

CODE	FUNCTION	FAILURES
01-16	Air Filter - Not Connected	
01-17	Air Filter - Plugged	
	Hydraulic Implement	
02-16	Filter - Not Connected	
	Hydraulic Implement	
02-17	Filter - Plugged	
03-09	Battery Voltage - Low	
03-10	Battery Voltage - High	
03-11	Battery Voltage - Extremely High	
03-14	Battery Voltage - Extremely Low	
03-22	Battery Voltage - Out of Range Low	
04-09	Engine Oil Pressure - Low	
04-14	Engine Oil Pressure - Extremely Low	
04-15	Engine Oil Pressure - In Shutdown	
04-21	Engine Oil Pressure - Out of Range High	
04-22	Engine Oil Pressure - Out of Range Low	
	Hydraulic Charge	
05-09	Pressure - Low	
	Hydraulic Charge	
05-10	Pressure - High	
	Hydraulic Charge	
05-11	Pressure - Extremely High	
	Hydraulic Charge	
05-14	Pressure - Extremely Low	
	Hydraulic Charge	
05-15	Pressure - In Shutdown	
	Hydraulic Charge	
05-21	Pressure - Out of Range High	
	Hydraulic Charge	
05-22	Pressure - Out of Range Low	
06-10	Engine Speed - High	
06-11	Engine Speed - Extremely High	
06-13	Engine Speed - No Signal	
06-15	Engine Speed - In Shutdown	
06-18	Engine Speed - Out of Range	
	Hydraulic Oil	
07-10	Temperature - High	
	Hydraulic Oil	
07-11	Temperature - Extremely High	
	Hydraulic Oil	
07-15	Temperature - In Shutdown	
	Hydraulic Oil	
07-21	Temperature - Out of Range High	
	Hydraulic Oil	
07-22	Temperature - Out of Range Low	
	Engine Coolant	
08-10	Temperature - High	
	Engine Coolant	
08-11	Temperature - Extremely High	
	Engine Coolant	
08-15	Temperature - In Shutdown	
	Engine Coolant	
08-21	Temperature - Out of Range High	
	Engine Coolant	

	Fuel Shutoff Hold
13-06	Solenoid - Short to Ground
	Fuel Shutoff Hold
13-07	Solenoid - Open Circuit
	Fuel Shutoff Pull
14-02	Solenoid - Error On
	Fuel Shutoff Pull
14-03	Solenoid - Error Off
	Traction Lock Pull
15-02	Solenoid - Error On
	Traction Lock Pull
15-03	Solenoid - Error Off
	Traction Lock Hold
16-05	Solenoid - Short to Battery
	Traction Lock Hold
16-06	Solenoid - Short to Ground
	Traction Lock Hold
16-07	Solenoid - Open Circuit
	Hydraulic Lock Valve
17-05	Solenoid - Short to Battery
	Hydraulic Lock Valve
17-06	Solenoid - Short to Ground
	Hydraulic Lock Valve
17-07	Solenoid - Open Circuit
18-05	Spool Lock Solenoid - Short to Battery
18-06	Spool Lock Solenoid - Short to Ground
18-07	Spool Lock Solenoid - Open Circuit
	Bucket Positioning
19-02	Solenoid - Error On
	Bucket Positioning
19-03	Solenoid - Error Off
20-02	Two Speed Solenoid - Error On
20-03	Two Speed Solenoid - Error off
21-02	Glow Plugs - Error On
21-03	Glow Plugs - Error Off
22-02	Starter - Error On
22-03	Starter - Error Off
23-02	Rear Base Solenoid - Error On
23-03	Rear Base Solenoid - Error Off
24-02	Rear Rod Solenoid - Error On
24-03	Rear Rod Solenoid - Error Off
	Rear Auxiliary Relief
25-02	Solenoid - Error On
	Rear Auxiliary Relief
25-03	Solenoid - Error Off
26-02	Front Base Solenoid - Error On
26-03	Front Base Solenoid - Error Off
27-02	Front Rod Solenoid - Error On
27-03	Front Rod Solenoid - Error Off
28-02	Diverter Solenoid - Error On
28-03	Diverter Solenoid - Error Off
29-02	High Flow Solenoid - Error On
29-03	High Flow Solenoid - Error Off
30-28	Controller Memory - Failure
	Interrupted Power (also
	occurs after software

32-41	AHC - No communication
32-49	ACS - Lift actuator short to ground
32-50	ACS - Tilt actuator short to ground
32-51	ACS - Lift actuator short to battery
32-52	ACS - Tilt actuator short to battery
32-53	ACS - Lift handle/pedal short to ground
32-54	ACS - Tilt handle/pedal short to ground
32-55	ACS - Lift handle/pedal short to battery
32-56	ACS - Tilt handle/pedal short to battery
32-57	ACS - Lift actuator reduced performance
32-58	ACS - Tilt actuator reduced performance
32-59	ACS - Lift actuator wrong direction
32-60	ACS - Tilt actuator wrong direction
32-61	ACS - Handle lock short to ground
32-62	ACS - Handle lock short to battery
32-63	ACS - Pedal lock short to ground
32-64	ACS - Pedal lock short to battery
32-65	ACS - Sensor supply voltage out of range
32-66	ACS - Battery voltage out of range
32-67	ACS - Switch flipped while operating
32-68	ACS - Lift handle information error
32-70	ACS - Right hand drive short to ground
32-71	ACS - Right hand drive short to battery
32-74	ACS - Left Joystick X-Axis Out of Range
32-75	ACS - Interrupted unswitched power
Main Controller (Bobcat	
33-23	Controller) - Not Programmed
34-04	Deluxe Panel - In Error
35-02	Hydraulic Fan - Error On
35-03	Hydraulic Fan - Error Off
ACD (Attachment control	
36-48	device) - Multiple
37-02	Two speed secondary - Error On
37-03	Two speed secondary - Error Off
38-04	AWS/SJC - No communication from Joystick Controller
38-05	AWS/SJC - Left joystick X axis not in neutral
38-06	AWS/SJC - Right joystick X axis not in neutral
38-07	AWS/SJC - Left joystick Y axis not in neutral
38-08	AWS/SJC - Right joystick Y axis not in neutral
38-09	SJC - Control pattern switch short to ground or battery
38-11	AWS/SJC - Lift actuator not in neutral
38-12	AWS/SJC - Tilt actuator not in neutral
38-13	AWS/SJC - Lift actuator fault
38-14	AWS/SJC - Tilt actuator fault
38-15	AWS/SJC - Right wheel speed fault
38-16	AWS/SJC - Left wheel speed fault
38-17	AWS/SJC - Tilt actuator reduced performance
38-18	AWS/SJC - Lift actuator reduced performance
38-19	AWS/SJC - Left joystick X axis out of range high
38-20	AWS/SJC - Right joystick X axis out of range high
38-21	AWS/SJC - Left joystick Y axis out of range high

38-37	AWS/SJC - 5 volt sensor supply 1 out of range low
38-38	AWS/SJC - 5 volt sensor supply 2 out of range low
38-39	AWS/SJC - Lift actuator short to ground / out of range low
38-40	AWS/SJC - Tilt actuator short to ground / out of range low
38-41	AWS/SJC - Tilt actuator wrong direction
38-42	AWS/SJC - Lift actuator wrong direction
38-43	AWS/SJC - Left forward drive solenoid error ON
38-44	AWS/SJC - Left reverse drive solenoid error ON
38-45	AWS/SJC - Right Forward Drive Solenoid Error On
38-46	AWS/SJC - Right Reverse Drive Solenoid Error On
38-47	AWS - Front Right Steering Solenoid Error On
38-48	AWS - Front Left Steering Solenoid Error On
38-49	AWS - Rear Right Steering Solenoid Error On
38-50	AWS - Rear Left Steering Solenoid Error On
38-51	AWS - Steering Pressure Solenoid Error On
38-52	AWS/SJC - Backup Alarm Error On
38-53	AWS/SJC - Left Forward Drive Solenoid Error Off
38-54	AWS/SJC - Left Reverse Drive Solenoid Error Off
38-55	AWS/SJC - Right Forward Drive Solenoid Error Off
38-56	AWS/SJC - Right Reverse Drive Solenoid Error Off
38-57	AWS - Front Right Extend Steering Solenoid Error Off
38-58	AWS - Front Right Retract Steering Solenoid Error Off
38-59	AWS - Front Left Extend Steering Solenoid Error Off
38-60	AWS - Front Left Retract Steering Solenoid Error Off
38-61	AWS - Rear Right Extend Steering Solenoid Error Off
38-62	AWS - Rear Right Retract Steering Solenoid Error Off
38-63	AWS - Rear Left Extend Steering Solenoid Error Off
38-64	AWS - Rear Left Retract Steering Solenoid Error Off
38-65	AWS - Steering Pressure Solenoid Error Off
38-66	AWS/SJC - Backup Alarm Error Off
38-67	AWS/SJC - No communication from Bobcat controller
38-68	AWS - Wheel angles (alignment) not calibrated
38-69	AWS/SJC - Lift & Tilt Actuators Not Calibrated
38-70	AWS/SJC - Interrupted Power (also occurs after update)
38-71	AWS/SJC - Battery out of range
38-72	AWS/SJC - Drive pump not calibrated
38-73	AWS/SJC - Steering mode switch flipped while operating
38-74	AWS/SJC - Right Wheel Speed Uncommanded Motion
38-75	AWS/SJC - Left Wheel Speed Uncommanded Motion
38-76	AWS - Undercurrent-steer pressure solenoid
38-77	AWS - Undercurrent-front right extend steer solenoid
38-78	AWS - Undercurrent-front right retract steer solenoid
38-79	AWS - Undercurrent-front left extend steer solenoid
38-80	AWS - Undercurrent-front left retract steer solenoid
38-81	AWS - Undercurrent-rear right extend steer solenoid
38-82	AWS - Undercurrent-rear right retract steer solenoid
38-83	AWS - Undercurrent-rear left extend steer solenoid
38-84	AWS - Undercurrent-rear left retract steer solenoid
38-85	AWS/SJC - 5 Volt sensor supply 1 out of range high
38-86	AWS/SJC - 5 Volt sensor supply 2 out of range high
38-87	AWS/SJC - Front right steering error
38-88	AWS/SJC - Front left steering error
38-89	AWS/SJC - Rear right steering error
38-90	AWS/SJC - Rear left steering error
38-91	AWS/SJC - Right speed sensor missing pulses

47-21	8 Volt Sensor Supply - Out of Range High
47-22	8 Volt Sensor Supply - Out of Range Low
48-02	Front Light Relay - Error On
48-03	Front Light Relay - Error Off
49-02	Rear Light Relay - Error On
49-03	Rear Light Relay - Error Off
50-1	Drive - Travel pedal OORH
50-2	Drive - Travel pedal OORL
50-3	Drive - Travel pedal not calibrated
50-4	Drive - Brake pedal OORH
50-5	Drive - Brake pedal OORL
50-6	Drive - Brake pedal Not Calibrated
50-7	Drive - Drive selector switch no signal
50-8	Drive - Drive selector switch multiple inputs
50-9	Drive - Front wheel speed OORH
50-10	Drive - Front wheel speed OORL
50-11	Drive - Rear wheel speed OORH
50-12	Drive - Rear wheel speed OORL
50-13	Drive - Front wheel speed sensor no signal
50-14	Drive - Rear wheel speed sensor no signal
50-15	Drive - Dual wheel speed sensor fault
50-24	Drive - Battery voltage over voltage
50-27	Drive - 5V sensor #1 over voltage
50-28	Drive - 5V sensor #1 under voltage
50-29	Drive - 5V sensor #2 over voltage
50-30	Drive - 5V sensor #2 under voltage
50-31	Drive - Front PWM error on
50-33	Drive - Front PWM no signal
50-34	Drive - Front PWM not calibrated
50-35	Drive - Front forward error on
50-36	Drive - Front forward error off
50-37	Drive - Front reverse error on
50-38	Drive - Front reverse error off
50-39	Drive - Rear PWM error on
50-41	Drive - Rear PWM no signal
50-42	Drive - Rear PWM not calibrated
50-43	Drive - Rear forward error on
50-44	Drive - Rear forward error off
50-45	Drive - Rear reverse error on
50-46	Drive - Rear reverse error off
50-47	Drive - Two speed error off
50-48	Drive - Two speed error on
50-49	Drive - Brake solenoid error on
50-50	Drive - Brake solenoid error off
50-51	Drive - Brake solenoid no signal
50-52	Drive - Brake light relay error on
50-53	Drive - Brake light relay error off
50-54	Drive - Differential lock error on
50-55	Drive - Differential lock error off
50-56	Drive - CAN communications fault
50-57	Drive - Drive controller not calibrated
50-59	Drive - Front speed sensor missing pulses
50-60	Drive - Rear speed sensor missing pulses
50-63	Drive - Front angle sensor Not Cal
50-66	Drive - Rear angle sensor Not Cal

65-05	Workgroup lockout - Short to Battery
65-06	Workgroup lockout - Short to Ground
65-07	Workgroup lockout - Open Circuit
66-05	Pilot Pressure Short to Battery
66-06	Pilot Pressure Short to Ground
Main Controller (Bobcat Controller)	
74-72	Controller - In Boot Code
75-4	Drive - No Communication from Drive Controller
75-5	Drive - Left Joystick X-Axis Not in Neutral
75-7	Drive - Left Joystick Y-Axis Not in Neutral
75-8	Drive - Right Joystick Y-Axis Not in Neutral (H-pattern only)
75-9	Drive - ISO/H Pattern Switch Short to Ground or Battery
75-17	Drive - Left Swash Plate Not in Neutral
75-18	Drive - Right Swash Plate Not in Neutral
75-19	Drive - Left Joystick X-Axis Out of Range High
75-21	Drive - Left Joystick Y-Axis Out of Range High
75-22	Drive - Right Joystick Y-Axis Out of Range High (H-pattern only)
75-27	Drive - Left Swash Plate Out of Position
75-28	Drive - Right Swash Plate Out of Position
75-29	Drive - Left Joystick X-Axis Out of Range Low
75-31	Drive - Left Joystick Y-Axis Out of Range Low
75-32	Drive - Right Joystick Y-Axis Out of Range Low (H-pattern only)
75-37	Drive - 5 Volt Sensor Supply 1 Out of Range Low
75-39	Drive - Left Swash Plate Sensor Out of Range High
75-40	Drive - Left Swash Plate Sensor Out of Range Low
75-41	Drive - Right Swash Plate Sensor Out of Range High
75-42	Drive - Right Swash Plate Sensor Out of Range Low
75-43	Drive - Left Forward Drive Solenoid Error On
75-44	Drive - Left Reverse Drive Solenoid Error On
75-45	Drive - Right Forward Drive Solenoid Error On
75-46	Drive - Right Reverse Drive Solenoid Error On
75-52	Drive - Backup Alarm Error On
75-53	Drive - Left Forward Drive Solenoid Error Off
75-54	Drive - Left Reverse Drive Solenoid Error Off
75-55	Drive - Right Forward Drive Solenoid Error Off
75-56	Drive - Right Reverse Drive Solenoid Error Off
75-66	Drive - Backup Alarm Error Off
75-67	Drive - No Communication from Bobcat Controller
75-69	Drive - Battery Voltage Out of Range High
75-70	Drive - Interrupted Power (also occurs after software updates)
75-71	Drive - Battery Voltage Out of Range Low
75-72	Drive - Drive Pump Not Calibrated
75-73	Drive - ISO/H Pattern Switch Flipped While Operating
75-74	Drive - Right Wheel Speed Uncommanded Motion
75-75	Drive - Left Wheel Speed Uncommanded Motion
75-76	Drive - No Communication from ACS Controller
75-77	Drive - Left Speed Sensor Out of Range High
75-78	Drive - Right Speed Sensor Out of Range High
75-79	Drive - Left Speed Sensor Out of Range Low
75-80	Drive - Right Speed Sensor Out of Range Low
75-85	Drive - 5 Volt Sensor Supply 1 Out of Range High
75-91	Drive - Left Swash Sensor Reversed
75-92	Drive - Right Swash Sensor Reversed
75-93	Drive - Unresponsive Right Speed Sensor
75-94	Drive - Unresponsive Left Speed Sensor

82-03	ACD output C - Error Off
83-02	ACD output D - Error On
83-03	ACD output D - Error Off
84-02	ACD output E - Error On
84-03	ACD output E - Error Off
85-02	ACD output F - Error On
85-03	ACD output F - Error Off
86-02	ACD output G - Error On
86-03	ACD output G - Error Off
87-02	ACD output H - Error On
87-03	ACD output H - Error Off
90-02	Service tool output C - Error On
90-03	Service tool output C - Error Off
91-02	Service tool output D - Error On
91-03	Service tool output D - Error Off
92-02	Service tool output E - Error On
92-03	Service tool output E - Error Off
93-02	Service tool output F - Error On
93-03	Service tool output F - Error Off