase C AC Frequency
2440	Generator Average Line-Line AC RMS Voltage
2441	Generator Phase AB Line-Line AC RMS Voltage
2442	Generator Phase BC Line-Line AC RMS Voltage
2443	Generator Phase CA Line-Line AC RMS Voltage
2444	Generator Average Line-Neutral AC RMS Voltage
2445	Generator Phase A Line-Neutral AC RMS Voltage
2446	Generator Phase B Line-Neutral AC RMS Voltage
2447	Generator Phase C Line-Neutral AC RMS Voltage
2448	Generator Average AC RMS Current
2449	Generator Phase A AC RMS Current
2450	Generator Phase B AC RMS Current
2451	Generator Phase C AC RMS Current
2452	Generator Total Real Power
2453	Generator Phase A Real Power
2454	Generator Phase B Real Power
2455	Generator Phase C Real Power
2456	Generator Total Reactive Power
2457	Generator Phase A Reactive Power
2458	Generator Phase B Reactive Power
2459	Generator Phase C Reactive Power
2460	Generator Total Apparent Power
2461	Generator Phase A Apparent Power
2462	Generator Phase B Apparent Power
2463	Generator Phase C Apparent Power
2464	Generator Overall Power Factor
2465	Generator Phase A Power Factor
2466	Generator Phase B Power Factor
2467	Generator Phase C Power Factor
2468	Generator Total kW Hours Export
2469	Generator Total kW Hours Import
2470	Utility Average AC Frequency
2471	Utility Phase A AC Frequency
2472	Utility Phase B AC Frequency
2473	Utility Phase C AC Frequency
2474	Utility Average Line-Line AC RMS Voltage
2475	Utility Phase AB Line-Line AC RMS Voltage

2476	Utility Phase BC Line-Line AC RMS Voltage
2477	Utility Phase CA Line-Line AC RMS Voltage
2478	Utility Average Line-Neutral AC RMS Voltage
2479	Utility Phase A Line-Neutral AC RMS Voltage
2480	Utility Phase B Line-Neutral AC RMS Voltage
2481	Utility Phase C Line-Neutral AC RMS Voltage
2482	Utility Average AC RMS Current
2483	Utility Phase A AC RMS Current
2484	Utility Phase B AC RMS Current
2485	Utility Phase C AC RMS Current
2486	Utility Total Real Power
2487	Utility Phase A Real Power
2488	Utility Phase B Real Power
2489	Utility Phase C Real Power
2490	Utility Total Reactive Power
2491	Utility Phase A Reactive Power
2492	Utility Phase B Reactive Power
2493	Utility Phase C Reactive Power
2494	Utility Total Apparent Power
2495	Utility Phase A Apparent Power
2496	Utility Phase B Apparent Power
2497	Utility Phase C Apparent Power
2498	Utility Overall Power Factor
2499	Utility Phase A Power Factor
2500	Utility Phase B Power Factor
2501	Utility Phase C Power Factor
2502	Utility Total kW Hours Export
2503	Utility Total kW Hours Import
2504	Bus #1 Average AC Frequency
2505	Bus #1 Phase A AC Frequency
2506	Bus #1 Phase B AC Frequency
2507	Bus #1 Phase C AC Frequency
2508	Bus #1 Average Line-Line AC RMS Voltage
2509	Bus #1 Phase AB Line-Line AC RMS Voltage
2510	Bus #1 Phase BC Line-Line AC RMS Voltage
2511	Bus #1 Phase CA Line-Line AC RMS Voltage
2512	Bus #1 Average Line-Neutral AC RMS Voltage
2513	Bus #1 Phase A Line-Neutral AC RMS Voltage
2514	Bus #1 Phase B Line-Neutral AC RMS Voltage
2515	Bus #1 Phase C Line-Neutral AC RMS Voltage
2516	Bus #1/Generator AC Phase Difference
2517	Bus #1/Utility AC Phase Difference
2518	Generator Overall Power Factor Lagging
2519	Generator Phase A Power Factor Lagging

2520	Generator Phase B Power Factor Lagging
2521	Generator Phase C Power Factor Lagging
2522	Utility Overall Power Factor Lagging
2523	Utility Phase A Power Factor Lagging
2524	Utility Phase B Power Factor Lagging
2525	Utility Phase C Power Factor Lagging
2526	Bus #1/Generator Phase Match
2527	Bus #1/Generator Voltage Match
2528	Bus #1/Generator Frequency Match
2529	Bus #1/Generator In Sync
2530	Bus #1/Generator Dead Bus
2531	Bus #1/Utility Phase Match
2532	Bus #1/Utility Voltage Match
2533	Bus #1/Utility Frequency Match
2534	Bus #1/Utility In Sync
2535	Bus #1/Utility Dead Bus
2536	Transmission Mode 1 Indicator
2537	Transmission Mode 2 Indicator
2538	Transmission Mode 3 Indicator
2539	Transmission Mode 4 Indicator
2540	Parameter Group Number (RQST)
2541	Control Byte (ACKM)
2542	Group Function Value (ACK)
2543	Parameter Group Number (ACK)
2544	Group Function Value (NACK)
2545	Parameter Group Number (NACK)
2546	Group Function Value (NACK_AD)
2547	Parameter Group Number (NACK_AD)
2548	Group Function Value (NACK_Busy)
2549	Parameter Group Number (NACK_Busy)
2550	Manufacturer Specific Information (PropA_PDU1)
2551	Manufacturer Defined Usage (PropB_PDU2)
2552	Parameter Group Number of Requested Information (XFER)
2553	Length of data for the reported PGN (XFER)
2554	Controller Application Identity (CAI)
2555	Transfer Data
2556	Control Byte (TP.CM)
2557	Total Message Size (TP.CM_RTS)
2558	Total Number of Packets (TP.CM_RTS)
2559	Maximum Number of Packets (TP.CM_RTS)
2560	Parameter Group Number of the packeted message (TP.CM_RTS)
2561	Number of Packets that can be sent (TP.CM_CTS)
2562	Next Packet Number to be sent (TP.CM_CTS)
2563	Parameter Group Number of the packeted message (TP.CM_CTS)

2564	Total Message Size (TP.CM_EndofMsgACK)
2565	Total Number of Packets (TP.CM_EndofMsgACK)
2566	Parameter Group Number of the packeted message (TP.CM_EndofMsgACK)
2567	Total Message Size (TP.CM_BAM)
2568	Total Number of Packets (TP.CM_BAM)
2569	Parameter Group Number of the packeted message (TP.CM_BAM)
2570	Connection Abort Reason
2571	Parameter Group Number of packeted message (TP.CM_Conn_Abort)
2572	Sequence Number (TP.DT)
2573	Packetized Data (TP.DT)
2574	Parameter Group Number (RQST2)
2575	Use Transfer Mode
2576	Laser Receiver Type
2577	Display Deadbands
2578	LED Pattern Control
2579	SLI Battery 1 Net Current (High Range/Resolution)
2580	Hydraulic Brake Pressure Circuit 1
2581	Hydraulic Brake Pressure Circuit 2
2582	Hydraulic Brake Pressure Supply State Circuit 1
2583	Hydraulic Brake Pressure Supply State Circuit 2
2584	Hydraulic Brake Pressure Warning State Circuit 1
2585	Hydraulic Brake Pressure Warning State Circuit 2
2586	Tire Air Leakage Rate
2587	Tire Pressure Threshold Detection
2588	Maximum Vehicle Speed Limit 1
2589	Maximum Vehicle Speed Limit 2
2590	Maximum Vehicle Speed Limit 3
2591	Maximum Vehicle Speed Limit 4
2592	Maximum Vehicle Speed Limit 5
2593	Maximum Vehicle Speed Limit 6
2594	Maximum Vehicle Speed Limit 7
2595	Applied Vehicle Speed Limit
2596	Selected Maximum Vehicle Speed Limit
2597	Implement Left Forward Work Light Command
2598	Implement Left Forward Work Light
2599	Fire Apparatus Pump Engagement
2600	Payload Percentage
2601	Travel Velocity Control Position
2602	Hydraulic Oil Level
2603	Pneumatic Supply Pressure Request
2604	Parking and/or Trailer Air Pressure Request
2605	Service Brake Air Pressure Request, Circuit #1
2606	Service Brake Air Pressure Request, Circuit #2
2607	Auxiliary Equipment Supply Pressure Request

2608	Air Suspension Supply Pressure Request
2609	Cab A/C Refrigerant Compressor Outlet Pressure
2610	Solar Intensity Percent
2611	Solar Sensor Maximum
2612	Front Wheel Drive Actuator Status
2613	Drive Axle Lube Pressure
2614	Steering Axle Lube Pressure
2615	Engine Throttle Synchronization Mode Status
2616	Trolling Mode Status
2617	Slow Vessel Mode Status
2618	Suspend Signal
2619	Suspend Duration
2620	Brake Lining Display
2621	Pneumatic Brake Pressure Limitation Valve Front Axle
2622	Hillholder system
2623	Accelerator Pedal #1 Channel 2
2624	Accelerator Pedal #1 Channel 3
2625	Accelerator Pedal #2 Channel 2
2626	Accelerator Pedal #2 Channel 3
2627	Gaseous Fuel Tank 1 High Pressure Shutoff Valve
2628	Gaseous Fuel Tank 1 Low Pressure Shutoff Valve
2629	Engine Turbocharger 1 Compressor Outlet Temperature
2630	Engine Charge Air Cooler 1 Outlet Temperature
2631	Engine Charge Air Cooler Outlet Pressure
2632	Engine Charge Air Cooler 1 Bypass
2633	Engine Variable Geometry Turbocharger (VGT) 1 Nozzle Position
2634	Power Relay
2635	"Neutral Only" Power Relay
2636	Windshield Wiper Motor ON/OFF
2637	Windshield Wiper Motor Speed
2638	Differential Lock Control Valve #2
2639	Cab Door "Lock" Control
2640	Cab Door "Unlock" Control
2641	Horn
2642	Mirror 1 Heater
2643	Battery Monitor Load #1
2644	Battery Monitor Load #2
2645	ECU "Wake Up" Control
2646	Auxiliary Output #4
2647	Auxiliary Output #5
2648	Maintenance Lamp
2649	Low Air Pressure
2650	Fan Override Indicator
2651	Interior Lamps

2652	Switch Diagnostic Enable
2653	Headlamp Low Beam Left #1
2654	Headlamp Low Beam Left #2
2655	Headlamp Low Beam Right #1
2656	Headlamp Low Beam Right #2
2657	Engine Auxiliary Cooling System
2658	Engine Intake Air Precleaner
2659	Engine Exhaust Gas Recirculation 1 Mass Flow Rate
2660	Joystick 1 X-Axis Position
2661	Joystick 1 Y-Axis Position
2662	Joystick 1 Grip X-Axis Position
2663	Joystick 1 Grip Y-Axis Position
2664	Joystick 1 Theta-Axis Position
2665	Joystick 1 X-Axis Lever Right Positive Position Status
2666	Joystick 1 Y-Axis Lever Forward Positive Position Status
2667	Joystick 1 Grip X-Axis Lever Right Positive Position Status
2668	Joystick 1 Grip Y-Axis Lever Forward Positive Position Status
2669	Joystick 1 Theta-Axis Clockwise Positive Position Status
2670	Joystick 1 X-Axis Lever Left Negative Position Status
2671	Joystick 1 Y-Axis Lever Back Negative Position Status
2672	Joystick 1 Grip X-Axis Lever Left Negative Position Status
2673	Joystick 1 Grip Y-Axis Lever Back Negative Position Status
2674	Joystick 1 Theta-Axis Counter Clockwise Negative Position Status
2675	Joystick 1 X-Axis Neutral Position Status
2676	Joystick 1 Y-Axis Neutral Position Status
2677	Joystick 1 Grip X-Axis Neutral Position Status
2678	Joystick 1 Grip Y-Axis Neutral Position Status
2679	Joystick 1 Theta-Axis Neutral Position Status
2680	Joystick 1 X-Axis Detent Position Status
2681	Joystick 1 Y-Axis Detent Position Status
2682	Joystick 1 Grip X-Axis Detent Position Status
2683	Joystick 1 Grip Y-Axis Detent Position Status
2684	Joystick 1 Theta-Axis Detent Position Status
2685	Joystick 1 Button 1 Pressed Status
2686	Joystick 1 Button 2 Pressed Status
2687	Joystick 1 Button 3 Pressed Status
2688	Joystick 1 Button 4 Pressed Status
2689	Joystick 1 Button 5 Pressed Status
2690	Joystick 1 Button 6 Pressed Status
2691	Joystick 1 Button 7 Pressed Status
2692	Joystick 1 Button 8 Pressed Status
2693	Joystick 1 Button 9 Pressed Status
2694	Joystick 1 Button 10 Pressed Status
2695	Joystick 1 Button 11 Pressed Status

2696	Joystick 1 Button 12 Pressed Status
2697	Joystick 2 X-Axis Position
2698	Joystick 2 Y-Axis Position
2699	Joystick 2 Grip X-Axis Position
2700	Joystick 2 Grip Y-Axis Position
2701	Joystick 2 Theta-Axis Position
2702	Joystick 2 X-Axis Lever Right Positive Position Status
2703	Joystick 2 Y-Axis Lever Forward Positive Position Status
2704	Joystick 2 Grip X-Axis Lever Right Positive Position Status
2705	Joystick 2 Grip Y-Axis Lever Forward Positive Position Status
2706	Joystick 2 Theta-Axis Clockwise Positive Position Status
2707	Joystick 2 X-Axis Lever Left Negative Position Status
2708	Joystick 2 Y-Axis Lever Back Negative Position Status
2709	Joystick 2 Grip X-Axis Lever Left Negative Position Status
2710	Joystick 2 Grip Y-Axis Lever Back Negative Position Status
2711	Joystick 2 Theta-Axis Counter Clockwise Negative Position Status
2712	Joystick 2 X-Axis Neutral Position Status
2713	Joystick 2 Y-Axis Neutral Position Status
2714	Joystick 2 Grip X-Axis Neutral Position Status
2715	Joystick 2 Grip Y-Axis Neutral Position Status
2716	Joystick 2 Theta-Axis Neutral Position Status
2717	Joystick 2 X-Axis Detent Position Status
2718	Joystick 2 Y-Axis Detent Position Status
2719	Joystick 2 Grip X-Axis Detent Position Status
2720	Joystick 2 Grip Y-Axis Detent Position Status
2721	Joystick 2 Theta-Axis Detent Position Status
2722	Joystick 2 Button 1 Pressed Status
2723	Joystick 2 Button 2 Pressed Status
2724	Joystick 2 Button 3 Pressed Status
2725	Joystick 2 Button 4 Pressed Status
2726	Joystick 2 Button 5 Pressed Status
2727	Joystick 2 Button 6 Pressed Status
2728	Joystick 2 Button 7 Pressed Status
2729	Joystick 2 Button 8 Pressed Status
2730	Joystick 2 Button 9 Pressed Status
2731	Joystick 2 Button 10 Pressed Status
2732	Joystick 2 Button 11 Pressed Status
2733	Joystick 2 Button 12 Pressed Status
2734	Joystick 3 X-Axis Position
2735	Joystick 3 Y-Axis Position
2736	Joystick 3 Grip X-Axis Position
2737	Joystick 3 Grip Y-Axis Position
2738	Joystick 3 Theta-Axis Position
2739	Joystick 3 X-Axis Lever Right Positive Position Status

2740	Joystick 3 Y-Axis Lever Forward Positive Position Status
2741	Joystick 3 Grip X-Axis Lever Right Positive Position Status
2742	Joystick 3 Grip Y-Axis Lever Forward Positive Position Status
2743	Joystick 3 Theta-Axis Clockwise Positive Position Status
2744	Joystick 3 X-Axis Lever Left Negative Position Status
2745	Joystick 3 Y-Axis Lever Back Negative Position Status
2746	Joystick 3 Grip X-Axis Lever Left Negative Position Status
2747	Joystick 3 Grip Y-Axis Lever Back Negative Position Status
2748	Joystick 3 Theta-Axis Counter Clockwise Negative Position Status
2749	Joystick 3 X-Axis Neutral Position Status
2750	Joystick 3 Y-Axis Neutral Position Status
2751	Joystick 3 Grip X-Axis Neutral Position Status
2752	Joystick 3 Grip Y-Axis Neutral Position Status
2753	Joystick 3 Theta-Axis Neutral Position Status
2754	Joystick 3 X-Axis Detent Position Status
2755	Joystick 3 Y-Axis Detent Position Status
2756	Joystick 3 Grip X-Axis Detent Position Status
2757	Joystick 3 Grip Y-Axis Detent Position Status
2758	Joystick 3 Theta-Axis Detent Position Status
2759	Joystick 3 Button 1 Pressed Status
2760	Joystick 3 Button 2 Pressed Status
2761	Joystick 3 Button 3 Pressed Status
2762	Joystick 3 Button 4 Pressed Status
2763	Joystick 3 Button 5 Pressed Status
2764	Joystick 3 Button 6 Pressed Status
2765	Joystick 3 Button 7 Pressed Status
2766	Joystick 3 Button 8 Pressed Status
2767	Joystick 3 Button 9 Pressed Status
2768	Joystick 3 Button 10 Pressed Status
2769	Joystick 3 Button 11 Pressed Status
2770	Joystick 3 Button 12 Pressed Status
2771	Engine Turbocharger Compressor Bypass Actuator 1 Control
2772	Engine Turbocharger Compressor Blowoff Actuator 1 Control
2773	Engine Fuel Supply Flow Rate
2774	Engine Fuel Return Flow Rate
2775	Engine Fuel Supply Temperature
2776	Engine Fuel Return Temperature
2777	Number of Fuel Consumption Monitoring Transducers
2778	Engine Idle Fuel Flow Rate Threshold
2779	SLI Battery 3 Temperature
2780	SLI Battery 4 Temperature
2781	Engine Secondary Coolant Circuit Coolant Pressure 2
2782	Engine Secondary Coolant Circuit Coolant Temperature 2
2783	Aftertreatment 1 Gas Oxidation Catalyst Missing

2784	Aftertreatment 2 Gas Oxidation Catalyst Missing
2785	Aftertreatment 1 Three Way Catalyst Missing
2786	Aftertreatment 2 Three Way Catalyst Missing
2789	Engine Turbocharger 1 Calculated Turbine Intake Temperature
2790	Engine Turbocharger 1 Calculated Turbine Outlet Temperature
2791	Engine Exhaust Gas Recirculation 1 Valve 1 Control 1
2792	Engine Variable Geometry Turbocharger (VGT) Air Control Shutoff Valve
2793	Laser Strike Data Latency
2794	Absolute Laser Strike Position
2795	Engine Variable Geometry Turbocharger (VGT) 1 Actuator Position
2796	Transfer Case Selector Switch
2797	Engine Fuel 1 Injector Group 1
2798	Engine Fuel 1 Injector Group 2
2799	Engine Turbocharger 2 Compressor Outlet Temperature
2800	Engine Turbocharger 3 Compressor Outlet Temperature
2801	Engine Turbocharger 4 Compressor Outlet Temperature
2802	Data Memory Usage
2803	Keep-Alive Battery Consumption
2804	FMS-standard Diagnostics Supported
2805	FMS-standard Requests Supported
2806	FMS-standard SW-version supported.
2807	Engine Fuel Shutoff 2 Control
2808	Keypad
2809	Engine Air Filter 2 Differential Pressure
2810	Engine Air Filter 3 Differential Pressure
2811	Engine Air Filter 4 Differential Pressure
2812	Engine Overspeed Test
2813	Engine Air Shutoff Command Status
2814	Engine Alarm Output Command Status
2815	Engine Alarm Acknowledge
2816	Simultaneous Upshift and Downshift
2817	Operator Using Clutch Pedal During Non-Recoverable Clutch Fault
2818	Operators Rear PTO Switch On with Operator Not Present
2819	Park Interlock Error
2820	Operator Not Present During Reverser Command
2821	Reverser Lever Neutral and Power Signals Conflict
2822	Reverser Lever Neither Forward or Reverse
2823	Reverser Lever Simultaneous Forward and Reverse
2824	Reverser Lever Motion Interlock Conflict
2825	Reverser Lever
2826	Reverser Lever Multiple Switch Conflicts
2827	Power Up Without Neutral
2828	Reverser Lever In Power Zero/Direction Transition Too Long
2829	Reverser Lever in Neutral/Park Transition Too Long

2830	Reversing Ratio Rationality Fault
2831	No Carrier Speed at Start-up
2832	Operator Not in Operating Station
2833	Motion with Park Brake Engaged
2834	No Hydrostatic Unit Speed at Start-up
2835	Neutral to Gear Command Conflict
2836	Battery 1 Potential 2 (Voltage), Switched (Obsolete)
2837	Identity Number
2838	Manufacturer Code
2839	Function Instance
2840	ECU Instance
2841	Function
2842	Vehicle System
2843	Vehicle System Instance
2844	Arbitrary Address Capable
2845	NAME of Working Set Member
2846	Industry Group
2847	Address Assignment (new source address)
2848	NAME of Controller Application (for address claimed)
2849	NAME of Commanded Address Target
2850	Communications Antenna
2851	Communications Service Personal Identification Number
2852	Communications Service Subscriber Identification Module
2853	Communications Connection
2854	Communications Carrier
2855	Communications Bit Error Rate
2856	Communications Data Upload
2857	Communications Data Download
2858	Machine Data Configuration 1
2859	Machine Data Configuration 2
2860	Machine Data Configuration 3
2861	Machine Data Configuration 4
2862	Machine Data Configuration 5
2863	Front Operator Wiper Switch
2864	Front Non-operator Wiper Switch
2865	Rear Wiper Switch
2866	Front Operator Washer Switch
2867	Front Non-operator Washer Switch
2868	Rear Washer Function
2869	Front Operator Wiper Delay Control
2870	Front Non-operator Wiper Delay Control
2871	Rear Wiper Delay Control
2872	Main Light Switch
2873	Work Light Switch

2874	High-Low Beam Switch
2875	Hazard Light Switch
2876	Turn Signal Switch
2877	Operators Desired - Delayed Lamp Off Time
2878	Operators Desired Back-light
2879	Engine Droop Accelerator 2 Select
2880	Engine Operator Primary Intermediate Speed Select
2881	Engine Droop Accelerator 1 Select
2882	Engine Alternate Rating Select
2883	Engine Alternate Low Idle Switch
2884	Engine Auxiliary Governor Switch
2885	Engine Droop Auxiliary Input Select
2886	Engine Droop Remote Accelerator Select
2887	Total Count of Configuration Changes Made
2888	Engine Alternate Rating Select State
2889	Engine Droop Accelerator 1 Select State
2890	Engine Multi-Unit Sync State
2891	Engine Alternate Low Idle Select State
2892	Engine Operator Primary Intermediate Speed Select State
2893	Engine Alternate Droop Accelerator 2 Select State
2894	Engine Droop Remote Accelerator Select State
2895	Engine Droop Auxiliary Input Select State
2896	Engine Auxiliary Governor State
2897	Operator Engine PTO Governor Memory Select Switch
2898	Engine Start Enable Device 2 Configuration
2899	Engine Start Enable Device 1 Configuration
2900	Transmission Engine Crank Enable
2901	ECU Part Number
2902	ECU Serial Number
2903	ECU Location
2904	ECU Type
2905	Transmission Range Clutch C7 Solenoid
2906	Transmission Range Clutch C8 Solenoid
2907	Transmission Axle Disconnect Clutch Valve Actuator
2908	Transmission Boost Pressure Valve Actuator
2909	Torque Converter Modulating Clutch Valve Actuator
2910	Transmission PTO Clutch Valve Actuator
2911	Halt brake switch
2912	Hill holder mode
2913	Halt brake mode
2914	XBR EBI Mode
2915	XBR Priority
2916	XBR Control Mode
2917	XBR System State

2918	XBR Active Control Mode
2919	Foundation Brake Use
2920	External Acceleration Demand
2921	XBR Acceleration Limit
2922	Steerable Lift Axle Lowering Inhibit
2923	Status of Steering Axle
2924	Steering Type
2925	Type of Steering Forces
2926	Type of Steering Transmission
2927	Actual Inner wheel steering angle
2928	Axle Location
2930	Hydraulic Brake System Audible Warning Command
2931	Hydraulic Brake Fluid Level Switch
2932	Valve State
2933	Valve State Command
2934	Valve Fail Safe Mode
2935	Valve Fail Safe Mode Command
2936	General Purpose Valve Number
2937	Extend Port Measured Flow
2938	Retract Port Measured Flow
2939	Extend Port Estimated Flow
2940	Retract Port Estimated Flow
2941	Extend Port Pressure
2942	Retract Port Pressure
2943	Return Port Pressure
2944	Port Flow Command
2945	Active Shift Console Indicator
2946	Engine Mixer Intake Relative Humidity
2947	Engine Fuel Rack Position #2
2948	Engine Intake Valve Actuation System Oil Pressure
2949	Engine Intake Valve Actuation System Oil Pressure Control Valve
2950	Engine Intake Valve Actuator #1
2951	Engine Intake Valve Actuator #2
2952	Engine Intake Valve Actuator #3
2953	Engine Intake Valve Actuator #4
2954	Engine Intake Valve Actuator #5
2955	Engine Intake Valve Actuator #6
2956	Engine Intake Valve Actuator #7
2957	Engine Intake Valve Actuator #8
2958	Engine Intake Valve Actuator #9
2959	Engine Intake Valve Actuator #10
2960	Engine Intake Valve Actuator #11
2961	Engine Intake Valve Actuator #12
2962	Engine Intake Valve Actuator #13

2963	Engine Intake Valve Actuator #14
2964	Engine Intake Valve Actuator #15
2965	Engine Intake Valve Actuator #16
2966	Engine Intake Valve Actuator #17
2967	Engine Intake Valve Actuator #18
2968	Engine Intake Valve Actuator #19
2969	Engine Intake Valve Actuator #20
2970	Accelerator Pedal 2 Low Idle Switch
2971	Accelerator Pedal 3 Low Idle Switch
2972	Accelerator Pedal Position 1 Output 2
2973	Accelerator Pedal Position 1 Output 3
2974	Accelerator Pedal Position 2 Output 2
2975	Accelerator Pedal Position 2 Output 3
2976	Accelerator Pedal Position 3 Output 2
2977	Accelerator Pedal Position 3 Output 3
2978	Estimated Engine Parasitic Losses - Percent Torque
2979	Vehicle Acceleration Rate Limit Status
2980	Engine Fuel Valve 1 Outlet Absolute Pressure
2981	Engine Secondary Coolant Circuit Coolant Pressure 1
2982	Engine Secondary Coolant Circuit Coolant Temperature 1
2983	Clutch Life Remaining
2984	Automatic traction help (load transfer)
2985	Transmission Shift Selector Display Mode Switch
2986	Engine Intake Valve Actuation System Oil Temperature
2987	Engine will not start, pre-lube system issue
2988	Engine Coolant Diverter Valve
2989	Combine separator speed
2991	Tailings volume
2992	Move reel forward
2993	Move reel aft
2994	Reel raise
2995	Reel lower
2996	Header raise slow
2997	Header lower slow
2998	Header raise fast
2999	Header lower fast
3000	Tilt header left
3001	Tilt header right
3002	Header fold
3003	Header unfold
3004	Draper speed increment
3005	Draper speed decrement
3006	Reel speed increment
3007	Reel speed decrement

3008	Threshing clearance increment
3009	Threshing clearance decrement
3010	Threshing speed increment
3011	Threshing speed decrement
3012	Product fan speed increment
3013	Product fan speed decrement
3015	Implement fold down
3016	Implement fold up
3017	RH header raise
3018	LH header raise
3019	Product fan engage mode
3020	Augers engage mode
3021	Product basket fill state
3022	Augers enable mode
3023	Header height control mode
3024	Header remote tether control mode
3025	Lubrication control mode
3026	Transmission Oil Level 1 Measurement Status
3027	Transmission Oil Level 1 High / Low
3028	Transmission Oil Level 1 Countdown Timer
3029	Engine Start Inhibited, Pre-lube System Issue
3030	Transmission Torque Converter Ratio
3031	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature 1
3032	Right Brake Pedal Position
3033	Left Brake Pedal Position
3034	DM22 Control Byte - Individual DTC Clear/Reset Control Byte
3035	DM22 - Control Byte Specific Indicator For Individual DTC Clear
3036	DM22 - SPN
3037	DM22 - FMI
3038	Flash Malfunction Indicator Lamp
3039	Flash Red Stop Lamp (RSL)
3040	Flash Amber Warning Lamp (AWL)
3041	Flash Protect Lamp
3042	Requested Wheel Speed
3043	Type of Passenger Count
3044	Silent Alarm Status
3045	Vehicle Use Status
3046	Transit Run Status
3047	Patron Count
3048	Engine Ignition Cycle Counter
3049	OBD Monitoring Conditions Encountered Counts
3050	Catalyst Bank 1 System Monitor
3051	Catalyst 2 System Monitor
3052	Engine Misfire System Monitor

3053	Engine Evaporative System Monitor
3054	Secondary Air System Monitor
3055	Engine Fuel System Monitor
3056	Oxygen (or Exhaust Gas) Sensor Bank 1 Monitor
3057	Oxygen (or Exhaust Gas) Sensor Bank 2 Monitor
3058	Engine Exhaust Gas Recirculation System Monitor
3059	Engine Positive Crankcase Ventilation System Monitor
3060	Engine Cooling System Monitor
3061	Engine Cold Start Emission Reduction Strategy System Monitor
3062	Air Conditioning System Component Monitor
3063	Direct Ozone Reduction Monitor
3064	Aftertreatment Diesel Particulate Filter System Monitor
3065	Comprehensive Component Monitor
3066	SPN of Applicable System Monitor
3067	Applicable System Monitor Numerator
3068	Applicable System Monitor Denominator
3069	Distance Travelled While MIL is Activated
3070	Number of bytes in the Milepost Identification
3071	Number of bytes in the Transit Assigned Route Identity
3072	Number of bytes in the Transit Assigned Run Identity
3073	Number of bytes in the Transit Assigned Block Identity
3074	Transit Assigned Route Identity
3075	Transit Assigned Run Identity
3076	Transit Assigned Block Identity
3078	Agency
3079	Intersection Preemption Request/Response
3080	Transit Route ID Usage
3081	Range Code Enable
3082	Strobe Activation Control Status
3083	Transit Door Enable
3084	Priority of Response Sent by Emitter
3085	Vehicle ID
3086	Transmission Ready for Brake Release
3087	Auxiliary Level
3088	Header height vertical rate control
3089	Header height sensitivity control
3090	Header height setpoint change
3091	Header height setpoint change sequence number
3092	Header platform height
3093	Header platform height maximum
3096	Header float pressure
3097	Header float pressure maximum
3098	Header position percent
3099	Header position percent maximum

3102	Unloading Auger swing out
3103	Unloading auger swing in
3104	Unloading auger swing out-auto
3105	Unloading auger swing in-auto
3106	Side hill left tilt
3107	Side hill right tilt
3108	Spreader speed increment
3109	Spreader speed decrement
3110	Precleaner open
3111	Precleaner close
3112	Open chaffer
3113	Close chaffer
3114	Open sieve
3115	Close sieve
3116	Move chopper vane left
3117	Move chopper vane right
3118	Quick stop switch
3119	Unloading auger engage/disengage
3120	Unloading auger fold
3121	Unloading auger unfold
3122	Max allowable cleaning shoe travel
3123	Right hand header height setpoint
3124	Left hand header height setpoint
3125	Left hand header height
3126	Right hand header height
3127	Header control response rate setpoint
3128	Header control response rate maximum setpoint
3129	Header control response rate minimum setpoint
3130	Product system tank water level
3131	Product fan speed
3132	Product system manifold pressure
3133	Product system pump discharge pressure
3134	Product fan hours
3135	Right hand header height max setpoint
3136	Right hand header height min setpoint
3137	Left hand header height min setpoint
3138	Left hand header height max setpoint
3139	Right hand header unit speed
3140	Left hand header unit speed
3141	GPS differential corrections license
3142	Method, GNSS
3143	Differential source
3144	Differential source, Secondary
3145	DGNSS fix

3146	PGN of message being configured
3147	Parameter being included
3148	Position of configured parameter
3149	Message will be used proprietarily
3150	Message will use transport protocol
3151	First parameter only being identified
3152	Number of parameters included
3153	Starting bit for this parameter
3154	Parameter to be located
3155	Parameter locate command
3156	Blade Control Mode Switch
3157	Desired Grade Offset Switch
3158	Blade Auto Mode Command
3159	Trip Number
3160	Assigned Route
3161	Pattern Number
3162	Assigned Run
3163	Assigned Block
3164	Driver's farebox security code
3165	Fare Validity
3166	Pass Category
3167	Initial Fare Agency
3168	Transfer Sold
3169	Route Number
3170	Transaction Type
3171	Passenger Type
3172	Type of Service
3173	Transfer Type
3174	Trip Direction
3175	Fare Presets
3176	Type of Fare
3177	Payment Details
3178	Farebox Service Status
3179	Farebox Emergency Status
3180	Trip Status
3181	Farebox Alarm Identifier
3182	Transmission Retarder Enable Solenoid Valve
3183	Transmission Retarder Modulation Solenoid Valve
3184	Transmission Torque Converter Lockup Clutch Pressure Indicator
3185	Transmission Differential Lock Solenoid Valve
3186	Transmission Differential Lock Clutch Pressure Indicator
3187	Transmission Shift Console Data Link
3188	XBR Message Checksum
3189	XBR Message Counter

3190	Tire Location
3191	Reference Tire Pressure
3192	Tire Location
3193	Reference Tire Pressure Setting
3194	Control Byte
3195	Number of Ports
3196	Uptime since last power-on reset
3197	Average Messages Filtered per Second
3198	Average Messages Forwarded per Second
3199	Average Messages Received per Second
3200	Number of Messages with Excessive Transit Delay Time
3201	Number of Messages lost due to Buffer Overflow
3202	Average Transit Delay Time
3203	Maximum Transit Delay Time
3204	Maximum Messages Filtered per Second
3205	Maximum Messages Forwarded per Second
3206	Maximum Messages Received per Second
3207	Number of Filter Database Entries
3208	Maximum Filter Database Size
3209	Buffer Size
3210	Parameter Number
3211	SA_List
3212	PGN_List
3213	Filter_Mode
3214	Port_Pair
3215	Prohibit air suspension control
3216	Aftertreatment 1 SCR Intake NOx 1
3217	Aftertreatment 1 Intake Percent Oxygen 1
3218	Aftertreatment 1 Intake Gas Sensor 1 Power In Range
3219	Aftertreatment 1 Intake Gas Sensor 1 at Temperature
3220	Aftertreatment 1 SCR Intake NOx 1 Reading Stable
3221	Aftertreatment 1 Intake Wide-Range Percent Oxygen 1 Reading Stable
3222	Aftertreatment 1 Intake Gas Sensor 1 Heater Preliminary FMI
3223	Aftertreatment 1 Intake Gas Sensor 1 Heater Control
3224	Aftertreatment 1 SCR Intake NOx Sensor 1 Preliminary FMI
3225	Aftertreatment 1 Intake Oxygen Sensor 1 Preliminary FMI
3226	Aftertreatment 1 Outlet NOx 1
3227	Aftertreatment 1 Outlet Percent Oxygen 1
3228	Aftertreatment 1 Outlet Gas Sensor 1 Power In Range
3229	Aftertreatment 1 Outlet Gas Sensor 1 at Temperature
3230	Aftertreatment 1 Outlet NOx 1 Reading Stable
3231	Aftertreatment 1 Outlet Wide-Range Percent Oxygen 1 Reading Stable
3232	Aftertreatment 1 Outlet Gas Sensor 1 Heater Preliminary FMI
3233	Aftertreatment 1 Outlet Gas Sensor 1 Heater Control

3234	Aftertreatment 1 Outlet NOx Sensor 1 Preliminary FMI
3235	Aftertreatment 1 Outlet Oxygen Sensor 1 Preliminary FMI
3236	Aftertreatment 1 Exhaust Gas Mass Flow Rate
3237	Aftertreatment 1 Intake Dew Point
3238	Aftertreatment 1 Exhaust Dew Point
3239	Aftertreatment 2 Intake Dew Point
3240	Aftertreatment 2 Exhaust Dew Point
3241	Aftertreatment 1 Exhaust Temperature 1
3242	Aftertreatment 1 Diesel Particulate Filter Intake Temperature
3243	Aftertreatment 1 Exhaust Temperature 1 Preliminary FMI
3244	Aftertreatment 1 Diesel Particulate Filter Intake Temperature Preliminary FMI
3245	Aftertreatment 1 Exhaust Temperature 3
3246	Aftertreatment 1 Diesel Particulate Filter Outlet Temperature
3247	Aftertreatment 1 Exhaust Temperature 3 Preliminary FMI
3248	Aftertreatment 1 Diesel Particulate Filter Outlet Exhaust Temperature Preliminary FMI
3249	Aftertreatment 1 Exhaust Temperature 2
3250	Aftertreatment 1 Diesel Particulate Filter Intermediate Temperature
3251	Aftertreatment 1 Diesel Particulate Filter Differential Pressure
3252	Aftertreatment 1 Exhaust Temperature 2 Preliminary FMI
3253	Aftertreatment 1 Diesel Particulate Filter Differential Pressure Preliminary FMI
3254	Aftertreatment 1 Diesel Particulate Filter Intermediate Temperature Preliminary FMI
3255	Aftertreatment 2 SCR Intake NOx 1
3256	Aftertreatment 2 Intake Percent Oxygen 1
3257	Aftertreatment 2 Intake Gas Sensor 1 Power In Range
3258	Aftertreatment 2 Intake Gas Sensor 1 at Temperature
3259	Aftertreatment 2 SCR Intake NOx 1 Reading Stable
3260	Aftertreatment 2 Intake Wide-Range Percent Oxygen 1 Reading Stable
3261	Aftertreatment 2 Intake Gas Sensor 1 Heater Preliminary FMI
3262	Aftertreatment 2 Intake Gas Sensor 1 Heater Control
3263	Aftertreatment 2 SCR Intake NOx Sensor 1 Preliminary FMI
3264	Aftertreatment 2 Intake Oxygen Sensor 1 Preliminary FMI
3265	Aftertreatment 2 Outlet NOx 1
3266	Aftertreatment 2 Outlet Percent Oxygen 1
3267	Aftertreatment 2 Outlet Gas Sensor 1 Power In Range
3268	Aftertreatment 2 Outlet Gas Sensor 1 at Temperature
3269	Aftertreatment 2 Outlet NOx 1 Reading Stable
3270	Aftertreatment 2 Outlet Wide-Range Percent Oxygen 1 Reading Stable
3271	Aftertreatment 2 Outlet Gas Sensor 1 Heater Preliminary FMI
3272	Aftertreatment 2 Outlet Gas Sensor 1 Heater Control
3273	Aftertreatment 2 Outlet NOx Sensor 1 Preliminary FMI
3274	Aftertreatment 2 Outlet Oxygen Sensor 1 Preliminary FMI
3275	Aftertreatment 2 Exhaust Temperature 1
3276	Aftertreatment 2 Diesel Particulate Filter Intake Temperature
3277	Aftertreatment 2 Exhaust Temperature 1 Preliminary FMI

3278	Aftertreatment 2 Diesel Particulate Filter Intake Temperature Preliminary FMI
3279	Aftertreatment 2 Exhaust Temperature 3
3280	Aftertreatment 2 Diesel Particulate Filter Outlet Temperature
3281	Aftertreatment 2 Exhaust Temperature 3 Preliminary FMI
3282	Aftertreatment 2 Diesel Particulate Filter Exhaust Temperature Preliminary FMI
3283	Aftertreatment 2 Exhaust Temperature 2
3284	Aftertreatment 2 Diesel Particulate Filter Intermediate Temperature
3285	Aftertreatment 2 Diesel Particulate Filter Differential Pressure
3286	Aftertreatment 2 Exhaust Temperature 2 Preliminary FMI
3287	Aftertreatment 2 Diesel Particulate Filter Differential Pressure Preliminary FMI
3288	Aftertreatment 2 Diesel Particulate Filter Intermediate Temperature Preliminary FMI
3289	Transmission Requested Gear Feedback
3290	Address Acknowledged
3291	Address Negative Acknowledgement
3292	Address Access Denied
3293	Address Busy
3294	Distance Since Diagnostic Trouble Codes Cleared
3295	Minutes Run by Engine While MIL is Activated
3296	Time Since Diagnostic Trouble Codes Cleared
3297	SPN Supported
3298	SPN Support Type
3299	SPN Data Length
3300	Expanded Freeze Frame Length
3301	Time Since Engine Start
3302	Number of Warm-Ups Since Diagnostic Trouble Codes Cleared
3303	Continuously Monitored Systems Enabled/Completed Status
3304	Non-Continuously Monitored Systems Enabled Status
3305	Non-Continuously Monitored Systems Completed Status
3306	Variable Valve Timing and/or Control
3307	Fifth Wheel Error Status
3308	Fifth Wheel Vertical Force
3309	Fifth Wheel Drawbar Force
3310	Fifth Wheel Roll Moment
3311	Fifth Wheel Slider Position
3312	Fifth Wheel Lock Ready to Couple Indicator
3313	Fifth Wheel Lock Couple Status Indicator
3314	Fifth Wheel Release Control
3315	Fifth Wheel Release Control Security Lockout
3316	Fifth Wheel Slider Lock Indicator
3317	Fifth Wheel Roll Warning Indicator
3318	Pitch Angle
3319	Roll Angle
3322	Pitch Rate
3323	Pitch Angle Figure of Merit

3324	Roll Angle Figure of Merit
3325	Pitch Rate Figure of Merit
3326	Pitch and Roll Compensated
3327	Roll and Pitch Measurement Latency
3328	Manufacturer Specific Information (PropA2_PDU1)
3329	Message Selection Control
3330	PGN of Configurable Message Desired
3331	Blade Rotation Angle
3332	Blade Rotation Angle Figure of Merit
3333	Feederhouse Height
3334	Left Blade Control Mode Operator Control
3335	Right Blade Control Mode Operator Control
3336	Left Desired Blade Offset Operator Control
3337	Right Desired Blade Offset Operator Control
3338	Side-shift Blade Control Mode Operator Control
3339	Side-shift Desired Blade Offset Operator Control
3340	Engine Charge Air Cooler 1 Intake Pressure
3341	Engine Charge Air Cooler 2 Intake Pressure
3342	Engine Coolant Pump Differential Pressure
3343	Engine Centrifugal Oil Filter speed
3344	Support Variable Rate TSC1 Message
3345	Support TSC1 Control Purpose Group 1
3346	Support TSC1 Control Purpose Group 2
3347	Support TSC1 Control Purpose Group 3
3348	Support TSC1 Control Purpose Group 4
3349	TSC1 Transmission Rate
3350	TSC1 Control Purpose
3351	Engine Exhaust Pressure Regulator Vent Valve Control
3352	Engine Exhaust Pressure Regulator Vent Valve Position
3353	Alternator 1 Status
3354	Alternator 2 Status
3355	Alternator 3 Status
3356	Alternator 4 Status
3357	Actual Maximum Available Engine - Percent Torque
3358	Engine Exhaust Gas Recirculation 1 Intake Pressure
3359	Transmission Oil Filter Restriction Switch
3360	Aftertreatment 1 Diesel Exhaust Fluid Controller 1
3361	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 1
3362	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 1 Input Lines
3363	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater
3364	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality
3365	Relative Blade Height
3366	Relative Blade Height and Blade Rotation Angle Measurement Latency
3367	Relative Blade Height Figure of Merit

3368	Network Transceiver Status 1
3369	Network Service Status 1
3370	Network Antenna Status 1
3371	Network Signal Strength 1
3372	Wireless Communication Network Type 1
3374	Generator Excitation Ripple Current
3375	Voltage Regulator Load Compensation Mode
3376	Voltage Regulator VAR/Power Factor operating mode
3377	Voltage Regulator Underfrequency Compensation enabled
3378	Voltage Regulator Soft Start State
3379	Voltage Regulator Enabled
3380	Generator Excitation Field Voltage
3381	Generator Excitation Field Current
3382	Generator Output Voltage Bias Percentage
3383	Requested Generator Total AC Reactive Power
3384	Requested Generator Overall Power Factor
3385	Requested Generator Overall Power Factor Lagging
3386	Requested Generator Average Line-Line AC RMS Voltage
3387	Engine Cylinder 1 Combustion Status
3388	Engine Cylinder 2 Combustion Status
3389	Engine Cylinder 3 Combustion Status
3390	Engine Cylinder 4 Combustion Status
3391	Engine Cylinder 5 Combustion Status
3392	Engine Cylinder 6 Combustion Status
3393	Engine Cylinder 7 Combustion Status
3394	Engine Cylinder 8 Combustion Status
3395	Engine Cylinder 9 Combustion Status
3396	Engine Cylinder 10 Combustion Status
3397	Engine Cylinder 11 Combustion Status
3398	Engine Cylinder 12 Combustion Status
3399	Engine Cylinder 13 Combustion Status
3400	Engine Cylinder 14 Combustion Status
3401	Engine Cylinder 15 Combustion Status
3402	Engine Cylinder 16 Combustion Status
3403	Engine Cylinder 17 Combustion Status
3404	Engine Cylinder 18 Combustion Status
3405	Engine Cylinder 19 Combustion Status
3406	Engine Cylinder 20 Combustion Status
3407	Engine Cylinder 21 Combustion Status
3408	Engine Cylinder 22 Combustion Status
3409	Engine Cylinder 23 Combustion Status
3410	Engine Cylinder 24 Combustion Status
3411	Status 2 of doors
3412	Lock Status of Door 1

3413	Open Status of Door 1
3414	Enable Status of Door 1
3415	Lock Status of Door 2
3416	Open Status of Door 2
3417	Enable Status of Door 2
3418	Lock Status of Door 3
3419	Open Status of Door 3
3420	Enable Status of Door 3
3421	Lock Status of Door 4
3422	Open Status of Door 4
3423	Enable Status of Door 4
3424	Lock Status of Door 5
3425	Open Status of Door 5
3426	Enable Status of Door 5
3427	Lock Status of Door 6
3428	Open Status of Door 6
3429	Enable Status of Door 6
3430	Lock Status of Door 7
3431	Open Status of Door 7
3432	Enable Status of Door 7
3433	Lock Status of Door 8
3434	Open Status of Door 8
3435	Enable Status of Door 8
3436	Lock Status of Door 9
3437	Open Status of Door 9
3438	Enable Status of Door 9
3439	Lock Status of Door 10
3440	Open Status of Door 10
3441	Enable Status of Door 10
3442	Network Transceiver Status 2
3443	Network Service Status 2
3444	Network Antenna Status 2
3445	Network Signal Strength 2
3446	Wireless Communication Network Type 2
3447	Remote PTO Governor Preprogrammed Speed Control Switch #2
3448	Auxiliary Input Ignore Switch
3451	Engine Multiple Cylinder Spark Voltage
3452	Enable Switch – Transmission input shaft PTO 1
3453	Enable Switch – Transmission input shaft PTO 2
3454	Enable Switch – Transmission output shaft PTO
3455	Enable Switch – Transfer case output shaft PTO
3456	Engagement Consent – Transmission input shaft PTO 1
3457	Engagement Consent – Transmission input shaft PTO 2
3458	Engagement Consent – Transmission output shaft PTO

3459	Engagement Consent – Transfer case output shaft PTO
3460	Engagement Status – Transmission input shaft PTO 1
3461	Engagement Status – Transmission input shaft PTO 2
3462	Engagement Status – Transmission output shaft PTO
3463	Engagement Status – Transfer case output shaft PTO
3464	Engine Throttle Actuator 1 Control Command
3465	Engine Throttle Actuator 2 Control Command
3466	Engine Fuel Valve 2 Intake Absolute Pressure
3467	Engine Fuel System 2 Gas Mass Flow Rate
3468	Engine Fuel 1 Temperature 2
3469	Engine Fuel Valve 2 Outlet Absolute Pressure
3470	Engine Turbocharger Compressor Bypass Actuator 1 Command
3471	Aftertreatment 1 Fuel Pressure Control Actuator
3472	Aftertreatment 1 Air Pressure Control Actuator
3473	Aftertreatment 1 Failed to Ignite
3474	Aftertreatment 1 Diesel Particulate Filter Loss of Combustion
3475	Aftertreatment 2 Fuel Pressure Control Actuator
3476	Aftertreatment 2 Air Pressure Control Actuator
3477	Aftertreatment 2 Failed to Ignite
3478	Aftertreatment 2 Diesel Particulate Filter Loss of Combustion
3479	Aftertreatment 1 Fuel Pressure 1 Control
3480	Aftertreatment 1 Fuel Pressure 1
3481	Aftertreatment 1 Fuel Rate
3482	Aftertreatment 1 Fuel Enable Actuator
3483	Aftertreatment 1 Regeneration Status
3484	Aftertreatment 1 Ignition
3485	Aftertreatment 1 Supply Air Pressure
3486	Aftertreatment 1 Purge Air Pressure
3487	Aftertreatment 1 Air Pressure Control
3488	Aftertreatment 1 Air Pressure Actuator Position
3489	Aftertreatment 1 Air Enable Actuator
3490	Aftertreatment 1 Purge Air Actuator
3491	Aftertreatment 1 Atomization Air Actuator
3492	Aftertreatment 1 Air System Relay
3493	Aftertreatment 2 Fuel Pressure 1 Control
3494	Aftertreatment 2 Fuel Pressure 1
3495	Aftertreatment 2 Fuel Rate
3496	Aftertreatment 2 Fuel Enable Actuator
3497	Aftertreatment 2 Regeneration Status
3498	Aftertreatment 2 Ignition
3499	Aftertreatment 2 Supply Air Pressure
3500	Aftertreatment 2 Purge Air Pressure
3501	Aftertreatment 2 Air Pressure Control
3502	Aftertreatment 2 Air Pressure Actuator Position

3503	Aftertreatment 2 Air Enable Actuator
3504	Aftertreatment 2 Purge Air Actuator
3505	Aftertreatment 2 Atomization Air Actuator
3506	Aftertreatment 2 Air System Relay
3507	TECU ECU_PWR relay
3508	TECU PWR Relay
3509	Sensor supply voltage 1
3510	Sensor supply voltage 2
3511	Sensor supply voltage 3
3512	Sensor supply voltage 4
3513	Sensor supply voltage 5
3514	Sensor supply voltage 6
3515	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2
3516	Aftertreatment 1 Diesel Exhaust Fluid Concentration
3517	Aftertreatment 1 Diesel Exhaust Fluid Tank Level
3518	Aftertreatment 1 Diesel Exhaust Fluid Conductivity
3519	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Preliminary FMI
3520	Aftertreatment 1 Diesel Exhaust Fluid Properties Preliminary FMI
3521	Aftertreatment 1 Diesel Exhaust Fluid Property
3522	Aftertreatment 1 Total Fuel Used
3523	Aftertreatment 1 Total Regeneration Time
3524	Aftertreatment 1 Total Disabled Time
3525	Aftertreatment 1 Total Number of Active Regenerations
3526	Aftertreatment 2 Total Fuel Used
3527	Aftertreatment 2 Total Regeneration Time
3528	Aftertreatment 2 Total Disabled Time
3529	Aftertreatment 2 Total Number of Active Regenerations
3530	Aftertreatment 1 Regeneration Manually Disabled
3531	Aftertreatment 2 Regeneration Manually Disabled
3532	Aftertreatment 1 Diesel Exhaust Fluid Tank Level/Volume Preliminary FMI
3533	Transmission Oil Level Switch
3534	Brake Torque Output Axle 1 Left
3535	Brake Torque Output Axle 1 Right
3536	Brake Torque Output Axle 2 Left
3537	Brake Torque Output Axle 2 Right
3538	Brake Torque Output Axle 3 Left
3539	Brake Torque Output Axle 3 Right
3540	Reference Ground Connection
3541	Brake Light Relay
3542	Requested Engine Control Mode
3543	Engine Operating State
3544	Time Remaining in Engine Operating State
3545	Generator Circuit Breaker Status
3546	Utility Circuit Breaker Status

3547	Automatic Transfer Switch Status
3548	Engine Waste Oil Reservoir Level
3549	Engine Oil Filter Outlet Pressure
3550	Engine Oil Priming Pump Switch
3551	Engine Oil Priming State
3552	Engine Oil Pre-Heated State
3553	Engine Coolant Pre-heated State
3554	Engine Ventilation Status
3555	Ambient Air Density
3556	Aftertreatment 1 Hydrocarbon Doser 1
3557	Parking Brake Red Warning Signal
3558	AETC Data Collection Standard
3559	Number of AETC data points
3560	AETC Speed Value
3561	AETC Torque value
3562	Engine Intake Manifold #2 Pressure
3563	Engine Intake Manifold #1 Absolute Pressure
3564	Lane Departure Warning Enable Command
3565	Lane Departure Left
3566	Lane Departure Right
3567	Generator Control Not In Automatic Start State
3568	Generator Not Ready to Automatically Parallel State
3569	Generator Neutral Earth Fault
3570	Generator Load Neutral Earth Leakage
3571	Generator Circuit Breaker Opening Time
3572	Generator Circuit Breaker Closing Time
3573	Utility Circuit Breaker Opening Time
3574	Utility Circuit Breaker Closing Time
3575	Utility to Generator Transfer Time
3576	Generator to Utility Transfer Time
3577	Loss of Electric Utility Grid
3578	Generator to Bus Synchronization Time
3579	Generator to Bus Phase Sequence Mismatch
3580	Generator Soft Unload Time
3581	Modbus Data Link
3582	Utility Power Supply
3583	Common AC Auxiliaries Breaker
3584	Fire Detected
3585	Engine Emergency Shutdown Switch
3587	Ether Hold Control
3588	Ether Start Control
3589	Engine Oil Priming Pump Control
3590	Generator Total Percent kW
3591	Generator Total Percent kVA

3592	Generator Total Percent kVAr
3593	Generator Total kVAr Hours Export
3594	Generator Total kVAr Hours Import
3595	Utility Total kVAr Hours Export
3596	Utility Total kVAr Hours Import
3597	ECU Power Output Supply Voltage #1
3598	ECU Power Output Supply Voltage #2
3599	ECU Power Output Supply Voltage #3
3600	Steering Straight Ahead Position Reset
3601	Engine Fuel Shutoff Valve Leak Test Control
3602	Engine Oil Pre-heater Control
3603	Engine Electrical System Power Conservation Control
3604	Engine Pre-Heater Control
3605	Engine Coolant Pump Control
3606	Engine Controlled Shutdown Request
3607	Engine Emergency (Immediate) Shutdown Indication
3608	Engine Fuel Shutoff Vent Control
3609	Aftertreatment 1 Diesel Particulate Filter Intake Pressure
3610	Aftertreatment 1 Diesel Particulate Filter Outlet Pressure
3611	Aftertreatment 2 Diesel Particulate Filter Intake Pressure
3612	Aftertreatment 2 Diesel Particulate Filter Outlet Pressure
3613	Text Display Instructions
3614	Text Display Index
3615	Text Display Character
3618	SAE J2012 DTC Presence
3619	Number of J2012 DTCs
3620	J2012 DTC
3621	J2012 DTC Status
3622	J2012 DTC Occurrence Count
3623	Vehicle Roll
3624	Engine Intake Valve Actuation Oil Pressure for Cylinder #1
3625	Engine Intake Valve Actuation Oil Pressure for Cylinder #2
3626	Engine Intake Valve Actuation Oil Pressure for Cylinder #3
3627	Engine Intake Valve Actuation Oil Pressure for Cylinder #4
3628	Engine Intake Valve Actuation Oil Pressure for Cylinder #5
3629	Engine Intake Valve Actuation Oil Pressure for Cylinder #6
3630	Engine Intake Valve Actuation Oil Pressure for Cylinder #7
3631	Engine Intake Valve Actuation Oil Pressure for Cylinder #8
3632	Engine Intake Valve Actuation Oil Pressure for Cylinder #9
3633	Engine Intake Valve Actuation Oil Pressure for Cylinder #10
3634	Engine Intake Valve Actuation Oil Pressure for Cylinder #11
3635	Engine Intake Valve Actuation Oil Pressure for Cylinder #12
3636	Engine Intake Valve Actuation Oil Pressure for Cylinder #13
3637	Engine Intake Valve Actuation Oil Pressure for Cylinder #14

3638	Engine Intake Valve Actuation Oil Pressure for Cylinder #15
3639	Engine Intake Valve Actuation Oil Pressure for Cylinder #16
3640	Engine Intake Valve Actuation Oil Pressure for Cylinder #17
3641	Engine Intake Valve Actuation Oil Pressure for Cylinder #18
3642	Engine Intake Valve Actuation Oil Pressure for Cylinder #19
3643	Engine Intake Valve Actuation Oil Pressure for Cylinder #20
3644	Engine Derate Request
3645	Transfer case status
3646	Transmission Park Selector
3647	Transmission Reverse Selector
3648	Transmission Neutral Selector
3649	Transmission Drive Selector
3650	Transmission Low Selector
3651	Transmission Primary Manual Selector
3652	Transmission Primary Shift Up Selector
3653	Transmission Primary Shift Down Selector
3654	Transmission Secondary Manual Selector
3655	Transmission Secondary Shift Up Selector
3656	Transmission Secondary Shift Down Selector
3657	Steering Wheel Mounted Shift Controls Decoder
3658	Steering Wheel Mounted Shift Controls Input
3659	Engine Fuel 1 Injector Cylinder 1 Actuator 2
3660	Engine Fuel 1 Injector Cylinder 2 Actuator 2
3661	Engine Fuel 1 Injector Cylinder 3 Actuator 2
3662	Engine Fuel 1 Injector Cylinder 4 Actuator 2
3663	Engine Fuel 1 Injector Cylinder 5 Actuator 2
3664	Engine Fuel 1 Injector Cylinder 6 Actuator 2
3665	Engine Fuel 1 Injector Cylinder 7 Actuator 2
3666	Engine Fuel 1 Injector Cylinder 8 Actuator 2
3667	Engine Air Shutoff Status
3668	Engine Charge Air Cooler Coolant Level
3669	Engine Rotation Direction
3670	Maximum Crank Attempts per Start Attempt
3671	Crank Attempt Count on Present Start Attempt
3672	Engine Exhaust Gas Recirculation 1 Cooler Bypass Actuator Position
3673	Engine Throttle Valve 2 Position
3675	Engine Turbocharger Compressor Bypass Actuator 1 Position
3676	Engine Aftercooler Coolant Level
3677	Generator Unavailable to Start / Run
3678	EPS Unavailable to Accept Load
3680	Transmission Master Valve
3681	Power Conversion Enable Signal
3682	Transmission Air Pressure Regulator Valve
3683	Steering Wheel Angle

3684	Steering Wheel Angle Range Counter
3685	Steering Wheel Angle Range Counter Type
3686	Steering Wheel Angle Range
3687	Steering Angle Sensor Active Mode
3688	Steering Angle Sensor Calibrated
3689	Message Counter
3690	Message Checksum
3691	Left Headlamp Dynamic Bending Light
3692	Right Headlamp Dynamic Bending Light
3693	Left Headlamp Light Distribution
3694	Right Headlamp Light Distribution
3695	Aftertreatment Regeneration Inhibit Switch
3696	Aftertreatment Regeneration Force Switch
3697	Diesel Particulate Filter Lamp Command
3698	Exhaust System High Temperature Lamp Command
3699	Aftertreatment Diesel Particulate Filter Passive Regeneration Status
3700	Aftertreatment Diesel Particulate Filter Active Regeneration Status
3701	Aftertreatment Diesel Particulate Filter Status
3702	Diesel Particulate Filter Active Regeneration Inhibited Status
3703	Diesel Particulate Filter Active Regeneration Inhibited Due to Inhibit Switch
3704	Diesel Particulate Filter Active Regeneration Inhibited Due to Clutch Disengaged
3705	Diesel Particulate Filter Active Regeneration Inhibited Due to Service Brake Active
3706	Diesel Particulate Filter Active Regeneration Inhibited Due to PTO Active
3707	Diesel Particulate Filter Active Regeneration Inhibited Due to Accelerator Pedal Off Idle
3708	Diesel Particulate Filter Active Regeneration Inhibited Due to Out of Neutral
3709	Diesel Particulate Filter Active Regeneration Inhibited Due to Vehicle Speed Above Allowed Speed
3710	Diesel Particulate Filter Active Regeneration Inhibited Due to Parking Brake Not Set
3711	Diesel Particulate Filter Active Regeneration Inhibited Due to Low Exhaust Temperature
3712	Diesel Particulate Filter Active Regeneration Inhibited Due to System Fault Active
3713	Diesel Particulate Filter Active Regeneration Inhibited Due to System Timeout
3714	Diesel Particulate Filter Active Regeneration Inhibited Due to Temporary System Lockout
3715	Diesel Particulate Filter Active Regeneration Inhibited Due to Permanent System Lockout
3716	Diesel Particulate Filter Active Regeneration Inhibited Due to Engine Not Warmed Up
3717	Diesel Particulate Filter Active Regeneration Inhibited Due to Vehicle Speed Below Allowed Speed
3718	Diesel Particulate Filter Automatic Active Regeneration Initiation Configuration
3719	Aftertreatment 1 Diesel Particulate Filter Soot Load Percent
3720	Aftertreatment 1 Diesel Particulate Filter Ash Load Percent
3721	Aftertreatment 1 Diesel Particulate Filter Time Since Last Active Regeneration
3722	Aftertreatment 2 Diesel Particulate Filter Soot Load Percent
3723	Aftertreatment 2 Diesel Particulate Filter Ash Load Percent

3724	Aftertreatment 2 Diesel Particulate Filter Time Since Last Active Regeneration
3725	Aftertreatment 1 Diesel Particulate Filter Total Passive Regeneration Time
3726	Aftertreatment 1 Diesel Particulate Filter Total Number of Passive Regenerations
3727	Aftertreatment 1 Diesel Particulate Filter Total Number of Active Regeneration Inhibit Requests
3728	Aftertreatment 1 Diesel Particulate Filter Total Number of Active Regeneration Manual Requests
3729	Aftertreatment 2 Diesel Particulate Filter Total Passive Regeneration Time
3730	Aftertreatment 2 Diesel Particulate Filter Total Number of Passive Regenerations
3731	Aftertreatment 2 Diesel Particulate Filter Total Number of Active Regeneration Inhibit Requests
3732	Aftertreatment 2 Diesel Particulate Filter Total Number of Active Regeneration Manual Requests
3733	Aftertreatment 1 Diesel Particulate Filter Trip Fuel Used
3734	Aftertreatment 1 Diesel Particulate Filter Trip Active Regeneration Time
3735	Aftertreatment 1 Diesel Particulate Filter Trip Disabled Time
3736	Aftertreatment 1 Diesel Particulate Filter Trip Number of Active Regenerations
3737	Aftertreatment 1 Diesel Particulate Filter Trip Passive Regeneration Time
3738	Aftertreatment 1 Diesel Particulate Filter Trip Number of Passive Regenerations
3739	Aftertreatment 1 Diesel Particulate Filter Trip Number of Active Regeneration Inhibit Requests
3740	Aftertreatment 1 Diesel Particulate Filter Trip Number of Active Regeneration Manual Requests
3741	Aftertreatment 2 Diesel Particulate Filter Trip Fuel Used
3742	Aftertreatment 2 Diesel Particulate Filter Trip Active Regeneration Time
3743	Aftertreatment 2 Diesel Particulate Filter Trip Disabled Time
3744	Aftertreatment 2 Diesel Particulate Filter Trip Number of Active Regenerations
3745	Aftertreatment 2 Diesel Particulate Filter Trip Passive Regeneration Time
3746	Aftertreatment 2 Diesel Particulate Filter Trip Number of Passive Regenerations
3747	Aftertreatment 2 Diesel Particulate Filter Trip Number of Active Regeneration Inhibit Requests
3748	Aftertreatment 2 Diesel Particulate Filter Trip Number of Active Regeneration Manual Requests
3749	Engine Overcooled
3750	Aftertreatment 1 Diesel Particulate Filter Conditions Not Met for Active Regeneration
3751	Aftertreatment 2 Diesel Particulate Filter Conditions Not Met for Active Regeneration
3752	Wrapping Arm Fast Speed Rotation Actuator
3753	Wrapping Arm Reverse Rotation Actuator
3754	Wrapping Arm Regular Speed Rotation Actuator
3755	Bale Rotational Speed
3756	Wrapper Knife Close Actuator
3757	Wrapper Knife Open Actuator
3758	Baler Gate Actuator
3759	Transfer Table Backward Actuator
3760	Transfer Table Forward Actuator
3761	Precutter Reverser Actuator

3762	Precutter Knives Actuator
3763	Baler Pickup Actuator
3764	Baler Net Actuator Mode
3765	Baler Net Actuator
3783	Intake Manifold Charge Combustion
3785	Tractor Brake Stroke Axle 1 Left
3786	Tractor Brake Stroke Axle 1 Right
3787	Tractor Brake Stroke Axle 2 Left
3788	Tractor Brake Stroke Axle 2 Right
3789	Tractor Brake Stroke Axle 3 Left
3790	Tractor Brake Stroke Axle 3 Right
3791	Tractor Brake Stroke Axle 4 Left
3792	Tractor Brake Stroke Axle 4 Right
3793	Tractor Brake Stroke Axle 5 Left
3794	Tractor Brake Stroke Axle 5 Right
3795	Trailer Brake Stroke Axle 1 Left
3796	Trailer Brake Stroke Axle 1 Right
3797	Trailer Brake Stroke Axle 2 Left
3798	Trailer Brake Stroke Axle 2 Right
3799	Trailer Brake Stroke Axle 3 Left
3800	Trailer Brake Stroke Axle 3 Right
3801	Trailer Brake Stroke Axle 4 Left
3802	Trailer Brake Stroke Axle 4 Right
3803	Trailer Brake Stroke Axle 5 Left
3804	Trailer Brake Stroke Axle 5 Right
3805	Tractor Brake Stroke Alert Monitor
3806	Trailer Brake Stroke Alert Monitor
3807	Park Brake Release Inhibit Request
3808	Park Brake Release Inhibit Status
3809	Transmission Oil Level Request
3810	Retract Status of ramp 1
3811	Enable status of ramp 1
3812	Movement status of ramp 1
3813	Retract Status of ramp 2
3814	Enable status of ramp 2
3815	Movement status of ramp 2
3816	Retract Status of ramp 3
3817	Enable status of ramp 3
3818	Movement status of ramp 3
3819	Front axle group engagement status
3820	Rear axle group engagement status
3821	Engine Exhaust Gas Recirculation 1 Valve 2 Control
3822	Engine Exhaust Gas Recirculation 1 Valve 2 Position
3823	Transmission Torque Converter Oil Outlet Temperature

3824	Transmission Gear Latch Actuator
3825	Transmission Output Speed 2
3826	Aftertreatment 1 Diesel Exhaust Fluid Average Consumption
3828	Aftertreatment 1 SCR Commanded Diesel Exhaust Fluid Consumption
3829	EPS Supplying Load
3830	Aftertreatment 1 Secondary Air Differential Pressure
3831	Aftertreatment 1 Secondary Air Temperature
3832	Aftertreatment 1 Secondary Air Mass Flow Rate
3833	Aftertreatment 2 Secondary Air Differential Pressure
3834	Aftertreatment 2 Secondary Air Temperature
3835	Aftertreatment 2 Secondary Air Mass Flow Rate
3837	Aftertreatment 1 Secondary Air Pressure
3838	Aftertreatment 2 Secondary Air Pressure
3839	Brake Temperature Warning
3840	Auxiliary I/O #17
3841	Auxiliary I/O #18
3842	Auxiliary I/O #19
3843	Auxiliary I/O #20
3844	Auxiliary I/O #21
3845	Auxiliary I/O #22
3846	Auxiliary I/O #23
3847	Auxiliary I/O #24
3848	Auxiliary I/O #25
3849	Auxiliary I/O #26
3850	Auxiliary I/O #27
3851	Auxiliary I/O #28
3852	Auxiliary I/O #29
3853	Auxiliary I/O #30
3854	Auxiliary I/O #31
3855	Auxiliary I/O #32
3856	Auxiliary I/O #33
3857	Auxiliary I/O #34
3858	Auxiliary I/O #35
3859	Auxiliary I/O #36
3860	Auxiliary I/O #37
3861	Auxiliary I/O #38
3862	Auxiliary I/O #39
3863	Auxiliary I/O #40
3864	Auxiliary I/O #41
3865	Auxiliary I/O #42
3866	Auxiliary I/O #43
3867	Auxiliary I/O #44
3868	Auxiliary I/O #45
3869	Auxiliary I/O #46

3870	Auxiliary I/O #47
3871	Auxiliary I/O #48
3872	Auxiliary I/O #49
3873	Auxiliary I/O #50
3874	Auxiliary I/O #51
3875	Auxiliary I/O #52
3876	Auxiliary I/O #53
3877	Auxiliary I/O #54
3878	Auxiliary I/O #55
3879	Auxiliary I/O #56
3880	Auxiliary I/O #57
3881	Auxiliary I/O #58
3882	Auxiliary I/O #59
3883	Auxiliary I/O #60
3884	Auxiliary I/O #61
3885	Auxiliary I/O #62
3886	Auxiliary I/O #63
3887	Auxiliary I/O #64
3888	Auxiliary I/O #65
3889	Auxiliary I/O #66
3890	Auxiliary I/O #67
3891	Auxiliary I/O #68
3892	Auxiliary I/O #69
3893	Auxiliary I/O #70
3894	Auxiliary I/O #71
3895	Auxiliary I/O #72
3896	Auxiliary I/O #73
3897	Auxiliary I/O #74
3898	Auxiliary I/O #75
3899	Auxiliary I/O #76
3900	Auxiliary I/O #77
3901	Auxiliary I/O #78
3902	Auxiliary I/O #79
3903	Auxiliary I/O #80
3904	Auxiliary I/O #81
3905	Auxiliary I/O #82
3906	Auxiliary I/O #83
3907	Auxiliary I/O #84
3908	Auxiliary I/O #85
3909	Auxiliary I/O #86
3910	Auxiliary I/O #87
3911	Auxiliary I/O #88
3912	Auxiliary I/O #89
3913	Auxiliary I/O #90

3914	Auxiliary I/O #91
3915	Auxiliary I/O #92
3916	Auxiliary I/O #93
3917	Auxiliary I/O #94
3918	Auxiliary I/O #95
3919	Auxiliary I/O #96
3920	Auxiliary I/O #97
3921	Auxiliary I/O #98
3922	Auxiliary I/O #99
3923	Auxiliary I/O #100
3924	Auxiliary I/O #101
3925	Auxiliary I/O #102
3926	Auxiliary I/O #103
3927	Auxiliary I/O #104
3928	Auxiliary I/O #105
3929	Auxiliary I/O #106
3930	Auxiliary I/O #107
3931	Auxiliary I/O #108
3932	Auxiliary I/O #109
3933	Auxiliary I/O #110
3934	Auxiliary I/O #111
3935	Auxiliary I/O #112
3936	Aftertreatment Diesel Particulate Filter System
3938	Generator Governing Bias
3939	Enable Switch - PTO Engine Flywheel
3940	Engagement Consent - PTO Engine Flywheel
3941	Engagement Status - PTO Engine Flywheel
3942	Enable Switch - PTO Engine Accessory Drive 1
3943	Engagement Consent - PTO Engine Accessory Drive 1
3944	Engagement Status - PTO Engine Accessory Drive 1
3945	Enable Switch - PTO Engine Accessory Drive 2
3946	Engagement Consent - PTO Engine Accessory Drive 2
3947	Engagement Status - PTO Engine Accessory Drive 2
3948	At least one PTO engaged
3949	AC Power Voltage, 120V, 60 Hz
3950	Air Horn
3951	Air Horn Switch
3952	Air Shield Light
3953	Auxiliary Gauge Package
3954	Auxiliary Gauge Package Gauge 1
3955	Auxiliary Gauge Package Gauge 2
3956	Auxiliary Gauge Package Gauge 3
3957	Auxiliary Transmission Constant Supply Actuator
3958	Auxiliary Transmission High Range Actuator

3959	Auxiliary Transmission Neutral Actuator
3960	Auxiliary Transmission Range Switch
3961	Body Equipment Hydraulic Power Auxiliary Pump Inhibit Switch
3962	Bus Amber Signal Light 1
3963	Bus Amber Signal Light 2
3964	Bus Amber Signal Light 3
3965	Bus Amber Signal Light 4
3966	Bus Crossing Gate
3967	Bus Passenger Door Close Relay
3968	Bus Passenger Door Control Switch 1
3969	Bus Passenger Door Control Switch 2
3970	Bus Passenger Door Open Relay
3971	Bus Red Signal Light 1
3972	Bus Red Signal Light 2
3973	Bus Red Signal Light 3
3974	Bus Red Signal Light 4
3975	Bus Stop Arm
3976	Cab Dome Light 1
3977	Cab Dome Light 2
3978	Cab Dome Light 2 Switch
3979	Cab Floor Light
3980	Cab Floor Light Switch
3981	Cab HVAC Mode Control Actuator
3982	Cab HVAC Rear Blower Speed Control Switch
3983	Cab HVAC Rear Temperature Control Switch
3984	Cab HVAC Recirculation Door Control Actuator
3985	Cab HVAC System Controller
3986	CAB HVAC Temperature Control Actuator
3987	Compression Brake Enable Switch Indicator Lamp Command
3988	Door 1 Control Module
3989	Door 1 Window Motor
3990	Door 2 Control Module
3991	Door 2 Window Motor
3992	Door 3 Control Module
3993	Door 3 Window Motor
3994	Door 4 Control Module
3995	Door 4 Window Motor
3996	Electrical Accessory Power
3997	Electrical Accessory Power Relay
3998	Electrical Load Shed OFF
3999	Electrical Load Shed ON
4000	Engine Exhaust Brake Enable Switch
4001	Engine Exhaust Brake Enable Switch Indicator
4002	Engine Remote Start

4003	Engine Remote Stop
4004	Exterior Lamp Check Switch
4005	Fifth Wheel Lock Actuator
4006	Fifth Wheel Slider Lock Actuator
4007	Fifth Wheel Slider Lock Switch
4008	Fog Light 2
4009	Fuel Filter Fuel Heater Relay
4010	Fuel Tank Transfer Pump
4011	Headlamp 1 High Beam
4012	Headlamp 2 High Beam
4013	Headlight Interrupt Switch
4014	High Current Auxiliary Load Switch 1
4015	High Current Auxiliary Load Switch 2
4016	High Current Auxiliary Power Relay 1
4017	High Current Auxiliary Power Relay 2
4018	Lift Axle Lower Actuator
4019	Lift Axle Lower Switch
4020	Lift Axle Raise Actuator
4021	Lift Axle Raise Switch
4022	Lift Gate Power Control Enable
4023	Lift Gate Power Control Switch
4024	Marker Light Interrupt Switch
4026	Mirror 2 Heater
4027	Power Inverter Enable Switch
4028	Service Brake Circuit 1 Air Tank Drain Valve
4029	Service Brake Circuit 1 Air Tank Drain Valve Switch
4030	Service Brake Circuit 2 Air Tank Drain Valve
4031	Service Brake Supply Air Tank Drain Valve
4032	Service Brake Supply Air Tank Drain Valve Switch
4033	Engine Remote Start/Stop Enable
4034	Snow Plow High Beam Light 1
4035	Snow Plow High Beam Light 2
4036	Snow Plow Low Beam Light 1
4037	Snow Plow Low Beam Light 2
4038	Snow Plow Forward Lighting Relay 2
4039	Snow Plow Forward Lighting Relay 1
4040	Snow Plow Lighting Mode Switch
4041	Software Loop Time Exceeded
4042	Trailer Auxiliary Power Switch
4043	Transfer Case Front Driveline Actuator
4044	Transfer Case High Range Actuator
4045	Transfer Case Low Range Actuator
4046	Transfer Case Neutral Actuator
4047	Transfer Case Output Shaft PTO Actuator

4048	Transfer Case Range Switch
4049	Transfer Case Rear Driveline Actuator
4050	Transmission Secondary Mode Switch
4051	Transmission Input Shaft PTO 1 Actuator
4052	Transmission Input Shaft PTO 1 Retention Actuator
4053	Transmission Input Shaft PTO 2 Actuator
4054	Transmission Input Shaft PTO 2 Retention Actuator
4055	Transmission Retarder Enable Switch
4056	Two Speed Axle Actuator
4057	Wiper Motor
4058	Cab Dome Light 1 Switch
4059	Sole or Forward-most Steer Axle Group Weight Available
4060	Lift Axle Group Weight Available
4061	Sole or Forward-most Drive Axle Group Weight Available
4062	Tag Axle Group Weight Available
4063	Additional Tractor Axle Group Weight Available
4064	Trailer A Axle Group Weight Available
4065	Trailer B Axle Group Weight Available
4066	Trailer C Axle Group Weight Available
4067	Trailer D Axle Group Weight Available
4068	Trailer E Axle Group Weight Available
4069	Trailer F Axle Group Weight Available
4070	Trailer G Axle Group Weight Available
4071	Trailer H Axle Group Weight Available
4072	Additional Trailer Axle Group Weight Available
4073	Axle Group Location
4074	Axle Group Location
4075	Zero Net Vehicle Weight Change
4076	Engine Coolant Temperature 2
4077	Aftertreatment 1 Fuel Pressure 2
4078	Generator Alternator Efficiency
4079	Generator Governing Speed Command
4080	Generator Frequency Selection
4081	Engine Oil Recovery Pump
4082	Fuel Pump Primer Control
4083	Fuel Pump Primer Status
4084	General Purpose Valve Spool
4085	General Purpose Valve
4086	Valve Load Sense Pressure
4087	Valve Pilot Pressure
4088	Valve Assembly Load sense Pressure
4089	Valve Assembly Supply Pressure
4090	NOx limits exceeded, root cause unknown
4091	NOx limits exceeded due to Deactivation of EGR

4092	NOx limits exceeded due to Incorrect EGR flow
4093	NOx limits exceeded due to Low Diesel Exhaust Fluid Consumption
4094	NOx limits exceeded due to Insufficient Diesel Exhaust Fluid Quality
4095	NOx limits exceeded due to Interrupted Diesel Exhaust Fluid Dosing
4096	NOx limits exceeded due to Empty Diesel Exhaust Fluid Tank
4097	Aftertreatment 1 Fuel Drain Actuator
4098	Aftertreatment 2 Fuel Drain Actuator
4099	XBR urgency
4100	Supported in Expanded Freeze Frame (e.g., DM25)
4101	Supported in Data Stream
4102	Supported in Scaled Test Results (e.g., DM30)
4103	SPN Data Length
4104	Pending DTCs
4105	All Pending DTCs
4106	MIL-On DTCs
4107	Previously MIL-On DTCs
4108	Permanent DTCs
4109	SLOT Identifier
4110	Test Value
4111	Test Limit Maximum
4112	Test Limit Minimum
4113	DTCx Malfunction Indicator Lamp Support & Status
4114	DTCx Red Stop Lamp Support & Status
4115	DTCx Amber Warning Lamp Support & Status
4116	DTCx Protect Lamp Support & Status
4117	DTCx Flash Malfunction Indicator Lamp Support & Status
4118	DTCx Flash Red Stop Lamp Support & Status
4119	DTCx Flash Amber Warning Lamp Support & Status
4120	DTCx Flash Protect Lamp Support & Status
4121	DTCx Total Active Time
4122	DTCx Total Previously Active Time
4123	DTCx Time Until Derate
4124	EI-AECD Number
4125	EI-AECD Engine Hours Timer 1
4126	EI-AECD Engine Hours Timer 2
4127	NOx NTE Control Area Status
4128	Manufacturer-specific NOx NTE Limited Testing Region Status
4129	NOx NTE Deficiency Area Status
4130	PM NTE Control Area Status
4131	Manufacturer-specific PM NTE Limited Testing Region Status
4132	PM NTE Deficiency Area Status
4133	Vehicle Non-Roadworthy Component Count
4134	Vehicle Continuous Malfunction Indicator
4135	Vehicle Malfunction Indicator Display Strategy

4136	Vehicle Malfunction Indicator Activation Mode
4137	Vehicle Incomplete Monitor Count
4138	Vehicle Current Malfunction Indicator Accumulated Time
4139	System Non-Roadworthy Component Count
4140	System Continuous Malfunction Indicator
4141	System Malfunction Indicator Display Strategy
4142	System Malfunction Indicator Activation Mode
4143	System Incomplete Monitor Count
4144	Global Technical Regulation Description
4145	System Cumulative Continuous MI Time
4146	System Greatest B1 Counter
4147	Failure Specific B1 Counter
4148	SPN Identifying Component / System
4149	FMI Identifying Component / System Specific Test
4151	Engine Exhaust Temperature Average
4152	Engine Exhaust Bank 2 Temperature Average
4153	Engine Exhaust Bank 1 Temperature Average
4154	Actual Engine - Percent Torque (Fractional)
4155	Auxiliary I/O Channel #6
4156	Auxiliary I/O Channel #5
4157	Auxiliary I/O Channel #4
4158	Auxiliary I/O Channel #3
4159	Auxiliary I/O Channel #10
4160	Auxiliary I/O Channel #9
4161	Auxiliary I/O Channel #8
4162	Auxiliary I/O Channel #7
4163	Auxiliary I/O Channel #14
4164	Auxiliary I/O Channel #13
4165	Auxiliary I/O Channel #12
4166	Auxiliary I/O Channel #11
4167	Auxiliary I/O Channel #18
4168	Auxiliary I/O Channel #17
4169	Auxiliary I/O Channel #16
4170	Auxiliary I/O Channel #15
4171	Auxiliary I/O Channel #22
4172	Auxiliary I/O Channel #21
4173	Auxiliary I/O Channel #20
4174	Auxiliary I/O Channel #19
4175	Diesel Particulate Filter Active Regeneration Forced Status
4176	Transmission Current Range Display Blank State
4177	Transmission Oil Life Remaining
4178	Transmission Service Indicator
4180	Data Dictionary Manufacturer Code
4181	Data Dictionary Method

4182	Generator Output Frequency Adjustment Circuit
4183	Generator Droop Adjustment Circuit
4184	Generator Gain Adjustment Circuit
4185	Overspeed Shutdown Relay Driver
4186	Low Oil Pressure Shutdown Relay Driver
4187	High Engine Temperature Shutdown Relay Driver
4188	Pre-Low Oil Pressure Indicator Relay Driver
4189	Pre-High Oil Pressure Indicator Relay Driver
4191	Engine Requested Torque (Fractional)
4192	Engine Fuel Filter Water Level sensor
4193	Engine Coolant Pump Outlet Temperature
4194	Engine Coolant Thermostat Opening
4195	Engine Coolant Thermostat Mode
4196	Desired Engine Coolant Pump Outlet Temperature
4197	Desired Engine Coolant Thermostat Opening
4198	Aftercooler Coolant Thermostat Mode
4199	Desired Aftercooler Coolant Intake Temperature
4200	Desired Aftercooler Coolant Thermostat Opening
4201	Engine Speed 1
4202	Engine Speed 3
4203	Engine Speed Sensor 1 Timing Pattern Status
4204	Engine Speed Sensor 2 Timing Pattern Status
4205	Engine Speed Sensor 3 Timing Pattern Status
4206	Message Counter
4207	Message Checksum
4209	Engine Crank Without Prelube
4210	Engine Prelube Drive
4211	Hydraulic Fan Motor Pressure
4212	Fan Drive Bypass Command Status
4213	Engine Crank Without Fuel Injection
4214	Engine Fan Reverse Actuator
4215	Ground-Level Shutdown Activated
4216	Transmission 1 Reverse Solenoid Valve
4217	Transmission 1 Shift Solenoid Valve
4218	Transmission Shift Rail 1 Position
4219	Transmission Shift Rail 2 Position
4220	Transmission Shift Rail 3 Position
4221	Transmission Directional Shift at High Speed
4222	Generator Speed/Load Governing Bias Circuit
4223	Pre-High Engine Temperature Warning Relay Driver
4225	NOx limits exceeded due to error in the NOx control system
4226	Engine Turbocharger Compressor Intake Differential Pressure
4227	Engine Crankcase Breather Oil Separator
4228	Engine Variable Geometry Turbocharger Actuator 1 Temperature

4229	Retarder Electromagnetic Coil 1
4230	Retarder Electromagnetic Coil 2
4231	Retarder Electromagnetic Coil 3
4232	Retarder Electromagnetic Coil 4
4233	Retarder Road Speed Limit Switch
4234	Retarder Road Speed Exceeded Status
4236	Short-term Fuel Trim - Bank 1
4237	Long-term Fuel Trim - Bank 1
4238	Short-term Fuel Trim - Bank 2
4239	Long-term Fuel Trim - Bank 2
4240	Engine Exhaust Bank 1 O2 Sensor Closed Loop Operation
4241	Engine Exhaust Bank 2 O2 Sensor Closed Loop Operation
4242	Transmission Reverse Gear Shift Inhibit Request
4243	Engine Oil to Coolant Differential Temperature
4244	Engine Run Relay
4245	Fuel energy content
4246	Transmission Mode 5
4247	Transmission Mode 6
4248	Transmission Mode 7
4249	Transmission Mode 8
4250	Transmission Mode 5 Indicator
4251	Transmission Mode 6 Indicator
4252	Transmission Mode 7 Indicator
4253	Transmission Mode 8 Indicator
4254	Transmission Mode Label
4255	Transmission Requested Launch Gear
4256	Cranking Voltage
4257	Engine Fuel 1 Injector Group 3
4258	Engine Fuel 1 Injector Group 4
4259	Engine Fuel 1 Injector Group 5
4260	Engine Fuel 1 Injector Group 6
4261	Transmission Reverse Gear Shift Inhibit Status
4263	Manufacturer Specified Information
4265	Aftertreatment 1 Ignition Transformer Secondary Output
4266	Aftertreatment 2 Ignition Transformer Secondary Output
4267	Engine Cylinder #01 Exhaust Valve Actuator
4268	Engine Cylinder #02 Exhaust Valve Actuator
4269	Engine Cylinder #03 Exhaust Valve Actuator
4270	Engine Cylinder #04 Exhaust Valve Actuator
4271	Engine Cylinder #05 Exhaust Valve Actuator
4272	Engine Cylinder #06 Exhaust Valve Actuator
4273	Engine Cylinder #07 Exhaust Valve Actuator
4274	Engine Cylinder #08 Exhaust Valve Actuator
4275	Engine Cylinder #09 Exhaust Valve Actuator

4276	Engine Cylinder #10 Exhaust Valve Actuator
4277	Engine Cylinder #11 Exhaust Valve Actuator
4278	Engine Cylinder #12 Exhaust Valve Actuator
4279	Engine Cylinder #13 Exhaust Valve Actuator
4280	Engine Cylinder #14 Exhaust Valve Actuator
4281	Engine Cylinder #15 Exhaust Valve Actuator
4282	Engine Cylinder #16 Exhaust Valve Actuator
4283	Engine Cylinder #17 Exhaust Valve Actuator
4284	Engine Cylinder #18 Exhaust Valve Actuator
4285	Engine Cylinder #19 Exhaust Valve Actuator
4286	Engine Cylinder #20 Exhaust Valve Actuator
4287	Engine Exhaust Valve Actuation System Oil Pressure
4288	Engine Exhaust Valve Actuation System Oil Temperature
4289	Aftertreatment 1 Three Way Catalyst Intake Temperature
4290	Aftertreatment 1 Three Way Catalyst Outlet Temperature
4291	Aftertreatment 1 Three Way Catalyst Differential Pressure
4292	Aftertreatment 1 Three Way Catalyst Intake Temperature Preliminary FMI
4293	Aftertreatment 1 Three Way Catalyst Outlet Temperature Preliminary FMI
4294	Aftertreatment 1 Three Way Catalytic Converter Differential Pressure Preliminary FMI
4295	Aftertreatment 2 Three Way Catalyst Intake Temperature
4296	Aftertreatment 2 Three Way Catalyst Outlet Temperature
4297	Aftertreatment 2 Three Way Catalyst Differential Pressure
4298	Aftertreatment 2 Three Way Catalyst Intake Temperature Preliminary FMI
4299	Aftertreatment 2 Three Way Catalyst Outlet Temperature Preliminary FMI
4300	Aftertreatment 2 Three Way Catalytic Converter Differential Pressure Preliminary FMI
4301	Aftertreatment 1 Fuel Injector 1 Heater Control
4302	Aftertreatment 2 Fuel Injector 1 Heater Control
4303	Aftertreatment 2 Fuel Pressure 2
4304	ECU Manufacturer Name
4305	Machine selected speed
4306	Machine selected distance
4307	Persistent limit status
4308	Machine selected speed source
4309	Machine selected direction
4310	Machine selected speed setpoint command
4311	Machine selected speed setpoint limit
4312	Machine selected direction command
4313	ISOBUS compliance certification year
4314	ISOBUS compliance certificate revision
4315	ISOBUS compliance certificate laboratory type
4316	ISOBUS Compliance certification laboratory ID
4317	ISOBUS Compliance certification type – Minimum ECU
4318	ISOBUS Compliance certification type – TECU Class 1
4319	ISOBUS Compliance certification type – TECU Class 2

4320	ISOBUS Compliance certification type – TECU Class 3
4321	ISOBUS Compliance certification type – Class 3 ECU
4322	ISOBUS Compliance certification type – Virtual terminal
4323	ISOBUS Compliance certification type – VT working set master
4324	ISOBUS Compliance certification type – VT working set member
4325	ISOBUS Compliance certification type – Task Controller
4326	ISOBUS Compliance certification type – TC working set master
4327	ISOBUS Compliance certification type – TC working set member
4328	ISOBUS Compliance certification type – File server
4329	ISOBUS Compliance certification type – GPS receiver
4330	ISOBUS Compliance certification reference number
4331	Aftertreatment 1 Diesel Exhaust Fluid Actual Dosing Quantity
4332	Aftertreatment 1 SCR System 1 State
4333	Aftertreatment 1 Diesel Exhaust Fluid Actual Quantity of Integrator
4334	Aftertreatment 1 Diesel Exhaust Fluid Doser 1 Absolute Pressure
4335	Aftertreatment 1 SCR Dosing Air Assist Absolute Pressure
4336	Aftertreatment 1 SCR Dosing Air Assist Valve
4337	Aftertreatment 1 Diesel Exhaust Fluid Doser 1 Temperature
4338	Aftertreatment 1 SCR Doser Valve Exhaust Temperature Reduction Request
4339	Aftertreatment 1 SCR Feedback Control Status
4340	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1 State
4341	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1 Preliminary FMI
4342	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2 State
4343	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2 Preliminary FMI
4344	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 3 State
4345	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 3 Preliminary FMI
4346	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 4 State
4347	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 4 Preliminary FMI
4348	Aftertreatment 1 Diesel Exhaust Fluid Dosing Requested Quantity
4349	Aftertreatment 1 SCR System Requested State
4350	Aftertreatment 1 Diesel Exhaust Fluid Requested Quantity of Integrator
4352	Aftertreatment 1 Diesel Exhaust Fluid Doser Fault Suppression Request
4353	Aftertreatment 1 Diesel Exhaust Fluid Doser Heating Mode Request
4354	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1
4355	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2
4356	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 3
4357	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 4
4358	Aftertreatment 1 SCR Differential Pressure
4359	Aftertreatment 1 SCR Differential Pressure Preliminary FMI
4360	Aftertreatment 1 SCR Intake Temperature
4361	Aftertreatment 1 SCR Intake Temperature Preliminary FMI
4362	Aftertreatment 1 SCR Outlet Temperature Preliminary FMI
4363	Aftertreatment 1 SCR Outlet Temperature
4364	Aftertreatment 1 SCR Conversion Efficiency

4365	Aftertreatment 1 Diesel Exhaust Fluid Tank 1 Temperature Preliminary FMI
4366	Aftertreatment 1 Diesel Exhaust Fluid Tank 1 Heater Preliminary FMI
4367	Aftertreatment 1 Diesel Exhaust Fluid Quick Thaw Tank Volume
4368	Aftertreatment 1 Diesel Exhaust Fluid Quick Thaw Temperature
4369	Aftertreatment 1 Diesel Exhaust Fluid Quick Thaw Tank Level
4370	Aftertreatment 1 Diesel Exhaust Fluid Quick Thaw Level/Volume Preliminary FMI
4371	Aftertreatment 1 Diesel Exhaust Fluid Quick Thaw Temperature Preliminary FMI
4372	Aftertreatment 1 Diesel Exhaust Fluid Quick Thaw Heater
4373	Aftertreatment 1 Diesel Exhaust Fluid Quick Thaw Heater Preliminary FMI
4374	Aftertreatment 1 Diesel Exhaust Fluid Pump 1 Motor Speed
4375	Aftertreatment 1 Diesel Exhaust Fluid Pump Drive Percentage
4376	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 1 Diverter Valve
4377	Aftertreatment 1 Outlet NH3
4378	Aftertreatment 1 Outlet NH3 Sensor Preliminary FMI
4379	Aftertreatment 1 Outlet NH3 Reading Stable
4380	Aftertreatment 1 Outlet NH3 Gas Sensor Power In Range
4381	Aftertreatment 1 Outlet NH3 Gas Sensor at Temperature
4382	Aftertreatment 1 Outlet NH3 Gas Sensor Heater Preliminary FMI
4383	Aftertreatment 1 Outlet NH3 Gas Sensor Heater Control
4384	Aftertreatment 2 Diesel Exhaust Fluid Actual Dosing Quantity
4385	Aftertreatment 2 SCR System 1 State
4386	Aftertreatment 2 Diesel Exhaust Fluid Actual Quantity of Integrator
4387	Aftertreatment 2 Diesel Exhaust Fluid Doser 1 Absolute Pressure
4388	Aftertreatment 2 SCR Dosing Air Assist Absolute Pressure
4389	Aftertreatment 2 SCR Dosing Air Assist Valve
4390	Aftertreatment 2 Diesel Exhaust Fluid Doser 1 Temperature
4391	Aftertreatment 2 SCR Doser Valve Exhaust Temperature Reduction Request
4392	Aftertreatment 2 SCR Feedback Control Status
4393	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 1 State
4394	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 1 Preliminary FMI
4395	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 2 State
4396	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 2 Preliminary FMI
4397	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 3 State
4398	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 3 Preliminary FMI
4399	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 4 State
4400	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 4 Preliminary FMI
4401	Aftertreatment 2 Diesel Exhaust Fluid Dosing Requested Quantity
4402	Aftertreatment 2 SCR System Requested State
4403	Aftertreatment 2 Diesel Exhaust Fluid Requested Quantity of Integrator
4405	Aftertreatment 2 Diesel Exhaust Fluid Doser Fault Suppression Request
4406	Aftertreatment 2 Diesel Exhaust Fluid Doser Heating Mode Request
4407	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 1
4408	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 2
4409	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 3

4410	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 4
4411	Aftertreatment 2 SCR Differential Pressure
4412	Aftertreatment 2 SCR Differential Pressure Preliminary FMI
4413	Aftertreatment 2 SCR Intake Temperature
4414	Aftertreatment 2 SCR Intake Temperature Preliminary FMI
4415	Aftertreatment 2 SCR Outlet Temperature
4416	Aftertreatment 2 SCR Outlet Temperature Preliminary FMI
4417	Aftertreatment 2 Diesel Exhaust Fluid Average Consumption
4418	Aftertreatment 2 SCR Commanded Diesel Exhaust Fluid Consumption
4419	Aftertreatment 2 SCR Conversion Efficiency
4420	Aftertreatment 2 Diesel Exhaust Fluid Temperature 2
4421	Aftertreatment 2 Diesel Exhaust Fluid Concentration
4422	Aftertreatment 2 Diesel Exhaust Fluid Conductivity
4423	Aftertreatment 2 Diesel Exhaust Fluid Temperature 2 Preliminary FMI
4424	Aftertreatment 2 Diesel Exhaust Fluid Properties Preliminary FMI
4425	Aftertreatment 2 Diesel Exhaust Fluid Type Property
4426	Aftertreatment 2 Diesel Exhaust Fluid Tank Volume
4427	Aftertreatment 2 Diesel Exhaust Fluid Tank Temperature 1
4428	Aftertreatment 2 Diesel Exhaust Fluid Tank Level
4429	Aftertreatment 2 Diesel Exhaust Fluid Tank Level/Volume Preliminary FMI
4430	Aftertreatment 2 Diesel Exhaust Fluid Tank 1 Temperature Preliminary FMI
4431	Aftertreatment 2 Diesel Exhaust Fluid Tank Heater
4432	Aftertreatment 2 Diesel Exhaust Fluid Tank 1 Heater Preliminary FMI
4433	Aftertreatment 2 Diesel Exhaust Fluid Quick Thaw Tank Volume
4434	Aftertreatment 2 Diesel Exhaust Fluid Quick Thaw Temperature
4435	Aftertreatment 2 Diesel Exhaust Fluid Quick Thaw Tank Level
4436	Aftertreatment 2 Diesel Exhaust Fluid Quick Thaw Level Preliminary FMI
4437	Aftertreatment 2 Diesel Exhaust Fluid Quick Thaw Temperature Preliminary FMI
4438	Aftertreatment 2 Diesel Exhaust Fluid Quick Thaw Heater
4439	Aftertreatment 2 Diesel Exhaust Fluid Quick Thaw Heater Preliminary FMI
4440	Aftertreatment 2 Diesel Exhaust Fluid Pump 1 Motor Speed
4441	Aftertreatment 2 Diesel Exhaust Fluid Pump Drive Percentage
4442	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 1 Diverter Valve
4443	Aftertreatment 2 Outlet NH3
4444	Aftertreatment 2 Outlet NH3 Sensor Preliminary FMI
4445	Aftertreatment 2 Outlet NH3 Reading Stable
4446	Aftertreatment 2 Outlet NH3 Gas Sensor Power In Range
4447	Aftertreatment 2 Outlet NH3 Gas Sensor at Temperature
4448	Aftertreatment 2 Outlet NH3 Gas Sensor Heater Preliminary FMI
4449	Aftertreatment 2 Outlet NH3 Gas Sensor Heater Control
4450	Aftertreatment 2 Diesel Exhaust Fluid Controller 1
4451	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 1
4452	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 1 Input Lines
4453	Aftertreatment 2 Diesel Exhaust Fluid Tank Quality

4454	Retract Status of ramp 4
4455	Enable status of ramp 4
4456	Movement status of ramp 4
4457	Retract Status of ramp 5
4458	Enable status of ramp 5
4459	Movement status of ramp 5
4460	Joystick 1 Lamp 1 Command
4461	Joystick 1 Lamp 2 Command
4462	Joystick 1 Lamp 3 Command
4463	Joystick 1 Lamp 4 Command
4464	Joystick 1 Lamp 5 Command
4465	Joystick 1 Lamp 6 Command
4466	Joystick 1 Lamp 7 Command
4467	Joystick 1 Lamp 8 Command
4468	Joystick 1 Lamp 9 Command
4469	Joystick 1 Lamp 10 Command
4470	Joystick 2 Lamp 1 Command
4471	Joystick 2 Lamp 2 Command
4472	Joystick 2 Lamp 3 Command
4473	Joystick 2 Lamp 4 Command
4474	Joystick 2 Lamp 5 Command
4475	Joystick 2 Lamp 6 Command
4476	Joystick 2 Lamp 7 Command
4477	Joystick 2 Lamp 8 Command
4478	Joystick 2 Lamp 9 Command
4479	Joystick 2 Lamp 10 Command
4480	Joystick 3 Lamp 1 Command
4481	Joystick 3 Lamp 2 Command
4482	Joystick 3 Lamp 3 Command
4483	Joystick 3 Lamp 4 Command
4484	Joystick 3 Lamp 5 Command
4485	Joystick 3 Lamp 6 Command
4486	Joystick 3 Lamp 7 Command
4487	Joystick 3 Lamp 8 Command
4488	Joystick 3 Lamp 9 Command
4489	Joystick 3 Lamp 10 Command
4490	Specific Humidity
4491	Joystick 4 X-Axis Neutral Position Status
4492	Joystick 4 X-Axis Lever Left Negative Position Status
4493	Joystick 4 X-Axis Lever Right Positive Position Status
4494	Joystick 4 X-Axis Position
4495	Joystick 4 Y-Axis Neutral Position Status
4496	Joystick 4 Y-Axis Lever Back Negative Position Status
4497	Joystick 4 Y-Axis Lever Forward Positive Position Status

4498	Joystick 4 Y-Axis Position
4499	Joystick 4 Y-Axis Detent Position Status
4500	Joystick 4 X-Axis Detent Position Status
4501	Joystick 4 Button 4 Pressed Status
4502	Joystick 4 Button 3 Pressed Status
4503	Joystick 4 Button 2 Pressed Status
4504	Joystick 4 Button 1 Pressed Status
4505	Joystick 4 Button 8 Pressed Status
4506	Joystick 4 Button 7 Pressed Status
4507	Joystick 4 Button 6 Pressed Status
4508	Joystick 4 Button 5 Pressed Status
4509	Joystick 4 Button 12 Pressed Status
4510	Joystick 4 Button 11 Pressed Status
4511	Joystick 4 Button 10 Pressed Status
4512	Joystick 4 Button 9 Pressed Status
4513	Joystick 4 Grip X-Axis Neutral Position Status
4514	Joystick 4 Grip X-Axis Lever Left Negative Position Status
4515	Joystick 4 Grip X-Axis Lever Right Positive Position Status
4516	Joystick 4 Grip X-Axis Position
4517	Joystick 4 Grip Y-Axis Neutral Position Status
4518	Joystick 4 Grip Y-Axis Lever Back Negative Position Status
4519	Joystick 4 Grip Y-Axis Lever Forward Positive Position Status
4520	Joystick 4 Grip Y-Axis Position
4521	Joystick 4 Theta-Axis Neutral Position Status
4522	Joystick 4 Theta-Axis Counter Clockwise Negative Position Status
4523	Joystick 4 Theta-Axis Clockwise Positive Position Status
4524	Joystick 4 Theta-Axis Position
4525	Joystick 4 Theta-Axis Detent Position Status
4526	Joystick 4 Grip Y-Axis Detent Position Status
4527	Joystick 4 Grip X-Axis Detent Position Status
4528	Joystick 5 X-Axis Neutral Position Status
4529	Joystick 5 X-Axis Lever Left Negative Position Status
4530	Joystick 5 X-Axis Lever Right Positive Position Status
4531	Joystick 5 X-Axis Position
4532	Joystick 5 Y-Axis Neutral Position Status
4533	Joystick 5 Y-Axis Lever Back Negative Position Status
4534	Joystick 5 Y-Axis Lever Forward Positive Position Status
4535	Joystick 5 Y-Axis Position
4536	Joystick 5 Y-Axis Detent Position Status
4537	Joystick 5 X-Axis Detent Position Status
4538	Joystick 5 Button 4 Pressed Status
4539	Joystick 5 Button 3 Pressed Status
4540	Joystick 5 Button 2 Pressed Status
4541	Joystick 5 Button 1 Pressed Status

4542	Joystick 5 Button 8 Pressed Status
4543	Joystick 5 Button 7 Pressed Status
4544	Joystick 5 Button 6 Pressed Status
4545	Joystick 5 Button 5 Pressed Status
4546	Joystick 5 Button 12 Pressed Status
4547	Joystick 5 Button 11 Pressed Status
4548	Joystick 5 Button 10 Pressed Status
4549	Joystick 5 Button 9 Pressed Status
4550	Joystick 5 Grip X-Axis Neutral Position Status
4551	Joystick 5 Grip X-Axis Lever Left Negative Position Status
4552	Joystick 5 Grip X-Axis Lever Right Positive Position Status
4553	Joystick 5 Grip X-Axis Position
4554	Joystick 5 Grip Y-Axis Neutral Position Status
4555	Joystick 5 Grip Y-Axis Lever Back Negative Position Status
4556	Joystick 5 Grip Y-Axis Lever Forward Positive Position Status
4557	Joystick 5 Grip Y-Axis Position
4558	Joystick 5 Theta-Axis Neutral Position Status
4559	Joystick 5 Theta-Axis Counter Clockwise Negative Position Status
4560	Joystick 5 Theta-Axis Clockwise Positive Position Status
4561	Joystick 5 Theta-Axis Position
4562	Joystick 5 Theta-Axis Detent Position Status
4563	Joystick 5 Grip Y-Axis Detent Position Status
4564	Joystick 5 Grip X-Axis Detent Position Status
4565	Joystick 6 X-Axis Neutral Position Status
4566	Joystick 6 X-Axis Lever Left Negative Position Status
4567	Joystick 6 X-Axis Lever Right Positive Position Status
4568	Joystick 6 X-Axis Position
4569	Joystick 6 Y-Axis Neutral Position Status
4570	Joystick 6 Y-Axis Lever Back Negative Position Status
4571	Joystick 6 Y-Axis Lever Forward Positive Position Status
4572	Joystick 6 Y-Axis Position
4573	Joystick 6 Y-Axis Detent Position Status
4574	Joystick 6 X-Axis Detent Position Status
4575	Joystick 6 Button 4 Pressed Status
4576	Joystick 6 Button 3 Pressed Status
4577	Joystick 6 Button 2 Pressed Status
4578	Joystick 6 Button 1 Pressed Status
4579	Joystick 6 Button 8 Pressed Status
4580	Joystick 6 Button 7 Pressed Status
4581	Joystick 6 Button 6 Pressed Status
4582	Joystick 6 Button 5 Pressed Status
4583	Joystick 6 Button 12 Pressed Status
4584	Joystick 6 Button 11 Pressed Status
4585	Joystick 6 Button 10 Pressed Status

4586	Joystick 6 Button 9 Pressed Status
4587	Joystick 6 Grip X-Axis Neutral Position Status
4588	Joystick 6 Grip X-Axis Lever Left Negative Position Status
4589	Joystick 6 Grip X-Axis Lever Right Positive Position Status
4590	Joystick 6 Grip X-Axis Position
4591	Joystick 6 Grip Y-Axis Neutral Position Status
4592	Joystick 6 Grip Y-Axis Lever Back Negative Position Status
4593	Joystick 6 Grip Y-Axis Lever Forward Positive Position Status
4594	Joystick 6 Grip Y-Axis Position
4595	Joystick 6 Theta-Axis Neutral Position Status
4596	Joystick 6 Theta-Axis Counter Clockwise Negative Position Status
4597	Joystick 6 Theta-Axis Clockwise Positive Position Status
4598	Joystick 6 Theta-Axis Position
4599	Joystick 6 Theta-Axis Detent Position Status
4600	Joystick 6 Grip Y-Axis Detent Position Status
4601	Joystick 6 Grip X-Axis Detent Position Status
4602	Joystick 7 X-Axis Neutral Position Status
4603	Joystick 7 X-Axis Lever Left Negative Position Status
4604	Joystick 7 X-Axis Lever Right Positive Position Status
4605	Joystick 7 X-Axis Position
4606	Joystick 7 Y-Axis Neutral Position Status
4607	Joystick 7 Y-Axis Lever Back Negative Position Status
4608	Joystick 7 Y-Axis Lever Forward Positive Position Status
4609	Joystick 7 Y-Axis Position
4610	Joystick 7 Y-Axis Detent Position Status
4611	Joystick 7 X-Axis Detent Position Status
4612	Joystick 7 Button 4 Pressed Status
4613	Joystick 7 Button 3 Pressed Status
4614	Joystick 7 Button 2 Pressed Status
4615	Joystick 7 Button 1 Pressed Status
4616	Joystick 7 Button 8 Pressed Status
4617	Joystick 7 Button 7 Pressed Status
4618	Joystick 7 Button 6 Pressed Status
4619	Joystick 7 Button 5 Pressed Status
4620	Joystick 7 Button 12 Pressed Status
4621	Joystick 7 Button 11 Pressed Status
4622	Joystick 7 Button 10 Pressed Status
4623	Joystick 7 Button 9 Pressed Status
4624	Joystick 7 Grip X-Axis Neutral Position Status
4625	Joystick 7 Grip X-Axis Lever Left Negative Position Status
4626	Joystick 7 Grip X-Axis Lever Right Positive Position Status
4627	Joystick 7 Grip X-Axis Position
4628	Joystick 7 Grip Y-Axis Neutral Position Status
4629	Joystick 7 Grip Y-Axis Lever Back Negative Position Status

4630	Joystick 7 Grip Y-Axis Lever Forward Positive Position Status
4631	Joystick 7 Grip Y-Axis Position
4632	Joystick 7 Theta-Axis Neutral Position Status
4633	Joystick 7 Theta-Axis Counter Clockwise Negative Position Status
4634	Joystick 7 Theta-Axis Clockwise Positive Position Status
4635	Joystick 7 Theta-Axis Position
4636	Joystick 7 Theta-Axis Detent Position Status
4637	Joystick 7 Grip Y-Axis Detent Position Status
4638	Joystick 7 Grip X-Axis Detent Position Status
4639	Joystick 8 X-Axis Neutral Position Status
4640	Joystick 8 X-Axis Lever Left Negative Position Status
4641	Joystick 8 X-Axis Lever Right Positive Position Status
4642	Joystick 8 X-Axis Position
4643	Joystick 8 Y-Axis Neutral Position Status
4644	Joystick 8 Y-Axis Lever Back Negative Position Status
4645	Joystick 8 Y-Axis Lever Forward Positive Position Status
4646	Joystick 8 Y-Axis Position
4647	Joystick 8 Y-Axis Detent Position Status
4648	Joystick 8 X-Axis Detent Position Status
4649	Joystick 8 Button 4 Pressed Status
4650	Joystick 8 Button 3 Pressed Status
4651	Joystick 8 Button 2 Pressed Status
4652	Joystick 8 Button 1 Pressed Status
4653	Joystick 8 Button 8 Pressed Status
4654	Joystick 8 Button 7 Pressed Status
4655	Joystick 8 Button 6 Pressed Status
4656	Joystick 8 Button 5 Pressed Status
4657	Joystick 8 Button 12 Pressed Status
4658	Joystick 8 Button 11 Pressed Status
4659	Joystick 8 Button 10 Pressed Status
4660	Joystick 8 Button 9 Pressed Status
4661	Joystick 8 Grip X-Axis Neutral Position Status
4662	Joystick 8 Grip X-Axis Lever Left Negative Position Status
4663	Joystick 8 Grip X-Axis Lever Right Positive Position Status
4664	Joystick 8 Grip X-Axis Position
4665	Joystick 8 Grip Y-Axis Neutral Position Status
4666	Joystick 8 Grip Y-Axis Lever Back Negative Position Status
4667	Joystick 8 Grip Y-Axis Lever Forward Positive Position Status
4668	Joystick 8 Grip Y-Axis Position
4669	Joystick 8 Theta-Axis Neutral Position Status
4670	Joystick 8 Theta-Axis Counter Clockwise Negative Position Status
4671	Joystick 8 Theta-Axis Clockwise Positive Position Status
4672	Joystick 8 Theta-Axis Position
4673	Joystick 8 Theta-Axis Detent Position Status

4674	Joystick 8 Grip Y-Axis Detent Position Status
4675	Joystick 8 Grip X-Axis Detent Position Status
4676	Joystick 9 X-Axis Neutral Position Status
4677	Joystick 9 X-Axis Lever Left Negative Position Status
4678	Joystick 9 X-Axis Lever Right Positive Position Status
4679	Joystick 9 X-Axis Position
4680	Joystick 9 Y-Axis Neutral Position Status
4681	Joystick 9 Y-Axis Lever Back Negative Position Status
4682	Joystick 9 Y-Axis Lever Forward Positive Position Status
4683	Joystick 9 Y-Axis Position
4684	Joystick 9 Y-Axis Detent Position Status
4685	Joystick 9 X-Axis Detent Position Status
4686	Joystick 9 Button 4 Pressed Status
4687	Joystick 9 Button 3 Pressed Status
4688	Joystick 9 Button 2 Pressed Status
4689	Joystick 9 Button 1 Pressed Status
4690	Joystick 9 Button 8 Pressed Status
4691	Joystick 9 Button 7 Pressed Status
4692	Joystick 9 Button 6 Pressed Status
4693	Joystick 9 Button 5 Pressed Status
4694	Joystick 9 Button 12 Pressed Status
4695	Joystick 9 Button 11 Pressed Status
4696	Joystick 9 Button 10 Pressed Status
4697	Joystick 9 Button 9 Pressed Status
4698	Joystick 9 Grip X-Axis Neutral Position Status
4699	Joystick 9 Grip X-Axis Lever Left Negative Position Status
4700	Joystick 9 Grip X-Axis Lever Right Positive Position Status
4701	Joystick 9 Grip X-Axis Position
4702	Joystick 9 Grip Y-Axis Neutral Position Status
4703	Joystick 9 Grip Y-Axis Lever Back Negative Position Status
4704	Joystick 9 Grip Y-Axis Lever Forward Positive Position Status
4705	Joystick 9 Grip Y-Axis Position
4706	Joystick 9 Theta-Axis Neutral Position Status
4707	Joystick 9 Theta-Axis Counter Clockwise Negative Position Status
4708	Joystick 9 Theta-Axis Clockwise Positive Position Status
4709	Joystick 9 Theta-Axis Position
4710	Joystick 9 Theta-Axis Detent Position Status
4711	Joystick 9 Grip Y-Axis Detent Position Status
4712	Joystick 9 Grip X-Axis Detent Position Status
4713	Joystick 10 X-Axis Neutral Position Status
4714	Joystick 10 X-Axis Lever Left Negative Position Status
4715	Joystick 10 X-Axis Lever Right Positive Position Status
4716	Joystick 10 X-Axis Position
4717	Joystick 10 Y-Axis Neutral Position Status

4718	Joystick 10 Y-Axis Lever Back Negative Position Status
4719	Joystick 10 Y-Axis Lever Forward Positive Position Status
4720	Joystick 10 Y-Axis Position
4721	Joystick 10 Y-Axis Detent Position Status
4722	Joystick 10 X-Axis Detent Position Status
4723	Joystick 10 Button 4 Pressed Status
4724	Joystick 10 Button 3 Pressed Status
4725	Joystick 10 Button 2 Pressed Status
4726	Joystick 10 Button 1 Pressed Status
4727	Joystick 10 Button 8 Pressed Status
4728	Joystick 10 Button 7 Pressed Status
4729	Joystick 10 Button 6 Pressed Status
4730	Joystick 10 Button 5 Pressed Status
4731	Joystick 10 Button 12 Pressed Status
4732	Joystick 10 Button 11 Pressed Status
4733	Joystick 10 Button 10 Pressed Status
4734	Joystick 10 Button 9 Pressed Status
4735	Joystick 10 Grip X-Axis Neutral Position Status
4736	Joystick 10 Grip X-Axis Lever Left Negative Position Status
4737	Joystick 10 Grip X-Axis Lever Right Positive Position Status
4738	Joystick 10 Grip X-Axis Position
4739	Joystick 10 Grip Y-Axis Neutral Position Status
4740	Joystick 10 Grip Y-Axis Lever Back Negative Position Status
4741	Joystick 10 Grip Y-Axis Lever Forward Positive Position Status
4742	Joystick 10 Grip Y-Axis Position
4743	Joystick 10 Theta-Axis Neutral Position Status
4744	Joystick 10 Theta-Axis Counter Clockwise Negative Position Status
4745	Joystick 10 Theta-Axis Clockwise Positive Position Status
4746	Joystick 10 Theta-Axis Position
4747	Joystick 10 Theta-Axis Detent Position Status
4748	Joystick 10 Grip Y-Axis Detent Position Status
4749	Joystick 10 Grip X-Axis Detent Position Status
4750	Engine Exhaust Gas Recirculation 1 Cooler Intake Temperature
4751	Engine Exhaust Gas Recirculation 1 Cooler Intake Absolute Pressure
4752	Engine Exhaust Gas Recirculation 1 Cooler Efficiency
4753	Aftertreatment 1 Gas Oxidation Catalyst Intake Temperature
4754	Aftertreatment 1 Gas Oxidation Catalyst Outlet Temperature
4755	Aftertreatment 1 Gas Oxidation Catalyst Differential Pressure
4756	Aftertreatment 1 Gas Oxidation Catalyst Intake Temperature Preliminary FMI
4757	Aftertreatment 1 Gas Oxidation Catalyst Outlet Temperature Preliminary FMI
4758	Aftertreatment 1 Gas Oxidation Catalyst Differential Pressure Preliminary FMI
4759	Aftertreatment 2 Gas Oxidation Catalyst Intake Temperature
4760	Aftertreatment 2 Gas Oxidation Catalyst Outlet Temperature
4761	Aftertreatment 2 Gas Oxidation Catalyst Differential Pressure

4762	Aftertreatment 2 Gas Oxidation Catalyst Intake Temperature Preliminary FMI
4763	Aftertreatment 2 Gas Oxidation Catalyst Outlet Temperature Preliminary FMI
4764	Aftertreatment 2 Gas Oxidation Catalyst Differential Pressure Preliminary FMI
4765	Aftertreatment 1 Diesel Oxidation Catalyst Intake Temperature
4766	Aftertreatment 1 Diesel Oxidation Catalyst Outlet Temperature
4767	Aftertreatment 1 Diesel Oxidation Catalyst Differential Pressure
4768	Aftertreatment 1 Diesel Oxidation Catalyst Intake Temperature Preliminary FMI
4769	Aftertreatment 1 Diesel Oxidation Catalyst Outlet Temperature Preliminary FMI
4770	Aftertreatment 1 Diesel Oxidation Catalyst Differential Pressure Preliminary FMI
4771	Aftertreatment 2 Diesel Oxidation Catalyst Intake Temperature
4772	Aftertreatment 2 Diesel Oxidation Catalyst Outlet Temperature
4773	Aftertreatment 2 Diesel Oxidation Catalyst Differential Pressure
4774	Aftertreatment 2 Diesel Oxidation Catalyst Intake Temperature Preliminary FMI
4775	Aftertreatment 2 Diesel Oxidation Catalyst Outlet Temperature Preliminary FMI
4776	Aftertreatment 2 Diesel Oxidation Catalyst Differential Pressure Preliminary FMI
4777	Aftertreatment 1 Gas Oxidation Catalyst Differential Temperature
4778	Aftertreatment 2 Gas Oxidation Catalyst Differential Temperature
4779	Aftertreatment 1 Three Way Catalyst Differential Temperature
4780	Aftertreatment 2 Three Way Catalyst Differential Temperature
4781	Aftertreatment 1 Diesel Particulate Filter Soot Mass
4782	Aftertreatment 1 Diesel Particulate Filter Soot Density
4783	Aftertreatment 1 Diesel Particulate Filter Mean Soot Signal
4784	Aftertreatment 1 Diesel Particulate Filter Median Soot Signal
4785	Aftertreatment 1 Diesel Particulate Filter Soot Sensor Preliminary FMI
4786	Aftertreatment 2 Diesel Particulate Filter Soot Mass
4787	Aftertreatment 2 Diesel Particulate Filter Soot Density
4788	Aftertreatment 2 Diesel Particulate Filter Mean Soot Signal
4789	Aftertreatment 2 Diesel Particulate Filter Median Soot Signal
4790	Aftertreatment 2 Diesel Particulate Filter Soot Sensor Preliminary FMI
4791	Aftertreatment 1 Warm Up Diesel Oxidation Catalyst
4792	Aftertreatment 1 Selective Catalytic Reduction System
4793	Aftertreatment 1 Warm Up Diesel Oxidation Catalyst Missing
4794	Aftertreatment 1 SCR System Missing
4795	Aftertreatment 1 Diesel Particulate Filter Missing
4796	Aftertreatment 1 Diesel Oxidation Catalyst Missing
4797	Engine Fuel 1 Injector Cylinder 9 Actuator 2
4798	Engine Fuel 1 Injector Cylinder 10 Actuator 2
4799	Engine Fuel 1 Injector Cylinder 11 Actuator 2
4800	Engine Fuel 1 Injector Cylinder 12 Actuator 2
4801	Engine Fuel 1 Injector Cylinder 13 Actuator 2
4802	Engine Fuel 1 Injector Cylinder 14 Actuator 2
4803	Engine Fuel 1 Injector Cylinder 15 Actuator 2

4804	Engine Fuel 1 Injector Cylinder 16 Actuator 2
4805	Engine Fuel 1 Injector Cylinder 17 Actuator 2
4806	Engine Fuel 1 Injector Cylinder 18 Actuator 2
4807	Engine Fuel 1 Injector Cylinder 19 Actuator 2
4808	Engine Fuel 1 Injector Cylinder 20 Actuator 2
4809	Aftertreatment 1 Warm Up Diesel Oxidation Catalyst Intake Temperature
4810	Aftertreatment 1 Warm Up Diesel Oxidation Catalyst Outlet Temperature
4811	Engine Piston Cooling Gallery Oil Pressure
4812	Engine Piston Cooling Oil Supply Valve Command
4813	Engine Oil Thermostat Bypass Valve Opening
4814	Engine Coolant Pump Command
4815	Engine Cooling Fan Thermal Switch
4816	Transmission Torque Converter Lockup Transition in Process
4817	Engine Intake Manifold 1 Absolute Pressure (High Resolution)
4818	Driver Airbag Ignitor Loop 1st Stage - Resistance
4819	Passenger Airbag Ignitor Loop 1st Stage - Resistance
4820	Driver Airbag Ignitor Loop 2nd Stage - Resistance
4821	Passenger Airbag Ignitor Loop 2nd Stage - Resistance
4822	Driver Belt Tensioner Ignitor Loop - Resistance
4823	Passenger Belt Tensioner Ignitor Loop - Resistance
4824	Side Bag Ignitor Loop 1 - Left - Resistance
4825	Side Bag Ignitor Loop 2 - Left - Resistance
4826	Side Bag Ignitor Loop 1 - Right - Resistance
4827	Side Bag Ignitor Loop 2 - Right - Resistance
4828	Special Ignitor Loop 1 - Resistance
4829	Special Ignitor Loop 2 - Resistance
4830	Special Ignitor Loop 3 - Resistance
4831	Special Ignitor Loop 4 - Resistance
4832	Special Ignitor Loop 5 - Resistance
4833	Special Ignitor Loop 6 - Resistance
4834	Special Ignitor Loop 7 - Resistance
4835	Special Ignitor Loop 8 - Resistance
4836	Special Ignitor Loop 9 - Resistance
4837	Special Ignitor Loop 10 - Resistance
4838	Special Ignitor Loop 11 - Resistance
4839	Special Ignitor Loop 12 - Resistance
4840	Special Ignitor Loop 13 - Resistance
4841	Special Ignitor Loop 14 - Resistance
4842	Special Ignitor Loop 15 - Resistance
4843	Special Ignitor Loop 16 - Resistance
4844	Special Ignitor Loop 17 - Resistance
4845	Special Ignitor Loop 18 - Resistance
4846	Special Ignitor Loop 19 - Resistance
4847	Special Ignitor Loop 20 - Resistance

4848	Special Ignitor Loop 21 - Resistance
4849	Special Ignitor Loop 22 - Resistance
4850	Special Ignitor Loop 23 - Resistance
4851	Special Ignitor Loop 24 - Resistance
4852	Special Ignitor Loop 25 - Resistance
4853	Special Ignitor Loop 26 - Resistance
4854	Special Ignitor Loop 27 - Resistance
4855	Special Ignitor Loop 28 - Resistance
4856	Special Ignitor Loop 29 - Resistance
4857	Special Ignitor Loop 30 - Resistance
4858	Special Ignitor Loop 31 - Resistance
4859	Special Ignitor Loop 32 - Resistance
4860	Special Ignitor Loop 33 - Resistance
4861	Special Ignitor Loop 34 - Resistance
4862	Special Ignitor Loop 35 - Resistance
4863	Special Ignitor Loop 36 - Resistance
4864	Special Ignitor Loop 37 - Resistance
4865	Special Ignitor Loop 38 - Resistance
4866	Special Ignitor Loop 39 - Resistance
4867	Special Ignitor Loop 40 - Resistance
4868	Special Ignitor Loop 41 - Resistance
4869	Special Ignitor Loop 42 - Resistance
4870	Special Ignitor Loop 43 - Resistance
4871	Special Ignitor Loop 44 - Resistance
4872	Special Ignitor Loop 45 - Resistance
4873	Special Ignitor Loop 46 - Resistance
4874	Special Ignitor Loop 47 - Resistance
4875	Special Ignitor Loop 48 - Resistance
4876	Special Ignitor Loop 49 - Resistance
4877	Special Ignitor Loop 50 - Resistance
4878	Special Ignitor Loop 51 - Resistance
4879	Special Ignitor Loop 52 - Resistance
4880	Special Ignitor Loop 53 - Resistance
4881	Special Ignitor Loop 54 - Resistance
4882	Special Ignitor Loop 55 - Resistance
4883	Special Ignitor Loop 56 - Resistance
4884	Special Ignitor Loop 57 - Resistance
4885	Special Ignitor Loop 58 - Resistance
4886	Special Ignitor Loop 59 - Resistance
4887	Special Ignitor Loop 60 - Resistance
4888	Special Ignitor Loop 61 - Resistance
4889	Special Ignitor Loop 62 - Resistance
4890	Special Ignitor Loop 63 - Resistance
4891	Special Ignitor Loop 64 - Resistance

4892	Special Ignitor Loop 65 - Resistance
4893	Special Ignitor Loop 66 - Resistance
4894	Special Ignitor Loop 67 - Resistance
4895	Special Ignitor Loop 68 - Resistance
4896	Special Ignitor Loop 69 - Resistance
4897	Special Ignitor Loop 70 - Resistance
4898	Special Ignitor Loop 71 - Resistance
4899	Special Ignitor Loop 72 - Resistance
4900	Special Ignitor Loop 73 - Resistance
4901	Special Ignitor Loop 74 - Resistance
4902	Special Ignitor Loop 75 - Resistance
4903	Special Ignitor Loop 76 - Resistance
4904	Special Ignitor Loop 77 - Resistance
4905	Special Ignitor Loop 78 - Resistance
4906	Special Ignitor Loop 79 - Resistance
4907	Special Ignitor Loop 80 - Resistance
4908	Special Ignitor Loop 81 - Resistance
4909	Special Ignitor Loop 82 - Resistance
4910	Special Ignitor Loop 83 - Resistance
4911	Special Ignitor Loop 84 - Resistance
4912	Special Ignitor Loop 85 - Resistance
4913	Special Ignitor Loop 86 - Resistance
4914	Special Ignitor Loop 87 - Resistance
4915	Special Ignitor Loop 88 - Resistance
4916	Special Ignitor Loop 89 - Resistance
4917	Special Ignitor Loop 90 - Resistance
4918	Frontal Collision Sensor 1 - Type
4919	Frontal Collision Sensor 2 - Type
4920	Frontal Collision Sensor 3 - Type
4921	Frontal Collision Sensor 4 - Type
4922	Side Collision Sensor Front Left - Type
4923	Side Collision Sensor Mid Front Left - Type
4924	Side Collision Sensor Mid Rear Left - Type
4925	Side Collision Sensor Rear Left - Type
4926	Side Collision Sensor Front Right - Type
4927	Side Collision Sensor Mid Front Right - Type
4928	Side Collision Sensor Mid Rear Right - Type
4929	Side Collision Sensor Rear Right - Type
4930	Rear Collision Sensor 1 - Type
4931	Rear Collision Sensor 2 - Type
4932	Rear Collision Sensor 3 - Type
4933	Rear Collision Sensor 4 - Type
4934	Rollover Sensor - Type
4935	Frontal Collision Sensor 1 - Serial Number

4936	Frontal Collision Sensor 2 - Serial Number
4937	Frontal Collision Sensor 3 - Serial Number
4938	Frontal Collision Sensor 4 - Serial Number
4939	Side Collision Sensor Front Left - Serial Number
4940	Side Collision Sensor Mid Front Left - Serial Number
4941	Side Collision Sensor Mid Rear Left - Serial Number
4942	Side Collision Sensor Rear Left - Serial Number
4943	Side Collision Sensor Front Right - Serial Number
4944	Side Collision Sensor Mid Front Right - Serial Number
4945	Side Collision Sensor Mid Rear Right - Serial Number
4946	Side Collision Sensor Rear Right - Serial Number
4947	Rear Collision Sensor 1 - Serial Number
4948	Rear Collision Sensor 2 - Serial Number
4949	Rear Collision Sensor 3 - Serial Number
4950	Rear Collision Sensor 4 - Serial Number
4951	Rollover Sensor - Serial Number
4952	Driver Beltlock Status
4953	Passenger Beltlock Status
4954	Beltlock 3 Status
4955	Beltlock 4 Status
4956	Beltlock 5 Status
4957	Beltlock 6 Status
4958	Beltlock 7 Status
4959	Beltlock 8 Status
4960	Beltlock 9 Status
4961	Beltlock 10 Status
4962	Passenger Airbag Deactivation Switch Status
4963	Driver Occupant Classification System Status
4964	Passenger Occupant Classification System Status
4965	Occupant Classification System 3 Status
4966	Occupant Classification System 4 Status
4967	Occupant Classification System 5 Status
4968	Occupant Classification System 6 Status
4969	Occupant Classification System 7 Status
4970	Occupant Classification System 8 Status
4971	Occupant Classification System 9 Status
4972	Occupant Classification System 10 Status
4973	Crash Type
4974	Crash Counter
4975	Crash Checksum
4976	Pitch Angle (Extended Range)
4977	Roll Angle (Extended Range)
4978	Pitch Angle Compensation (Extended Range)
4979	Pitch Angle Figure of Merit (Extended Range)

4980	Roll Angle Compensation (Extended Range)
4981	Roll Angle Figure of Merit (Extended Range)
4982	Roll and Pitch Measurement Latency (Extended Range)
4983	Pitch Rate (Extended Range)
4984	Roll Rate (Extended Range)
4985	Yaw Rate (Extended Range)
4986	Pitch Rate Figure of Merit (Extended Range)
4987	Roll Rate Figure of Merit (Extended Range)
4988	Yaw Rate Figure of Merit (Extended Range)
4989	Angular Rate Measurement Latency
4990	Battery Charger 1 State
4991	Battery Charger 1 Power Line State
4992	Battery Charger 1 Output Voltage
4993	Battery Charger 1 Output Current
4994	Battery Charger 2 State
4995	Battery Charger 2 Power Line State
4996	Battery Charger 2 Output Voltage
4997	Battery Charger 2 Output Current
4998	Magnet Boost Time
4999	Magnet Rated Power
5000	Generator Overheat Status
5001	Genset System Output Voltage Range Status
5002	Reverse Current Range Setting
5003	Grapple/Magnet Selection Switch
5004	Genset Softstart Active Status
5005	Genset Enable Active Status
5006	Voltage Monitor Active Status
5007	Generator Duty Cycle Exceeded Status
5008	Magnet Forward Current
5009	Magnet Reverse Current
5010	Material Lift Switch
5011	Material Drop Switch
5012	Generator Current Boost Active Status
5013	Material Lift Active Status
5014	Material Drop Active Status
5015	Momentary Engine Maximum Power Enable
5016	ECU Power Output Supply Voltage #4
5017	ECU Power Output Supply Voltage #5
5018	Aftertreatment 1 Diesel Oxidation Catalyst System
5019	Engine Exhaust Gas Recirculation 1 Outlet Pressure
5020	Engine Exhaust Gas Recirculation 1 Mixer Intake Temperature
5021	Momentary Engine Maximum Power Enable Feedback
5022	Forward Collision Warning
5023	ACC usage demand

5024	Aftertreatment 1 Intake NOx Sensor Heater Ratio
5025	Aftertreatment 1 Intake NOx Sensor New part deviation NOx Gain
5026	Aftertreatment 1 Intake NOx Sensor New part deviation NOx Offset
5027	Aftertreatment 1 Intake NOx Sensor O2 Pressure Correction
5028	Aftertreatment 1 Intake NOx Sensor NOx Pressure Correction
5029	Aftertreatment 1 Intake NOx Sensor NO2 Correction
5030	Aftertreatment 1 Intake NOx Sensor NH3 Correction
5031	Aftertreatment 1 Outlet NOx Sensor Heater Ratio
5032	Aftertreatment 1 Outlet NOx Sensor New part deviation NOx Gain
5033	Aftertreatment 1 Outlet NOx Sensor New part deviation NOx Offset
5034	Aftertreatment 1 Outlet NOx Sensor O2 Pressure Correction
5035	Aftertreatment 1 Outlet NOx Sensor NOx Pressure Correction
5036	Aftertreatment 1 Outlet NOx Sensor NO2 Correction
5037	Aftertreatment 1 Outlet NOx Sensor NH3 Correction
5038	Aftertreatment 2 Intake NOx Sensor Heater Ratio
5039	Aftertreatment 2 Intake NOx Sensor New part deviation NOx Gain
5040	Aftertreatment 2 Intake NOx Sensor New part deviation NOx Offset
5041	Aftertreatment 2 Intake NOx Sensor O2 Pressure Correction
5042	Aftertreatment 2 Intake NOx Sensor NOx Pressure Correction
5043	Aftertreatment 2 Intake NOx Sensor NO2 Correction
5044	Aftertreatment 2 Intake NOx Sensor NH3 Correction
5045	Aftertreatment 2 Outlet NOx Sensor Heater Ratio
5046	Aftertreatment 2 Outlet NOx Sensor New part deviation NOx Gain
5047	Aftertreatment 2 Outlet NOx Sensor New part deviation NOx Offset
5048	Aftertreatment 2 Outlet NOx Sensor O2 Pressure Correction
5049	Aftertreatment 2 Outlet NOx Sensor NOx Pressure Correction
5050	Aftertreatment 2 Outlet NOx Sensor NO2 Correction
5051	Aftertreatment 2 Outlet NOx Sensor NH3 Correction
5052	Transmission Clutch/Converter Input Speed
5053	Engine Trip Fuel (High Resolution)
5054	Engine Total Fuel Used (High Resolution)
5055	Engine Oil Viscosity
5056	Engine Oil Density
5057	Cab Noise Control Command
5058	Cab Noise Control Tuning Command
5059	Cab Noise Control Status
5060	Cab Noise Control Tuning Status
5061	Noise Controller
5062	Noise Control Microphone 1
5063	Noise Control Microphone 2
5064	Noise Control Microphone 3
5065	Noise Control Microphone 4
5066	Noise Control Microphone 5
5067	Noise Control Microphone 6

5068	Noise Control Output 1
5069	Noise Control Output 2
5070	Noise Control Output 3
5071	Noise Control Output 4
5072	Noise Control Output 5
5073	Noise Control Output 6
5074	Noise Control Feed Forward Sensor 1
5075	Noise Control Feed Forward Sensor 2
5077	Engine Protect Lamp Command
5078	Engine Amber Warning Lamp Command
5079	Engine Red Stop Lamp Command
5080	OBD Malfunction Indicator Lamp Command
5081	Engine Brake Active Lamp Command
5082	Engine Oil Pressure Low Lamp Command
5083	Engine Coolant Temperature High Lamp Command
5084	Engine Coolant Level Low Lamp Command
5085	Engine Idle Management Active Lamp Command
5086	Engine Air Filter Restriction Lamp Command
5087	Vehicle Battery Voltage Low Lamp Command
5088	Vehicle Fuel Level Low Lamp Command
5089	Vehicle Air Pressure Low Lamp Command
5090	Vehicle HVAC Recirculation Lamp Command
5091	Vehicle Battery Charging Lamp Command
5093	Engine Protect Lamp Data
5094	Engine Amber Warning Lamp Data
5095	Engine Red Stop Lamp Data
5096	OBD Malfunction Indicator Lamp Data
5097	Engine Brake Active Lamp Data
5098	Compression Brake Enable Switch Indicator Lamp Data
5099	Engine Oil Pressure Low Lamp Data
5100	Engine Coolant Temperature High Lamp Data
5101	Engine Coolant Level Low Lamp Data
5102	Engine Idle Management Active Lamp Data
5103	Engine Air Filter Restriction Lamp Data
5104	Vehicle Battery Voltage Low Lamp Data
5105	Vehicle Fuel Level Low Lamp Data
5106	Vehicle Air Pressure Low Lamp Data
5107	Vehicle HVAC Recirculation Lamp Data
5108	Vehicle Battery Charging Lamp Data
5109	Controller #3
5110	Controller #4
5111	Controller #5
5112	Controller #6
5113	Controller #7

5114	Controller #8
5115	Controller #9
5116	Controller #10
5117	Controller #11
5118	Controller #12
5119	Controller #13
5120	Controller #14
5121	Controller #15
5122	Controller #16
5123	Controller #17
5124	Controller #18
5125	Sensor supply voltage 7
5126	Sensor supply voltage 8
5127	Sensor supply voltage 9
5128	Sensor supply voltage 10
5129	Sensor supply voltage 11
5130	Sensor supply voltage 12
5131	Sensor supply voltage 13
5132	Sensor supply voltage 14
5133	Sensor supply voltage 15
5134	Sensor supply voltage 16
5135	Sensor supply voltage 17
5136	Sensor supply voltage 18
5137	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater Command
5138	Aftertreatment 2 Diesel Exhaust Fluid Tank Heater Command
5139	Implement operating state – command
5140	All Implement Stop Operations Switch State
5141	Low Voltage Disconnect Manual Disconnect State
5142	Low Voltage Disconnect Manual Connect State
5143	Low Voltage Disconnect Current Operating Mode
5144	Low Voltage Disconnect Output #3 State
5145	Low Voltage Disconnect Output #2 State
5146	Low Voltage Disconnect Output #1 State
5147	Low Voltage Disconnect Vout Output State
5148	Low Voltage Disconnect Temperature
5149	Low Voltage Disconnect Desired Operating Mode
5150	Front Hitch Position Limit status
5151	Rear Hitch Position Limit status
5152	Front PTO engagement request status
5153	Front PTO mode request status
5154	Front PTO Economy mode request status
5155	Front PTO shaft speed limit status
5156	Rear PTO engagement request status
5157	Rear PTO mode request status

5158	Rear PTO Economy mode request status
5159	Rear PTO shaft speed limit status
5160	Auxiliary valve number 0 measured flow limit status
5161	Auxiliary valve number 0 estimated flow limit status
5162	Auxiliary valve number 1 measured flow limit status
5163	Auxiliary valve number 1 estimated flow limit status
5164	Auxiliary valve number 2 measured flow limit status
5165	Auxiliary valve number 2 estimated flow limit status
5166	Auxiliary valve number 3 measured flow limit status
5167	Auxiliary valve number 3 estimated flow limit status
5168	Auxiliary valve number 4 measured flow limit status
5169	Auxiliary valve number 4 estimated flow limit status
5170	Auxiliary valve number 5 measured flow limit status
5171	Auxiliary valve number 5 estimated flow limit status
5172	Auxiliary valve number 6 measured flow limit status
5173	Auxiliary valve number 6 estimated flow limit status
5174	Auxiliary valve number 7 measured flow limit status
5175	Auxiliary valve number 7 estimated flow limit status
5176	Auxiliary valve number 8 measured flow limit status
5177	Auxiliary valve number 8 estimated flow limit status
5178	Auxiliary valve number 9 measured flow limit status
5179	Auxiliary valve number 9 estimated flow limit status
5180	Auxiliary valve number 10 measured flow limit status
5181	Auxiliary valve number 10 estimated flow limit status
5182	Auxiliary valve number 11 measured flow limit status
5183	Auxiliary valve number 11 estimated flow limit status
5184	Auxiliary valve number 12 measured flow limit status
5185	Auxiliary valve number 12 estimated flow limit status
5186	Auxiliary valve number 13 measured flow limit status
5187	Auxiliary valve number 13 estimated flow limit status
5188	Auxiliary valve number 14 measured flow limit status
5189	Auxiliary valve number 14 estimated flow limit status
5190	Auxiliary valve number 15 measured flow limit status
5191	Auxiliary valve number 15 estimated flow limit status
5192	General purpose valve measured limit status
5193	General purpose valve estimated limit status
5194	Temperature units
5195	Pressure units
5196	Force units
5197	Units system
5198	Repetition rate
5199	Process data command
5200	Process data element number
5201	Process data data dictionary identifier

5202	Process data variable value
5203	Implement Start/Stop operations
5204	Tractor control mode commands
5205	Tractor control commanded vehicle speed
5206	Tractor control commanded PTO speed
5207	Tractor control commanded hitch position
5208	Tractor control commanded PTO torque
5209	Tractor control commanded auxiliary valve flow
5210	Tractor control commanded auxiliary valve state
5211	Tractor control commanded auxiliary valve number
5212	Tractor control commanded draft force
5213	Tractor control mode command response
5214	Tractor control vehicle speed set point value response
5215	Tractor control PTO speed set point value response
5216	Tractor control hitch position set point value response
5217	Tractor control PTO torque set point value response
5218	Tractor control maximum slip set point value response
5219	Tractor control auxiliary valve flow set point value response
5220	Tractor control auxiliary valve state response
5221	Tractor control auxiliary valve number response
5222	Tractor control draft force set point value response
5223	Tractor Control draft force limit set point
5224	Tractor Control PTO torque limit set point
5225	Tractor Control Absolute maximum PTO torque limit set point 540 rpm
5226	Tractor Control auxiliary valve flow limit set point
5227	Tractor Control limit status
5228	Tractor control draft force limit set point command
5229	Tractor control PTO torque limit set point command
5230	Tractor control absolute maximum PTO torque limit set point 540 rpm command
5231	Tractor control auxiliary valve flow limit set point command
5232	Tractor ECU class request
5233	Tractor facility request
5234	Tractor ECU class response
5235	Tractor facility response
5236	Tractor facility reserved bit indicator
5237	Guidance curvature command
5238	Guidance estimated curvature
5239	Guidance curvature command status
5240	Guidance request reset command status
5241	Guidance steering input position status
5242	Guidance steering system readiness
5243	Mechanical system lockout
5244	Operator direction reversed
5245	Aftertreatment Diesel Exhaust Fluid Tank Low Level Indicator

5246	Aftertreatment SCR Operator Inducement Severity
5247	Command - Process Data
5248	Sub-command - Process Data
5249	Command specific parameters - Process Data
5250	Element number
5251	Data Dictionary Identifier
5252	Engine Exhaust Gas Recirculation 2 Differential Pressure
5253	Engine Exhaust Gas Recirculation 2 Intake Pressure
5254	Engine Exhaust Gas Recirculation 2 Outlet Absolute Pressure
5255	Engine Exhaust Gas Recirculation 2 Temperature
5256	Engine Exhaust Gas Recirculation 2 Mixer Intake Temperature
5257	Engine Exhaust Gas Recirculation 2 Mass Flow Rate
5258	Engine Exhaust Gas Recirculation 2 Cooler Intake Temperature
5259	Engine Exhaust Gas Recirculation 2 Cooler Intake Gas Absolute Pressure
5260	Engine Exhaust Gas Recirculation 2 Cooler Efficiency
5261	Engine Exhaust Gas Recirculation 2 Cooler Bypass Actuator Position
5262	Engine Exhaust Gas Recirculation 2 Valve Position
5263	Engine Exhaust Gas Recirculation 2 Valve 2 Position
5264	Engine Exhaust Gas Recirculation 2 Valve 1 Control
5265	Engine Exhaust Gas Recirculation 2 Valve 2 Control
5266	Aftertreatment 1 Diesel Particulate Filter Soot Signal Standard Deviation
5267	Aftertreatment 1 Diesel Particulate Filter Soot Signal Maximum
5268	Aftertreatment 1 Diesel Particulate Filter Soot Signal Minimum
5269	Aftertreatment 2 Diesel Particulate Filter Soot Signal Standard Deviation
5270	Aftertreatment 2 Diesel Particulate Filter Soot Signal Maximum
5271	Aftertreatment 2 Diesel Particulate Filter Soot Signal Minimum
5272	Unexpected Engine Shutdown
5273	Crank Terminate Relay
5274	Prohibit Automatic Air Suspension Control
5275	Parking Brake Actuator Fully Activated
5276	Engine Exhaust Manifold Bank 1 Flow Balance Valve Actuator Control
5277	Engine Exhaust Manifold Bank 1 Flow Balance Valve Actuator Position
5278	Engine Exhaust Manifold Bank 2 Flow Balance Valve Actuator Control
5279	Engine Exhaust Manifold Bank 2 Flow Balance Valve Actuator Position
5280	Engine Charge Air Cooler 1 Precooler Intake Temperature
5281	Engine Charge Air Cooler 1 Precooler Outlet Temperature
5282	Engine Charge Air Cooler 1 Precooler Efficiency
5283	Engine Charge Air Cooler 1 Intake Temperature
5284	Engine Charge Air Cooler 1 Ambient Air Temperature
5285	Engine Charge Air Cooler 1 Efficiency
5286	Engine Charge Air Cooler 2 Precooler Intake Temperature
5287	Engine Charge Air Cooler 2 Precooler Outlet Temperature
5288	Engine Charge Air Cooler 2 Precooler Efficiency
5289	Engine Charge Air Cooler 2 Intake Temperature

5290	Engine Charge Air Cooler 2 Outlet Temperature
5291	Engine Charge Air Cooler 2 Ambient Air Temperature
5292	Engine Charge Air Cooler 2 Efficiency
5293	Allow Level Control During Braking Command
5294	Allow Level Control During Braking Status
5295	Speed Dependent Level Control Request
5296	Speed Dependent Level Control Status
5297	Aftertreatment 2 Warm Up Diesel Oxidation Catalyst Conversion Efficiency
5298	Aftertreatment 1 Diesel Oxidation Catalyst Conversion Efficiency
5299	Aftertreatment 2 Diesel Oxidation Catalyst Conversion Efficiency
5300	Aftertreatment 1 Diesel Oxidation Catalyst Insufficient NO2 Conversion
5301	Aftertreatment 2 Diesel Oxidation Catalyst Insufficient NO2 Conversion
5302	Aftertreatment 1 Post SCR NH3 Conversion Efficiency
5303	Aftertreatment 2 Post SCR NH3 Conversion Efficiency
5304	Aftertreatment 1 NOx Adsorber Catalyst Conversion Efficiency
5305	Aftertreatment 2 NOx Adsorber Catalyst Conversion Efficiency
5306	Aftertreatment 1 NOx Adsorber Catalyst Dosing System
5307	Aftertreatment 2 NOx Adsorber Catalyst Dosing System
5308	Aftertreatment 1 NOx Adsorber Catalyst System Monitor
5309	Aftertreatment 2 NOx Adsorber Catalyst System
5310	Aftertreatment 1 Diesel Particulate Filter NMHC Conversion Efficiency
5311	Aftertreatment 2 Diesel Particulate Filter NMHC Conversion Efficiency
5312	Engine Intake Manifold Commanded Pressure
5313	Commanded Engine Fuel Rail Pressure
5314	Commanded Engine Fuel Injection Control Pressure
5315	Aftertreatment 2 Warm Up Diesel Oxidation Catalyst Intake Temperature
5316	Aftertreatment 2 Warm Up Diesel Oxidation Catalyst Outlet Temperature
5317	Aftertreatment 2 Diesel Oxidation Catalyst System
5318	Aftertreatment Exhaust Gas Sensor System Monitor
5319	Aftertreatment 1 Diesel Particulate Filter Incomplete Regeneration
5320	Aftertreatment 2 Diesel Particulate Filter Incomplete Regeneration
5321	Engine Intake Manifold Pressure System Monitor
5322	Aftertreatment NMHC Converting Catalyst System Monitor
5323	Engine Fuel Control Mode
5324	Engine Glow Plug 1
5325	Engine Glow Plug 2
5326	Engine Glow Plug 3
5327	Engine Glow Plug 4
5328	Engine Glow Plug 5
5329	Engine Glow Plug 6
5330	Engine Glow Plug 7
5331	Engine Glow Plug 8
5332	Engine Glow Plug 9
5333	Engine Glow Plug 10

5334	Engine Glow Plug 11
5335	Engine Glow Plug 12
5336	Engine Glow Plug 13
5337	Engine Glow Plug 14
5338	Engine Glow Plug 15
5339	Engine Glow Plug 16
5340	Engine Glow Plug 17
5341	Engine Glow Plug 18
5342	Engine Glow Plug 19
5343	Engine Glow Plug 20
5344	Transmission Warning Indicator
5345	Transmission Overheat Indicator
5346	Driveline Retarder Overheat Indicator
5347	Lateral Acceleration (Extended Range)
5348	Longitudinal Acceleration (Extended Range)
5349	Vertical Acceleration (Extended Range)
5350	Lateral Acceleration Figure of Merit (Extended Range)
5351	Longitudinal Acceleration Figure of Merit (Extended Range)
5352	Vertical Acceleration Figure of Merit (Extended Range)
5353	Support Variable Transmission Repetition Rate for Acceleration Sensor
5354	Aftertreatment NMHC Converting Catalyst Monitor
5355	Engine Intake Manifold #1 Pressure System Monitor
5356	NOx Converting Catalyst and/or NOx Adsorber Monitor
5357	Engine Fuel Injection Quantity Error for Multiple Cylinders
5358	Engine Cylinder #1 Fuel Injection Quantity
5359	Engine Cylinder #2 Fuel Injection Quantity
5360	Engine Cylinder #3 Fuel Injection Quantity
5361	Engine Cylinder #4 Fuel Injection Quantity
5362	Engine Cylinder #5 Fuel Injection Quantity
5363	Engine Cylinder #6 Fuel Injection Quantity
5364	Engine Cylinder #7 Fuel Injection Quantity
5365	Engine Cylinder #8 Fuel Injection Quantity
5366	Engine Turbocharger Compressor Bypass Actuator 1 Desired Position
5367	Engine Turbocharger Compressor Bypass Actuator 1 Preliminary FMI
5368	Engine Turbocharger Compressor Bypass Actuator 1 Temperature Status
5369	Engine Turbocharger Compressor Bypass Actuator 2 Command
5370	Engine Turbocharger Wastegate Actuator 1 Desired Position
5371	Engine Turbocharger Wastegate Actuator 1 Preliminary FMI
5372	Engine Turbocharger Wastegate Actuator 1 Temperature Status
5373	Engine Turbocharger Wastegate Actuator 2 Desired Position
5374	Engine Desired Throttle Valve 1 Position
5375	Engine Throttle Valve 1 Preliminary FMI
5376	Engine Throttle Valve 1 Temperature Status
5377	Engine Desired Throttle Valve 2 Position

5378	Engine Throttle Valve 2 Preliminary FMI
5379	Engine Throttle Valve 2 Temperature status
5380	Engine Fuel Valve 1 Preliminary FMI
5381	Engine Fuel Valve 1 Temperature Status
5382	Engine Fuel Valve 2 Preliminary FMI
5383	Engine Fuel Valve 2 Temperature Status
5384	Engine Turbocharger Wastegate Actuator 2 Preliminary FMI
5385	Engine Turbocharger Wastegate Actuator 2 Temperature Status
5386	Engine Turbocharger Wastegate Actuator 1 Command
5387	Engine Turbocharger Wastegate Actuator 2 Command
5388	Engine Turbocharger Compressor Bypass Actuator 2 Position
5389	Engine Turbocharger Compressor Bypass Actuator 2 Desired Position
5390	Engine Turbocharger compressor Bypass Actuator 2 Preliminary FMI
5391	Engine Turbocharger Compressor Bypass Actuator 2 Temperature Status
5392	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 1 Loss of Prime
5393	Engine Exhaust Gas Recirculation 1 Cooler Bypass Actuator
5394	Aftertreatment 1 Diesel Exhaust Fluid Doser Valve 1
5395	Engine Idle Fuel Quantity
5396	Engine Crankcase Ventilation Hose Disconnected
5397	Aftertreatment 1 Diesel Particulate Filter Regeneration too Frequent
5398	Estimated Pumping - Percent Torque
5399	DPF Thermal Management Active
5400	SCR Thermal Management Active
5401	Engine Turbocharger Turbine Bypass Actuator
5402	Lift Relay Control
5403	Drop Relay Control
5404	PTO Shutdown has Shutdown Engine
5405	Set Elevation Sensor #1 Reference Elevation
5406	Set Elevation Sensor #2 Reference Elevation
5407	Blade Control Mode - Left
5408	Blade Control Mode - Right
5409	Land Leveling System Enable Status
5410	Blade Elevation Deviation - Left
5411	Blade Elevation Deviation - Right
5412	Blade Reference Elevation Offset - Left
5413	Blade Reference Elevation Offset - Right
5414	Aftertreatment 1 Diesel Exhaust Fluid Quick Thaw Heater Command
5415	Aftertreatment 2 Diesel Exhaust Fluid Quick Thaw Heater Command
5416	Engine Wait To Start Lamp Data
5417	Engine Fuel Filter (Suction Side) Intake Absolute Pressure
5418	Engine Fuel Actuator 1
5419	Engine Throttle Actuator 1
5420	Engine Turbocharger Compressor Bypass Actuator 1
5421	Engine Turbocharger 1 Wastegate Actuator 1

5422	Engine Intake Manifold 2 Absolute Pressure
5423	Aftertreatment 1 Fuel Pump Relay Control
5424	Aftertreatment 1 Fuel Flow Diverter Valve Control
5425	Aftertreatment 1 Fuel Pressure 2 Actuator Control
5426	Aftertreatment 2 Fuel Pump Relay Control
5427	Aftertreatment 2 Fuel Flow Diverter Valve Control
5428	Aftertreatment 2 Fuel Pressure 2 Control
5429	Engine Exhaust Gas Recirculation 2 Intake Absolute Pressure
5430	Engine Exhaust Gas Recirculation 1 Intake Absolute Pressure
5431	Engine Exhaust Gas Recirculation 1 Outlet Absolute Pressure (High Resolution)
5432	Memory level
5433	Memory level request
5434	Aftertreatment 1 Diesel Exhaust Fluid Tank Fill Valve Command
5435	Aftertreatment 1 Diesel Exhaust Fluid Pump State
5436	Aftertreatment 1 Diesel Exhaust Fluid Tank Drain Valve Command
5437	Aftertreatment 2 Diesel Exhaust Fluid Tank Fill Valve Command
5438	Aftertreatment 2 Diesel Exhaust Fluid Pump State
5439	Aftertreatment 2 Diesel Exhaust Fluid Tank Drain Valve Command
5440	Aftertreatment 2 Hydrocarbon Doser
5441	Engine Fuel Injection Timing Error for Multiple Cylinders
5442	Engine Fuel Injection Pressure Error for Multiple Cylinders
5443	Aftertreatment 1 Hydrocarbon Dosing System
5444	Engine Crankcase Breather Oil Separator Speed
5445	Engine Throttle Valve 1 Operation Status
5446	Engine Throttle Valve 2 Operation Status
5447	Engine Fuel Valve 1 Operation Status
5448	Engine Fuel Valve 2 Operation Status
5449	Engine Turbocharger Compressor Bypass Actuator 1 Operation Status
5450	Engine Turbocharger Compressor Bypass Actuator 2 Operation Status
5451	Engine Turbocharger Wastegate Actuator 1 Operation Status
5452	Engine Turbocharger Wastegate Actuator 2 Operation Status
5454	Aftertreatment 1 Diesel Particulate Filter Average Time Between Active Regenerations
5455	Aftertreatment 2 Diesel Particulate Filter Average Time Between Active Regenerations
5456	Aftertreatment 1 Hydrocarbon Doser Intake Fuel Temperature
5457	Engine Variable Geometry Turbocharger 1 Control Mode
5458	Flexible Fuel Percentage
5459	Aftertreatment 1 NOx Adsorber Regeneration Status
5460	Aftertreatment 2 NOx Adsorber Regeneration Status
5461	Aftertreatment 1 NOx Adsorber Desulfation Status
5462	Aftertreatment 2 NOx Adsorber Desulfation Status
5463	Aftertreatment SCR Operator Inducement Active Traveled Distance
5464	Hybrid Battery Pack Remaining Charge
5465	Engine Intake Manifold Pressure Control Mode

5466	Aftertreatment 1 Diesel Particulate Filter Soot Load Regeneration Threshold
5467	Aftertreatment 2 Diesel Particulate Filter Soot Load Regeneration Threshold
5468	Engine Oil Relative Dielectricity (High Resolution)
5469	Engine Fuel Filter Restricted Lamp Command
5470	Engine Fuel Filter Restricted Lamp Data
5471	Engine Friction Percent Torque At Idle, Point 1
5472	Engine Friction Percent Torque, Point 2
5473	Engine Friction Percent Torque, Point 3
5474	Engine Friction Percent Torque, Point 4
5475	Engine Friction Percent Torque, Point 5
5476	Engine Friction Percent Torque, Point 6
5477	Engine Friction Percent Torque, Point 7
5478	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 1 Loss of Prime (Obsolete)
5479	Aftertreatment 1 NOx Adsorber Catalyst Intake Temperature
5480	Aftertreatment 1 Diesel Exhaust Fluid Controller 1 Temperature
5481	Aftertreatment 1 NOx Adsorber Catalyst Outlet Temperature
5482	Aftertreatment 1 NOx Adsorber Catalyst Missing
5483	Engine Turbocharger 1 Turbine Bypass Actuator 1 Position
5484	Engine Fan Clutch 2 Output Driver
5485	Aftertreatment 1 Diesel Exhaust Fluid Pump Orifice Flow
5486	Exhaust Emission Controller ECU Temperature
5487	Aftertreatment 1 Burner Unit Combustion Chamber Temperature
5488	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 5 State
5489	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 5 Preliminary FMI
5490	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 5
5491	Aftertreatment 1 Diesel Exhaust Fluid Line Heater Relay 1
5492	Armrest 1 Switch 2
5493	Armrest 2 Switch 1
5494	Armrest 2 Switch 2
5495	Aftertreatment 1 Diesel Particulate Filter Soot Mean Calibration Offset
5496	Aftertreatment 1 Diesel Particulate Filter Soot Standard Deviation Calibration Offset
5497	Aftertreatment 2 Diesel Particulate Filter Soot Mean Calibration Offset
5498	Aftertreatment 2 Diesel Particulate Filter Soot Standard Deviation Calibration Offset
5499	Intake Valve Actuation System Oil Pressure 1 Solenoid Control
5500	Intake Valve Actuation System Oil Pressure 2 Solenoid Control
5501	Aftertreatment 1 Diesel Particulate Filter Intake Temperature Set Point
5502	Engine Unburned Fuel Percentage
5503	Aftertreatment 1 Fuel Mass Rate
5504	Hydrocarbon Doser Purging Enable
5505	Requested Fuel Mass Rate
5506	HC Doser Status
5507	HC Doser Injecting Status
5508	Diagnostic Status of HC Doser
5509	Hydrocarbon Doser Purging Required

5510	Lubrication Cycle Mode Lock Command
5511	Lubrication Cycle Set Command
5512	Lubrication Operation Mode Set Command
5513	Lubrication Pump Enable Command
5514	Lubrication Timing Cycle Command
5515	Lubrication Cycle Mode Lock Status
5516	Lubrication Cycle Mode Status
5517	Lubrication Operation Mode Status
5518	Lubrication Pump Enable Status
5519	Lubrication Reservoir Level
5520	Lubrication Timing Cycle Status
5521	Lubrication System
5522	Lubrication Pump Outlet Line 1 Pressure
5523	Lubrication Pump Outlet Line 2 Pressure
5524	Unexpected Lubrication Line 1 Pressure
5525	Unexpected Lubrication Line 2 Pressure
5526	Lubrication Line Pressure
5527	Lubrication Pump Actuator
5528	Lubrication Pump Outlet Valve 1 Actuator
5529	Lubrication Pump Outlet Valve 2 Actuator
5530	Lubrication Pump
5531	Controller Internal Memory Battery
5532	Switch Backlight Illumination Brightness Percent
5533	Hydraulic Oil Dynamic Viscosity
5534	Hydraulic Oil Density
5535	Hydraulic Oil Relative Dielectricity (High Resolution)
5536	Hydraulic Oil Temperature (High Resolution)
5537	Engine Fuel Dynamic Viscosity
5538	Engine Fuel Density
5539	Engine Fuel Dielectricity (High Resolution)
5540	Engine Fuel 1 Temperature 1 (High Resolution)
5541	Engine Turbocharger 1 Turbine Outlet Pressure
5542	Engine Turbocharger 1 Turbine Desired Outlet Pressure
5543	Engine Exhaust Brake Actuator Command
5544	Engine Turbocharger 2 Turbine Outlet Pressure
5545	Engine Turbocharger 2 Turbine Desired Outlet Pressure
5546	Engine Auxiliary Cooler Supply Valve 1 Actuator Command
5547	Engine Auxiliary Cooler Supply Valve 2 Actuator Command
5548	Engine Cold Start Fuel Igniter Command
5549	Engine Cold Start Fuel Igniter Relay
5550	Engine Cold Start Fuel Igniter Relay Feedback
5551	Magnet Generator Control
5552	Supplemental Fan Enable Command
5553	Supplemental Fan Direction Command

5554	Supplemental Fan Speed Command
5555	Supplemental Fan Power Hold
5556	Supplemental Fan Enable Status
5557	Supplemental Fan Direction Status
5558	Supplemental Fan Velocity Status
5559	Supplemental Fan Controller Temperature Status
5560	Supplemental Fan Drive Status
5561	Supplemental Fan Controller ECU Temperature
5562	Supplemental Fan Speed
5563	Supplemental Fan Current
5564	Supplemental Fan Power
5565	Coolant Level Engine Protection Shutdown Override Command
5566	Coolant Level Engine Protection Shutdown Status
5567	Engine Speed Governor Gain Adjust
5568	Engine Speed Governor Droop
5569	Diesel Particulate Filter 1 Soot Sensor ECU Internal Temperature
5570	Diesel Particulate Filter 2 Soot Sensor ECU Internal Temperature
5571	High Pressure Common Rail Fuel Pressure Relief Valve
5572	Electrical Power Inverter/Converter
5573	Auxiliary Cab Air Conditioner
5574	Auxiliary Cab Heater
5575	Vehicle Hood Tilt Switch
5576	Aftertreatment 1 Identification
5577	Aftertreatment 2 Identification
5578	Engine Fuel Delivery Absolute Pressure
5579	Engine Filtered Fuel Delivery Pressure
5580	Engine Filtered Fuel Delivery Absolute Pressure
5581	Calculated Ambient Air Temperature
5582	Static Roll Angle
5583	Static Roll Angle Status
5584	Engine Fuel Filter Degradation
5585	Engine Fuel 1 Injector Metering Rail 1 Cranking Pressure
5586	Engine Fuel 1 Injector Metering Rail 2 Cranking Pressure
5587	Engine Intake Manifold Temperatures Inconsistent
5588	Proprietary Network #2
5589	Aftertreatment 1 Secondary Air Absolute Pressure
5590	Aftertreatment 2 Secondary Air Absolute Pressure
5591	Aftertreatment 1 Diesel Particulate Filter Air Control Module
5592	Network Message Control Byte
5593	NIECU Port
5594	To Port
5595	From Port
5596	Filter Mode
5597	NIECU Parameter Number

5598	NIECU Parameter Data
5599	PGN (Network Message)
5600	Source Address (Network Message)
5601	NAME (Network Message)
5602	Number of SA/NAME Pairs
5603	Cruise Control Disable Command
5604	Cruise Control Resume Command
5605	Cruise Control Pause Command
5606	Adaptive Cruise Control Readiness Status
5607	Cruise Control System Command State
5608	Source Address of Controlling Device for Disabling Cruise Control
5609	Source Address of Controlling Device for Pausing Cruise Control
5610	Transmission input clutch calculated load
5611	Transmission shift cylinder #1 position sensor
5612	Transmission shift cylinder #2 position sensor
5613	Vehicle attitude sensor
5614	Transmission Clutch Coarse Engagement Actuator
5615	Transmission Clutch Fine Engagement Actuator
5616	Transmission Clutch Coarse Disengagement Actuator
5617	Transmission Clutch Fine Disengagement Actuator
5618	Transmission Gear Shift Cylinder 1 Actuator 1
5619	Transmission Gear Shift Cylinder 1 Actuator 2
5620	Transmission Gear Shift Cylinder 2 Actuator 1
5621	Transmission Gear Shift Cylinder 2 Actuator 2
5622	Transmission splitter engagement system
5623	Transmission range engagement system
5624	Trailer-VDC Active
5625	Engine Exhaust Bank 1 Pressure Regulator Position
5626	Engine Exhaust Pressure Regulator Preliminary FMI
5627	Engine Exhaust Pressure Regulator Temperature Status
5628	Engine Exhaust Pressure Regulator Control Operation Status
5629	Diesel Particulate Filter Active Regeneration Inhibited Due to Low Exhaust Pressure
5630	Park Brake Command
5631	Engine Throttle Valve 1 Differential Pressure
5632	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Analysis Request Frequency 1
5633	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Analysis Request Frequency 2
5634	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Analysis Request Frequency 3
5635	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Analysis Request Frequency 4
5636	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Analysis Frequency 1
5637	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Frequency 1 Soot Signal
5638	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Analysis Frequency 2
5639	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Frequency 2 Soot Signal

5640	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Analysis Frequency 3
5641	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Frequency 3 Soot Signal
5642	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Analysis Frequency 4
5643	Aftertreatment 1 Diesel Particulate Filter 1 Soot Sensor Frequency 4 Soot Signal
5644	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Analysis Request Frequency 1
5645	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Analysis Request Frequency 2
5646	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Analysis Request Frequency 3
5647	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Analysis Request Frequency 4
5648	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Analysis Frequency 1
5649	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Frequency 1 Soot Signal
5650	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Analysis Frequency 2
5651	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Frequency 2 Soot Signal
5652	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Analysis Frequency 3
5653	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Frequency 3 Soot Signal
5654	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Analysis Frequency 4
5655	Aftertreatment 1 Diesel Particulate Filter 2 Soot Sensor Frequency 4 Soot Signal
5656	Retarder Coolant Outlet Temperature
5657	NAME Checksum / Error Code
5658	Manufacturer Code Qualifier Flag
5659	ECU Instance Qualifier Flag
5660	Function Instance Qualifier Flag
5661	Function Qualifier Flag
5662	Vehicle System Qualifier Flag
5663	Vehicle System Instance Qualifier Flag
5664	Industry Group Qualifier Flag
5665	Arbitrary Address Capable Qualifier Flag
5666	NM Control Mode Indicator
5667	Commanded Manufacturer Code
5668	Commanded ECU Instance
5669	Commanded Function Instance
5670	Commanded Function
5671	Commanded Vehicle System
5672	Commanded Vehicle System Instance
5673	Commanded Industry Group
5674	Commanded Arbitrary Address Capable
5675	Operator Shift Prompt
5676	Advanced emergency braking system state
5677	Collision warning level
5678	Relevant object detected for advanced emergency braking system
5679	Bend off probability of relevant object
5680	Time to collision with relevant object

5681	Driver activation demand for Advanced Emergency Braking System
5682	AEBS2 message Counter
5683	AEBS2 message checksum
5684	Reference Engine Gas Mass Flow Rate
5685	Barometric Absolute Pressure (High Resolution)
5686	Engine Exhaust Gas Port 1 Difference from Average Temperature
5687	Engine Exhaust Gas Port 2 Difference from Average Temperature
5688	Engine Exhaust Gas Port 3 Difference from Average Temperature
5689	Engine Exhaust Gas Port 4 Difference from Average Temperature
5690	Engine Exhaust Gas Port 5 Difference from Average Temperature
5691	Engine Exhaust Gas Port 6 Difference from Average Temperature
5692	Engine Exhaust Gas Port 7 Difference from Average Temperature
5693	Engine Exhaust Gas Port 8 Difference from Average Temperature
5694	Engine Exhaust Gas Port 9 Difference from Average Temperature
5695	Engine Exhaust Gas Port 10 Difference from Average Temperature
5696	Engine Exhaust Gas Port 11 Difference from Average Temperature
5697	Engine Exhaust Gas Port 12 Difference from Average Temperature
5698	Engine Exhaust Gas Port 13 Difference from Average Temperature
5699	Engine Exhaust Gas Port 14 Difference from Average Temperature
5700	Engine Exhaust Gas Port 15 Difference from Average Temperature
5701	Engine Exhaust Gas Port 16 Difference from Average Temperature
5702	Engine Exhaust Gas Port 17 Difference from Average Temperature
5703	Engine Exhaust Gas Port 18 Difference from Average Temperature
5704	Engine Exhaust Gas Port 19 Difference from Average Temperature
5705	Engine Exhaust Gas Port 20 Difference from Average Temperature
5706	Aftertreatment 1 Diesel Exhaust Fluid Pump Heater
5707	Aftertreatment 1 Diesel Exhaust Fluid Pump Heater Command
5708	Engine Coolant Pressure 2
5709	Aftertreatment 1 Outlet NOx Sensor Self-diagnosis Trigger
5710	Aftertreatment 1 Intake NOx Sensor Self-diagnosis Trigger
5711	Aftertreatment 2 Outlet NOx Sensor Self-diagnosis Trigger
5712	Aftertreatment 2 Intake NOx Sensor Self-diagnosis Trigger
5713	Aftertreatment 1 Outlet NOx Sensor 1 Self-diagnosis Status
5714	Aftertreatment 1 Intake NOx Sensor 1 Self-diagnosis Status
5715	Aftertreatment 2 Outlet NOx Sensor 1 Self-diagnosis Status
5716	Aftertreatment 2 Intake NOx Sensor 1 Self-diagnosis Status
5717	Aftertreatment 1 Outlet NOx Sensor Self-diagnosis Final Result
5718	Aftertreatment 1 Intake NOx Sensor Self-diagnosis Final Result
5719	Aftertreatment 2 Outlet NOx Sensor Self-diagnosis Final Result
5720	Aftertreatment 2 Intake NOx Sensor Self-diagnosis Final Result
5721	Aftertreatment 1 Outlet NOx Sensor Operation Hours
5722	Aftertreatment 1 Intake NOx Sensor Operation Hours
5723	Aftertreatment 2 Outlet NOx Sensor Operation Hours
5724	Aftertreatment 2 Intake NOx Sensor Operation Hours

5725	Guidance system command exit/reason code
5726	Guidance Limit Status
5727	Drive Strategy Priority 1
5728	Drive Strategy Priority 2
5729	Drive Strategy Priority 3
5730	Drive Strategy Priority 4
5731	Drive Strategy Request State
5732	Drive Strategy Exit/Reason Code
5733	Drive Strategy Priority 1 Request
5734	Drive Strategy Priority 2 Request
5735	Drive Strategy Priority 3 Request
5736	Drive Strategy Priority 4 Request
5737	Restore Operator Drive Strategy Setting Request
5738	Engine Fuel System Water Drain Actuator
5739	Aftertreatment 2 Outlet Soot Sensor Heater
5740	Aftertreatment 2 Outlet Soot
5741	Aftertreatment 1 Outlet Soot
5742	Aftertreatment Diesel Particulate Filter Temperature Sensor Module
5743	Aftertreatment 1 SCR Temperature Sensor Module
5744	Aftertreatment 2 SCR System Missing
5745	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 1 Heater
5746	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 1 Heater Relay
5747	Aftertreatment 1 Outlet Soot Sensor Heater
5748	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 1 Loss of Prime
5749	Engine Exhaust Pressure 2
5750	Wireless Rolling Message Counter
5751	Transmitter Command State
5752	Transmitter ID 1
5753	Wireless Signal Strength 1
5754	Unique Beacon Message Identifier Number
5755	Radio Beacon Direction
5756	Transmitter ID 2
5757	Wireless Signal Strength 2
5758	Aftertreatment 1 Intake 1 Gas Sensor Power Supply
5759	Aftertreatment 1 Outlet 1 Gas Sensor Power Supply
5760	Aftertreatment 2 Intake 1 Gas Sensor Power Supply
5761	Aftertreatment 2 Outlet 1 Gas Sensor Power Supply
5762	Transmission Load Reduction Inhibit Request
5763	Engine Exhaust Gas Recirculation 1 Actuator 1 Preliminary FMI
5764	Engine Exhaust Gas Recirculation 1 Actuator 1 Temperature Status
5765	Engine Exhaust Gas Recirculation 1 Actuator 1 Temperature
5766	Engine Exhaust Gas Recirculation 1 Actuator 1 Desired Position
5767	Engine Exhaust Gas Recirculation 1 Actuator 2 Preliminary FMI
5768	Engine Exhaust Gas Recirculation 1 Actuator 2 Temperature Status

5769	Engine Exhaust Gas Recirculation 1 Actuator 2 Temperature
5770	Engine Exhaust Gas Recirculation 1 Actuator 2 Desired Position
5771	Engine Exhaust Gas Recirculation 1 Actuator 1 Operation Status
5772	Engine Exhaust Gas Recirculation 1 Actuator 2 Operation Status
5773	Engine Exhaust Gas Recirculation 2 Actuator 1 Preliminary FMI
5774	Engine Exhaust Gas Recirculation 2 Actuator 1 Temperature Status
5775	Engine Exhaust Gas Recirculation 2 Actuator 1 Temperature
5776	Engine Exhaust Gas Recirculation 2 Actuator 1 Desired Position
5777	Engine Exhaust Gas Recirculation 2 Actuator 2 Preliminary FMI
5778	Engine Exhaust Gas Recirculation 2 Actuator 2 Temperature Status
5779	Engine Exhaust Gas Recirculation 2 Actuator 2 Temperature
5780	Engine Exhaust Gas Recirculation 2 Actuator 2 Desired Position
5781	Engine Exhaust Gas Recirculation 2 Actuator 1 Operation Status
5782	Engine Exhaust Gas Recirculation 2 Actuator 2 Operation Status
5783	Engine Throttle Valve 1 Temperature
5784	Engine Throttle Valve 2 Temperature
5785	Engine Fuel Valve 1 Temperature
5786	Engine Fuel Valve 2 Temperature
5787	Engine Turbocharger Wastegate Actuator 2 Temperature
5788	Engine Turbocharger Wastegate Actuator 1 Temperature
5789	Engine Exhaust Pressure Actuator 1 Desired Position
5790	Engine Exhaust Pressure Actuator 1 Temperature
5791	Engine Turbocharger Compressor Bypass Actuator 1 Temperature
5792	Engine Turbocharger Compressor Bypass Actuator 2 Temperature
5793	Desired Engine Fueling State
5794	Feedback Engine Fueling State
5795	Engine Fueling Inhibit Allowed
5796	Aftertreatment 1 SCR Dosing Air Assist Pump
5797	Aftertreatment Warm Up Diesel Oxidation Catalyst Temperature Sensor Module
5798	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 1 Heater Temperature
5799	Aftertreatment 1 SCR Dosing Air Assist Pump Relay
5800	Auxiliary valve 0 exit/reason code
5801	Auxiliary valve 1 exit/reason code
5802	Auxiliary valve 2 exit/reason code
5803	Auxiliary valve 3 exit/reason code
5804	Auxiliary valve 4 exit/reason code
5805	Auxiliary valve 5 exit/reason code
5806	Auxiliary valve 6 exit/reason code
5807	Auxiliary valve 7 exit/reason code
5808	Auxiliary valve 8 exit/reason code
5809	Auxiliary valve 9 exit/reason code
5810	Auxiliary valve 10 exit/reason code
5811	Auxiliary valve 11 exit/reason code
5812	Auxiliary valve 12 exit/reason code

5813	Auxiliary valve 13 exit/reason code
5814	Auxiliary valve 14 exit/reason code
5815	Auxiliary valve 15 exit/reason code
5816	Front hitch exit/reason code
5817	Front PTO exit/reason code
5818	Machine selected speed exit/reason code
5819	Rear hitch exit/reason code
5820	Rear PTO exit/reason code
5821	Wand Angle
5822	Wand Sensor Figure of Merit
5823	Measured Linear Displacement
5824	Linear Displacement Sensor Sensor Figure of Merit
5825	Driver Warning System Indicator Status
5826	Emission Control System Operator Inducement Severity
5827	Aftertreatment 1 Diesel Particulate Filter Average Distance Between Active Regenerations
5828	Aftertreatment 2 Diesel Particulate Filter Average Distance Between Active Regenerations
5829	Engine Exhaust Gas Recirculation 1 Valve 1 Position Error
5830	Engine Exhaust Gas Recirculation 1 Valve 2 Position Error
5831	Engine Exhaust Gas Recirculation 2 Valve 1 Position Error
5832	Engine Exhaust Gas Recirculation 2 Valve 2 Position Error
5833	Engine Fuel Mass Flow Rate
5834	Aftertreatment 2 Fuel Mass Rate
5835	Aftertreatment 1 Particulate Sensor
5836	Aftertreatment 2 Particulate Sensor
5837	Fuel Type
5838	Engine Exhaust Gas Recirculation Valve Malfunction
5839	Diesel Exhaust Fluid Consumption Malfunction
5840	Diesel Exhaust Fluid Dosing Malfunction
5841	Diesel Exhaust Fluid Quality Malfunction
5842	SCR Monitoring System Malfunction
5843	Engine OBD Warm-up Sequence
5844	Model Year
5845	Certification Engine Family Name
5846	OBD Test Results
5847	Emergency Braking Active
5848	Aftertreatment 1 SCR Intermediate NH3
5849	Aftertreatment 1 SCR Intermediate NH3 Sensor Preliminary FMI
5850	Aftertreatment 1 SCR Intermediate NH3 Reading Stable
5851	Aftertreatment 1 SCR Intermediate NH3 Sensor Power In Range
5852	Aftertreatment 1 SCR Intermediate NH3 Sensor at Temperature
5853	Aftertreatment 1 SCR Intermediate NH3 Sensor Heater Preliminary FMI
5854	Aftertreatment 1 SCR Intermediate NH3 Sensor Heater Control
5855	Aftertreatment 2 SCR Intermediate NH3
5856	Aftertreatment 2 SCR Intermediate NH3 Sensor Preliminary FMI

5857	Aftertreatment 2 SCR Intermediate NH3 Reading Stable
5858	Aftertreatment 2 SCR Intermediate NH3 Sensor Power In Range
5859	Aftertreatment 2 SCR Intermediate NH3 Sensor at Temperature
5860	Aftertreatment 2 SCR Intermediate NH3 Sensor Heater Preliminary FMI
5861	Aftertreatment 2 SCR Intermediate NH3 Sensor Heater Control
5862	Aftertreatment 1 SCR Intermediate Temperature
5863	Aftertreatment 1 SCR Intermediate Temperature Preliminary FMI
5864	Aftertreatment 2 SCR Intermediate Temperature
5865	Aftertreatment 2 SCR Intermediate Temperature Preliminary FMI
5866	Engine Fueling Inhibit Prevented Reason
5867	Supply Gas Methane Percentage
5868	Spark Ignition Module Shutdown Relay Driver Control Circuit
5869	Auxiliary Device AC Power Supply Circuit Breaker Tripped
5870	Alternator Heater Control Relay Driver Control Circuit
5871	O2 Sensor Power Relay Driver Control Circuit
5872	Hybrid System Warning Indicator
5873	Hybrid System Overheat Indicator
5874	Hybrid System Stop Indicator
5875	Transmission Ratio Neutral
5876	Transmission Ratio Forward Range Low
5877	Transmission Ratio Forward Range 1
5878	Transmission Ratio Forward Range 2
5879	Transmission Ratio Forward Range 3
5880	Transmission Ratio Forward Range 4
5881	Transmission Ratio Forward Range 5
5882	Transmission Ratio Forward Range 6
5883	Transmission Ratio Forward Range 7
5884	Transmission Ratio Forward Range 8
5885	Transmission Ratio Forward Range 9
5886	Transmission Ratio Forward Range 10
5887	Transmission Ratio Reverse Range 1
5888	Transmission Ratio Reverse Range 2
5889	Hybrid System Fault
5890	Hybrid System Temperature
5891	Transmission Pressure Switch 1
5892	Transmission Pressure Switch 2
5893	Transmission Pressure Switch 3
5894	Transmission Pressure Switch 4
5895	Transmission Pressure Switch 5
5896	Transmission Pressure Switch 6
5897	Transmission Pressure Switch 7
5898	Transmission Pressure Switch 8
5899	Transmission Pressure Switch 9
5900	Transmission Pressure Control Solenoid 1

5901	Transmission Pressure Control Solenoid 2
5902	Transmission Pressure Control Solenoid 3
5903	Transmission Pressure Control Solenoid 4
5904	Transmission Pressure Control Solenoid 5
5905	Transmission Pressure Control Solenoid 6
5906	Transmission Pressure Control Solenoid 7
5907	Transmission Pressure Control Solenoid 8
5908	Transmission Shift Solenoid 1
5909	Transmission Shift Solenoid 2
5910	Transmission Shift Solenoid 3
5911	Transmission Shift Solenoid 4
5912	Transmission ECU Temperature
5913	Transmission Oil Temperature 2
5914	Transmission Oil Level 2 High / Low
5915	Transmission Oil Level 2 Countdown Timer
5916	Transmission Oil Level 2 Measurement Status
5917	HVES1 Available Discharge Power
5918	HVES1 Available Charge Power
5919	HVES1 Voltage Level
5920	HVES1 Current
5921	HVES1 Fast Update State of Charge
5922	HVES1 Highest Cell Voltage
5923	HVES1 Lowest Cell Voltage
5924	HVES1 Cell Voltage Differential Status
5925	Engine Oil Temperature 3
5926	Engine Charge Air Cooler Differential Pressure
5927	Engine Coolant Pump
5928	Engine Exhaust Gas Recirculation 1 Valve 1 Control 2
5929	Engine Exhaust Gas Recirculation 1 Catalyst 1 Performance Monitor
5930	Engine Exhaust Gas Recirculation 1 Catalyst 2 Performance Monitor
5931	Engine Exhaust Gas Recirculation 2 Catalyst 1 Performance Monitor
5932	Engine Exhaust Gas Recirculation 2 Catalyst 2 Performance Monitor
5933	Rear Steer Axle Group Weight Available
5934	Rear Drive Axle Group Weight Available
5935	Additional Axle Group Location
5936	Additional Axle Group Location
5937	Transmission Clutch 2 Pressure
5938	Transmission Oil Transmission Cooler Outlet Temperature
5939	Transmission Clutch 1 Temperature
5940	Transmission Clutch 2 Temperature
5941	Transmission Shift Rail 4 Position
5942	Transmission Shift Rail 5 Position
5943	Transmission Shift Rail 6 Position
5944	Transmission Clutch 1 Actuator Percent

5945	Transmission Clutch 2 Actuator Percent
5946	Transmission Hydraulic Pump Actuator 1 Percent
5947	Transmission Shift Actuator 1 Percent
5948	Transmission Shift Actuator 2 Percent
5949	Transmission Clutch 1 Cooling Actuator Status
5950	Transmission Clutch 2 Cooling Actuator Status
5951	Transmission Shift Rail 1 Actuator Status
5952	Transmission Shift Rail 2 Actuator Status
5953	Transmission Shift Rail 3 Actuator Status
5954	Transmission Shift Rail 4 Actuator Status
5955	Transmission Shift Rail 5 Actuator Status
5956	Transmission Shift Rail 6 Actuator Status
5957	Dual Clutch Transmission Selected Pre-selection Gear
5958	Dual Clutch Transmission Current Pre-selection Gear
5960	Dual Clutch Transmission Input Shaft 1 Speed
5961	Dual Clutch Transmission Input Shaft 2 Speed
5963	Aftertreatment 1 Total Diesel Exhaust Fluid Used
5964	Aftertreatment 2 Total Diesel Exhaust Fluid Used
5965	Aftertreatment 1 Diesel Exhaust Fluid Control Module 1 Relay Control
5966	Aftertreatment 1 Diesel Exhaust Fluid Control Module 1 Power Supply 1
5967	Aftertreatment 2 Diesel Exhaust Fluid Control Module 1 Relay Control
5968	Aftertreatment 2 Diesel Exhaust Fluid Control Module 1 Power Supply 1
5969	Engine Exhaust Manifold Bank 2 Temperature 2
5970	Engine Exhaust Manifold Bank 1 Temperature 2
5971	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 1 Heater
5972	Aftertreatment 2 Diesel Exhaust Fluid Doser 1 Absolute Pressure (Duplicate, use SPN 4387)
5973	Aftertreatment 2 Diesel Exhaust Fluid Line Heater Relay 1
5974	Aftertreatment 2 Diesel Exhaust Fluid Doser Valve 1
5975	Engine Fuel Pump Pressurizing Assembly 3
5976	Engine Fuel Pump Pressurizing Assembly 4
5977	Engine Fuel Injection Pump 2 Speed/Position Sensor
5978	Aftertreatment 1 Diesel Particulate Filter Time to Next Active Regeneration
5979	Aftertreatment 2 Diesel Particulate Filter Time to Next Active Regeneration
5980	Engine Turbocharger Differential Speed
5981	SLI Battery Pack State of Charge
5982	SLI Battery Pack Capacity
5983	SLI Battery Pack Health
5984	Switched Power Output #4 Command
5985	Switched Power Output #3 Command
5986	Switched Power Output #2 Command
5987	Switched Power Output #1 Command
5988	Switched Power Output #8 Command
5989	Switched Power Output #7 Command
5990	Switched Power Output #6 Command

5991	Switched Power Output #5 Command
5992	Switched Power Output #12 Command
5993	Switched Power Output #11 Command
5994	Switched Power Output #10 Command
5995	Switched Power Output #9 Command
5996	Switched Power Output #16 Command
5997	Switched Power Output #15 Command
5998	Switched Power Output #14 Command
5999	Switched Power Output #13 Command
6000	Switched Power Output #20 Command
6001	Switched Power Output #19 Command
6002	Switched Power Output #18 Command
6003	Switched Power Output #17 Command
6004	Switched Power Output #24 Command
6005	Switched Power Output #23 Command
6006	Switched Power Output #22 Command
6007	Switched Power Output #21 Command
6008	Switched Power Output #28 Command
6009	Switched Power Output #27 Command
6010	Switched Power Output #26 Command
6011	Switched Power Output #25 Command
6012	Switched Power Output #32 Command
6013	Switched Power Output #31 Command
6014	Switched Power Output #30 Command
6015	Switched Power Output #29 Command
6016	Fused Output #4
6017	Fused Output #3
6018	Fused Output #2
6019	Fused Output #1
6020	Fused Output #8
6021	Fused Output #7
6022	Fused Output #6
6023	Fused Output #5
6024	Fused Output #12
6025	Fused Output #11
6026	Fused Output #10
6027	Fused Output #9
6028	Fused Output #16
6029	Fused Output #15
6030	Fused Output #14
6031	Fused Output #13
6032	Fused Output #20
6033	Fused Output #19
6034	Fused Output #18

6035	Fused Output #17
6036	Fused Output #24
6037	Fused Output #23
6038	Fused Output #22
6039	Fused Output #21
6040	Fused Output #28
6041	Fused Output #27
6042	Fused Output #26
6043	Fused Output #25
6044	Fused Output #32
6045	Fused Output #31
6046	Fused Output #30
6047	Fused Output #29
6048	Switched Output #4
6049	Switched Output #3
6050	Switched Output #2
6051	Switched Output #1
6052	Switched Output #8
6053	Switched Output #7
6054	Switched Output #6
6055	Switched Output #5
6056	Switched Output #12
6057	Switched Output #11
6058	Switched Output #10
6059	Switched Output #9
6060	Switched Output #16
6061	Switched Output #15
6062	Switched Output #14
6063	Switched Output #13
6064	Switched Output #20
6065	Switched Output #19
6066	Switched Output #18
6067	Switched Output #17
6068	Switched Output #24
6069	Switched Output #23
6070	Switched Output #22
6071	Switched Output #21
6072	Switched Output #28
6073	Switched Output #27
6074	Switched Output #26
6075	Switched Output #25
6076	Switched Output #32
6077	Switched Output #31
6078	Switched Output #30

6079	Switched Output #29
6080	Fused Output #1 Current
6081	Fused Output #2 Current
6082	Fused Output #3 Current
6083	Fused Output #4 Current
6084	Fused Output #5 Current
6085	Fused Output #6 Current
6086	Fused Output #7 Current
6087	Fused Output #8 Current
6088	Fused Output #9 Current
6089	Fused Output #10 Current
6090	Fused Output #11 Current
6091	Fused Output #12 Current
6092	Fused Output #13 Current
6093	Fused Output #14 Current
6094	Fused Output #15 Current
6095	Fused Output #16 Current
6096	Fused Output #17 Current
6097	Fused Output #18 Current
6098	Fused Output #19 Current
6099	Fused Output #20 Current
6100	Fused Output #21 Current
6101	Fused Output #22 Current
6102	Fused Output #23 Current
6103	Fused Output #24 Current
6104	Fused Output #25 Current
6105	Fused Output #26 Current
6106	Fused Output #27 Current
6107	Fused Output #28 Current
6108	Fused Output #29 Current
6109	Fused Output #30 Current
6110	Fused Output #31 Current
6111	Fused Output #32 Current
6112	Switched Output #1 Current
6113	Switched Output #2 Current
6114	Switched Output #3 Current
6115	Switched Output #4 Current
6116	Switched Output #5 Current
6117	Switched Output #6 Current
6118	Switched Output #7 Current
6119	Switched Output #8 Current
6120	Switched Output #9 Current
6121	Switched Output #10 Current
6122	Switched Output #11 Current

6123	Switched Output #12 Current
6124	Switched Output #13 Current
6125	Switched Output #14 Current
6126	Switched Output #15 Current
6127	Switched Output #16 Current
6128	Switched Output #17 Current
6129	Switched Output #18 Current
6130	Switched Output #19 Current
6131	Switched Output #20 Current
6132	Switched Output #21 Current
6133	Switched Output #22 Current
6134	Switched Output #23 Current
6135	Switched Output #24 Current
6136	Switched Output #25 Current
6137	Switched Output #26 Current
6138	Switched Output #27 Current
6139	Switched Output #28 Current
6140	Switched Output #29 Current
6141	Switched Output #30 Current
6142	Switched Output #31 Current
6143	Switched Output #32 Current
6144	Transmission Shift Rail 1
6145	Transmission Shift Rail 2
6146	Transmission Shift Rail 3
6147	Transmission Shift Rail 4
6148	Transmission Shift Rail 5
6149	Transmission Shift Rail 6
6150	Transmission Clutch 1
6151	Transmission Clutch 2
6152	Transmission Synchronizer 1
6153	Transmission Synchronizer 2
6154	Transmission Synchronizer 3
6155	Transmission Synchronizer 4
6156	Transmission Synchronizer 5
6157	Transmission Synchronizer 6
6158	Transmission Synchronizer 7
6159	Transmission Neutral Selector 2
6160	Transmission Alternate Shift Schedule Selector
6161	Engine Cylinder 1 Pressure
6162	Engine Cylinder 2 Pressure
6163	Engine Cylinder 3 Pressure
6164	Engine Cylinder 4 Pressure
6165	Engine Cylinder 5 Pressure
6166	Engine Cylinder 6 Pressure

6167	Engine Cylinder 7 Pressure
6168	Engine Cylinder 8 Pressure
6169	Engine Cylinder 9 Pressure
6170	Engine Cylinder 10 Pressure
6171	Engine Cylinder 11 Pressure
6172	Engine Cylinder 12 Pressure
6173	Engine Cylinder 13 Pressure
6174	Engine Cylinder 14 Pressure
6175	Engine Cylinder 15 Pressure
6176	Engine Cylinder 16 Pressure
6177	Engine Cylinder 17 Pressure
6178	Engine Cylinder 18 Pressure
6179	Engine Cylinder 19 Pressure
6180	Engine Cylinder 20 Pressure
6181	Engine Cylinder 1 Gaseous Fuel Valve
6182	Engine Cylinder 2 Gaseous Fuel Valve
6183	Engine Cylinder 3 Gaseous Fuel Valve
6184	Engine Cylinder 4 Gaseous Fuel Valve
6185	Engine Cylinder 5 Gaseous Fuel Valve
6186	Engine Cylinder 6 Gaseous Fuel Valve
6187	Engine Cylinder 7 Gaseous Fuel Valve
6188	Engine Cylinder 8 Gaseous Fuel Valve
6189	Engine Cylinder 9 Gaseous Fuel Valve
6190	Engine Cylinder 10 Gaseous Fuel Valve
6191	Engine Cylinder 11 Gaseous Fuel Valve
6192	Engine Cylinder 12 Gaseous Fuel Valve
6193	Engine Cylinder 13 Gaseous Fuel Valve
6194	Engine Cylinder 14 Gaseous Fuel Valve
6195	Engine Cylinder 15 Gaseous Fuel Valve
6196	Engine Cylinder 16 Gaseous Fuel Valve
6197	Engine Cylinder 17 Gaseous Fuel Valve
6198	Engine Cylinder 18 Gaseous Fuel Valve
6199	Engine Cylinder 19 Gaseous Fuel Valve
6200	Engine Cylinder 20 Gaseous Fuel Valve
6201	Engine Turbocharger Compressor Blowoff Actuator 1 Command
6202	Engine Control Module 1 Ready for Use Lamp Data
6203	Engine Control Module 2 Ready for Use Lamp Data
6204	Engine Control Module 3 Ready for Use Lamp Data
6205	Engine Control Module 1 Ready for Use Lamp Command
6206	Engine Control Module 2 Ready for Use Lamp Command
6207	Engine Control Module 3 Ready for Use Lamp Command
6208	AEBS readiness state
6209	Engine Coolant Temperature 3
6210	Aftertreatment 1 Burner

6211	Aftertreatment 2 Burner
6212	Aftertreatment 1 Burner Unit Spark Plug
6213	Aftertreatment 2 Burner Unit Spark Plug
6214	Engine Ignition Control Module 1 Temperature
6215	Engine Ignition Control Module 2 Temperature
6216	Engine Ignition Control Module 1 State
6217	Engine Ignition Control Module 2 State
6218	Engine Spark Plug Secondary Voltage Tracking Reset
6219	Engine Ignition Control Maintenance Hours Reset
6220	Engine Ignition Control Module 1 Time Remaining
6221	Engine Ignition Control Module 2 Time Remaining
6222	Engine Spark Plug 1 Minimum Voltage
6223	Engine Spark Plug 2 Minimum Voltage
6224	Engine Spark Plug 3 Minimum Voltage
6225	Engine Spark Plug 4 Minimum Voltage
6226	Engine Spark Plug 5 Minimum Voltage
6227	Engine Spark Plug 6 Minimum Voltage
6228	Engine Spark Plug 7 Minimum Voltage
6229	Engine Spark Plug 8 Minimum Voltage
6230	Engine Spark Plug 9 Minimum Voltage
6231	Engine Spark Plug 10 Minimum Voltage
6232	Engine Spark Plug 11 Minimum Voltage
6233	Engine Spark Plug 12 Minimum Voltage
6234	Engine Spark Plug 13 Minimum Voltage
6235	Engine Spark Plug 14 Minimum Voltage
6236	Engine Spark Plug 15 Minimum Voltage
6237	Engine Spark Plug 16 Minimum Voltage
6238	Engine Spark Plug 17 Minimum Voltage
6239	Engine Spark Plug 18 Minimum Voltage
6240	Engine Spark Plug 19 Minimum Voltage
6241	Engine Spark Plug 20 Minimum Voltage
6242	Engine Spark Plug 21 Minimum Voltage
6243	Engine Spark Plug 22 Minimum Voltage
6244	Engine Spark Plug 23 Minimum Voltage
6245	Engine Spark Plug 24 Minimum Voltage
6246	Engine Spark Plug 1 Maximum Voltage
6247	Engine Spark Plug 2 Maximum Voltage
6248	Engine Spark Plug 3 Maximum Voltage
6249	Engine Spark Plug 4 Maximum Voltage
6250	Engine Spark Plug 5 Maximum Voltage
6251	Engine Spark Plug 6 Maximum Voltage
6252	Engine Spark Plug 7 Maximum Voltage
6253	Engine Spark Plug 8 Maximum Voltage
6254	Engine Spark Plug 9 Maximum Voltage

6255	Engine Spark Plug 10 Maximum Voltage
6256	Engine Spark Plug 11 Maximum Voltage
6257	Engine Spark Plug 12 Maximum Voltage
6258	Engine Spark Plug 13 Maximum Voltage
6259	Engine Spark Plug 14 Maximum Voltage
6260	Engine Spark Plug 15 Maximum Voltage
6261	Engine Spark Plug 16 Maximum Voltage
6262	Engine Spark Plug 17 Maximum Voltage
6263	Engine Spark Plug 18 Maximum Voltage
6264	Engine Spark Plug 19 Maximum Voltage
6265	Engine Spark Plug 20 Maximum Voltage
6266	Engine Spark Plug 21 Maximum Voltage
6267	Engine Spark Plug 22 Maximum Voltage
6268	Engine Spark Plug 23 Maximum Voltage
6269	Engine Spark Plug 24 Maximum Voltage
6270	Engine Spark Plug 1 Misfire Rate
6271	Engine Spark Plug 2 Misfire Rate
6272	Engine Spark Plug 3 Misfire Rate
6273	Engine Spark Plug 4 Misfire Rate
6274	Engine Spark Plug 5 Misfire Rate
6275	Engine Spark Plug 6 Misfire Rate
6276	Engine Spark Plug 7 Misfire Rate
6277	Engine Spark Plug 8 Misfire Rate
6278	Engine Spark Plug 9 Misfire Rate
6279	Engine Spark Plug 10 Misfire Rate
6280	Engine Spark Plug 11 Misfire Rate
6281	Engine Spark Plug 12 Misfire Rate
6282	Engine Spark Plug 13 Misfire Rate
6283	Engine Spark Plug 14 Misfire Rate
6284	Engine Spark Plug 15 Misfire Rate
6285	Engine Spark Plug 16 Misfire Rate
6286	Engine Spark Plug 17 Misfire Rate
6287	Engine Spark Plug 18 Misfire Rate
6288	Engine Spark Plug 19 Misfire Rate
6289	Engine Spark Plug 20 Misfire Rate
6290	Engine Spark Plug 21 Misfire Rate
6291	Engine Spark Plug 22 Misfire Rate
6292	Engine Spark Plug 23 Misfire Rate
6293	Engine Spark Plug 24 Misfire Rate
6294	Engine Turbocharger 1 Wastegate Actuator 2
6295	Engine Turbocharger 2 Wastegate Actuator 1
6296	Engine Turbocharger 2 Wastegate Actuator 2
6297	Engine Turbocharger 3 Wastegate Actuator 1
6298	Engine Turbocharger 3 Wastegate Actuator 2

6299	Engine Turbocharger 4 Wastegate Actuator 1
6300	Engine Turbocharger 4 Wastegate Actuator 2
6301	Water in Fuel Indicator 2
6302	Engine Crankcase Pressure 2
6303	Engine Coolant Level 2
6304	Brake Switch and Accelerator Pedal Position Incompatible
6305	Powertrain Circuit Air Supply Pressure
6306	Powertrain Circuit Air Supply Pressure Request
6307	Source Address of Controlling Device for Fueling State
6308	Wheel Lockup Status
6309	Aftertreatment 1 Diesel Exhaust Fluid Control Module 1 Power Supply 2
6310	Aftertreatment 2 Diesel Exhaust Fluid Control Module 1 Power Supply 2
6311	Engine Turbocharger Compressor Blowoff Actuator 1 Preliminary FMI
6312	Engine Turbocharger Compressor Blowoff Actuator 1 Temperature Status
6313	Engine Turbocharger Compressor Blowoff Actuator 1 Temperature
6314	Engine Turbocharger Compressor Blowoff Actuator 1 Desired Position
6315	Engine Turbocharger Compressor Blowoff Actuator 1 Position
6316	Engine Turbocharger Compressor Blowoff Actuator 1 Operation Status
6317	Requested Fuel Type
6318	Emergency Fuel Limit Inhibit Switch
6319	Engine Total Hours of Gaseous Fuel Operation
6320	Engine Total Hours of Diesel Fuel Operation
6321	Engine Oil Filter Differential Pressure (Extended Range)
6322	Aftertreatment 1 SCR Desulfation too Frequent
6323	Engine Fuel Supply Pump
6324	Aftertreatment 1 Diesel Exhaust Fluid Doser Valve 2
6325	Aftertreatment 2 Diesel Exhaust Fluid Doser Valve 2
6326	Aftertreatment 1 Diesel Exhaust Fluid Doser Valve 1 Heater
6327	Aftertreatment 1 Diesel Exhaust Fluid Doser Valve 2 Heater
6328	Aftertreatment 2 Diesel Exhaust Fluid Doser Valve 1 Heater
6329	Aftertreatment 2 Diesel Exhaust Fluid Doser Valve 2 Heater
6330	Engine Intake Air Source Valve
6331	Engine Intake Air Source Valve Position
6332	Engine Intake Air Source Valve Power Supply
6333	Engine Gas Substitution Fuel Percentage
6334	Engine Timing Actuator 1 Requested Position
6335	Engine Timing Actuator 2 Requested Position
6336	Engine Timing Actuator 1 Position Command
6337	Engine Timing Actuator 2 Position Command
6338	Joystick 1 Lamp 1 Status
6339	Joystick 1 Lamp 2 Status
6340	Joystick 1 Lamp 3 Status
6341	Joystick 1 Lamp 4 Status
6342	Joystick 1 Lamp 5 Status

6343	Joystick 1 Lamp 6 Status
6344	Joystick 1 Lamp 7 Status
6345	Joystick 1 Lamp 8 Status
6346	Joystick 1 Lamp 9 Status
6347	Joystick 1 Lamp 10 Status
6348	Joystick 2 Lamp 1 Status
6349	Joystick 2 Lamp 2 Status
6350	Joystick 2 Lamp 3 Status
6351	Joystick 2 Lamp 4 Status
6352	Joystick 2 Lamp 5 Status
6353	Joystick 2 Lamp 6 Status
6354	Joystick 2 Lamp 7 Status
6355	Joystick 2 Lamp 8 Status
6356	Joystick 2 Lamp 9 Status
6357	Joystick 2 Lamp 10 Status
6358	Joystick 3 Lamp 1 Status
6359	Joystick 3 Lamp 2 Status
6360	Joystick 3 Lamp 3 Status
6361	Joystick 3 Lamp 4 Status
6362	Joystick 3 Lamp 5 Status
6363	Joystick 3 Lamp 6 Status
6364	Joystick 3 Lamp 7 Status
6365	Joystick 3 Lamp 8 Status
6366	Joystick 3 Lamp 9 Status
6367	Joystick 3 Lamp 10 Status
6368	Number of Assembly Unit Identification Fields
6369	Assembly Unit Identification
6370	Soft Top Speed Limit Active
6371	Soft Top Ratio Limit Exceeded
6372	Soft Top Speed Limit Remaining Distance
6373	Soft Top Speed Limit Reset Distance
6374	Steering Controller ECU Temperature
6375	Steering Mode Switch
6376	Front Steering Axle Centered Status
6377	Rear Steering Axle Centered Status
6378	2 Wheel Steer Actuator State
6379	4 Wheel Steer Actuator State
6380	Circle Steer Mode Actuator State
6381	Crab Steer Mode Actuator State
6382	Steer Actuator Common Return 1
6383	Steer Actuator Common Return 2
6384	Engine Exhaust Pressure 1 (Extended Range)
6385	Engine Starter Motor Relay Control
6386	Engine Gas Substitution Fuel Percentage Command

6387	Engine Cylinder Gas Mass Flow Rate Command
6388	Engine Cylinder Diesel Mass Flow Rate Command
6389	Engine Cylinder Torque
6390	Engine Cylinder Pressure Monitor 1 Preliminary FMI
6391	Engine Cylinder Pressure Monitor 2 Preliminary FMI
6392	Engine Desired Air Fuel Ratio
6393	Engine Fuel System 1 Total Intake Mass Air Flow Rate
6394	Number of Combustion Cycles for Averaging
6395	Engine Configuration Identification
6396	Engine Cylinder 1 Heat Release
6397	Engine Cylinder 1 Peak Pressure
6398	Engine Cylinder 1 Synchronous Knock Level
6399	Engine Cylinder 1 Pressure Sensor Preliminary FMI
6400	Engine Cylinder 2 Heat Release
6401	Engine Cylinder 2 Peak Pressure
6402	Engine Cylinder 2 Synchronous Knock Level
6403	Engine Cylinder 2 Pressure Sensor Preliminary FMI
6404	Engine Cylinder 3 Heat Release
6405	Engine Cylinder 3 Peak Pressure
6406	Engine Cylinder 3 Synchronous Knock Level
6407	Engine Cylinder 3 Pressure Sensor Preliminary FMI
6408	Engine Cylinder 4 Heat Release
6409	Engine Cylinder 4 Peak Pressure
6410	Engine Cylinder 4 Synchronous Knock Level
6411	Engine Cylinder 4 Pressure Sensor Preliminary FMI
6412	Engine Cylinder 5 Heat Release
6413	Engine Cylinder 5 Peak Pressure
6414	Engine Cylinder 5 Synchronous Knock Level
6415	Engine Cylinder 5 Pressure Sensor Preliminary FMI
6416	Engine Cylinder 6 Heat Release
6417	Engine Cylinder 6 Peak Pressure
6418	Engine Cylinder 6 Synchronous Knock Level
6419	Engine Cylinder 6 Pressure Sensor Preliminary FMI
6420	Engine Cylinder 7 Heat Release
6421	Engine Cylinder 7 Peak Pressure
6422	Engine Cylinder 7 Synchronous Knock Level
6423	Engine Cylinder 7 Pressure Sensor Preliminary FMI
6424	Engine Cylinder 8 Heat Release
6425	Engine Cylinder 8 Peak Pressure
6426	Engine Cylinder 8 Synchronous Knock Level
6427	Engine Cylinder 8 Pressure Sensor Preliminary FMI
6428	Engine Cylinder 9 Heat Release
6429	Engine Cylinder 9 Peak Pressure
6430	Engine Cylinder 9 Synchronous Knock Level

6431	Engine Cylinder 9 Pressure Sensor Preliminary FMI
6432	Engine Cylinder 10 Heat Release
6433	Engine Cylinder 10 Peak Pressure
6434	Engine Cylinder 10 Synchronous Knock Level
6435	Engine Cylinder 10 Pressure Sensor Preliminary FMI
6436	Engine Cylinder 11 Heat Release
6437	Engine Cylinder 11 Peak Pressure
6438	Engine Cylinder 11 Synchronous Knock Level
6439	Engine Cylinder 11 Pressure Sensor Preliminary FMI
6440	Engine Cylinder 12 Heat Release
6441	Engine Cylinder 12 Peak Pressure
6442	Engine Cylinder 12 Synchronous Knock Level
6443	Engine Cylinder 12 Pressure Sensor Preliminary FMI
6444	Engine Cylinder 13 Heat Release
6445	Engine Cylinder 13 Peak Pressure
6446	Engine Cylinder 13 Synchronous Knock Level
6447	Engine Cylinder 13 Pressure Sensor Preliminary FMI
6448	Engine Cylinder 14 Heat Release
6449	Engine Cylinder 14 Peak Pressure
6450	Engine Cylinder 14 Synchronous Knock Level
6451	Engine Cylinder 14 Pressure Sensor Preliminary FMI
6452	Engine Cylinder 15 Heat Release
6453	Engine Cylinder 15 Peak Pressure
6454	Engine Cylinder 15 Synchronous Knock Level
6455	Engine Cylinder 15 Pressure Sensor Preliminary FMI
6456	Engine Cylinder 16 Heat Release
6457	Engine Cylinder 16 Peak Pressure
6458	Engine Cylinder 16 Synchronous Knock Level
6459	Engine Cylinder 16 Pressure Sensor Preliminary FMI
6460	Engine Cylinder 17 Heat Release
6461	Engine Cylinder 17 Peak Pressure
6462	Engine Cylinder 17 Synchronous Knock Level
6463	Engine Cylinder 17 Pressure Sensor Preliminary FMI
6464	Engine Cylinder 18 Heat Release
6465	Engine Cylinder 18 Peak Pressure
6466	Engine Cylinder 18 Synchronous Knock Level
6467	Engine Cylinder 18 Pressure Sensor Preliminary FMI
6468	Engine Cylinder 19 Heat Release
6469	Engine Cylinder 19 Peak Pressure
6470	Engine Cylinder 19 Synchronous Knock Level
6471	Engine Cylinder 19 Pressure Sensor Preliminary FMI
6472	Engine Cylinder 20 Heat Release
6473	Engine Cylinder 20 Peak Pressure
6474	Engine Cylinder 20 Synchronous Knock Level

6475	Engine Cylinder 20 Pressure Sensor Preliminary FMI
6476	Aftertreatment Diesel Exhaust Fluid Doser Cooldown Interrupt Count
6477	Aftertreatment Diesel Exhaust Fluid Doser Purge Interrupt Count
6478	Aftertreatment Diesel Exhaust Fluid Doser Cooldown Complete This Cycle
6479	Aftertreatment Diesel Exhaust Fluid Doser Cooldown Complete Last Cycle
6480	Aftertreatment Diesel Exhaust Fluid Doser Purge Complete This Cycle
6481	Aftertreatment Diesel Exhaust Fluid Doser Purge Complete Last Cycle
6482	After-run Complete This Cycle
6483	Engine Cylinder 1 Indicated Mean Effective Pressure
6484	Engine Cylinder 1 Average Start of Combustion Timing
6485	Engine Cylinder 1 Average Center of Combustion Timing
6486	Engine Cylinder 1 Average Combustion Duration
6487	Engine Cylinder 2 Indicated Mean Effective Pressure
6488	Engine Cylinder 2 Average Start of Combustion Timing
6489	Engine Cylinder 2 Average Center of Combustion Timing
6490	Engine Cylinder 2 Average Combustion Duration
6491	Engine Cylinder 3 Indicated Mean Effective Pressure
6492	Engine Cylinder 3 Average Start of Combustion Timing
6493	Engine Cylinder 3 Average Center of Combustion Timing
6494	Engine Cylinder 3 Average Combustion Duration
6495	Engine Cylinder 4 Indicated Mean Effective Pressure
6496	Engine Cylinder 4 Average Start of Combustion Timing
6497	Engine Cylinder 4 Average Center of Combustion Timing
6498	Engine Cylinder 4 Average Combustion Duration
6499	Engine Cylinder 5 Indicated Mean Effective Pressure
6500	Engine Cylinder 5 Average Start of Combustion Timing
6501	Engine Cylinder 5 Average Center of Combustion Timing
6502	Engine Cylinder 5 Average Combustion Duration
6503	Engine Cylinder 6 Indicated Mean Effective Pressure
6504	Engine Cylinder 6 Average Start of Combustion Timing
6505	Engine Cylinder 6 Average Center of Combustion Timing
6506	Engine Cylinder 6 Average Combustion Duration
6507	Engine Cylinder 7 Indicated Mean Effective Pressure
6508	Engine Cylinder 7 Average Start of Combustion Timing
6509	Engine Cylinder 7 Average Center of Combustion Timing
6510	Engine Cylinder 7 Average Combustion Duration
6511	Engine Cylinder 8 Indicated Mean Effective Pressure
6512	Engine Cylinder 8 Average Start of Combustion Timing
6513	Engine Cylinder 8 Average Center of Combustion Timing
6514	Engine Cylinder 8 Average Combustion Duration
6515	Engine Cylinder 9 Indicated Mean Effective Pressure
6516	Engine Cylinder 9 Average Start of Combustion Timing
6517	Engine Cylinder 9 Average Center of Combustion Timing
6518	Engine Cylinder 9 Average Combustion Duration

6519	Engine Cylinder 10 Indicated Mean Effective Pressure
6520	Engine Cylinder 10 Average Start of Combustion Timing
6521	Engine Cylinder 10 Average Center of Combustion Timing
6522	Engine Cylinder 10 Average Combustion Duration
6523	Engine Cylinder 11 Indicated Mean Effective Pressure
6524	Engine Cylinder 11 Average Start of Combustion Timing
6525	Engine Cylinder 11 Average Center of Combustion Timing
6526	Engine Cylinder 11 Average Combustion Duration
6527	Engine Cylinder 12 Indicated Mean Effective Pressure
6528	Engine Cylinder 12 Average Start of Combustion Timing
6529	Engine Cylinder 12 Average Center of Combustion Timing
6530	Engine Cylinder 12 Average Combustion Duration
6531	Engine Cylinder 13 Indicated Mean Effective Pressure
6532	Engine Cylinder 13 Average Start of Combustion Timing
6533	Engine Cylinder 13 Average Center of Combustion Timing
6534	Engine Cylinder 13 Average Combustion Duration
6535	Engine Cylinder 14 Indicated Mean Effective Pressure
6536	Engine Cylinder 14 Average Start of Combustion Timing
6537	Engine Cylinder 14 Average Center of Combustion Timing
6538	Engine Cylinder 14 Average Combustion Duration
6539	Engine Cylinder 15 Indicated Mean Effective Pressure
6540	Engine Cylinder 15 Average Start of Combustion Timing
6541	Engine Cylinder 15 Average Center of Combustion Timing
6542	Engine Cylinder 15 Average Combustion Duration
6543	Engine Cylinder 16 Indicated Mean Effective Pressure
6544	Engine Cylinder 16 Average Start of Combustion Timing
6545	Engine Cylinder 16 Average Center of Combustion Timing
6546	Engine Cylinder 16 Average Combustion Duration
6547	Engine Cylinder 17 Indicated Mean Effective Pressure
6548	Engine Cylinder 17 Average Start of Combustion Timing
6549	Engine Cylinder 17 Average Center of Combustion Timing
6550	Engine Cylinder 17 Average Combustion Duration
6551	Engine Cylinder 18 Indicated Mean Effective Pressure
6552	Engine Cylinder 18 Average Start of Combustion Timing
6553	Engine Cylinder 18 Average Center of Combustion Timing
6554	Engine Cylinder 18 Average Combustion Duration
6555	Engine Cylinder 19 Indicated Mean Effective Pressure
6556	Engine Cylinder 19 Average Start of Combustion Timing
6557	Engine Cylinder 19 Average Center of Combustion Timing
6558	Engine Cylinder 19 Average Combustion Duration
6559	Engine Cylinder 20 Indicated Mean Effective Pressure
6560	Engine Cylinder 20 Average Start of Combustion Timing
6561	Engine Cylinder 20 Average Center of Combustion Timing
6562	Engine Cylinder 20 Average Combustion Duration

6563	Aftertreatment Trip Diesel Exhaust Fluid
6564	Engine Cylinder Pressure Monitor 1
6565	Engine Cylinder Pressure Monitor 2
6566	Transmission Air Supply Pressure Indicator
6567	Transmission Mode 9 Indicator
6568	Transmission Mode 10 Indicator
6569	Transmission Mode 9
6570	Transmission Mode 10
6571	Engine Main Chamber Fuel Absolute Pressure
6572	Engine Main Chamber Fuel Desired Absolute Pressure
6573	Engine Prechamber Fuel Absolute Pressure
6574	Engine Prechamber Fuel Desired Absolute Pressure
6575	Engine Main Chamber Air Fuel Ratio
6576	Engine Main Chamber Desired Air Fuel Ratio
6577	Engine Prechamber Air Fuel Ratio
6578	Engine Prechamber Desired Air Fuel Ratio
6579	Engine Exhaust NOx
6580	Engine Exhaust Desired NOx
6581	Aftertreatment 1 Hydrocarbon Doser 2
6582	Transmission Hydraulic Pump Actuator 2 Percent
6583	Transmission Hydrostatic Loop 1 Pressure
6584	Transmission Hydrostatic Loop 2 Pressure
6585	Transmission Directional Output Shaft Speed
6586	Aftertreatment 1 SCR Intake Pressure
6587	Aftertreatment 2 SCR Intake Pressure
6588	Operator Shutdown With High Exhaust Temperature
6589	Engine Fuel 1 Injector Metering Rail 1 Pressure 1
6590	Engine Fuel 1 Injector Metering Rail 1 Pressure 2
6591	Engine Fuel 1 Injector Metering Rail 2 Pressure 1
6592	Engine Fuel 1 Injector Metering Rail 2 Pressure 2
6593	Aftertreatment 1 Diesel Exhaust Fluid Dosing Requested Quantity (High Range)
6594	Aftertreatment 2 Diesel Exhaust Fluid Dosing Requested Quantity (High Range)
6595	Aftertreatment 1 Diesel Exhaust Fluid Actual Dosing Quantity (High Range)
6596	Aftertreatment 2 Diesel Exhaust Fluid Actual Dosing Quantity (High Range)
6597	Network Connection 1
6598	Network Connection 2
6599	Network Connection 3
6600	Dampened CNG Temperature
6601	Hydraulically Driven Fuel Pump Hydraulic Flow Bypass Valve
6606	Engine Fuel 2 Tank 1 Level Signal Conditioner
6607	Engine Fuel 2 Tank 2 Level Signal Conditioner
6608	Engine Fuel 2 Tank 3 Level Signal Conditioner
6609	Engine Fuel 2 Tank 4 Level Signal Conditioner
6610	Engine Fuel Vaporizer 1 Discharge Temperature

6611	Engine Fuel Vaporizer 2 Discharge Temperature
6612	Engine Fuel Vaporizer 3 Discharge Temperature
6613	Engine Fuel Vaporizer 4 Discharge Temperature
6614	Hydraulically Driven Fuel Pump 1 Hydraulic Circuit Flow Rate
6615	Hydraulically Driven Fuel Pump 2 Hydraulic Circuit Flow Rate
6616	Hydraulically Driven Fuel Pump 3 Hydraulic Circuit Flow Rate
6617	Hydraulically Driven Fuel Pump 4 Hydraulic Circuit Flow Rate
6618	Hydraulically Driven Fuel Pump 1 Hydraulic Work
6619	Hydraulically Driven Fuel Pump 2 Hydraulic Work
6620	Hydraulically Driven Fuel Pump 3 Hydraulic Work
6621	Hydraulically Driven Fuel Pump 4 Hydraulic Work
6622	Hydraulically Driven Fuel Pump 1
6623	Hydraulically Driven Fuel Pump 2
6624	Hydraulically Driven Fuel Pump 3
6625	Hydraulically Driven Fuel Pump 4
6626	Hydraulically Driven Fuel Pump 1 Compression Stroke Valve
6627	Hydraulically Driven Fuel Pump 2 Compression Stroke Valve
6628	Hydraulically Driven Fuel Pump 3 Compression Stroke Valve
6629	Hydraulically Driven Fuel Pump 4 Compression Stroke Valve
6630	LNG Vaporizer 1
6631	LNG Vaporizer 2
6632	LNG Vaporizer 3
6633	LNG Vaporizer 4
6634	Hydraulically Driven Fuel Pump 1 Selection Valve
6635	Hydraulically Driven Fuel Pump 2 Selection Valve
6636	Hydraulically Driven Fuel Pump 3 Selection Valve
6637	Hydraulically Driven Fuel Pump 4 Selection Valve
6638	Gaseous Fuel Tank 2 High Pressure Shutoff Valve
6639	Gaseous Fuel Tank 3 High Pressure Shutoff Valve
6640	Gaseous Fuel Tank 4 High Pressure Shutoff Valve
6641	Gaseous Fuel Leakage 1
6642	Engine Fuel 2 Tank 1 Level
6643	Engine Fuel 2 Tank 2 Level
6644	Engine Fuel 2 Tank 3 Level
6645	Engine Fuel 2 Tank 4 Level
6646	Engine Gaseous Fuel Supply Pressure 1 (Extended Range)
6647	Gaseous Fuel High Pressure Shutoff Valve 1
6648	Engine Dual Fuel Differential Rail Pressure
6649	Gaseous Fuel Injection Pulse Correction Factor
6650	Engine Throttle Valve 1 Position 2
6651	Engine Knock 2
6652	Aftertreatment 1 Three Way Catalyst Conversion Efficiency
6653	Engine Fuel 1 Injector Metering Rail 1 Cold Start Pressure
6654	Engine Fuel 1 Injector Metering Rail 2 Cold Start Pressure

6655	Maintain ECU Power Lamp
6656	Engine Gaseous Fuel Valve Nominal Duration Command
6657	Engine Gaseous Fuel Valve Nominal Start of Actuation Command
6658	Engine Gaseous Fuel Valve 1 Duration Command
6659	Engine Gaseous Fuel Valve 2 Duration Command
6660	Engine Gaseous Fuel Valve 3 Duration Command
6661	Engine Gaseous Fuel Valve 4 Duration Command
6662	Engine Gaseous Fuel Valve 5 Duration Command
6663	Engine Gaseous Fuel Valve 6 Duration Command
6664	Engine Gaseous Fuel Valve 7 Duration Command
6665	Engine Gaseous Fuel Valve 8 Duration Command
6666	Engine Gaseous Fuel Valve 9 Duration Command
6667	Engine Gaseous Fuel Valve 10 Duration Command
6668	Engine Gaseous Fuel Valve 11 Duration Command
6669	Engine Gaseous Fuel Valve 12 Duration Command
6670	Engine Gaseous Fuel Valve 13 Duration Command
6671	Engine Gaseous Fuel Valve 14 Duration Command
6672	Engine Gaseous Fuel Valve 15 Duration Command
6673	Engine Gaseous Fuel Valve 16 Duration Command
6674	Engine Gaseous Fuel Valve 17 Duration Command
6675	Engine Gaseous Fuel Valve 18 Duration Command
6676	Engine Gaseous Fuel Valve 19 Duration Command
6677	Engine Gaseous Fuel Valve 20 Duration Command
6678	Engine Gaseous Fuel Valve 1 Start of Actuation Command
6679	Engine Gaseous Fuel Valve 2 Start of Actuation Command
6680	Engine Gaseous Fuel Valve 3 Start of Actuation Command
6681	Engine Gaseous Fuel Valve 4 Start of Actuation Command
6682	Engine Gaseous Fuel Valve 5 Start of Actuation Command
6683	Engine Gaseous Fuel Valve 6 Start of Actuation Command
6684	Engine Gaseous Fuel Valve 7 Start of Actuation Command
6685	Engine Gaseous Fuel Valve 8 Start of Actuation Command
6686	Engine Gaseous Fuel Valve 9 Start of Actuation Command
6687	Engine Gaseous Fuel Valve 10 Start of Actuation Command
6688	Engine Gaseous Fuel Valve 11 Start of Actuation Command
6689	Engine Gaseous Fuel Valve 12 Start of Actuation Command
6690	Engine Gaseous Fuel Valve 13 Start of Actuation Command
6691	Engine Gaseous Fuel Valve 14 Start of Actuation Command
6692	Engine Gaseous Fuel Valve 15 Start of Actuation Command
6693	Engine Gaseous Fuel Valve 16 Start of Actuation Command
6694	Engine Gaseous Fuel Valve 17 Start of Actuation Command
6695	Engine Gaseous Fuel Valve 18 Start of Actuation Command
6696	Engine Gaseous Fuel Valve 19 Start of Actuation Command
6697	Engine Gaseous Fuel Valve 20 Start of Actuation Command
6698	Engine Fuel Supply Pump Temperature

6699	Product Identification Code
6700	Product Identification Brand
6701	Product Identification Model
6702	Fire Apparatus Okay To Pump Interlock
6703	Hydraulic Pressure Governor Increase Switch
6704	Hydraulic Pressure Governor Decrease Switch
6705	Hydraulic Pressure Governor Idle Switch
6706	Hydraulic Pressure Governor Preset Switch
6707	Hydraulic Intake Pressure
6708	Hydraulic Discharge Pressure Set Point
6709	Engine Speed High Lamp Command
6710	Engine Speed Very High Lamp Command
6711	Engine Speed High Lamp Data
6712	Engine Speed Very High Lamp Data
6713	Engine Variable Geometry Turbocharger Actuator Software Identification
6714	ECU Hardware ID
6715	Engine Gaseous Fuel Supply Desired Pressure
6716	Engine Fuel Filter (Suction Side) Degradation
6717	Transmission Driveline Engaged Circuit
6718	Load Share Active Circuit
6719	Engine Fuel Injection Pump 1 Fuel Control Valve Command
6720	Engine Fuel Injection Pump 2 Fuel Control Valve Command
6721	Engine Fuel Injection Pump 2 Fuel Control Valve
6722	Transmission 2 Forward Solenoid Valve
6723	Transmission 2 Reverse Solenoid Valve
6724	Vibration Actuator 1
6725	Vibration Actuator 2
6726	Vibration Actuator 3
6727	Vibration Actuator 4
6728	Vibration Sensor 1
6729	Vibration Sensor 2
6730	Engine Fan 2 Requested Percent Speed
6731	Joystick 1 Button 13 Pressed Status
6732	Joystick 1 Button 14 Pressed Status
6733	Joystick 1 Button 15 Pressed Status
6734	Joystick 1 Button 16 Pressed Status
6735	Joystick 2 Button 13 Pressed Status
6736	Joystick 2 Button 14 Pressed Status
6737	Joystick 2 Button 15 Pressed Status
6738	Joystick 2 Button 16 Pressed Status
6739	Joystick 3 Button 13 Pressed Status
6740	Joystick 3 Button 14 Pressed Status
6741	Joystick 3 Button 15 Pressed Status
6742	Joystick 3 Button 16 Pressed Status

6743	Joystick 4 Button 13 Pressed Status
6744	Joystick 4 Button 14 Pressed Status
6745	Joystick 4 Button 15 Pressed Status
6746	Joystick 4 Button 16 Pressed Status
6747	Joystick 5 Button 13 Pressed Status
6748	Joystick 5 Button 14 Pressed Status
6749	Joystick 5 Button 15 Pressed Status
6750	Joystick 5 Button 16 Pressed Status
6751	Joystick 6 Button 13 Pressed Status
6752	Joystick 6 Button 14 Pressed Status
6753	Joystick 6 Button 15 Pressed Status
6754	Joystick 6 Button 16 Pressed Status
6755	Joystick 7 Button 13 Pressed Status
6756	Joystick 7 Button 14 Pressed Status
6757	Joystick 7 Button 15 Pressed Status
6758	Joystick 7 Button 16 Pressed Status
6759	Joystick 8 Button 13 Pressed Status
6760	Joystick 8 Button 14 Pressed Status
6761	Joystick 8 Button 15 Pressed Status
6762	Joystick 8 Button 16 Pressed Status
6763	Joystick 9 Button 13 Pressed Status
6764	Joystick 9 Button 14 Pressed Status
6765	Joystick 9 Button 15 Pressed Status
6766	Joystick 9 Button 16 Pressed Status
6767	Joystick 10 Button 13 Pressed Status
6768	Joystick 10 Button 14 Pressed Status
6769	Joystick 10 Button 15 Pressed Status
6770	Joystick 10 Button 16 Pressed Status
6771	Aftertreatment 1 Particulate Sensor Resistance
6772	Aftertreatment 1 Particulate Sensor Heater State
6773	Aftertreatment 1 Particulate Sensor Regeneration Status
6774	Aftertreatment 1 Particulate Sensor Regeneration State
6775	Aftertreatment 1 Particulate Sensor Active Accumulation Time
6776	Aftertreatment 1 Particulate Sensor Time Between Regenerations
6777	Aftertreatment 1 Particulate Sensor Detection Status
6778	Aftertreatment 1 Particulate Sensor Power Supply
6779	Aftertreatment 1 Particulate Sensor Regeneration Failed Count
6780	Aftertreatment 1 Particulate Sensor Temperature
6781	Aftertreatment 1 Particulate Sensor Maximum Resistance
6782	Aftertreatment 1 Particulate Sensor Shutdown Request
6783	Aftertreatment 1 Particulate Sensor Regeneration Request
6784	Aftertreatment 1 Particulate Sensor Dewpoint
6785	Aftertreatment 1 Particulate Sensor Exhaust Temperature
6787	LNG Tank 1 Vapor Pressure

6788	LNG Tank 2 Vapor Pressure
6789	LNG Tank 3 Vapor Pressure
6790	LNG Tank 4 Vapor Pressure
6791	Engine Dual Fuel Mode
6792	Engine Dual Fuel Mode Command
6793	Engine Unload Status
6794	Engine Load Share Status
6795	Transmission 2 Shift Solenoid Valve
6796	Engine Torque Curve Selection Command
6797	Aftertreatment 1 SCR Intake Absolute Pressure
6798	Aftertreatment 2 SCR Intake Absolute Pressure
6799	Engine Fan Blade Pitch
6800	Aftertreatment Derate Request
6801	Aftertreatment 2 SCR System
6802	Aftertreatment 1 Diesel Exhaust Fluid Dosing System Frozen
6803	Aftertreatment 2 Diesel Exhaust Fluid Dosing System Frozen
6805	Engine Protection Speed Derate
6806	ECU 1 Interface Mismatch
6807	Engine Desired Torque Request
6808	Maximum Vehicle Speed Limit (High Resolution)
6809	Cruise Control Set Speed (High Resolution)
6810	Hybrid System OBD Related DTC Status
6811	Engine Turbocharger 2 Lube Oil Pressure
6812	Engine Turbocharger 3 Lube Oil Pressure
6813	Engine Turbocharger 4 Lube Oil Pressure
6814	Engine Gaseous Fuel Vent Pressure
6815	Gaseous Fuel Accumulator Temperature
6816	Engine Fuel Return Pressure
6817	Diesel Exhaust Fluid Tank 1 Empty Time
6818	Diesel Exhaust Fluid Quality Malfunction Time
6819	Aftertreatment SCR Malfunction Time
6820	Switch Indication Illumination Brightness Percent
6821	ADR Compliant Heater Installation
6822	ECU High Side Driver 1
6823	ECU High Side Driver 2
6824	ECU High Side Driver 3
6825	ECU High Side Driver 4
6826	ECU High Side Driver 5
6827	ECU High Side Driver 6
6828	Transmission Pressure Switch 10
6829	Aftertreatment 1 Particulate Sensor Exhaust Velocity
6830	Engine Main Bearing 12 Temperature
6831	Engine Air Start Pressure (Extended Range)
6832	Engine Air Stop Pressure

6833	Engine Gaseous Fuel Usage Inhibited
6834	Gaseous Fuel Leakage 1 Concentration
6835	Gaseous Fuel Leakage 2 Concentration
6836	Gaseous Fuel Leakage 3 Concentration
6837	Gas Leakage Detection 1 Pressure
6838	Gas Leakage Detection 2 Pressure
6839	Gas Leakage Detection 3 Pressure
6840	Bin Lift Count
6841	Net Bin Weight
6842	Bin Weighing Error Status
6843	Lift Axle 1 Status
6844	Lift Axle 2 Status
6845	Bin Instance
6846	Display Remain Powered
6847	Haul Cycle Count
6848	Haul Mode Status
6849	Delivered Payload Weight
6850	Delivered Payload Confidence
6851	Payload Weight
6852	Payload Weight Confidence
6853	Payload Carry Back Weight
6854	Payload Capacity Percentage
6855	Payload Weight Sensor 1 Status
6856	Payload Weight Sensor 2 Status
6857	Payload Weight Sensor 3 Status
6858	Payload Weight Sensor 4 Status
6859	Payload Weight Sensor 5 Status
6860	Payload Weight Sensor 6 Status
6861	Payload Weight Sensor 7 Status
6862	Payload Weight Sensor 8 Status
6863	Payload Weight 1
6864	Payload Weight 2
6865	Payload Weight 3
6866	Payload Weight 4
6867	Payload Weight 5
6868	Payload Weight 6
6869	Payload Weight 7
6870	Payload Weight 8
6871	Payload Calibration Set Point Command
6872	Payload Calibration Commanded Weight
6873	Payload Correction Factor Command
6874	Performance Bias Selection
6875	Aftertreatment 1 Diesel Exhaust Fluid Doser Pressure
6876	Aftertreatment 2 Diesel Exhaust Fluid Doser Pressure

6877	SCR Operator Inducement Override Enable
6878	SCR Operator Inducement Override Time Remaining
6879	Number of SCR Operator Inducement Override Events Remaining
6880	Total Number of SCR Operator Inducement Override Events
6881	SCR Operator Inducement Override Switch
6882	Aftertreatment DOC Temperature Sensor Module
6884	Engine Cold Ambient Elevated Idle Status
6885	Engine Fuel Valve 2 Differential Pressure
6886	Engine Gaseous Fuel Supply Pressure Regulator
6887	Engine Turbocharger Wastegate Actuator 3 Temperature
6888	Engine Turbocharger Wastegate Actuator 4 Temperature
6889	Engine Turbocharger Wastegate Actuator 1 Power Supply
6890	Engine Turbocharger Wastegate Actuator 2 Power Supply
6891	Engine Turbocharger Wastegate Actuator 3 Power Supply
6892	Engine Turbocharger Wastegate Actuator 4 Power Supply
6893	PEMS Engine Fuel Mass Flow Rate
6894	Vehicle Fuel Rate
6895	Engine Exhaust Flow Rate
6896	Engine Fueling Inhibit Request Count
6897	Engine Fueling Desired Request Count
6898	Bin Lift Count Reset
6899	Vehicle Acceleration Rate Limit Lamp Command
6900	Vehicle Acceleration Rate Limit Lamp Data
6901	Transmission Ratio Forward Range 11
6902	Transmission Ratio Forward Range 12
6903	Transmission Ratio Forward Range 13
6904	Transmission Ratio Forward Range 14
6905	Transmission Ratio Forward Range 15
6906	Transmission Ratio Forward Range 16
6907	Transmission Ratio Reverse Range 3
6908	Transmission Ratio Reverse Range 4
6909	Transmission Ratio Reverse Range 5
6910	Transmission Ratio Reverse Range 6
6911	Transmission Internal Component 1 Speed
6912	Transmission Internal Component 2 Speed
6913	Transmission Internal Component 3 Speed
6914	Soft Top Speed Limit Remaining Continuous Interval Distance
6915	SCR System Cleaning Lamp Command
6916	SCR System Cleaning Status
6917	SCR System Cleaning Inhibited Status
6918	SCR System Cleaning Inhibited Due to Inhibit Switch
6919	SCR System Cleaning Inhibited Due to Clutch Disengaged
6920	SCR System Cleaning Inhibited Due to Service Brake Active
6921	SCR System Cleaning Inhibited Due to PTO Active

6922	SCR System Cleaning Inhibited Due to Accelerator Pedal Off Idle
6923	SCR System Cleaning Inhibited Due to Out of Neutral
6924	SCR System Cleaning Inhibited Due to Vehicle Speed Above Allowed Speed
6925	SCR System Cleaning Inhibited Due to Parking Brake Not Set
6926	SCR System Cleaning Inhibited Due to Low Exhaust Temperature
6927	SCR System Cleaning Inhibited Due to System Fault Active
6928	SCR System Cleaning Inhibited Due to System Timeout
6929	SCR System Cleaning Inhibited Due to Temporary System Lockout
6930	SCR System Cleaning Inhibited Due to Permanent System Lockout
6931	SCR System Cleaning Inhibited Due to Engine Not Warmed Up
6932	SCR System Cleaning Inhibited Due to Vehicle Speed Below Allowed Speed
6933	SCR System Cleaning Automatic Initiation Configuration
6934	SCR System Cleaning Forced Status
6935	Aftertreatment 1 SCR System Total Cleaning Time
6936	Aftertreatment 1 SCR System Total Number of System Cleaning Events
6937	Aftertreatment 1 SCR System Total Number of System Cleaning Inhibit Requests
6938	Aftertreatment 1 SCR System Total Number of System Cleaning Manual Requests
6939	Aftertreatment 1 SCR System Average Time Between System Cleaning Events
6940	Aftertreatment 1 SCR System Average Distance Between System Cleaning Events
6941	Aftertreatment 1 SCR System Time Since Last System Cleaning Event
6942	Aftertreatment 2 SCR System Total System Cleaning Time
6943	Aftertreatment 2 SCR System Total Number of System Cleaning Events
6944	Aftertreatment 2 SCR System Total Number of System Cleaning Inhibit Requests
6945	Aftertreatment 2 SCR System Total Number of System Cleaning Manual Requests
6946	Aftertreatment 2 SCR System Average Time Between System Cleaning Events
6947	Aftertreatment 2 SCR System Average Distance Between System Cleaning Events
6948	Aftertreatment 2 SCR System Time Since Last System Cleaning Event
6949	Number of Axles on the Vehicle
6950	Number of Tires on the Vehicle
6951	Axle 1 Monitored Tire Count
6952	Axle 2 Monitored Tire Count
6953	Axle 3 Monitored Tire Count
6954	Axle 4 Monitored Tire Count
6955	Axle 5 Monitored Tire Count
6956	Axle 6 Monitored Tire Count
6957	Axle 7 Monitored Tire Count
6958	Axle 8 Monitored Tire Count
6959	Axle 9 Monitored Tire Count
6960	Axle 10 Monitored Tire Count
6961	Axle 11 Monitored Tire Count
6962	Axle 12 Monitored Tire Count

6963	Number of Tire Sensors
6964	Tire Number
6965	Tire Location
6966	Tire Sensor Identification Number
6967	Total Number of Antennas Used
6968	Antenna Number
6969	Total Number of Tire Sensors Monitored
6970	Tire Sensor Number
6971	Tire Location
6972	Tire Wireless Signal Strength Indicator
6973	Tire Location
6974	Cold Inflation Pressure Setting
6975	Under Pressure Percentage Threshold Setting
6976	Extreme Under Pressure Percentage Threshold Setting
6977	Over Pressure Percentage Threshold Setting
6978	Over Temperature Setting
6979	Tire Location
6980	Cold Inflation Pressure
6981	Under Pressure Percentage Threshold
6982	Extreme Under Pressure Percentage Threshold
6983	Over Pressure Percentage Threshold
6984	Over Temperature
6985	Tire Configuration Information
6986	Tire Sensor Information
6987	Tire Location
6988	Tire Pressure (Extended Range)
6989	Required Tire Pressure
6990	Extended Tire Pressure Support
6991	Number of Engine Cylinders to Exclude from Combustion
6992	Engine Cylinder 1 Exclude from Combustion Request
6993	Engine Cylinder 2 Exclude from Combustion Request
6994	Engine Cylinder 3 Exclude from Combustion Request
6995	Engine Cylinder 4 Exclude from Combustion Request
6996	Engine Cylinder 5 Exclude from Combustion Request
6997	Engine Cylinder 6 Exclude from Combustion Request
6998	Engine Cylinder 7 Exclude from Combustion Request
6999	Engine Cylinder 8 Exclude from Combustion Request
7000	Engine Cylinder 9 Exclude from Combustion Request
7001	Engine Cylinder 10 Exclude from Combustion Request
7002	Engine Cylinder 11 Exclude from Combustion Request
7003	Engine Cylinder 12 Exclude from Combustion Request
7004	Engine Cylinder 13 Exclude from Combustion Request
7005	Engine Cylinder 14 Exclude from Combustion Request
7006	Engine Cylinder 15 Exclude from Combustion Request

7007	Engine Cylinder 16 Exclude from Combustion Request
7008	Engine Cylinder 17 Exclude from Combustion Request
7009	Engine Cylinder 18 Exclude from Combustion Request
7010	Engine Cylinder 19 Exclude from Combustion Request
7011	Engine Cylinder 20 Exclude from Combustion Request
7012	Engine Cylinder 21 Exclude from Combustion Request
7013	Engine Cylinder 22 Exclude from Combustion Request
7014	Engine Cylinder 23 Exclude from Combustion Request
7015	Engine Cylinder 24 Exclude from Combustion Request
7016	Engine Fuel 2 Pump Hydraulic Flow Control Valve
7017	Engine Fuel 2 Pump Hydraulic Swash Plate Angle
7018	Engine Fuel 2 Pump Hydraulic Directional Valve
7019	Engine Fuel 2 Pump Hydraulic Pressure
7020	LNG Vaporizer Coolant Outlet Temperature
7021	Engine Fuel 2 Injector Metering Rail 1 Pressure
7022	Engine Fuel 2 Injector Metering Rail 2 Pressure
7023	Engine Fuel 2 Injector Metering Rail 1 Temperature
7024	Engine Fuel 2 Injector Metering Rail 2 Temperature
7025	Engine Staged Turbocharger Solenoid Status
7026	Engine Diesel Fuel Metering Valve
7027	Engine Diesel Fuel Metering Valve Power Supply
7028	Engine Diesel Fuel Metering Valve Temperature
7029	Engine Diesel Fuel Metering Valve Position
7030	Aftertreatment 1 Control Module
7031	Aftertreatment 2 Control Module
7032	Aftertreatment System has Shutdown Engine
7033	Heat Exchanger Debris Purge Inhibit Switch
7034	Heat Exchanger Debris Purge Force Switch
7035	Heat Exchanger Debris Purge Status
7036	Heat Exchanger Debris Purge Approaching
7037	Transmission Override Control Mode
7038	Transmission Override Control Mode Priority
7039	Transmission Requested Output Shaft Speed
7040	Transmission Requested Torque / Torque Limit
7041	Message Counter
7042	Message Checksum
7043	Engine End Bearing 1 Temperature
7044	Engine End Bearing 2 Temperature
7045	Engine End Bearing 3 Temperature
7046	Engine End Bearing 4 Temperature
7047	Engine End Bearing 5 Temperature
7048	Engine End Bearing 6 Temperature
7049	Engine End Bearing 7 Temperature
7050	Engine End Bearing 8 Temperature

7051	Engine End Bearing 9 Temperature
7052	Engine End Bearing 10 Temperature
7053	Engine End Bearing 11 Temperature
7054	Engine End Bearing 12 Temperature
7055	Engine End Bearing 13 Temperature
7056	Engine End Bearing 14 Temperature
7057	Engine End Bearing 15 Temperature
7058	Engine End Bearing 16 Temperature
7059	Engine End Bearing 17 Temperature
7060	Engine End Bearing 18 Temperature
7061	Engine End Bearing 19 Temperature
7062	Engine End Bearing 20 Temperature
7063	Engine Gaseous Fuel Supply Pressure 2
7064	Engine Gaseous Fuel Supply Unit Intake Pressure
7065	Engine Gaseous Fuel Supply Shutoff Valve 1 Intake Pressure
7066	Engine Gaseous Fuel Supply Shutoff Valve 2 Intake Pressure
7067	Plant Gaseous Fuel Supply Outlet Pressure
7068	Plant Inert Gas Supply Outlet Pressure
7069	Aftertreatment 1 Diesel Exhaust Fluid Line Heater Relay 2
7070	Aftertreatment 1 Particulate Sensor Heater Resistance
7071	Engine Oil Mist 1 Concentration
7072	Engine Oil Mist 2 Concentration
7073	Engine Oil Mist 3 Concentration
7074	Engine Oil Mist 4 Concentration
7075	Engine Oil Mist 5 Concentration
7076	Engine Oil Mist 6 Concentration
7077	Engine Oil Mist 7 Concentration
7078	Engine Oil Mist 8 Concentration
7079	Engine Oil Mist 9 Concentration
7080	Engine Oil Mist 10 Concentration
7081	Engine Gaseous Fuel Supply Shutoff Valve 1 Position
7082	Engine Gaseous Fuel Supply Shutoff Valve 2 Position
7083	Engine Gaseous Fuel Supply Bleed Valve 1 Position
7084	Engine Gaseous Fuel Supply Bleed Valve 2 Position
7085	Engine Gaseous Fuel Supply Bleed Valve 3 Position
7086	Aftertreatment 2 Diesel Exhaust Fluid Pump Heater
7087	Aftertreatment 2 Diesel Exhaust Fluid Pump Heater Command
7088	Engine Cylinder Head Bypass Actuator 1 Preliminary FMI
7089	Engine Cylinder Head Bypass Actuator 1 Temperature Status
7090	Engine Cylinder Head Bypass Actuator 1 Temperature
7091	Engine Cylinder Head Bypass Actuator 1 Desired Position
7092	Engine Cylinder Head Bypass Actuator 1 Position
7093	Engine Cylinder Head Bypass Actuator 1 Operation Status
7094	Engine Cylinder Head Bypass Actuator 1 Command

7095	SCR Operator Inducement Total Time
7096	Engine Fuel 1 Injector Metering Rail 1 Pressure 1 (Extended Range)
7097	Engine Fuel 1 Injector Metering Rail 1 Pressure 2 (Extended Range)
7098	Engine Fuel 1 Injector Metering Rail 2 Pressure 1 (Extended Range)
7099	Engine Fuel 1 Injector Metering Rail 2 Pressure 2 (Extended Range)
7100	Engine Fuel 1 Injector Metering Rail 1 Desired Pressure
7101	Engine Fuel 1 Injector Metering Rail 2 Desired Pressure
7102	Engine Fuel Filter Circulating Pump
7103	Engine Fuel Metering Rail Pump
7104	Engine Fuel Supply Pump Intake Pressure
7105	Aftertreatment 1 Inconsistent Configuration Detected
7106	Aftertreatment 2 Inconsistent Configuration Detected
7107	Aftertreatment 1 Diesel Exhaust Fluid Pump
7108	Aftertreatment 2 Diesel Exhaust Fluid Pump
7109	Engine Fuel Flow 1 Output 1
7110	Engine Fuel Flow 1 Output 2
7111	Engine Fuel Flow 2 Output 1
7112	Engine Fuel Flow 2 Output 2
7113	Tire 1 Pressure
7114	Tire 2 Pressure
7115	Tire 3 Pressure
7116	Tire 4 Pressure
7117	Tire 5 Pressure
7118	Tire 6 Pressure
7119	Tire 7 Pressure
7120	Tire 8 Pressure
7121	Tire 9 Pressure
7122	Tire 10 Pressure
7123	Tire 11 Pressure
7124	Tire 12 Pressure
7125	Tire 13 Pressure
7126	Tire 14 Pressure
7127	Tire 15 Pressure
7128	Tire 16 Pressure
7129	Tire 17 Pressure
7130	Tire 18 Pressure
7131	Tire 19 Pressure
7132	Tire 20 Pressure
7133	Tire 21 Pressure
7134	Tire 22 Pressure
7135	Tire 23 Pressure
7136	Tire 24 Pressure
7137	Tire 25 Pressure
7138	Tire 26 Pressure

7139	Tire 27 Pressure
7140	Tire 28 Pressure
7141	Tire 29 Pressure
7142	Tire 30 Pressure
7143	Tire 31 Pressure
7144	Tire 32 Pressure
7145	Tire 33 Pressure
7146	Tire 34 Pressure
7147	Tire 35 Pressure
7148	Tire 36 Pressure
7149	Tire 37 Pressure
7150	Tire 38 Pressure
7151	Tire 39 Pressure
7152	Tire 40 Pressure
7153	Tire 1 Temperature
7154	Tire 2 Temperature
7155	Tire 3 Temperature
7156	Tire 4 Temperature
7157	Tire 5 Temperature
7158	Tire 6 Temperature
7159	Tire 7 Temperature
7160	Tire 8 Temperature
7161	Tire 9 Temperature
7162	Tire 10 Temperature
7163	Tire 11 Temperature
7164	Tire 12 Temperature
7165	Tire 13 Temperature
7166	Tire 14 Temperature
7167	Tire 15 Temperature
7168	Tire 16 Temperature
7169	Tire 17 Temperature
7170	Tire 18 Temperature
7171	Tire 19 Temperature
7172	Tire 20 Temperature
7173	Tire 21 Temperature
7174	Tire 22 Temperature
7175	Tire 23 Temperature
7176	Tire 24 Temperature
7177	Tire 25 Temperature
7178	Tire 26 Temperature
7179	Tire 27 Temperature
7180	Tire 28 Temperature
7181	Tire 29 Temperature
7182	Tire 30 Temperature

7183	Tire 31 Temperature
7184	Tire 32 Temperature
7185	Tire 33 Temperature
7186	Tire 34 Temperature
7187	Tire 35 Temperature
7188	Tire 36 Temperature
7189	Tire 37 Temperature
7190	Tire 38 Temperature
7191	Tire 39 Temperature
7192	Tire 40 Temperature
7193	Tire 1 Sensor Enable Status
7194	Tire 2 Sensor Enable Status
7195	Tire 3 Sensor Enable Status
7196	Tire 4 Sensor Enable Status
7197	Tire 5 Sensor Enable Status
7198	Tire 6 Sensor Enable Status
7199	Tire 7 Sensor Enable Status
7200	Tire 8 Sensor Enable Status
7201	Tire 9 Sensor Enable Status
7202	Tire 10 Sensor Enable Status
7203	Tire 11 Sensor Enable Status
7204	Tire 12 Sensor Enable Status
7205	Tire 13 Sensor Enable Status
7206	Tire 14 Sensor Enable Status
7207	Tire 15 Sensor Enable Status
7208	Tire 16 Sensor Enable Status
7209	Tire 17 Sensor Enable Status
7210	Tire 18 Sensor Enable Status
7211	Tire 19 Sensor Enable Status
7212	Tire 20 Sensor Enable Status
7213	Tire 21 Sensor Enable Status
7214	Tire 22 Sensor Enable Status
7215	Tire 23 Sensor Enable Status
7216	Tire 24 Sensor Enable Status
7217	Tire 25 Sensor Enable Status
7218	Tire 26 Sensor Enable Status
7219	Tire 27 Sensor Enable Status
7220	Tire 28 Sensor Enable Status
7221	Tire 29 Sensor Enable Status
7222	Tire 30 Sensor Enable Status
7223	Tire 31 Sensor Enable Status
7224	Tire 32 Sensor Enable Status
7225	Tire 33 Sensor Enable Status
7226	Tire 34 Sensor Enable Status

7227	Tire 35 Sensor Enable Status
7228	Tire 36 Sensor Enable Status
7229	Tire 37 Sensor Enable Status
7230	Tire 38 Sensor Enable Status
7231	Tire 39 Sensor Enable Status
7232	Tire 40 Sensor Enable Status
7233	Tire 1 Leak Status
7234	Tire 2 Leak Status
7235	Tire 3 Leak Status
7236	Tire 4 Leak Status
7237	Tire 5 Leak Status
7238	Tire 6 Leak Status
7239	Tire 7 Leak Status
7240	Tire 8 Leak Status
7241	Tire 9 Leak Status
7242	Tire 10 Leak Status
7243	Tire 11 Leak Status
7244	Tire 12 Leak Status
7245	Tire 13 Leak Status
7246	Tire 14 Leak Status
7247	Tire 15 Leak Status
7248	Tire 16 Leak Status
7249	Tire 17 Leak Status
7250	Tire 18 Leak Status
7251	Tire 19 Leak Status
7252	Tire 20 Leak Status
7253	Tire 21 Leak Status
7254	Tire 22 Leak Status
7255	Tire 23 Leak Status
7256	Tire 24 Leak Status
7257	Tire 25 Leak Status
7258	Tire 26 Leak Status
7259	Tire 27 Leak Status
7260	Tire 28 Leak Status
7261	Tire 29 Leak Status
7262	Tire 30 Leak Status
7263	Tire 31 Leak Status
7264	Tire 32 Leak Status
7265	Tire 33 Leak Status
7266	Tire 34 Leak Status
7267	Tire 35 Leak Status
7268	Tire 36 Leak Status
7269	Tire 37 Leak Status
7270	Tire 38 Leak Status

7271	Tire 39 Leak Status
7272	Tire 40 Leak Status
7273	Tire 1 Sensor Electrical Fault
7274	Tire 2 Sensor Electrical Fault
7275	Tire 3 Sensor Electrical Fault
7276	Tire 4 Sensor Electrical Fault
7277	Tire 5 Sensor Electrical Fault
7278	Tire 6 Sensor Electrical Fault
7279	Tire 7 Sensor Electrical Fault
7280	Tire 8 Sensor Electrical Fault
7281	Tire 9 Sensor Electrical Fault
7282	Tire 10 Sensor Electrical Fault
7283	Tire 11 Sensor Electrical Fault
7284	Tire 12 Sensor Electrical Fault
7285	Tire 13 Sensor Electrical Fault
7286	Tire 14 Sensor Electrical Fault
7287	Tire 15 Sensor Electrical Fault
7288	Tire 16 Sensor Electrical Fault
7289	Tire 17 Sensor Electrical Fault
7290	Tire 18 Sensor Electrical Fault
7291	Tire 19 Sensor Electrical Fault
7292	Tire 20 Sensor Electrical Fault
7293	Tire 21 Sensor Electrical Fault
7294	Tire 22 Sensor Electrical Fault
7295	Tire 23 Sensor Electrical Fault
7296	Tire 24 Sensor Electrical Fault
7297	Tire 25 Sensor Electrical Fault
7298	Tire 26 Sensor Electrical Fault
7299	Tire 27 Sensor Electrical Fault
7300	Tire 28 Sensor Electrical Fault
7301	Tire 29 Sensor Electrical Fault
7302	Tire 30 Sensor Electrical Fault
7303	Tire 31 Sensor Electrical Fault
7304	Tire 32 Sensor Electrical Fault
7305	Tire 33 Sensor Electrical Fault
7306	Tire 34 Sensor Electrical Fault
7307	Tire 35 Sensor Electrical Fault
7308	Tire 36 Sensor Electrical Fault
7309	Tire 37 Sensor Electrical Fault
7310	Tire 38 Sensor Electrical Fault
7311	Tire 39 Sensor Electrical Fault
7312	Tire 40 Sensor Electrical Fault
7313	Engine Coolant Pressure 2 (Extended Range)
7314	Engine Fuel Rack Fuel Supply Temperature

7315	Propulsion System Active
7316	Predictive Cruise Control Set Speed Offset
7317	Predictive Cruise Control State
7318	Predictive Cruise Control Set Speed Offset Status
7319	Cruise Control Speed
7320	Engine Multiple Cylinder Knock Level
7321	Aftertreatment 1 Particulate Sensor Heater High Side Driver Preliminary FMI
7322	Aftertreatment 1 Particulate Sensor Heater High Side Driver Diagnostic Status
7323	Aftertreatment 1 Particulate Sensor Heater Low Side Driver Preliminary FMI
7324	Aftertreatment 1 Particulate Sensor Heater Low Side Driver Diagnostic Status
7325	Aftertreatment 1 Particulate Sensor Input Preliminary FMI
7326	Aftertreatment 1 Particulate Sensor Input Diagnostic Status
7327	Aftertreatment 1 Particulate Sensor Power Supply Preliminary FMI
7328	Aftertreatment 1 Particulate Sensor Power Supply Diagnostic Status
7329	Aftertreatment 1 Particulate Sensor Heater Power Supply Preliminary FMI
7330	Aftertreatment 1 Particulate Sensor Heater Power Supply Diagnostic Status
7331	Aftertreatment Thermal Management Inhibit Request
7332	Aftertreatment Thermal Management Status
7333	Cylinder Fuel Rate
7334	Extended Identifier Type (Least Significant Byte)
7335	Extended Identifier Type
7336	Extended Identifier Type (Most Significant Byte)
7337	Control Indicating Extended Identifier Type
7338	Extended Identifier (Least Significant Byte)
7339	Extended Identifier
7340	Extended Identifier (Most Significant Byte)
7341	SCR Operator Inducement Emergency Override Total Reset Occurrences
7342	SCR Operator Inducement Override Mode
7343	SCR Operator Inducement Override Renewal Required
7344	SCR Operator Inducement Override Time Remaining (Extended Range)
7345	Reserved for Heartbeat Sequence Number
7346	Diesel Exhaust Fluid Speed of Sound
7347	Fire Suppression Water Tank Level
7348	Fire Suppression Class-A Foam Tank Level
7349	Fire Suppression Class-B Foam Tank Level
7350	Fire Suppression Compressed Air Foam System Air Pressure
7351	Aftertreatment 1 Outlet Corrected NOx
7352	Aftertreatment 2 Outlet Corrected NOx
7353	Aftertreatment 1 SCR Intake Corrected NOx
7354	Aftertreatment 2 SCR Intake Corrected NOx
7355	Engine Timing Advance
7356	Engine Cylinder 1 Ignition Timing Offset
7357	Engine Cylinder 2 Ignition Timing Offset
7358	Engine Cylinder 3 Ignition Timing Offset

7359	Engine Cylinder 4 Ignition Timing Offset
7360	Engine Cylinder 5 Ignition Timing Offset
7361	Engine Cylinder 6 Ignition Timing Offset
7362	Engine Cylinder 7 Ignition Timing Offset
7363	Engine Cylinder 8 Ignition Timing Offset
7364	Engine Cylinder 9 Ignition Timing Offset
7365	Engine Cylinder 10 Ignition Timing Offset
7366	Engine Cylinder 11 Ignition Timing Offset
7367	Engine Cylinder 12 Ignition Timing Offset
7368	Engine Cylinder 13 Ignition Timing Offset
7369	Engine Cylinder 14 Ignition Timing Offset
7370	Engine Cylinder 15 Ignition Timing Offset
7371	Engine Cylinder 16 Ignition Timing Offset
7372	Engine Cylinder 17 Ignition Timing Offset
7373	Engine Cylinder 18 Ignition Timing Offset
7374	Engine Cylinder 19 Ignition Timing Offset
7375	Engine Cylinder 20 Ignition Timing Offset
7376	Engine Cylinder 21 Ignition Timing Offset
7377	Engine Cylinder 22 Ignition Timing Offset
7378	Engine Cylinder 23 Ignition Timing Offset
7379	Engine Cylinder 24 Ignition Timing Offset
7380	Engine Turbocharger Compressor Blowoff Actuator 1 Motor Current Disable
7381	Engine Turbocharger Wastegate Actuator 1 Motor Current Disable
7382	Engine Cylinder Head Bypass Actuator 1 Motor Current Disable
7383	Engine Throttle Valve 1 Motor Current Disable
7384	Engine Cold Start Cylinder 1 Fuel Injection Timing
7385	Engine Cold Start Cylinder 2 Fuel Injection Timing
7386	Engine Cold Start Cylinder 3 Fuel Injection Timing
7387	Engine Cold Start Cylinder 4 Fuel Injection Timing
7388	Engine Cold Start Cylinder 5 Fuel Injection Timing
7389	Engine Cold Start Cylinder 6 Fuel Injection Timing
7390	Engine Cold Start Cylinder 7 Fuel Injection Timing
7391	Engine Cold Start Cylinder 8 Fuel Injection Timing
7392	Engine Cold Start Fuel Injection Timing for All Cylinders
7393	Aftertreatment 1 Particulate Sensor Current
7394	Engine Fuel Isolation Control
7395	Fuel Tank Transfer Pump Pressure
7396	Tractor Brake Caliper Lining Clearance Axle 1 Left
7397	Tractor Brake Caliper Lining Clearance Axle 1 Right
7398	Tractor Brake Caliper Lining Clearance Axle 2 Left
7399	Tractor Brake Caliper Lining Clearance Axle 2 Right
7400	Tractor Brake Caliper Lining Clearance Axle 3 Left
7401	Tractor Brake Caliper Lining Clearance Axle 3 Right
7402	Tractor Brake Caliper Lining Clearance Axle 4 Left

7403	Tractor Brake Caliper Lining Clearance Axle 4 Right
7404	Tractor Brake Caliper Lining Clearance Axle 5 Left
7405	Tractor Brake Caliper Lining Clearance Axle 5 Right
7406	Trailer Brake Caliper Lining Clearance Axle 1 Left
7407	Trailer Brake Caliper Lining Clearance Axle 1 Right
7408	Trailer Brake Caliper Lining Clearance Axle 2 Left
7409	Trailer Brake Caliper Lining Clearance Axle 2 Right
7410	Trailer Brake Caliper Lining Clearance Axle 3 Left
7411	Trailer Brake Caliper Lining Clearance Axle 3 Right
7412	Trailer Brake Caliper Lining Clearance Axle 4 Left
7413	Trailer Brake Caliper Lining Clearance Axle 4 Right
7414	Trailer Brake Caliper Lining Clearance Axle 5 Left
7415	Trailer Brake Caliper Lining Clearance Axle 5 Right
7416	Aftertreatment 1 Diesel Exhaust Fluid Pump Power Relay
7417	Aftertreatment 1 Diesel Exhaust Fluid Control Module Circuit Breaker
7418	Hybrid System Engine Assist Status
7420	Applied Vehicle Speed Limit (High Resolution)
7421	Engine Charge Air Cooler Bypass Valve 1 Command
7422	Engine Charge Air Cooler Bypass Valve 2 Command
7423	Engine Coolant System Thermostat 2
7424	Diesel Exhaust Fluid Lamp
7425	Operator Inducement Torque Derate Level 1
7426	Operator Inducement Time to Torque Derate Level 1
7427	Operator Inducement Torque Derate Level 2
7428	Operator Inducement Time to Torque Derate Level 2
7429	Vehicle Speed Control Override Request
7430	Predictive Cruise Control Driveline Disengage Inhibit Request
7431	Predictive Cruise Control Event in Range
7432	Roadway Present Grade
7433	Roadway Next Grade
7434	Predictive Cruise Control Speed Event Indicator
7435	Vehicle Speed Control Override Event Indicator
7436	Predictive Cruise Control Enable Switch
7437	Predictive Cruise Control Deactivation Request
7438	Predictive Cruise Control Maximum Positive Offset
7439	Predictive Cruise Control Maximum Negative Offset
7440	Aftertreatment Active Regeneration Inhibited Due to Low Exhaust Pressure
7441	Aftertreatment Ambient Air Temperature
7442	Inert Gas Supply Valve Position
7443	Stop All Implement Operations Transition Number
7444	Tractor Facility Response - Limit/Request Status Reporting
7445	Tractor Facility Request - Limit/Request Status Reporting
7446	ISOBUS Compliance Certification Message Revision
7447	Implement In-Work State

7448	Hybrid System Service Indicator
7449	Hybrid System Motor Overspeed Indicator
7450	Hybrid System Motor Overspeed Audible Alarm
7451	Hybrid System Electric Alternator Indicator
7452	Hybrid System Regenerative Braking Indicator
7453	Hybrid System Initialization Indicator
7454	Hybrid System High Voltage Exposure Indicator
7455	Engine Total Gaseous Fuel Volume Used
7456	Engine Total Gaseous Idle Fuel Volume Used
7457	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 2
7458	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 2 Input Lines
7459	Aftertreatment 1 Diesel Exhaust Fluid Doser 2 Absolute Pressure
7460	Aftertreatment 1 Diesel Exhaust Fluid Doser 2 Temperature
7461	Aftertreatment 1 Diesel Exhaust Fluid Pump 2 Motor Speed
7462	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 2
7463	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 2 Input Lines
7464	Aftertreatment 2 Diesel Exhaust Fluid Doser 2 Absolute Pressure
7465	Aftertreatment 2 Diesel Exhaust Fluid Doser 2 Temperature
7466	Aftertreatment 2 Diesel Exhaust Fluid Pump 2 Motor Speed
7467	Aftertreatment 2 SCR Temperature Sensor Module
7468	Engine Oil Pressure (High Resolution/Extended Range)
7469	Engine Fuel Delivery Pressure (High Resolution/Extended Range)
7470	Engine Oil Filter Intake Pressure (High Resolution/Extended Range)
7471	Engine Oil Filter Differential Pressure (Extended Range)
7472	Engine Fuel Supply Pump Intake Absolute Pressure (Extended Range)
7473	Driver Alertness Warning
7474	Driver Alertness Level
7475	Driver Alertness Warning System State
7476	Left Distance to Lane Mark from Vehicle's Middle
7477	Right Distance to Lane Mark from Vehicle's Middle
7478	Road Curvature Based on Lane Marks
7479	Lane Departure Angle Left
7480	Lane Departure Angle Right
7481	Lane Mark Quality on the Left Side
7482	Lane Mark Quality on the Right Side
7483	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 3
7484	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 3 Input Lines
7485	Aftertreatment 1 Diesel Exhaust Fluid Doser 3 Absolute Pressure
7486	Aftertreatment 1 Diesel Exhaust Fluid Doser 3 Temperature
7487	Aftertreatment 1 Diesel Exhaust Fluid Pump 3 Motor Speed
7488	Aftertreatment 1 Diesel Exhaust Fluid Doser Valve 3
7489	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 3
7490	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 3 Input Lines
7491	Aftertreatment 2 Diesel Exhaust Fluid Doser 3 Absolute Pressure

7492	Aftertreatment 2 Diesel Exhaust Fluid Doser 3 Temperature
7493	Aftertreatment 2 Diesel Exhaust Fluid Pump 3 Motor Speed
7494	Aftertreatment 2 Diesel Exhaust Fluid Doser Valve 3
7495	Cruise Control Adjusted Maximum Speed
7496	Cruise Control Retarder Active Speed Offset
7497	SLI Cranking Predicted Minimum Battery Voltage
7498	SLI Battery 2 Net Current
7499	ECU 2 Interface Mismatch
7500	Gaseous Fuel Leakage 2
7501	Engine Charge Air Cooler 2 Bypass
7502	Aftertreatment Engine Speed Increase request
7503	Aftertreatment Engine Load Request
7504	Aftertreatment 1 SCR System Sulfation Level
7505	Engine Fuel Valve 3 Intake Absolute Pressure
7506	Engine Fuel Valve 4 Intake Absolute Pressure
7507	Engine Fuel Valve 3 Differential Pressure
7508	Engine Fuel Valve 4 Differential Pressure
7509	Engine Fuel System 3 Gas Mass Flow Rate
7510	Engine Fuel System 4 Gas Mass Flow Rate
7511	Engine Fuel Valve 3 Position
7512	Engine Fuel Valve 4 Position
7513	Engine Fuel 2 Injector Metering Rail 1 Pressure 2
7514	Engine Fuel 2 Injector Metering Rail 1 Temperature 2
7515	Request to Permit DEF Hydraulic Stiffness Check
7516	Request to Permit DEF Dosing Test Injection
7517	Aftertreatment 1 Diesel Exhaust Fluid Hydraulic Stiffness Check Permission Status
7518	Aftertreatment 1 Diesel Exhaust Fluid Dosing Test Injection Permission Status
7519	Aftertreatment 2 Diesel Exhaust Fluid Hydraulic Stiffness Check Permission Status
7520	Aftertreatment 2 Diesel Exhaust Fluid Dosing Test Injection Permission Status
7521	Aftertreatment 1 Diesel Exhaust Fluid Control Module 2 Relay Control
7522	Aftertreatment 1 Diesel Exhaust Fluid Control Module 2 Power Supply 1
7523	Aftertreatment 1 Diesel Exhaust Fluid Control Module 2 Power Supply 2
7524	Aftertreatment 1 SCR System 2 State
7525	Aftertreatment 2 SCR System 2 State
7526	Aftertreatment 2 Diesel Exhaust Fluid Line Heater Relay 2
7527	Aftertreatment 2 Diesel Exhaust Fluid Line Heater Relay 3
7528	Aftertreatment 1 Diesel Exhaust Fluid Controller 2 Temperature
7529	Aftertreatment 2 Diesel Exhaust Fluid Controller Temperature
7530	Aftertreatment 1 Diesel Exhaust Fluid Tank Volume 2
7531	Aftertreatment 2 Diesel Exhaust Fluid Tank Volume 2
7532	Aftertreatment 2 Diesel Exhaust Fluid Control Module 2 Relay Control
7533	Aftertreatment 2 Diesel Exhaust Fluid Control Module 2 Power Supply 1
7534	Aftertreatment 2 Diesel Exhaust Fluid Control Module 2 Power Supply 2
7535	Aftertreatment 2 Diesel Exhaust Fluid Controller 2 Temperature

7536	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 2 Diverter Valve
7537	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 2 Diverter Valve
7538	Aftertreatment 1 Diesel Exhaust Fluid Controller 2
7539	Aftertreatment 2 Diesel Exhaust Fluid Controller 2
7540	Aftertreatment 1 Diesel Exhaust Fluid Line Heater Relay 3
7541	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 2 Loss of Prime
7542	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 2 Loss of Prime
7543	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit 2 Heater Temperature
7544	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 1 Heater Temperature
7545	Aftertreatment 2 Diesel Exhaust Fluid Dosing Unit 2 Heater Temperature
7546	Aftertreatment 1 Diesel Exhaust Fluid Doser Valve 4
7547	Aftertreatment 2 Diesel Exhaust Fluid Doser Valve 4
7548	Hybrid System Protection Override Switch
7549	Hybrid System Propulsion Coolant Level Switch
7550	Hybrid System Power Electronics Coolant Level Switch
7551	Hybrid System Off-Board Charger Connection Status
7552	Hybrid System Regenerative Braking Disable Switch
7553	Hybrid System Brake Pedal Regenerative Braking Disable Switch
7554	Hybrid System Propulsion Disable Switch
7555	Hybrid System Shutdown Switch
7556	Hybrid System Coasting Regenerative Braking Level Selector
7557	Hybrid System Protection Override Request
7558	Hybrid System Propulsion Disable Request
7559	Hybrid System Regenerative Braking Disable Request
7560	Hybrid System Shutdown Command
7561	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 5
7562	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 6
7563	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 7
7564	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 8
7565	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 9
7566	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 10
7567	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 6
7568	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 7
7569	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 8
7570	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 9
7571	Aftertreatment 2 Diesel Exhaust Fluid Line Heater 10
7572	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature 2
7573	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater 2
7574	Aftertreatment 2 Diesel Exhaust Fluid Tank Temperature 2
7575	Aftertreatment 2 Diesel Exhaust Fluid Tank Heater 2
7576	Glow Plug Control Module
7577	Glow Plug Control Module Internal Temperature
7579	Elevated Engine Speed Allowed Switch
7580	Aftertreatment Regeneration Engine Speed Allowed Switch

7581	Engine Gaseous Fuel Pressure Regulator Intake Pressure
7583	Number of Tire Sensors
7584	Tire Number
7585	Tire Location
7586	Tire Sensor Identification Number
7587	Tire Sensor Enable Setting
7588	Aftertreatment Diesel Exhaust Fluid Heater Circuit Breaker
7589	Alternator Setpoint Voltage Command
7590	Alternator Excitation Maximum Current Limit
7591	Alternator Torque Ramp Time Command
7592	Alternator Torque Ramp Maximum Speed Command
7593	Engine Fuel Actuator 3 Control Command
7594	Engine Fuel Actuator 4 Control Command
7595	Engine Throttle Valve 2 Differential Pressure
7596	Engine Diesel Fuel Demand Rate
7597	Engine Total Diesel Fuel Demand
7598	Aftertreatment 1 Diesel Exhaust Fluid Backflow Valve 1
7599	Aftertreatment 1 Diesel Exhaust Fluid Backflow Valve 2
7600	Aftertreatment 2 Diesel Exhaust Fluid Backflow Valve 1
7601	Aftertreatment 2 Diesel Exhaust Fluid Backflow Valve 2
7602	Aftertreatment 1 Diesel Exhaust Fluid Controller 1 Identification
7603	Aftertreatment 1 Diesel Exhaust Fluid Controller 2 Identification
7604	Aftertreatment 2 Diesel Exhaust Fluid Controller 1 Identification
7605	Aftertreatment 2 Diesel Exhaust Fluid Controller 2 Identification
7606	Aftertreatment Diesel Exhaust Fluid Tank Volume
7607	Aftertreatment Diesel Exhaust Fluid Tank Temperature
7608	Total Engine Energy
7609	Engine Cylinder 1 Low Frequency Knock Level
7610	Engine Cylinder 2 Low Frequency Knock Level
7611	Engine Cylinder 3 Low Frequency Knock Level
7612	Engine Cylinder 4 Low Frequency Knock Level
7613	Engine Cylinder 5 Low Frequency Knock Level
7614	Engine Cylinder 6 Low Frequency Knock Level
7615	Engine Cylinder 7 Low Frequency Knock Level
7616	Engine Cylinder 8 Low Frequency Knock Level
7617	Engine Cylinder 9 Low Frequency Knock Level
7618	Engine Cylinder 10 Low Frequency Knock Level
7619	Engine Cylinder 11 Low Frequency Knock Level
7620	Engine Cylinder 12 Low Frequency Knock Level
7621	Engine Cylinder 13 Low Frequency Knock Level
7622	Engine Cylinder 14 Low Frequency Knock Level
7623	Engine Cylinder 15 Low Frequency Knock Level
7624	Engine Cylinder 16 Low Frequency Knock Level
7625	Engine Cylinder 17 Low Frequency Knock Level

7626	Engine Cylinder 18 Low Frequency Knock Level
7627	Engine Cylinder 19 Low Frequency Knock Level
7628	Engine Cylinder 20 Low Frequency Knock Level
7629	Engine Cylinder 1 Maximum Pressure Increase Rate
7630	Engine Cylinder 2 Maximum Pressure Increase Rate
7631	Engine Cylinder 3 Maximum Pressure Increase Rate
7632	Engine Cylinder 4 Maximum Pressure Increase Rate
7633	Engine Cylinder 5 Maximum Pressure Increase Rate
7634	Engine Cylinder 6 Maximum Pressure Increase Rate
7635	Engine Cylinder 7 Maximum Pressure Increase Rate
7636	Engine Cylinder 8 Maximum Pressure Increase Rate
7637	Engine Cylinder 9 Maximum Pressure Increase Rate
7638	Engine Cylinder 10 Maximum Pressure Increase Rate
7639	Engine Cylinder 11 Maximum Pressure Increase Rate
7640	Engine Cylinder 12 Maximum Pressure Increase Rate
7641	Engine Cylinder 13 Maximum Pressure Increase Rate
7642	Engine Cylinder 14 Maximum Pressure Increase Rate
7643	Engine Cylinder 15 Maximum Pressure Increase Rate
7644	Engine Cylinder 16 Maximum Pressure Increase Rate
7645	Engine Cylinder 17 Maximum Pressure Increase Rate
7646	Engine Cylinder 18 Maximum Pressure Increase Rate
7647	Engine Cylinder 19 Maximum Pressure Increase Rate
7648	Engine Cylinder 20 Maximum Pressure Increase Rate
7649	Aftertreatment 1 SCR Intake NOx 2
7650	Aftertreatment 1 Intake Percent Oxygen 2
7651	Aftertreatment 1 Intake Gas Sensor 2 Power In Range
7652	Aftertreatment 1 Intake Gas Sensor 2 at Temperature
7653	Aftertreatment 1 SCR Intake NOx 2 Reading Stable
7654	Aftertreatment 1 Intake Wide-Range Percent Oxygen 2 Reading Stable
7655	Aftertreatment 1 Intake Gas Sensor 2 Heater Preliminary FMI
7656	Aftertreatment 1 Intake Gas Sensor 2 Heater Control
7657	Aftertreatment 1 SCR Intake NOx Sensor 2 Preliminary FMI
7658	Aftertreatment 1 Intake NOx Sensor 2 Self-diagnosis Status
7659	Aftertreatment 1 Intake Oxygen Sensor 2 Preliminary FMI
7660	Aftertreatment 1 Outlet NOx 2
7661	Aftertreatment 1 Outlet Percent Oxygen 2
7662	Aftertreatment 1 Outlet Gas Sensor 2 Power In Range
7663	Aftertreatment 1 Outlet Gas Sensor 2 at Temperature
7664	Aftertreatment 1 Outlet NOx 2 Reading Stable
7665	Aftertreatment 1 Outlet Wide-Range Percent Oxygen 2 Reading Stable
7666	Aftertreatment 1 Outlet Gas Sensor 2 Heater Preliminary FMI
7667	Aftertreatment 1 Outlet Gas Sensor 2 Heater Control
7668	Aftertreatment 1 Outlet NOx Sensor 2 Preliminary FMI
7669	Aftertreatment 1 Outlet NOx Sensor 2 Self-diagnosis Status

7670	Aftertreatment 1 Outlet Oxygen Sensor 2 Preliminary FMI
7671	Aftertreatment 2 SCR Intake NOx 2
7672	Aftertreatment 2 Intake Percent Oxygen 2
7673	Aftertreatment 2 Intake Gas Sensor 2 Power In Range
7674	Aftertreatment 2 Intake Gas Sensor 2 at Temperature
7675	Aftertreatment 2 SCR Intake NOx 2 Reading Stable
7676	Aftertreatment 2 Intake Wide-Range Percent Oxygen 2 Reading Stable
7677	Aftertreatment 2 Intake Gas Sensor 2 Heater Preliminary FMI
7678	Aftertreatment 2 Intake Gas Sensor 2 Heater Control
7679	Aftertreatment 2 SCR Intake NOx Sensor 2 Preliminary FMI
7680	Aftertreatment 2 Intake NOx Sensor 2 Self-diagnosis Status
7681	Aftertreatment 2 Intake Oxygen Sensor 2 Preliminary FMI
7682	Aftertreatment 2 Outlet NOx 2
7683	Aftertreatment 2 Outlet Percent Oxygen 2
7684	Aftertreatment 2 Outlet Gas Sensor 2 Power In Range
7685	Aftertreatment 2 Outlet Gas Sensor 2 at Temperature
7686	Aftertreatment 2 Outlet NOx 2 Reading Stable
7687	Aftertreatment 2 Outlet Wide-Range Percent Oxygen 2 Reading Stable
7688	Aftertreatment 2 Outlet Gas Sensor 2 Heater Preliminary FMI
7689	Aftertreatment 2 Outlet Gas Sensor 2 Heater Control
7690	Aftertreatment 2 Outlet NOx Sensor 2 Preliminary FMI
7691	Aftertreatment 2 Outlet NOx Sensor 2 Self-diagnosis Status
7692	Aftertreatment 2 Outlet Oxygen Sensor 2 Preliminary FMI
7693	Payload Temperature 1 (duplicate, use SPN 7703)
7694	Transmission Auto-Neutral (Manual Return) Enable Switch
7695	Transmission Auto-Neutral (Manual Return) Request
7696	Transmission Auto-Neutral (Manual Return) State
7697	Aftertreatment 1 Diesel Exhaust Fluid Controller Sensor Supply Voltage
7698	Aftertreatment 2 Diesel Exhaust Fluid Controller Sensor Supply Voltage
7699	Total Delivered Payload Weight
7700	Total Haul Cycle Count
7701	Total Payload Transaction Count
7702	Payload Delivery Transaction Status
7703	Payload Temperature 1
7704	Payload Temperature 2
7705	Payload Temperature 3
7706	Payload Temperature 4
7707	Payload Temperature 5
7708	Engine Turbocharger Compressor Bypass Actuator 1 Motor Current Disable
7709	Engine Turbocharger Compressor Bypass Actuator 2 Motor Current Disable
7710	Engine Turbocharger Wastegate Actuator 2 Motor Current Disable
7711	Vehicle Trailer Status
7712	Battery Potential / Power Input 3
7713	Battery Potential / Power Input 4

7714	SLI Battery 3 Net Current
7715	SLI Battery 4 Net Current
7716	Differential Lock State - Rear Axle 3
7717	Camshaft Phase Actuator Position
7718	Camshaft Phase Actuator Command
7719	Operator Inducement Time to Final Inducement Action
7720	Engine Common Rail Oil Pressure
7721	Engine Common Rail Oil Absolute Pressure
7722	Engine Fuel 2 Temperature 1
7723	Left Front Cab Door Latch Position
7724	Right Front Cab Door Latch Position
7725	Left Rear Cab Door Latch Position
7726	Right Rear Cab Door Latch Position
7727	Cab Doors Lock Actuation Command
7728	Remote Cab Door Lock Request
7729	Left Front Window Position Command
7730	Right Front Window Position Command
7731	Left Rear Window Position Command
7732	Right Rear Window Position Command
7733	Mirror Left 1 Horizontal Command
7734	Mirror Left 1 Vertical Command
7735	Mirror Right 1 Horizontal Command
7736	Mirror Right 1 Vertical Command
7737	Mirror Left 2 Horizontal Command
7738	Mirror Left 2 Vertical Command
7739	Mirror Right 2 Horizontal Command
7740	Mirror Right 2 Vertical Command
7741	Mirror Left 1 Heat Command
7742	Mirror Right 1 Heat Command
7743	Mirror Left 2 Heat Command
7744	Mirror Right 2 Heat Command
7745	Engine Start Request
7746	Engine Start Consent
7747	Engine Start Abort Request
7748	Engine Starter 1 Feedback
7749	Engine Starter 2 Feedback
7750	Engine Start Control Message Counter
7751	Engine Start Control Checksum
7752	Engine Start Control Message Rate
7753	Engine Starter Command
7754	Engine Start Request Latch Status
7755	Operator Engine Start Consent Summary
7756	Automatic Engine Start Consent Summary
7757	Engine Start Arbitrator Message Counter

7758	Engine Start Arbitrator Checksum
7759	Engine Stop-Start Disable Command
7760	Requested Engine Speed Acceleration Rate Limit
7761	Requested Engine Speed Deceleration Rate Limit
7762	Engine Valve Control Module 1
7763	Engine Valve Control Module 2
7764	Engine Valve Control Module 3
7765	Engine Valve Control Module 4
7766	Engine Valve Control Module 5
7767	Engine Valve Control Module 6
7768	Engine Valve Control Module 7
7769	Engine Valve Control Module 8
7770	Engine Valve Control Module 1 Preliminary FMI
7771	Engine Valve Control Module 2 Preliminary FMI
7772	Engine Valve Control Module 3 Preliminary FMI
7773	Engine Valve Control Module 4 Preliminary FMI
7774	Engine Valve Control Module 5 Preliminary FMI
7775	Engine Valve Control Module 6 Preliminary FMI
7776	Engine Valve Control Module 7 Preliminary FMI
7777	Engine Valve Control Module 8 Preliminary FMI
7778	Transmission Reference Torque
7779	Maximum Forward Transmission Output Shaft Speed
7780	Maximum Reverse Transmission Output Shaft Speed
7781	Barometric Absolute Pressure 2
7782	Engine Protection Due To Turbocharger Overspeed
7783	Aftertreatment 1 Diesel Exhaust Fluid Requested Quantity of Integrator (High Resolution)
7784	Aftertreatment 2 Diesel Exhaust Fluid Requested Quantity of Integrator (High Resolution)
7785	Engine Fluid Bund Level
7786	Aftertreatment 1 Diesel Exhaust Fluid Actual Quantity of Integrator (High Resolution)
7787	Aftertreatment 2 Diesel Exhaust Fluid Actual Quantity of Integrator (High Resolution)
7788	Transmission Shift Selector Requested Vehicle Direction
7789	Engine Fueling Desired Reason
7790	Front Hitch Roll Angle
7791	Front Hitch Roll Limit State
7792	Front Hitch Roll Exit/Reason Code
7793	Front Hitch Pitch Angle
7794	Front Hitch Pitch Limit State
7795	Front Hitch Pitch Exit/Reason Code
7796	Front Hitch Roll Command
7797	Front Hitch Roll Sensitivity Command
7798	Front Hitch Pitch Command
7799	Front Hitch Pitch Sensitivity Command
7800	Front Hitch Roll Sensitivity

7801	Front Hitch Pitch Sensitivity
7802	Rear Hitch Roll Angle
7803	Rear Hitch Roll Limit State
7804	Rear Hitch Roll Exit/Reason Code
7805	Rear Hitch Pitch Angle
7806	Rear Hitch Pitch Limit State
7807	Rear Hitch Pitch Exit/Reason Code
7808	Rear Hitch Roll Command
7809	Rear Hitch Roll Sensitivity Command
7810	Rear Hitch Pitch Command
7811	Rear Hitch Pitch Sensitivity Command
7812	Rear Hitch Roll Sensitivity
7813	Rear Hitch Pitch Sensitivity
7814	Fire Pump Water Tank Level
7815	Fire Pump Discharge Pressure
7816	Fire Pump Intake Pressure
7817	Class-A Foam Tank Level
7818	Class-B Foam Tank Level
7819	CAFS Air Pressure
7820	GPS Antenna
7821	Satellite Communication Antenna
7822	Cellular Communication Antenna
7823	Incorrect Antenna for Cellular Radio
7824	Incorrect Antenna for Satellite Radio
7825	Fire Pump Operation Time
7826	Fire Pump Engagement Cycles
7827	Transmission Communications Failure Idle Torque Limit
7828	Engine Default Idle Torque Limit
7829	Transmission Idle Governor Fueling Inhibit
7830	Transmission Idle Governor Fueling Inhibit Support
7831	Generator Trip kW Hours Export
7832	Generator Trip kVAr Hours Export
7833	Canister Vent Valve
7834	Canister Purge Valve Command
7835	Gasoline Fuel Tank Pressure
7836	Cruise Control Driver Cancellation Status
7837	Estimated Engine Parasitic Losses - Percent Torque (High Resolution)
7838	Engine Load Threshold Exceeded Output
7839	Engine Load Share Master Output
7840	Engine Speed Governor Mode
7841	Bus Tie Breaker 1
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7845	Engine Marine Operating Mode Status
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7849	Aftertreatment 2 SCR System Sulfation Level
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7903	SLI Battery Pack 1 Battery 1 State of Charge
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7907	SLI Battery Pack 1 Sensor 1 Initialization Status
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8165	Aftertreatment 2 DOC Intake to DPF Outlet Delta Pressure
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8176	Oil Debris Monitor Non-Ferrous Bins 1 and 2 Identification Number
8177	Oil Debris Monitor Non-Ferrous Bin 1 Count
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8198	Oil Debris Monitor Non-Ferrous Bin 1 Count Command
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8332	DC/AC Accessory Inverter 1 Device Frequency Rate of Change Limit
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8336	DC/AC Accessory Inverter 1 Operational Command
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8342	DC/AC Accessory Inverter 2 Device Maximum Frequency
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8344	DC/AC Accessory Inverter 2 Device Rated Frequency
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8419	Front Fuel Receptacle Cover Status
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8435	Engine Self-Induced Derate Load
8436	Engine Power Derate Request
8438	Idle Speed Request
8439	Idle Control Enable State
8440	Idle Control Request Activation
8441	Engine External Idle Request Feedback
8442	Aftertreatment 1 Diesel Exhaust Fluid Doser Valve 1 Command
8443	Engine Alternator Winding 7 Temperature
8444	Engine Alternator Winding 8 Temperature
8445	Engine Alternator Winding 9 Temperature
8446	Engine Alternator Winding 10 Temperature
8447	Engine Alternator Winding 11 Temperature
8448	Engine Alternator Winding 12 Temperature
8449	Alternator Air Cooler Air Intake Temperature
8450	Alternator Air Cooler Air Outlet Temperature
8451	Power Rectifier Diode 1 Temperature
8452	Power Rectifier Diode 2 Temperature
8453	Power Rectifier Diode 3 Temperature
8454	Power Rectifier Diode 4 Temperature
8455	Power Rectifier Diode 5 Temperature
8456	Power Rectifier Diode 6 Temperature
8457	Power Rectifier Diode 7 Temperature
8458	Power Rectifier Diode 8 Temperature
8459	Power Rectifier Diode 9 Temperature
8460	Power Rectifier Diode 10 Temperature
8461	Power Rectifier Diode 11 Temperature
8462	Power Rectifier Diode 12 Temperature
8463	Engine Alternator Winding 4 Temperature
8464	Engine Alternator Winding 5 Temperature
8465	Engine Alternator Winding 6 Temperature
8466	Alternator Oil Cooler Oil Intake Temperature
8467	Alternator Oil Cooler Oil Outlet Temperature
8468	Alternator Oil Cooler Coolant Intake Temperature
8469	Alternator Oil Cooler Coolant Outlet Temperature
8470	Alternator Aftercooler Coolant Pump Outlet Temperature
8471	Alternator Aftercooler Coolant Outlet Temperature
8472	Alternator Aftercooler Coolant Pump Outlet Pressure
8473	Engine Coolant Pump Coolant Outlet Pressure
8474	Aftertreatment 1 Diesel Exhaust Fluid Pump Power Supply

8475	Power Electronics Coolant Fill Switch
8476	Propulsion Motor Coolant Fill Switch
8477	Engine Mixer 1 Intake Pressure
8478	Engine Turbocharger 2 Calculated Turbine Outlet Temperature
8479	Engine Turbocharger 3 Calculated Turbine Outlet Temperature
8480	Engine Turbocharger 4 Calculated Turbine Outlet Temperature
8481	Aftertreatment 2 Diesel Exhaust Fluid Pump Power Relay
8482	Aftertreatment 2 Diesel Exhaust Fluid Pump (Obsolete - Use SPN 7108)
8483	Aftertreatment 2 Diesel Exhaust Fluid Control Module Circuit Breaker
8484	Demanded Brake Application Pressure
8485	Aftertreatment 2 Intake 2 Gas Sensor Power Supply
8486	Aftertreatment 2 Outlet 2 Gas Sensor Power Supply
8487	Engine Charge Air Cooler Intake Coolant Temperature
8488	Engine Charge Air Cooler Outlet Coolant Temperature
8489	Engine Intake Coolant Temperature
8490	Engine Turbocharger 1 Difference from Average Speed
8491	Engine Turbocharger 2 Difference from Average Speed
8492	Engine Turbocharger 3 Difference from Average Speed
8493	Engine Turbocharger 4 Difference from Average Speed
8494	Engine Fuel Valve 1 Differential Pressure (High Resolution)
8495	Lock Status of Door 11
8496	Open Status of Door 11
8497	Enable Status of Door 11
8498	Lock Status of Door 12
8499	Open Status of Door 12
8500	Enable Status of Door 12
8501	Lock Status of Door 13
8502	Open Status of Door 13
8503	Enable Status of Door 13
8504	Lock Status of Door 14
8505	Open Status of Door 14
8506	Enable Status of Door 14
8507	Lock Status of Door 15
8508	Open Status of Door 15
8509	Enable Status of Door 15
8510	Lock Status of Door 16
8511	Open Status of Door 16
8512	Enable Status of Door 16
8513	Lock Status of Door 17
8514	Open Status of Door 17
8515	Enable Status of Door 17
8516	Lock Status of Door 18
8517	Open Status of Door 18
8518	Enable Status of Door 18

8519	Lock Status of Door 19
8520	Open Status of Door 19
8521	Enable Status of Door 19
8522	Lock Status of Door 20
8523	Open Status of Door 20
8524	Enable Status of Door 20
8525	Lock Status of Door 21
8526	Open Status of Door 21
8527	Enable Status of Door 21
8528	Lock Status of Door 22
8529	Open Status of Door 22
8530	Enable Status of Door 22
8531	Lock Status of Door 23
8532	Open Status of Door 23
8533	Enable Status of Door 23
8534	Lock Status of Door 24
8535	Open Status of Door 24
8536	Enable Status of Door 24
8537	Lock Status of Door 25
8538	Open Status of Door 25
8539	Enable Status of Door 25
8540	Lock Status of Door 26
8541	Open Status of Door 26
8542	Enable Status of Door 26
8543	Lock Status of Door 27
8544	Open Status of Door 27
8545	Enable Status of Door 27
8546	Lock Status of Door 28
8547	Open Status of Door 28
8548	Enable Status of Door 28
8549	Lock Status of Door 29
8550	Open Status of Door 29
8551	Enable Status of Door 29
8552	Lock Status of Door 30
8553	Open Status of Door 30
8554	Enable Status of Door 30
8555	Data Value SPN
8556	Data Value Data
8557	Supported in Data Value DM
8558	Hybrid System Engine Stop-Start Remaining Percentage
8560	DC/DC 1 Operational Command
8561	DC/DC 1 Low Side Voltage Buck Setpoint
8562	DC/DC 1 High Side Voltage Boost Setpoint
8563	DC/DC 1 High Side Voltage Minimum Limit Request

8564	DC/DC 1 High Side Voltage Maximum Limit Request
8565	DC/DC 1 High Side Current Maximum Limit Request
8566	DC/DC 1 Low Side Voltage Minimum Limit Request
8567	DC/DC 1 Low Side Voltage Maximum Limit Request
8568	DC/DC 1 Low Side Current Maximum Limit Request
8569	DC/DC 1 Operational Status
8570	DC/DC 1 HVIL Status
8571	DC/DC 1 Loadshed Request
8572	DC/DC 1 Power Limit due to High Side Current
8573	DC/DC 1 Power Limit due to Low Side Current
8574	DC/DC 1 Power Limit due to High Side Voltage Minimum
8575	DC/DC 1 Power Limit due to High Side Voltage Maximum
8576	DC/DC 1 Power Limit due to Low Side Voltage Minimum
8577	DC/DC 1 Power Limit due to Low Side Voltage Maximum
8578	DC/DC 1 Power Limit due to Converter Temperature
8579	DC/DC 1 Power Limit due to Electronic Filter Temperature
8580	DC/DC 1 Power Limit due to Power Electronics Temperature
8581	DC/DC 1 Power Limit due to SLI Battery Terminal Voltage
8582	DC/DC 1 Power Limit due to SLI Battery Terminal Temperature
8583	DC/DC 1 Power Limit due to SLI Battery Terminal Current
8584	DC/DC 1 Power Limit due to Undefined Reason
8585	DC/DC 1 Low Side Voltage
8586	DC/DC 1 Low Side Current
8587	DC/DC 1 High Side Voltage
8588	DC/DC 1 High Side Current
8589	DC/DC 1 SLI Battery Terminal Voltage
8590	DC/DC 1 SLI Battery Terminal Current
8591	DC/DC 1 SLI Battery Terminal Temperature
8592	DC/DC 1 Converter Temperature
8593	DC/DC 1 Converter Electronic Filter Temperature
8594	DC/DC 1 Power Electronics Temperature
8595	Transmit PGNs Commanded Port
8596	Transmit PGNs Transaction Mode
8597	Commanded Transmit PGN
8598	Commanded Transmit PGN Requested State
8599	Transmit PGNs Port
8600	Transmit PGNs Port Pending Changes Status
8601	Transmit PGNs Port Command Status
8602	Configurable Transmit PGN
8603	Configurable Transmit PGN Current Transmit Status
8604	Configurable Transmit PGN Pending Change Status
8605	Configurable Transmit PGN Modified Status
8606	Auxiliary PWM Input 1
8607	Engine Mixer 2 Intake Pressure

8608	Engine Operating Mode Command
8609	Transmission Software / Hardware Incompatible
8610	Transmission Hardware Indeterminate
8611	Water In Charge Air Duct After Charge Air Cooler Indicator
8612	Engine Overloaded Indicator
8613	Source Address of Active or Pending Transmission Requested Gear
8614	Engine Shutdown Command
8615	Transmission Pressure Control Solenoid 9
8616	Transmission Pressure Control Solenoid 10
8617	Transmission Pressure Control Solenoid 11
8618	Transmission Pressure Control Solenoid 12
8619	Engine Exhaust Manifold Absolute Pressure 1
8620	Engine Exhaust Manifold Absolute Pressure 2
8621	Non-Volatile Memory (NVM)
8622	Engine Prelube Oil Low Pressure Threshold
8629	Total Aftertreatment Operating Hours
8630	Actual Maximum Available Engine - Percent Fuel
8631	Engine Turbocharger 1 Efficiency
8632	Engine Turbocharger 2 Efficiency
8633	Engine Turbocharger 3 Efficiency
8634	Engine Turbocharger 4 Efficiency
8635	Alternator Bearing Header Intake Pressure
8636	Alternator Oil Cooler Discharge Pump Pressure
8637	Engine Oil Cooler Discharge Pump Pressure
8638	Engine Oil Cooler Intake Temperature
8639	Engine PTO Governor Disable Switch
8640	Well Stimulation Pump Vibration 1
8641	Well Stimulation Pump Vibration 2
8642	Well Stimulation Pump Vibration 3
8643	Well Stimulation Pump Vibration 4
8644	Well Stimulation Pump Vibration 5
8645	Well Stimulation Pump Vibration 6
8646	Well Stimulation Pump Vibration 7
8647	Well Stimulation Pump Vibration 8
8648	Well Stimulation Pump Rod Load
8649	Well Stimulation Pump Cavitation Status
8650	Well Stimulation Pump Flow Rate
8651	Well Stimulation Pump Fluid End Valve Leak
8652	Well Stimulation Pump Plunger Diameter
8653	Well Stimulation Pump Stroke Length
8654	Well Stimulation Pump Gear Ratio
8655	Well Stimulation Pump Rated Speed
8656	Well Stimulation Pump Fluid End Working Hours
8657	Well Stimulation Pump Power End Working Hours

8658	Well Stimulation Pump Working Hours
8659	Well Stimulation Pump Cycle Count
8660	Well Stimulation Pump Oil Viscosity
8661	Well Stimulation Pump Oil Density
8662	Well Stimulation Pump Oil Relative Dielectricity
8663	Well Stimulation Pump Oil Temperature
8664	Engine Operating Mode Selection
8665	Auxiliary Valve 0 Flow
8666	Auxiliary Valve 1 Flow
8667	Auxiliary Valve 2 Flow
8668	Auxiliary Valve 3 Flow
8669	Auxiliary Valve 4 Flow
8670	Auxiliary Valve 5 Flow
8671	Auxiliary Valve 6 Flow
8672	Auxiliary Valve 7 Flow
8673	Auxiliary Valve 8 Flow
8674	Auxiliary Valve 9 Flow
8675	Auxiliary Valve 10 Flow
8676	Auxiliary Valve 11 Flow
8677	Auxiliary Valve 12 Flow
8678	Auxiliary Valve 13 Flow
8679	Auxiliary Valve 14 Flow
8680	Auxiliary Valve 15 Flow
8681	Auxiliary Valve 16 Flow
8682	Auxiliary Valve 17 Flow
8683	Auxiliary Valve 18 Flow
8684	Auxiliary Valve 19 Flow
8685	Auxiliary Valve 20 Flow
8686	Auxiliary Valve 21 Flow
8687	Auxiliary Valve 22 Flow
8688	Auxiliary Valve 23 Flow
8689	Auxiliary Valve 24 Flow
8690	Auxiliary Valve 25 Flow
8691	Auxiliary Valve 26 Flow
8692	Auxiliary Valve 27 Flow
8693	Auxiliary Valve 28 Flow
8694	Auxiliary Valve 29 Flow
8695	Auxiliary Valve 30 Flow
8696	Auxiliary Valve 31 Flow
8697	Auxiliary Valve 0 Automation Status
8698	Auxiliary Valve 1 Automation Status
8699	Auxiliary Valve 2 Automation Status
8700	Auxiliary Valve 3 Automation Status
8701	Auxiliary Valve 4 Automation Status

8702	Auxiliary Valve 5 Automation Status
8703	Auxiliary Valve 6 Automation Status
8704	Auxiliary Valve 7 Automation Status
8705	Auxiliary Valve 8 Automation Status
8706	Auxiliary Valve 9 Automation Status
8707	Auxiliary Valve 10 Automation Status
8708	Auxiliary Valve 11 Automation Status
8709	Auxiliary Valve 12 Automation Status
8710	Auxiliary Valve 13 Automation Status
8711	Auxiliary Valve 14 Automation Status
8712	Auxiliary Valve 15 Automation Status
8713	Auxiliary Valve 16 Automation Status
8714	Auxiliary Valve 17 Automation Status
8715	Auxiliary Valve 18 Automation Status
8716	Auxiliary Valve 19 Automation Status
8717	Auxiliary Valve 20 Automation Status
8718	Auxiliary Valve 21 Automation Status
8719	Auxiliary Valve 22 Automation Status
8720	Auxiliary Valve 23 Automation Status
8721	Auxiliary Valve 24 Automation Status
8722	Auxiliary Valve 25 Automation Status
8723	Auxiliary Valve 26 Automation Status
8724	Auxiliary Valve 27 Automation Status
8725	Auxiliary Valve 28 Automation Status
8726	Auxiliary Valve 29 Automation Status
8727	Auxiliary Valve 30 Automation Status
8728	Auxiliary Valve 31 Automation Status
8729	Auxiliary Valve 0 Exit/Reason Code
8730	Auxiliary Valve 1 Exit/Reason Code
8731	Auxiliary Valve 2 Exit/Reason Code
8732	Auxiliary Valve 3 Exit/Reason Code
8733	Auxiliary Valve 4 Exit/Reason Code
8734	Auxiliary Valve 5 Exit/Reason Code
8735	Auxiliary Valve 6 Exit/Reason Code
8736	Auxiliary Valve 7 Exit/Reason Code
8737	Auxiliary Valve 8 Exit/Reason Code
8738	Auxiliary Valve 9 Exit/Reason Code
8739	Auxiliary Valve 10 Exit/Reason Code
8740	Auxiliary Valve 11 Exit/Reason Code
8741	Auxiliary Valve 12 Exit/Reason Code
8742	Auxiliary Valve 13 Exit/Reason Code
8743	Auxiliary Valve 14 Exit/Reason Code
8744	Auxiliary Valve 15 Exit/Reason Code
8745	Auxiliary Valve 16 Exit/Reason Code

8746	Auxiliary Valve 17 Exit/Reason Code
8747	Auxiliary Valve 18 Exit/Reason Code
8748	Auxiliary Valve 19 Exit/Reason Code
8749	Auxiliary Valve 20 Exit/Reason Code
8750	Auxiliary Valve 21 Exit/Reason Code
8751	Auxiliary Valve 22 Exit/Reason Code
8752	Auxiliary Valve 23 Exit/Reason Code
8753	Auxiliary Valve 24 Exit/Reason Code
8754	Auxiliary Valve 25 Exit/Reason Code
8755	Auxiliary Valve 26 Exit/Reason Code
8756	Auxiliary Valve 27 Exit/Reason Code
8757	Auxiliary Valve 28 Exit/Reason Code
8758	Auxiliary Valve 29 Exit/Reason Code
8759	Auxiliary Valve 30 Exit/Reason Code
8760	Auxiliary Valve 31 Exit/Reason Code
8761	Front PTO Output Shaft Speed
8762	Rear PTO Output Shaft Speed
8763	Front PTO Automation Status
8764	Rear PTO Automation Status
8765	Front PTO Exit/Reason Code
8766	Rear PTO Exit/Reason Code
8767	Front Hitch Position
8768	Rear Hitch Position
8769	Front Hitch Automation Status
8770	Rear Hitch Automation Status
8771	Front Hitch Exit/Reason Code
8772	Rear Hitch Exit/Reason Code
8773	Machine Speed
8774	Machine Speed Automation Status
8775	Machine Speed Exit/Reason Code
8776	External Guidance Curvature
8777	External Guidance Automation Status
8778	External Guidance Exit/Reason Code
8779	Auxiliary Valve 0 Flow Request
8780	Auxiliary Valve 1 Flow Request
8781	Auxiliary Valve 2 Flow Request
8782	Auxiliary Valve 3 Flow Request
8783	Auxiliary Valve 4 Flow Request
8784	Auxiliary Valve 5 Flow Request
8785	Auxiliary Valve 6 Flow Request
8786	Auxiliary Valve 7 Flow Request
8787	Auxiliary Valve 8 Flow Request
8788	Auxiliary Valve 9 Flow Request
8789	Auxiliary Valve 10 Flow Request

8790	Auxiliary Valve 11 Flow Request
8791	Auxiliary Valve 12 Flow Request
8792	Auxiliary Valve 13 Flow Request
8793	Auxiliary Valve 14 Flow Request
8794	Auxiliary Valve 15 Flow Request
8795	Auxiliary Valve 16 Flow Request
8796	Auxiliary Valve 17 Flow Request
8797	Auxiliary Valve 18 Flow Request
8798	Auxiliary Valve 19 Flow Request
8799	Auxiliary Valve 20 Flow Request
8800	Auxiliary Valve 21 Flow Request
8801	Auxiliary Valve 22 Flow Request
8802	Auxiliary Valve 23 Flow Request
8803	Auxiliary Valve 24 Flow Request
8804	Auxiliary Valve 25 Flow Request
8805	Auxiliary Valve 26 Flow Request
8806	Auxiliary Valve 27 Flow Request
8807	Auxiliary Valve 28 Flow Request
8808	Auxiliary Valve 29 Flow Request
8809	Auxiliary Valve 30 Flow Request
8810	Auxiliary Valve 31 Flow Request
8811	Front PTO Output Shaft Speed Request
8812	Rear PTO Output Shaft Speed Request
8813	Front Hitch Position Request
8814	Rear Hitch Position Request
8815	Machine Speed Request
8816	External Guidance Curvature Request
8817	DC/DC 1 SLI Battery Terminal Voltage Maximum Limit Request
8818	DC/DC 1 SLI Battery Terminal Charge Current Maximum Limit Request
8819	DC/DC 1 SLI Battery Temperature Maximum Limit Request
8820	DC/DC 1 Low Side Power
8821	DC/DC 1 High Side Power
8822	DC/DC 1 Coolant In Temperature
8823	DC/DC 1 Coolant Out Temperature
8824	DC/DC 1 High Side Voltage Minimum Limit Setting
8825	DC/DC 1 High Side Voltage Maximum Limit Setting
8826	DC/DC 1 High Side Current Maximum Limit Setting
8827	DC/DC 1 Low Side Voltage Minimum Limit Setting
8828	DC/DC 1 Low Side Voltage Maximum Limit Setting
8829	DC/DC 1 Low Side Current Maximum Limit Setting
8830	DC/DC 1 SLI Battery Terminal Voltage Maximum Limit Setting
8831	DC/DC 1 SLI Battery Terminal Charge Current Maximum Limit Setting
8832	DC/DC 1 SLI Battery Temperature Maximum Limit Setting
8833	DC/DC 1 Total High Side Energy

8834	DC/DC 1 Total Low Side Energy
8835	DC/DC 1 Total High Side Charge
8836	DC/DC 1 Total Low Side Charge
8837	Receive SPNs Commanded Port
8838	Receive SPNs Transaction Mode
8839	Commanded Receive SPN
8840	Commanded Receive SPN Requested State
8841	Commanded Receive SPN Source Address
8842	Receive SPNs Port
8843	Receive SPNs Port Pending Changes Status
8844	Receive SPNs Port Command Status
8845	Configurable Receive SPN
8846	Configurable Receive SPN Source Address
8847	Configurable Receive SPN Modified Status
8848	Configurable Receive SPN Detailed Status
8849	Transfer Case Direction Status
8850	Engine Turbocharger 2 Oil Temperature
8851	DC/AC Accessory Inverter 1 HVIL Status
8852	DC/AC Accessory Inverter 2 HVIL Status
8853	DC/AC Accessory Inverter 3 HVIL Status
8854	DC/AC Accessory Inverter 4 HVIL Status
8855	Active Shift Console Request
8856	Engine Oil Level High / Low
8857	Diesel Particulate Filter Active Regeneration Availability Status
8858	Aftertreatment 1 SCR System Cleaning Incomplete
8859	Aftertreatment 2 SCR System Cleaning Incomplete
8860	Well Stimulation Pump Gear Box Oil Pressure Low Threshold
8861	Well Stimulation Pump Gear Box Oil Pressure High Threshold
8862	Well Stimulation Pump Gear Box Oil Temperature Low Threshold
8863	Well Stimulation Pump Gear Box Oil Temperature High Threshold
8864	Well Stimulation Pump Suction Pressure Low Threshold
8865	Well Stimulation Pump Suction Pressure High Threshold
8866	Well Stimulation Pump Discharge Pressure High Threshold
8867	Well Stimulation Pump Crankshaft Speed Low Threshold
8868	Well Stimulation Pump Crankshaft Speed High Threshold
8869	Well Stimulation Pump Rod Load High Threshold
8870	Well Stimulation Pump Plunger Firing Order
8871	Well Stimulation Pump Gear Box Oil Pressure Low Threshold Setting
8872	Well Stimulation Pump Gear Box Oil Pressure High Threshold Setting
8873	Well Stimulation Pump Gear Box Oil Temperature Low Threshold Setting
8874	Well Stimulation Pump Gear Box Oil Temperature High Threshold Setting
8875	Well Stimulation Pump Suction Pressure Low Threshold Setting
8876	Well Stimulation Pump Suction Pressure High Threshold Setting
8877	Well Stimulation Pump Discharge Pressure High Threshold Setting

8878	Well Stimulation Pump Crankshaft Speed Low Threshold Setting
8879	Well Stimulation Pump Crankshaft Speed High Threshold Setting
8880	Well Stimulation Pump Rod Load High Threshold Setting
8881	Well Stimulation Pump Plunger Firing Order Setting
8882	Well Stimulation Pump Maintenance Interval Hours
8883	Well Stimulation Pump Valve Operation Hours
8884	Well Stimulation Pump Packing Operation Hours
8885	Well Stimulation Pump Valve Seat Operation Hours
8886	Engine Exhaust Gas Recirculation 2 Cooler Bypass Actuator
8887	Exhaust Particulate Control System Diagnostic Time
8888	Exhaust Particulate Control System Diagnostic Count
8889	DC/AC Accessory Inverter 1 DC Side Power
8890	DC/AC Accessory Inverter 1 DC Side Voltage
8891	DC/AC Accessory Inverter 1 DC Side Current
8892	DC/DC 2 Operational Command
8893	DC/DC 2 Low Side Voltage Buck Setpoint
8894	DC/DC 2 High Side Voltage Boost Setpoint
8895	DC/DC 2 Operational Status
8896	DC/DC 2 HVIL Status
8897	DC/DC 2 Loadshed Request
8898	DC/DC 2 Power Limit due to High Side Current
8899	DC/DC 2 Power Limit due to Low Side Current
8900	DC/DC 2 Power Limit due to High Side Voltage Minimum
8901	DC/DC 2 Power Limit due to High Side Voltage Maximum
8902	DC/DC 2 Power Limit due to Low Side Voltage Minimum
8903	DC/DC 2 Power Limit due to Low Side Voltage Maximum
8904	DC/DC 2 Power Limit due to Converter Temperature
8905	DC/DC 2 Power Limit due to Electronic Filter Temperature
8906	DC/DC 2 Power Limit due to Power Electronics Temperature
8907	DC/DC 2 Power Limit due to SLI Battery Terminal Voltage
8908	DC/DC 2 Power Limit due to SLI Battery Terminal Current
8909	DC/DC 2 Power Limit due to SLI Battery Terminal Temperature
8910	DC/DC 2 Power Limit due to Undefined Reason
8911	DC/DC 2 Low Side Voltage
8912	DC/DC 2 Low Side Current
8913	DC/DC 2 High Side Voltage
8914	DC/DC 2 High Side Current
8915	DC/DC 2 SLI Battery Terminal Voltage
8916	DC/DC 2 SLI Battery Terminal Current
8917	DC/DC 2 SLI Battery Terminal Temperature
8918	DC/DC 2 Low Side Power
8919	DC/DC 2 High Side Power
8920	DC/DC 2 Total High Side Energy
8921	DC/DC 2 Total Low Side Energy

8922	DC/DC 2 Total High Side Charge
8923	DC/DC 2 Total Low Side Charge
8924	DC/DC 2 High Side Voltage Minimum Limit Setting
8925	DC/DC 2 High Side Voltage Maximum Limit Setting
8926	DC/DC 2 High Side Current Maximum Limit Setting
8927	DC/DC 2 Low Side Voltage Minimum Limit Setting
8928	DC/DC 2 Low Side Voltage Maximum Limit Setting
8929	DC/DC 2 Low Side Current Maximum Limit Setting
8930	DC/DC 2 SLI Battery Terminal Voltage Maximum Limit Setting
8931	DC/DC 2 SLI Battery Terminal Charge Current Maximum Limit Setting
8932	DC/DC 2 SLI Battery Temperature Maximum Limit Setting
8933	DC/DC 2 SLI Battery Terminal Voltage Maximum Limit Request
8934	DC/DC 2 SLI Battery Terminal Charge Current Maximum Limit Request
8935	DC/DC 2 SLI Battery Temperature Maximum Limit Request
8936	DC/DC 2 Converter Temperature
8937	DC/DC 2 Converter Electronic Filter Temperature
8938	DC/DC 2 Power Electronics Temperature
8939	DC/DC 2 Coolant In Temperature
8940	DC/DC 2 Coolant Out Temperature
8941	DC/DC 2 Low Side Voltage Minimum Limit Request
8942	DC/DC 2 Low Side Voltage Maximum Limit Request
8943	DC/DC 2 Low Side Current Maximum Limit Request
8944	DC/DC 2 High Side Voltage Minimum Limit Request
8945	DC/DC 2 High Side Voltage Maximum Limit Request
8946	DC/DC 2 High Side Current Maximum Limit Request
8947	DC/DC 3 Operational Command
8948	DC/DC 3 Low Side Voltage Buck Setpoint
8949	DC/DC 3 High Side Voltage Boost Setpoint
8950	DC/DC 3 Operational Status
8951	DC/DC 3 HVIL Status
8952	DC/DC 3 Loadshed Request
8953	DC/DC 3 Power Limit due to High Side Current
8954	DC/DC 3 Power Limit due to Low Side Current
8955	DC/DC 3 Power Limit due to High Side Voltage Minimum
8956	DC/DC 3 Power Limit due to High Side Voltage Maximum
8957	DC/DC 3 Power Limit due to Low Side Voltage Minimum
8958	DC/DC 3 Power Limit due to Low Side Voltage Maximum
8959	DC/DC 3 Power Limit due to Converter Temperature
8960	DC/DC 3 Power Limit due to Electronic Filter Temperature
8961	DC/DC 3 Power Limit due to Power Electronics Temperature
8962	DC/DC 3 Power Limit due to SLI Battery Terminal Voltage
8963	DC/DC 3 Power Limit due to SLI Battery Terminal Current
8964	DC/DC 3 Power Limit due to SLI Battery Terminal Temperature
8965	DC/DC 3 Power Limit due to Undefined Reason

8966	DC/DC 3 Low Side Voltage
8967	DC/DC 3 Low Side Current
8968	DC/DC 3 High Side Voltage
8969	DC/DC 3 High Side Current
8970	DC/DC 3 SLI Battery Terminal Voltage
8971	DC/DC 3 SLI Battery Terminal Current
8972	DC/DC 3 SLI Battery Terminal Temperature
8973	DC/DC 3 Low Side Power
8974	DC/DC 3 High Side Power
8975	DC/DC 3 Total High Side Energy
8976	DC/DC 3 Total Low Side Energy
8977	DC/DC 3 Total High Side Charge
8978	DC/DC 3 Total Low Side Charge
8979	DC/DC 3 High Side Voltage Minimum Limit Setting
8980	DC/DC 3 High Side Voltage Maximum Limit Setting
8981	DC/DC 3 High Side Current Maximum Limit Setting
8982	DC/DC 3 Low Side Voltage Minimum Limit Setting
8983	DC/DC 3 Low Side Voltage Maximum Limit Setting
8984	DC/DC 3 Low Side Current Maximum Limit Setting
8985	DC/DC 3 SLI Battery Terminal Voltage Maximum Limit Setting
8986	DC/DC 3 SLI Battery Terminal Charge Current Maximum Limit Setting
8987	DC/DC 3 SLI Battery Temperature Maximum Limit Setting
8988	DC/DC 3 SLI Battery Terminal Voltage Maximum Limit Request
8989	DC/DC 3 SLI Battery Terminal Charge Current Maximum Limit Request
8990	DC/DC 3 SLI Battery Temperature Maximum Limit Request
8991	DC/DC 3 Converter Temperature
8992	DC/DC 3 Converter Electronic Filter Temperature
8993	DC/DC 3 Power Electronics Temperature
8994	DC/DC 3 Coolant In Temperature
8995	DC/DC 3 Coolant Out Temperature
8996	DC/DC 3 Low Side Voltage Minimum Limit Request
8997	DC/DC 3 Low Side Voltage Maximum Limit Request
8998	DC/DC 3 Low Side Current Maximum Limit Request
8999	DC/DC 3 High Side Voltage Minimum Limit Request
9000	DC/DC 3 High Side Voltage Maximum Limit Request
9001	DC/DC 3 High Side Current Maximum Limit Request
9002	DC/DC 4 Operational Command
9003	DC/DC 4 Low Side Voltage Buck Setpoint
9004	DC/DC 4 High Side Voltage Boost Setpoint
9005	DC/DC 4 Operational Status
9006	DC/DC 4 HVIL Status
9007	DC/DC 4 Loadshed Request
9008	DC/DC 4 Power Limit due to High Side Current
9009	DC/DC 4 Power Limit due to Low Side Current

9010	DC/DC 4 Power Limit due to High Side Voltage Minimum
9011	DC/DC 4 Power Limit due to High Side Voltage Maximum
9012	DC/DC 4 Power Limit due to Low Side Voltage Minimum
9013	DC/DC 4 Power Limit due to Low Side Voltage Maximum
9014	DC/DC 4 Power Limit due to Converter Temperature
9015	DC/DC 4 Power Limit due to Electronic Filter Temperature
9016	DC/DC 4 Power Limit due to Power Electronics Temperature
9017	DC/DC 4 Power Limit due to SLI Battery Terminal Voltage
9018	DC/DC 4 Power Limit due to SLI Battery Terminal Current
9019	DC/DC 4 Power Limit due to SLI Battery Terminal Temperature
9020	DC/DC 4 Power Limit due to Undefined Reason
9021	DC/DC 4 Low Side Voltage
9022	DC/DC 4 Low Side Current
9023	DC/DC 4 High Side Voltage
9024	DC/DC 4 High Side Current
9025	DC/DC 4 SLI Battery Terminal Voltage
9026	DC/DC 4 SLI Battery Terminal Current
9027	DC/DC 4 SLI Battery Terminal Temperature
9028	DC/DC 4 Low Side Power
9029	DC/DC 4 High Side Power
9030	DC/DC 4 Total High Side Energy
9031	DC/DC 4 Total Low Side Energy
9032	DC/DC 4 Total High Side Charge
9033	DC/DC 4 Total Low Side Charge
9034	DC/DC 4 High Side Voltage Minimum Limit Setting
9035	DC/DC 4 High Side Voltage Maximum Limit Setting
9036	DC/DC 4 High Side Current Maximum Limit Setting
9037	DC/DC 4 Low Side Voltage Minimum Limit Setting
9038	DC/DC 4 Low Side Voltage Maximum Limit Setting
9039	DC/DC 4 Low Side Current Maximum Limit Setting
9040	DC/DC 4 SLI Battery Terminal Voltage Maximum Limit Setting
9041	DC/DC 4 SLI Battery Terminal Charge Current Maximum Limit Setting
9042	DC/DC 4 SLI Battery Temperature Maximum Limit Setting
9043	DC/DC 4 SLI Battery Terminal Voltage Maximum Limit Request
9044	DC/DC 4 SLI Battery Terminal Charge Current Maximum Limit Request
9045	DC/DC 4 SLI Battery Temperature Maximum Limit Request
9046	DC/DC 4 Converter Temperature
9047	DC/DC 4 Converter Electronic Filter Temperature
9048	DC/DC 4 Power Electronics Temperature
9049	DC/DC 4 Coolant In Temperature
9050	DC/DC 4 Coolant Out Temperature
9051	DC/DC 4 Low Side Voltage Minimum Limit Request
9052	DC/DC 4 Low Side Voltage Maximum Limit Request
9053	DC/DC 4 Low Side Current Maximum Limit Request

9054	DC/DC 4 High Side Voltage Minimum Limit Request
9055	DC/DC 4 High Side Voltage Maximum Limit Request
9056	DC/DC 4 High Side Current Maximum Limit Request
9057	Propulsion Motor 1 Speed
9058	Propulsion Motor 2 Speed
9059	Propulsion Motor 1 Temperature
9060	Propulsion Motor 2 Temperature
9061	Propulsion Motor 1 Torque
9062	Propulsion Motor 2 Torque
9063	Propulsion Motor 1 Speed 1
9064	Propulsion Motor 1 Speed 2
9065	Propulsion Motor 2 Speed 1
9066	Propulsion Motor 2 Speed 2
9067	Propulsion Motor 1 Speed Sensors
9068	Propulsion Motor 2 Speed Sensors
9069	Propulsion Motor 1 Inverter Phase U Current
9070	Propulsion Motor 1 Inverter Phase V Current
9071	Propulsion Motor 1 Inverter Phase W Current
9072	Propulsion Motor 2 Inverter Phase U Current
9073	Propulsion Motor 2 Inverter Phase V Current
9074	Propulsion Motor 2 Inverter Phase W Current
9075	Propulsion Motor 1 Inverter Phase U Voltage
9076	Propulsion Motor 1 Inverter Phase V Voltage
9077	Propulsion Motor 1 Inverter Phase W Voltage
9078	Propulsion Motor 2 Inverter Phase U Voltage
9079	Propulsion Motor 2 Inverter Phase V Voltage
9080	Propulsion Motor 2 Inverter Phase W Voltage
9081	Propulsion Motor 1 Inverter Phase U Power Module Switch
9082	Propulsion Motor 1 Inverter Phase V Power Module Switch
9083	Propulsion Motor 1 Inverter Phase W Power Module Switch
9084	Propulsion Motor 2 Inverter Phase U Power Module Switch
9085	Propulsion Motor 2 Inverter Phase V Power Module Switch
9086	Propulsion Motor 2 Inverter Phase W Power Module Switch
9087	Propulsion Motor 1 Inverter Phase U Power Module Switch Temperature
9088	Propulsion Motor 1 Inverter Phase V Power Module Temperature
9089	Propulsion Motor 1 Inverter Phase W Power Module Temperature
9090	Propulsion Motor 2 Inverter Phase U Power Module Temperature
9091	Propulsion Motor 2 Inverter Phase V Power Module Temperature
9092	Propulsion Motor 2 Inverter Phase W Power Module Temperature
9093	Propulsion Motor 1 Inverter Phase U Power Module Switch Power Supply Voltage
9094	Propulsion Motor 1 Inverter Phase V Power Module Switch Power Supply Voltage
9095	Propulsion Motor 1 Inverter Phase W Power Module Switch Power Supply Voltage
9096	Propulsion Motor 2 Inverter Phase U Power Module Switch Power Supply Voltage

9097	Propulsion Motor 2 Inverter Phase V Power Module Switch Power Supply Voltage
9098	Propulsion Motor 2 Inverter Phase W Power Module Switch Power Supply Voltage
9099	Propulsion Motor 1 Inverter AC Current Output
9100	Propulsion Motor 2 Inverter AC Current Output
9101	Propulsion Motor 1 Inverter DC High Voltage Bus Input
9102	Propulsion Motor 2 Inverter DC High Voltage Bus Input
9103	Propulsion Motor 1 Inverter HVIL Status
9104	Propulsion Motor 2 Inverter HVIL Status
9105	Propulsion Motor 1 Inverter Ignition Voltage
9106	Propulsion Motor 2 Inverter Ignition Voltage
9107	Propulsion Motor 1 Inverter Power Module Switch Temperature
9108	Propulsion Motor 2 Inverter Power Module Switch Temperature
9109	Propulsion Motor 1 Inverter Power Module Switch
9110	Propulsion Motor 2 Inverter Power Module Switch
9111	Propulsion Motor 1 Inverter DC Isolation Resistance
9112	Propulsion Motor 2 Inverter DC Isolation Resistance
9113	Propulsion Motor 1 Inverter AC Isolation Resistance
9114	Propulsion Motor 2 Inverter AC Isolation Resistance
9115	Propulsion Motor 1 Inverter Phase Current Imbalance
9116	Propulsion Motor 2 Inverter Phase Current Imbalance
9117	Propulsion Motor 1 Inverter SLI Voltage
9118	Propulsion Motor 2 Inverter SLI Voltage
9119	HVES1 Temperature
9120	HVES1 Pre-Charge Failed to Complete
9121	HVES1 Voltage Sensors
9122	HVES1 Module Voltage 1
9123	HVES1 Module Voltage 2
9124	HVES1 Module Voltage 3
9125	HVES1 Module Voltage 4
9126	HVES1 Module Voltage 5
9127	HVES1 Module Voltage 6
9128	HVES1 Module Voltage 7
9129	HVES1 Module Voltage 8
9130	HVES1 Module Voltage 9
9131	HVES1 Module Voltage 10
9132	HVES1 Module Voltage 11
9133	HVES1 Module Voltage 12
9134	HVES1 Module Voltage 13
9135	HVES1 Module Voltage 14
9136	HVES1 Module Voltage 15
9137	HVES1 Module Voltage 16
9138	HVES1 Module Current 1
9139	HVES1 Module Current 2
9140	HVES1 Module Current 3

9141	HVES1 Module Current 4
9142	HVES1 Module Current 5
9143	HVES1 Module Current 6
9144	HVES1 Module Current 7
9145	HVES1 Module Current 8
9146	HVES1 Module Current 9
9147	HVES1 Module Current 10
9148	HVES1 Module Current 11
9149	HVES1 Module Current 12
9150	HVES1 Module Current 13
9151	HVES1 Module Current 14
9152	HVES1 Module Current 15
9153	HVES1 Module Current 16
9154	HVES1 Module Temperature 1
9155	HVES1 Module Temperature 2
9156	HVES1 Module Temperature 3
9157	HVES1 Module Temperature 4
9158	HVES1 Module Temperature 5
9159	HVES1 Module Temperature 6
9160	HVES1 Module Temperature 7
9161	HVES1 Module Temperature 8
9162	HVES1 Module Temperature 9
9163	HVES1 Module Temperature 10
9164	HVES1 Module Temperature 11
9165	HVES1 Module Temperature 12
9166	HVES1 Module Temperature 13
9167	HVES1 Module Temperature 14
9168	HVES1 Module Temperature 15
9169	HVES1 Module Temperature 16
9170	Transfer Case Actual Gear Ratio
9171	Transfer Case Message Counter
9172	Transfer Case Message Checksum
9173	Engine Protection Derate Override Command
9174	Engine Protection Derate Override Status
9175	Aftertreatment DEF Dosing Mode Command
9176	Aftertreatment DEF Dosing Mode Status
9177	Aftertreatment 1 Intake Oxygen Pumping Current
9178	Aftertreatment 1 Outlet Oxygen Pumping Current
9179	SCR Operator Inducement Emergency Override Total Activation Time
9180	Rudder Position
9181	Grade Threshold Indicator 1
9182	Grade Threshold Indicator 2
9183	Grade Threshold Indicator 3
9184	Grade Threshold Indicator 4

9185	Grade Threshold Indicator 5
9186	Grade Threshold Indicator 6
9187	Well Stimulation Pump Fluid End Trip Hours
9188	Well Stimulation Pump Power End Trip Hours
9189	Well Stimulation Pump Power End Serial Number
9190	Well Stimulation Pump Fluid End Serial Number
9191	Well Stimulation Pump Total Fluid Pumped
9192	Well Stimulation Pump Trip Fluid Pumped
9193	Well Stimulation Pump Suction Pressure Calibration Set Point
9194	Well Stimulation Pump Suction Pressure Calibration Set Point Status
9195	Well Stimulation Pump Discharge Pressure Calibration Set Point
9196	Well Stimulation Pump Discharge Pressure Calibration Set Point Status
9197	Well Stimulation Pump Suction Pressure Calibration Set Point Command
9198	Well Stimulation Pump Discharge Pressure Calibration Set Point Command
9199	Roadway Next Grade Distance
9200	DC/AC Accessory Inverter 1 AC Side RMS Current
9201	DC/AC Accessory Inverter 2 AC Side RMS Current
9202	DC/AC Accessory Inverter 3 AC Side RMS Current
9203	DC/AC Accessory Inverter 4 AC Side RMS Current
9204	DC/AC Accessory Inverter 1 Controller Temperature
9205	DC/AC Accessory Inverter 1 Inverter Electronic Filter Temperature
9206	DC/AC Accessory Inverter 1 Power Electronics Temperature
9207	DC/AC Accessory Inverter 1 Coolant In Temperature
9208	DC/AC Accessory Inverter 1 Coolant Out Temperature
9209	DC/AC Accessory Inverter 1 Ignition Voltage
9210	DC/AC Accessory Inverter 1 SLI Voltage
9211	DC/AC Accessory Inverter 1 Power Limited due to DC Side Current
9212	DC/AC Accessory Inverter 1 Power Limited due to AC Side RMS Current
9213	DC/AC Accessory Inverter 1 Power Limited due to DC Side Voltage Minimum
9214	DC/AC Accessory Inverter 1 Frequency Command below Minimum
9215	DC/AC Accessory Inverter 1 Frequency Command exceeds Maximum
9216	DC/AC Accessory Inverter 1 Power Limited due to Controller Temperature
9217	DC/AC Accessory Inverter 1 Power Limited due to Electronic Filter Temperature
9218	DC/AC Accessory Inverter 1 Power Limited due to Power Electronics Temperature
9219	DC/AC Accessory Inverter 1 Power Limited due to Rate of Change Limit
9220	DC/AC Accessory Inverter 1 Power Limited due to Undefined Reason
9221	DC/AC Accessory Inverter 1 DC Side Voltage Minimum Limit Request
9222	DC/AC Accessory Inverter 1 DC Side Current Maximum Limit Request
9223	DC/AC Accessory Inverter 1 AC Side RMS Voltage Maximum Limit Request
9224	DC/AC Accessory Inverter 1 AC Side RMS Current Maximum Limit Request
9225	DC/AC Accessory Inverter 1 DC Side Voltage Minimum Limit Setting
9226	DC/AC Accessory Inverter 1 DC Side Current Maximum Limit Setting
9227	DC/AC Accessory Inverter 1 AC Side RMS Voltage Maximum Limit Setting
9228	DC/AC Accessory Inverter 1 AC Side RMS Current Maximum Limit Setting

9229	DC/AC Accessory Inverter 1 Total DC Input Charge
9230	DC/AC Accessory Inverter 1 Total DC Input Energy
9231	DC/AC Accessory Inverter 2 Controller Temperature
9232	DC/AC Accessory Inverter 2 Inverter Electronic Filter Temperature
9233	DC/AC Accessory Inverter 2 Power Electronics Temperature
9234	DC/AC Accessory Inverter 2 Coolant In Temperature
9235	DC/AC Accessory Inverter 2 Coolant Out Temperature
9236	DC/AC Accessory Inverter 2 DC Side Power
9237	DC/AC Accessory Inverter 2 DC Side Voltage
9238	DC/AC Accessory Inverter 2 DC Side Current
9239	DC/AC Accessory Inverter 2 Ignition Voltage
9240	DC/AC Accessory Inverter 2 SLI Voltage
9241	DC/AC Accessory Inverter 2 Power Limited due to DC Side Current
9242	DC/AC Accessory Inverter 2 Power Limited due to AC Side RMS Current
9243	DC/AC Accessory Inverter 2 Power Limited due to DC Side Voltage Minimum
9244	DC/AC Accessory Inverter 2 Frequency Command below Minimum
9245	DC/AC Accessory Inverter 2 Frequency Command exceeds Maximum
9246	DC/AC Accessory Inverter 2 Power Limited due to Controller Temperature
9247	DC/AC Accessory Inverter 2 Power Limited due to Electronic Filter Temperature
9248	DC/AC Accessory Inverter 2 Power Limited due to Power Electronics Temperature
9249	DC/AC Accessory Inverter 2 Power Limited due to Rate of Change Limit
9250	DC/AC Accessory Inverter 2 Power Limited due to Undefined Reason
9251	DC/AC Accessory Inverter 2 DC Side Voltage Minimum Limit Request
9252	DC/AC Accessory Inverter 2 DC Side Current Maximum Limit Request
9253	DC/AC Accessory Inverter 2 AC Side RMS Voltage Maximum Limit Request
9254	DC/AC Accessory Inverter 2 AC Side RMS Current Maximum Limit Request
9255	DC/AC Accessory Inverter 2 DC Side Voltage Minimum Limit Setting
9256	DC/AC Accessory Inverter 2 DC Side Current Maximum Limit Setting
9257	DC/AC Accessory Inverter 2 AC Side RMS Voltage Maximum Limit Setting
9258	DC/AC Accessory Inverter 2 AC Side RMS Current Maximum Limit Setting
9259	DC/AC Accessory Inverter 2 Total DC Input Charge
9260	DC/AC Accessory Inverter 2 Total DC Input Energy
9261	DC/AC Accessory Inverter 3 Controller Temperature
9262	DC/AC Accessory Inverter 3 Inverter Electronic Filter Temperature
9263	DC/AC Accessory Inverter 3 Power Electronics Temperature
9264	DC/AC Accessory Inverter 3 Coolant In Temperature
9265	DC/AC Accessory Inverter 3 Coolant Out Temperature
9266	DC/AC Accessory Inverter 3 DC Side Power
9267	DC/AC Accessory Inverter 3 DC Side Voltage
9268	DC/AC Accessory Inverter 3 DC Side Current
9269	DC/AC Accessory Inverter 3 Ignition Voltage
9270	DC/AC Accessory Inverter 3 SLI Voltage
9271	DC/AC Accessory Inverter 3 Power Limited due to DC Side Current
9272	DC/AC Accessory Inverter 3 Power Limited due to AC Side RMS Current

9273	DC/AC Accessory Inverter 3 Power Limited due to DC Side Voltage Minimum
9274	DC/AC Accessory Inverter 3 Frequency Command below Minimum
9275	DC/AC Accessory Inverter 3 Frequency Command exceeds Maximum
9276	DC/AC Accessory Inverter 3 Power Limited due to Controller Temperature
9277	DC/AC Accessory Inverter 3 Power Limited due to Electronic Filter Temperature
9278	DC/AC Accessory Inverter 3 Power Limited due to Power Electronics Temperature
9279	DC/AC Accessory Inverter 3 Power Limited due to Rate of Change Limit
9280	DC/AC Accessory Inverter 3 Power Limited due to Undefined Reason
9281	DC/AC Accessory Inverter 3 DC Side Voltage Minimum Limit Request
9282	DC/AC Accessory Inverter 3 DC Side Current Maximum Limit Request
9283	DC/AC Accessory Inverter 3 AC Side RMS Voltage Maximum Limit Request
9284	DC/AC Accessory Inverter 3 AC Side RMS Current Maximum Limit Request
9285	DC/AC Accessory Inverter 3 DC Side Voltage Minimum Limit Setting
9286	DC/AC Accessory Inverter 3 DC Side Current Maximum Limit Setting
9287	DC/AC Accessory Inverter 3 AC Side RMS Voltage Maximum Limit Setting
9288	DC/AC Accessory Inverter 3 AC Side RMS Current Maximum Limit Setting
9289	DC/AC Accessory Inverter 3 Total DC Input Charge
9290	DC/AC Accessory Inverter 3 Total DC Input Energy
9291	DC/AC Accessory Inverter 4 Controller Temperature
9292	DC/AC Accessory Inverter 4 Inverter Electronic Filter Temperature
9293	DC/AC Accessory Inverter 4 Power Electronics Temperature
9294	DC/AC Accessory Inverter 4 Coolant In Temperature
9295	DC/AC Accessory Inverter 4 Coolant Out Temperature
9296	DC/AC Accessory Inverter 4 DC Side Power
9297	DC/AC Accessory Inverter 4 DC Side Voltage
9298	DC/AC Accessory Inverter 4 DC Side Current
9299	DC/AC Accessory Inverter 4 Ignition Voltage
9300	DC/AC Accessory Inverter 4 SLI Voltage
9301	DC/AC Accessory Inverter 4 Power Limited due to DC Side Current
9302	DC/AC Accessory Inverter 4 Power Limited due to AC Side RMS Current
9303	DC/AC Accessory Inverter 4 Power Limited due to DC Side Voltage Minimum
9304	DC/AC Accessory Inverter 4 Frequency Command below Minimum
9305	DC/AC Accessory Inverter 4 Frequency Command exceeds Maximum
9306	DC/AC Accessory Inverter 4 Power Limited due to Controller Temperature
9307	DC/AC Accessory Inverter 4 Power Limited due to Electronic Filter Temperature
9308	DC/AC Accessory Inverter 4 Power Limited due to Power Electronics Temperature
9309	DC/AC Accessory Inverter 4 Power Limited due to Rate of Change Limit
9310	DC/AC Accessory Inverter 4 Power Limited due to Undefined Reason
9311	DC/AC Accessory Inverter 4 DC Side Voltage Minimum Limit Request
9312	DC/AC Accessory Inverter 4 DC Side Current Maximum Limit Request
9313	DC/AC Accessory Inverter 4 AC Side RMS Voltage Maximum Limit Request
9314	DC/AC Accessory Inverter 4 AC Side RMS Current Maximum Limit Request
9315	DC/AC Accessory Inverter 4 DC Side Voltage Minimum Limit Setting

9316	DC/AC Accessory Inverter 4 DC Side Current Maximum Limit Setting
9317	DC/AC Accessory Inverter 4 AC Side RMS Voltage Maximum Limit Setting
9318	DC/AC Accessory Inverter 4 AC Side RMS Current Maximum Limit Setting
9319	DC/AC Accessory Inverter 4 Total DC Input Charge
9320	DC/AC Accessory Inverter 4 Total DC Input Energy
9321	DC/AC Accessory Inverter 5 Device Maximum Frequency
9322	DC/AC Accessory Inverter 5 Device Minimum Frequency
9323	DC/AC Accessory Inverter 5 Device Rated Frequency
9324	DC/AC Accessory Inverter 5 Device Rated RMS Voltage
9325	DC/AC Accessory Inverter 5 Device Frequency Rate of Change Limit
9326	DC/AC Accessory Inverter 5 Frequency Command
9327	DC/AC Accessory Inverter 5 Device 1 Status
9328	DC/AC Accessory Inverter 5 Device 2 Status
9329	DC/AC Accessory Inverter 5 Operational Command
9330	DC/AC Accessory Inverter 5 Frequency
9331	DC/AC Accessory Inverter 5 AC Side RMS Voltage
9332	DC/AC Accessory Inverter 5 AC Side Power
9333	DC/AC Accessory Inverter 5 AC Side RMS Current
9334	DC/AC Accessory Inverter 5 Operational Status
9335	DC/AC Accessory Inverter 5 Loadshed Request
9336	DC/AC Accessory Inverter 5 HVIL Status
9337	DC/AC Accessory Inverter 5 Controller Temperature
9338	DC/AC Accessory Inverter 5 Inverter Electronic Filter Temperature
9339	DC/AC Accessory Inverter 5 Power Electronics Temperature
9340	DC/AC Accessory Inverter 5 Coolant In Temperature
9341	DC/AC Accessory Inverter 5 Coolant Out Temperature
9342	DC/AC Accessory Inverter 5 DC Side Power
9343	DC/AC Accessory Inverter 5 DC Side Voltage
9344	DC/AC Accessory Inverter 5 DC Side Current
9345	DC/AC Accessory Inverter 5 Ignition Voltage
9346	DC/AC Accessory Inverter 5 SLI Voltage
9347	DC/AC Accessory Inverter 5 Power Limited due to DC Side Current
9348	DC/AC Accessory Inverter 5 Power Limited due to AC Side RMS Current
9349	DC/AC Accessory Inverter 5 Power Limited due to DC Side Voltage Minimum
9350	DC/AC Accessory Inverter 5 Frequency Command below Minimum
9351	DC/AC Accessory Inverter 5 Frequency Command exceeds Maximum
9352	DC/AC Accessory Inverter 5 Power Limited due to Controller Temperature
9353	DC/AC Accessory Inverter 5 Power Limited due to Electronic Filter Temperature
9354	DC/AC Accessory Inverter 5 Power Limited due to Power Electronics Temperature
9355	DC/AC Accessory Inverter 5 Power Limited due to Rate of Change Limit
9356	DC/AC Accessory Inverter 5 Power Limited due to Undefined Reason
9357	DC/AC Accessory Inverter 5 DC Side Voltage Minimum Limit Request
9358	DC/AC Accessory Inverter 5 DC Side Current Maximum Limit Request
9359	DC/AC Accessory Inverter 5 AC Side RMS Voltage Maximum Limit Request

9360	DC/AC Accessory Inverter 5 AC Side RMS Current Maximum Limit Request
9361	DC/AC Accessory Inverter 5 DC Side Voltage Minimum Limit Setting
9362	DC/AC Accessory Inverter 5 DC Side Current Maximum Limit Setting
9363	DC/AC Accessory Inverter 5 AC Side RMS Voltage Maximum Limit Setting
9364	DC/AC Accessory Inverter 5 AC Side RMS Current Maximum Limit Setting
9365	DC/AC Accessory Inverter 5 Total DC Input Charge
9366	DC/AC Accessory Inverter 5 Total DC Input Energy
516096	Manufacturer Assignable SPN - See Description
516097	Manufacturer Assignable SPN - See Description
516098	Manufacturer Assignable SPN - See Description
516099	Manufacturer Assignable SPN - See Description
516100	Manufacturer Assignable SPN - See Description
516101	Manufacturer Assignable SPN - See Description
516102	Manufacturer Assignable SPN - See Description
516103	Manufacturer Assignable SPN - See Description
516104	Manufacturer Assignable SPN - See Description
516105	Manufacturer Assignable SPN - See Description
516106	Manufacturer Assignable SPN - See Description
516107	Manufacturer Assignable SPN - See Description
516108	Manufacturer Assignable SPN - See Description
516109	Manufacturer Assignable SPN - See Description
516110	Manufacturer Assignable SPN - See Description
516111	Manufacturer Assignable SPN - See Description
516112	Manufacturer Assignable SPN - See Description
516113	Manufacturer Assignable SPN - See Description
516114	Manufacturer Assignable SPN - See Description
516115	Manufacturer Assignable SPN - See Description
516116	Manufacturer Assignable SPN - See Description
516117	Manufacturer Assignable SPN - See Description
516118	Manufacturer Assignable SPN - See Description
516119	Manufacturer Assignable SPN - See Description
516120	Manufacturer Assignable SPN - See Description
516121	Manufacturer Assignable SPN - See Description
516122	Manufacturer Assignable SPN - See Description
516123	Manufacturer Assignable SPN - See Description
516124	Manufacturer Assignable SPN - See Description
516125	Manufacturer Assignable SPN - See Description
516126	Manufacturer Assignable SPN - See Description
516127	Manufacturer Assignable SPN - See Description
516128	Manufacturer Assignable SPN - See Description
516129	Manufacturer Assignable SPN - See Description
516130	Manufacturer Assignable SPN - See Description
516131	Manufacturer Assignable SPN - See Description
516132	Manufacturer Assignable SPN - See Description

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524273	Manufacturer Assignable SPN - See Description
524274	Manufacturer Assignable SPN - See Description
524275	Manufacturer Assignable SPN - See Description
524276	Manufacturer Assignable SPN - See Description
524277	Manufacturer Assignable SPN - See Description
524278	Manufacturer Assignable SPN - See Description
524279	Manufacturer Assignable SPN - See Description
524280	Manufacturer Assignable SPN - See Description
524281	Manufacturer Assignable SPN - See Description
524282	Manufacturer Assignable SPN - See Description
524283	Manufacturer Assignable SPN - See Description
524284	Manufacturer Assignable SPN - See Description
524285	Manufacturer Assignable SPN - See Description
524286	Manufacturer Assignable SPN - See Description
524287	Manufacturer Assignable SPN - See Description

FMI	Description
0	Data valid but above normal operating range - Most Severe
1	Data valid but below normal operating range - Most Severe
2	Data erratic, intermittent or incorrect
3	Voltage above normal, or shorted to high source
4	Voltage below normal, or shorted to low source
5	Current below normal, or open circuit
6	Current above normal, or grounded circuit
7	Mechanical System not responding, or out of adjustment
8	Abnormal Frequency, or Pulse Width, or Period
9	Abnormal update rate
10	Abnormal rate of change
11	Root cause not known
12	Bad intelligent device or component
13	Out of calibration
14	Special instructions
15	Data valid but above normal operating range - Least Severe
16	Data valid but above normal operating range - Moderately Severe
17	Data valid but below normal operating range - Least Severe
18	Data valid but below normal operating range - Moderately Severe
19	Received network data in error
20	Data drifted high
21	Data drifted low
22	Reserved - See Description
23	Reserved - See Description
24	Reserved - See Description
25	Reserved - See Description
26	Reserved - See Description
27	Reserved - See Description
28	Reserved - See Description
29	Reserved - See Description
30	Reserved - See Description
31	Condition exists