

Listing of Diagnostic Trouble Codes (DTCs) on ECU

NOTE: If the DST or SERVICE ADVISOR™ is available, it will show the SPN/FMI trouble code.

Ascending SPN/FMI Codes

SPN	FMI	Definition
000028	03	Throttle Voltage High
	04	Throttle Voltage Low
000029	03	Throttle Voltage High
	04	Throttle Voltage Low
000091	03	Throttle Voltage High
	04	Throttle Voltage Low
	08	PWM Throttle Abnormal Pulse Width
	09	Throttle Invalid
000094	14	Throttle Voltage Out of Range
	01	Fuel Supply Pressure Extremely Low
	03	Fuel Supply Pressure Input Voltage High
	04	Fuel Supply Pressure Input Voltage Low
	16	Fuel Supply Pressure Moderately High
	18	Fuel Supply Pressure Moderately Low
	00	Water in Fuel Continuously Detected
	03	Water in Fuel Signal Voltage High
000097	04	Water in Fuel Signal Voltage Low
	16	Water in Fuel Detected
	31	Water in Fuel Detected
000100	01	Engine Oil Pressure Extremely Low
	03	Engine Oil Pressure Input Voltage High
	04	Engine Oil Pressure Input Voltage Low
	18	Engine Oil Pressure Moderately Low
000102	03	Manifold Air Pressure Input Voltage High
	04	Manifold Air Pressure Input Voltage Low
000105	03	Manifold Air Temperature Input Voltage High
	04	Manifold Air Temperature Input Voltage Low
	16	Manifold Air Temperature Moderately High
000107	00	Air Filter Restriction High
	31	Air Filter Restriction High
000110	00	Engine Coolant Temperature High Most Severe
	03	Engine Coolant Temperature Input Voltage High
	04	Engine Coolant Temperature Input Voltage Low
	15	Engine Coolant Temperature High Least Severe
	16	Engine Coolant Temperature High Moderately Severe
000111	01	Engine Coolant Level Low
000158	17	ECU Power Down Error
000174	03	Fuel Temperature Input Voltage High
	04	Fuel Temperature Input Voltage Low
000177	09	Transmission Oil Temperature Invalid
000523	09	Gear Selection Invalid
000611	03	Injector Wiring Shorted to Power Source
	04	Injector Wiring Shorted to Ground
000620	03	Sensor Supply Voltage High
	04	Sensor Supply Voltage Low

Trouble Code Diagnostics and Tests

000627	01	Injector Supply Voltage Problem
000629	12	ECU Error
	13	ECU Error
000636	02	Cam Position Input Noise
	08	Cam Position Input Missing
	10	Cam Position Input Pattern Error
000637	02	Crank Position Input Noise
	07	Crank Position/Cam Position Out of Sync
	08	Crank Position Input Missing
	10	Crank Position Input Pattern Error
000639	13	CAN Error
000651	05	Cylinder #1 EUI Circuit Open
	06	Cylinder #1 EUI Circuit Shorted
000652	05	Cylinder #2 EUI Circuit Open
	06	Cylinder #2 EUI Circuit Shorted
000653	05	Cylinder #3 EUI Circuit Open
	06	Cylinder #3 EUI Circuit Shorted
000654	05	Cylinder #4 EUI Circuit Open
	06	Cylinder #4 EUI Circuit Shorted
000655	05	Cylinder #5 EUI Circuit Open
	06	Cylinder #5 EUI Circuit Shorted
000656	05	Cylinder #6 EUI Circuit Open
	06	Cylinder #6 EUI Circuit Shorted
000970	02	Auxiliary Engine Shutdown Switch Signal Invalid
	31	Auxiliary Engine Shutdown Switch Active
000971	31	External Fuel Derate Switch Active
001109	31	Engine Shutdown Warning
001110	31	Engine Shutdown
001569	31	Fuel Derate
002000	13	Security Violation

04
160
49

Continued on next page

RG, RG34710, 1563 -19-15APR02-2/4

Ascending 2-Digit Codes

2-Digit Code	SPN	FMI	Definition
11			Throttle Voltage High
12			Throttle Voltage Low
13			Throttle Voltage High or PWM Throttle Abnormal Pulse Width
14			Throttle Voltage Low or PWM Throttle Abnormal Pulse Width
15			PWM Throttle Abnormal Pulse Width
21	000102	03	Manifold Air Pressure Input Voltage High
22	000102	04	Manifold Air Pressure Input Voltage Low
23	000105	03	Manifold Air Temperature Input Voltage High
24	000105	04	Manifold Air Temperature Input Voltage Low
25	000110	03	Engine Coolant Temperature Input Voltage High
26	000110	04	Engine Coolant Temperature Input Voltage Low
27 ^a	000094	03	Fuel Supply Pressure Input Voltage High
28	000629	12	ECU Error
		13	ECU Error
29	000094	04	Fuel Supply Pressure Input Voltage Low
31	000651	05	Cylinder #1 EUI Circuit Open
		06	Cylinder #1 EUI Circuit Shorted
32	000652	05	Cylinder #2 EUI Circuit Open
		06	Cylinder #2 EUI Circuit Shorted
33	000653	05	Cylinder #3 EUI Circuit Open
		06	Cylinder #3 EUI Circuit Shorted
34	000654	05	Cylinder #4 EUI Circuit Open
		06	Cylinder #4 EUI Circuit Shorted
35	000655	05	Cylinder #5 EUI Circuit Open
		06	Cylinder #5 EUI Circuit Shorted
36	000656	05	Cylinder #6 EUI Circuit Open
		06	Cylinder #6 EUI Circuit Shorted
37	000174	03	Fuel Temperature Input Voltage High
38	000174	04	Fuel Temperature Input Voltage Low
41	000637	08	Crank Position Input Missing
42	000637	02	Crank Position Input Noise
		10	Crank Position Input Pattern Error
43	000636	08	Cam Position Input Missing
44	000636	02	Cam Position Input Noise
		10	Cam Position Input Pattern Error
45	000637	07	Crank Position/Cam Position Out of Sync
49	000970	02	Auxiliary Engine Shutdown Switch Signal Invalid
50	000094	03	Fuel Supply Pressure Input Voltage High
51	000094	04	Fuel Supply Pressure Input Voltage Low
52	000970	31	Auxiliary Engine Shutdown Switch Active
53	000097	03	Water in Fuel Signal Voltage High
54	000097	04	Water in Fuel Signal Voltage Low
55	000105	16	Manifold Air Temperature Moderately High
56	000639	13	CAN Error
57	000094	18	Fuel Supply Pressure Moderately Low
58	000094	01	Fuel Supply Pressure Extremely Low
59	000094	16	Fuel Supply Pressure Moderately High
61	000111	01	Engine Coolant Level Low
62	000110	16	Engine Coolant Temperature High Moderately Severe
63	000110	00	Engine Coolant Temperature High Most Severe

^aFor 744H/MH and LXE 230 Loaders, see T7 - CAN THROTTLE INVALID.

Continued on next page

RG, RG34710, 1563 -19-15APR02-3/4

Trouble Code Diagnostics and Tests

64	000100	18	Engine Oil Pressure Moderately Low
65	000100	01	Engine Oil Pressure Extremely Low
66	000105	16	Manifold Air Temperature Moderately Low
67	001109	31	Engine Shutdown Warning
68	001569	31	Fuel Derate
75	000097	31	Water in Fuel Detected
76	000097	03	Water in Fuel Input Voltage High
76	000097	04	Water in Fuel Input Voltage Low
84	000158	17	ECU Power Down Error
89	000094	01	Fuel Supply Pressure Extremely Low
91	000651	06	Cylinder #1 EUI Circuit Shorted
92	000652	06	Cylinder #2 EUI Circuit Shorted
93	000653	06	Cylinder #3 EUI Circuit Shorted
94	000654	06	Cylinder #4 EUI Circuit Shorted
95	000655	06	Cylinder #5 EUI Circuit Shorted
96	000656	06	Cylinder #6 EUI Circuit Shorted
97	000627	01	Injector Supply Voltage Problem
98	000611	03	Injector Wiring Shorted to Power Source
99	000611	04	Injector Wiring Shorted to Ground

RG, RG34710, 1563 -19-15APR02-4/4

04
160
51