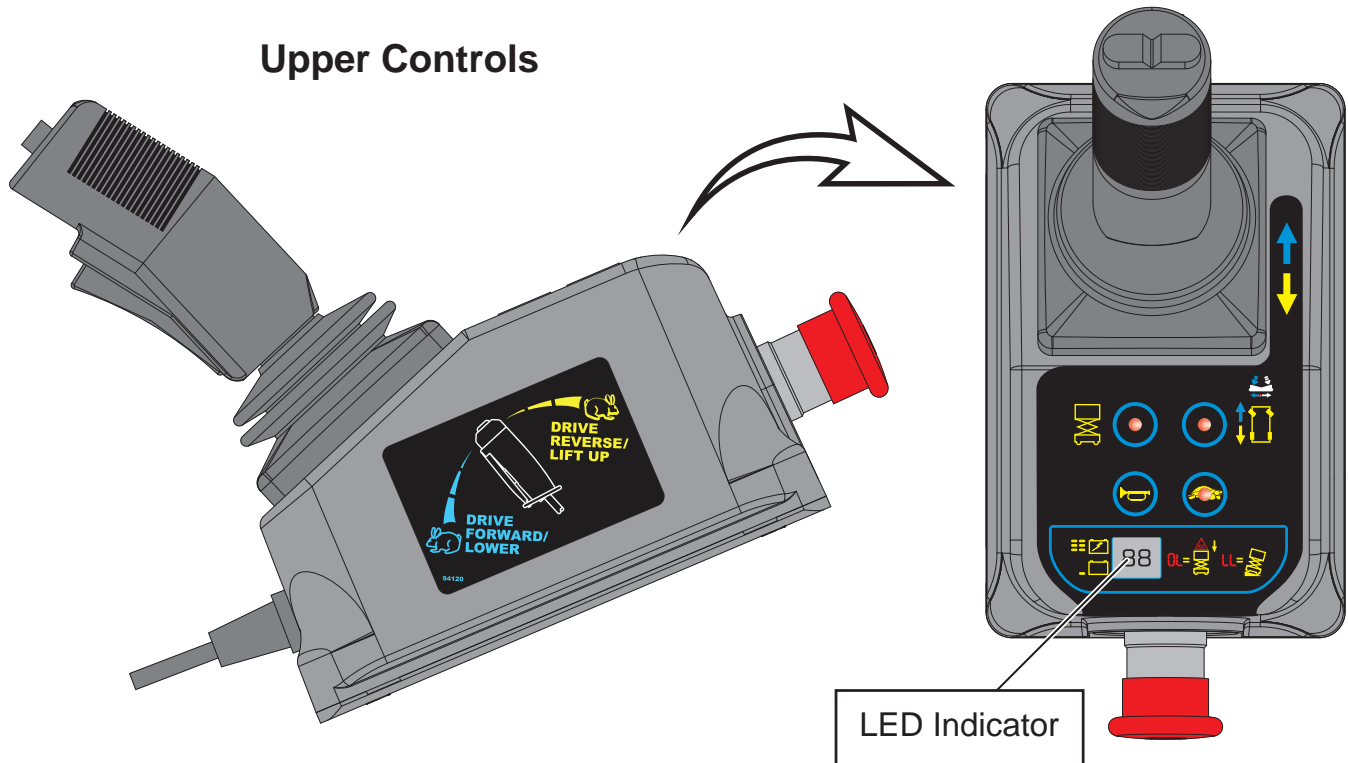


Fault Codes

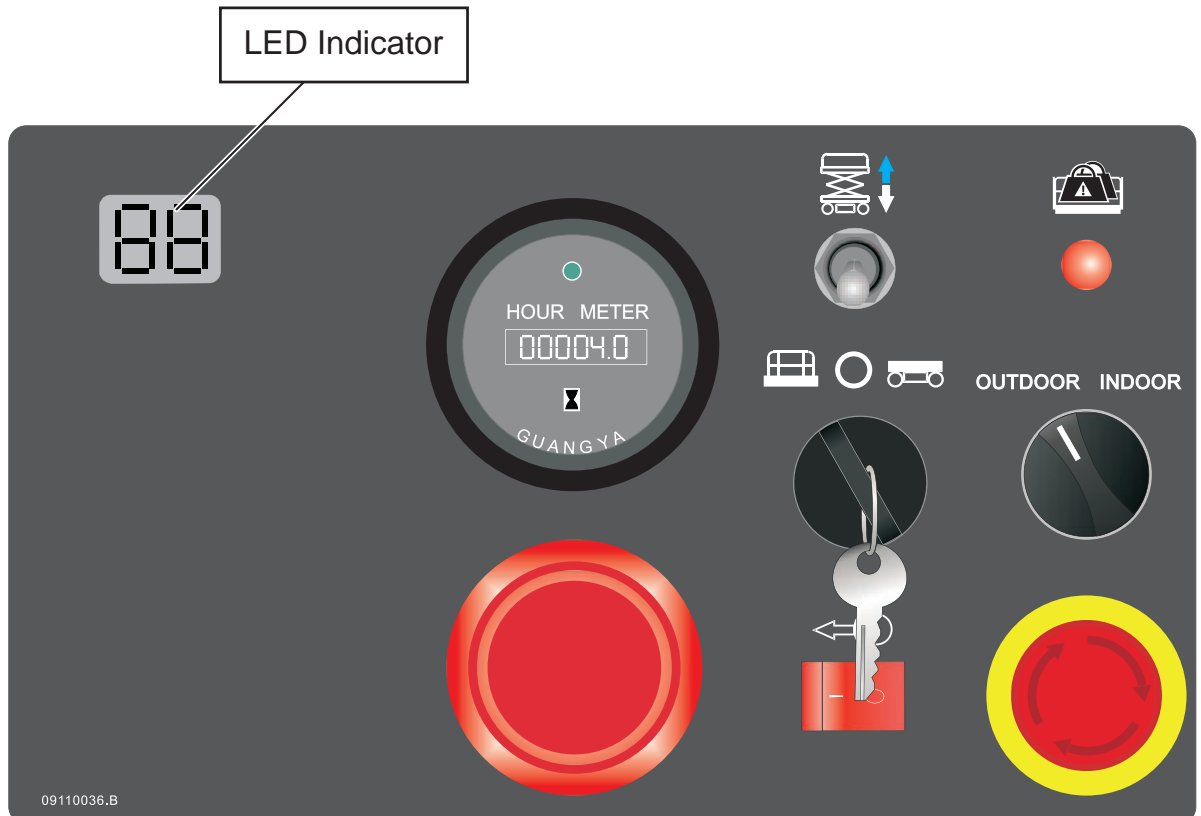
Fault Codes, when present, appear on the LED Indicator at the Upper Controls station and on the LED Screen at the Lower Controls station.

Upper Controls



Lower Controls

Art_5592E



Error Indicator Readout



Art_5533

If the LED diagnostic readout displays an error code, such as LL, push in and turn the red Emergency Stop button to reset the system.

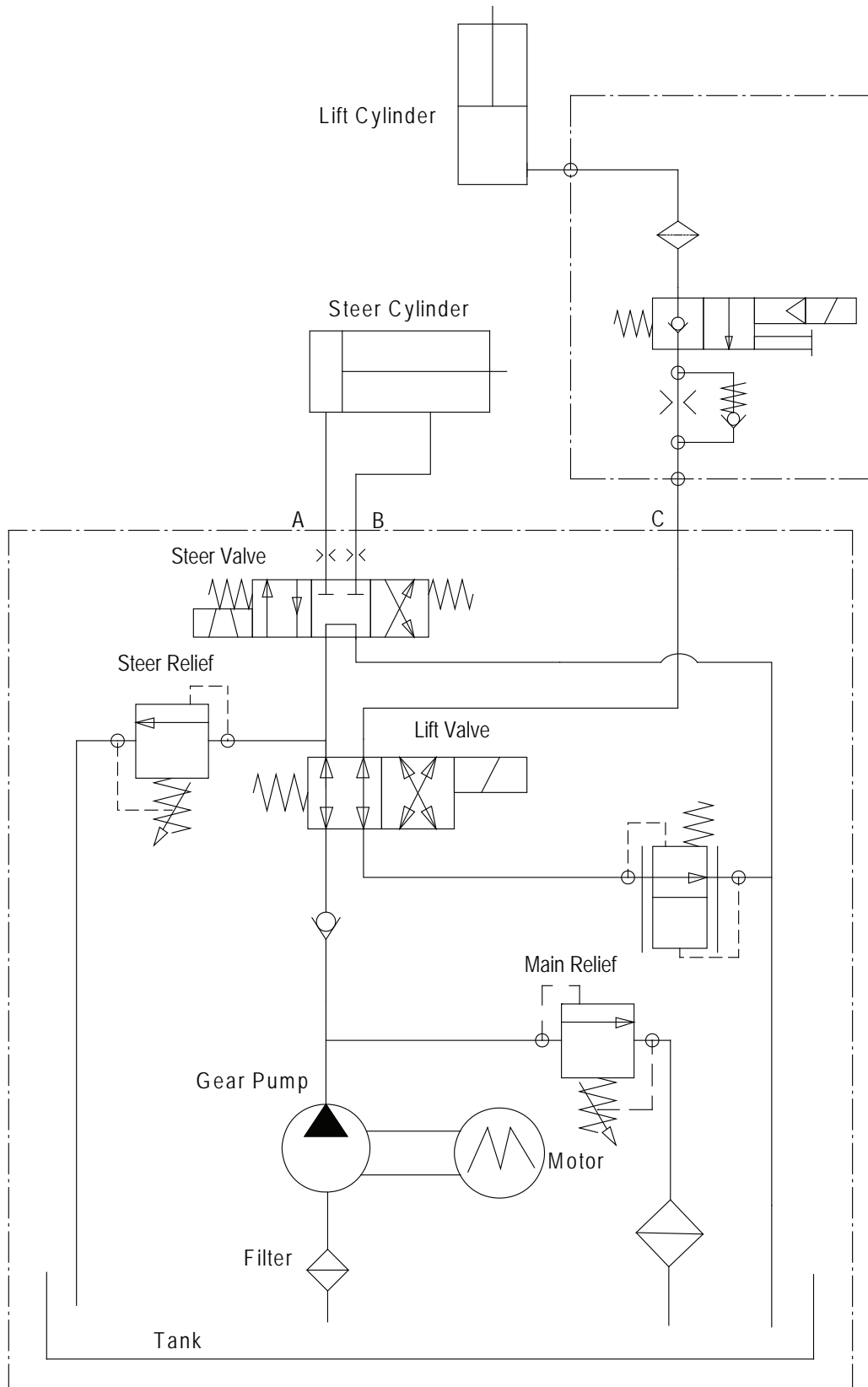
Fault	Description	Models	Solutions
01/10	System Initialization Fault	All Models	Check ECU.
02/20	System Communication Fault	All Models	Check platform control box, check wiring to platform connector, check ECU, check battery voltage, check relay in lower cabinet.
		Micro26®	Check height sensor, check pressure sensor.
03	Invalid Option Setting	All Models	Reset option code.
12	Chassis Up Or Down Switch ON At Power-Up	All Models	Check wiring to toggle switch, check toggle switch.
18	Pothole Guard Fault	All Models	Check pothole limit switch, check pothole bar functionality, recalibrate height.
30/35	No Functions	All Models	Remove telematics from hour meter.
31	Pressure Sensor Fault	All Models	Check option code (older machines), check wiring to pressure sensor, check pressure sensor, recalibrate overload.
32	Angle Sensor Fault	All Models	Check wiring to angle sensor (operating range 1.9-3.8V), check option code.
36	Low Voltage Fault	All Models (Newer Machines)	Check battery voltage, check battery connections, load test batteries, replace batteries ONLY if necessary, charge machine.
42	Left Turn Switch ON At Power-Up	All Models	Check joystick left steer button, check platform controller, replace joystick.
43	Right Turn Switch ON At Power-Up	All Models	Check joystick right steer button, check platform controller, replace joystick.
46	Joystick Enable Switch ON At Power-Up	All Models	Enable pushed before self-check finished, check dead-man switch, replace joystick.
47	Joystick Not In Neutral At Power-Up	All Models	Check joystick for centering, replace joystick.
52	Drive Forward Coil Fault	All Models	Check option code.
53	Drive Reverse Coil Fault	All Models	Check option code.
54	Up Coil Fault	All Models	Check lift coil for voltage, check resistance on coil, replace lift coil.
55	Down Coil Fault	All Models	Check down coil for voltage, check resistance on coil, replace down coil.
56	Right Steer Coil Fault	All Models	Check steer coil for voltage, check resistance on coil, replace steer coil.
57	Left Steer Coil Fault	All Models	Check steer coil for voltage, check resistance on coil, replace steer coil.
58	Brake Coil Fault <ul style="list-style-type: none"> • Brakes Are 46 Ohms 	All Models	Check brake module and wiring, check brakes and wiring, check battery voltage.
60	Motor Controller Fault	All Models	Cycle power to machine, replace motor controller.

61	Motor Controller Sensor Fault	All Models	Check drive motor and wiring, check motor controller wiring, change option code, replace motor controller.
62	Motor Controller Hardware Fail Safe Fault	All Models	Cycle power, check brake switch functionality and wiring, tighten drive motor connections, replace motor controller.
63	Motor Controller Output Fault	All Models	Cycle power, tighten drive motor connections, replace motor controller.
64	Motor Controller Fault	All Models	Replace motor controller.
65	Motor Controller Throttle Fault	All Models	Check wiring to controller, replace motor controller.
66	Motor Controller Reverse Fault	All Models	Replace motor controller.
67	Motor Controller HPD Fault	All Models	Check contactor, change option code, replace ECU, replace motor controller.
68	Low Voltage Fault	All Models	Check battery voltage, check battery connection, load test batteries, replace batteries ONLY if necessary, charge machine.
69	High Neutral Current Fault	All Models	Motor controller thinks the brakes are on and the motors are still running (this message comes just before other faults, should be ignored in those cases), replace motor controller.
70	Steer Input Out Of Range	All Models	Check for loose connection at motor controller, replace motor controller.
71	Motor Controller Main Contactor Fault	All Models	Check wiring to contactor (check white & black for connection & voltage), check drive motor and wiring, check motor controller wiring.
72	Motor Controller Over Voltage Fault	All Models	Check battery voltage (battery charger must NOT be connected), cycle power to machine, replace motor controller.
73	Motor Controller	All Models	Drive or lift motor may be overheating (let the lift cool down), cycle power to machine, replace motor controller.
74	Motor Controller Motor Fault	All Models	Check connections to motors, check wiring to motors, cycle power to the lift, replace motor controller.
75	Motor Controller Pump Motor Fault	All Models	Check connections on pump motor, tap on pump motor (brushes possibly stuck), cycle power to machine, replace pump, replace motor controller.
76	Motor Controller Left Drive Motor Fault	All Models	Check drive motor terminals, cycle power to the lift, replace motor controller.
77	Motor Controller Right Drive Motor Fault	All Models	Check drive motor terminals, cycle power to the lift, replace motor controller.
78	Pump Motor Short Fault <ul style="list-style-type: none"> Should Be 0.8 To 1.4 Ohms 	All Models	Check connections on pump motor, tap on pump motor (brushes possibly stuck), cycle power to machine, replace motor controller.
79	Left Drive Motor Short <ul style="list-style-type: none"> Should Be 0.5 To 2.0 Ohms For Micro19 	1930SE ONLY	Check left drive motor terminal, check motor controller wiring.
		Micro19®	Swap drive motor wires (if code changes trace wiring, if it does not replace motor controller), tighten drive motor terminals.

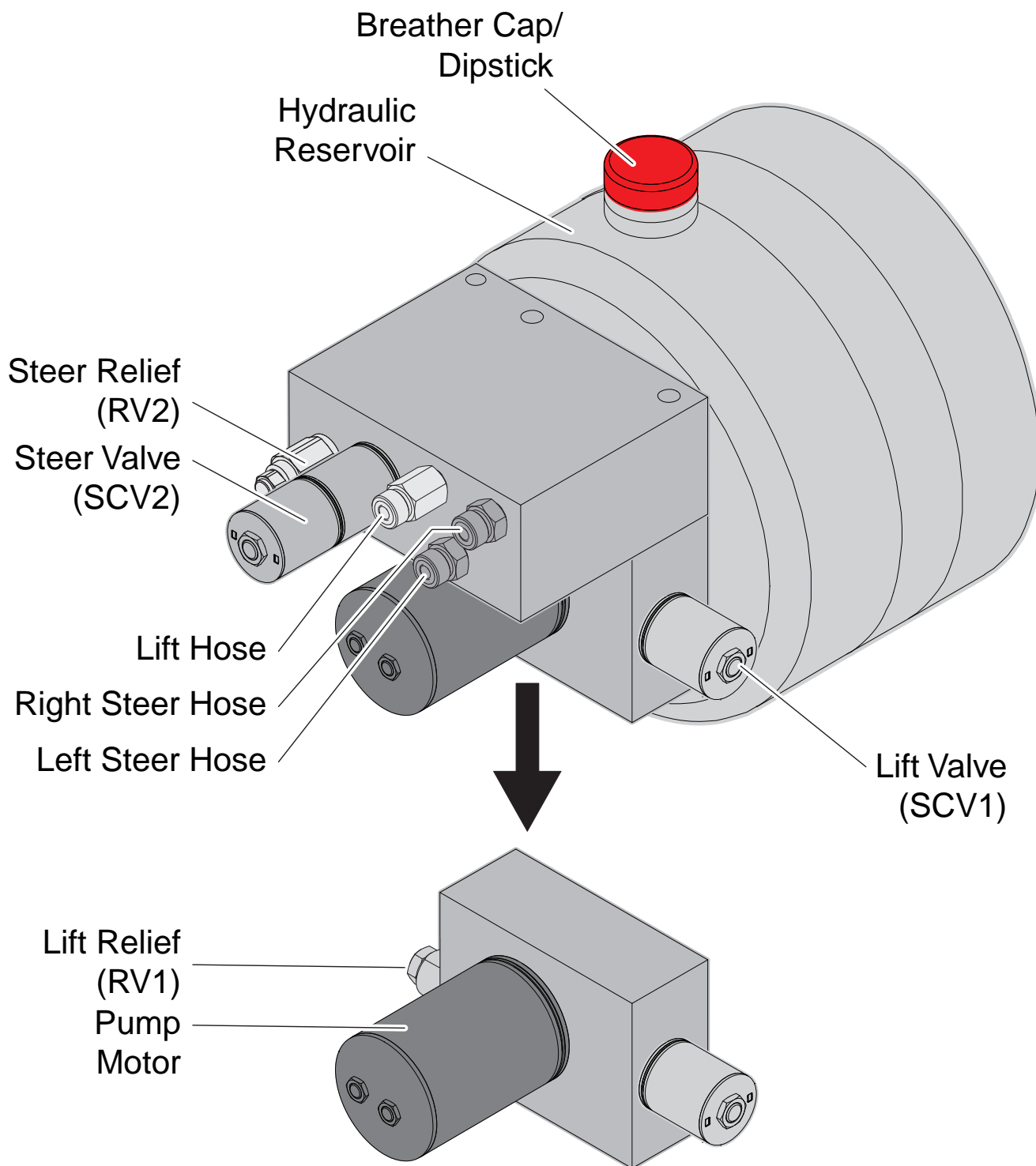
80	Over 80% Load Warning	All Models	Platform capacity close to limit of weight (consider not adding more load).
81	Right Drive Motor Short	1930SE/Micro19®	Check right drive motor and wiring, check motor controller and wiring.
82	Right Brake Coil <ul style="list-style-type: none"> Brakes Should Be 46 Ohms On Micro19 And 26 Ohms For All Others 	All Models	Check battery voltage, check right brake terminals, check brake module and wiring, check contactor, check option code, check fuse near motor controller, replace ECU.
83	Left Brake Coil	All Models	Check battery voltage, check left brake terminals, check brake module wiring, check contactor.
		1930SE/Micro19®	Check drive motor terminals, check fuse connected to motor controller, replace motor controller.
85	Brake Release Switch Closed	1930SE/Micro19® ONLY	Turn brake release switch off.
86	Raised Brake Release Fault	1930SE ONLY	Brake release switch engaged when elevated.
87	Brake Release Switch Fault	1930SE ONLY	Brake release switch is open.
89	Drive Motor Field Open Fault	All Models	Check wiring on motors, check wiring to motor controller.
90	Over 90% Load Warning	All Models	Platform getting close to weight capacity.
91	Left Drive Motor Short	All Models	Check wiring to motor, check wiring to motor controller.
92	Right Drive Motor Short	All Models	Check wiring to motor, check wiring to motor controller.
99	Over 99% Load Warning	All Models	Platform has reached load capacity.
OL	Platform Overloaded	All Models	Remove excess load.
LL	Tilted	All Models	Check wiring to tilt sensor, recalibrate tilt.
H9	Height Not Calibrated	All Models	Calibrate height.
CH	Not A Fault Code	All Models	Machine is in chassis controls.

Option Code For Machines		
Model	Older	With Overload (Yellow Gate)
MICRO19®	To Serial #16900460 58 From Serial #16900461 62	E2
MICRO19XD®	N/A	E3
MICRO26®	N/A	27
1930SE	58	--
2632SE, 3346SE, 4046SE, 4555SE	30, 26	A7
MME20, MME25	N/A	A7

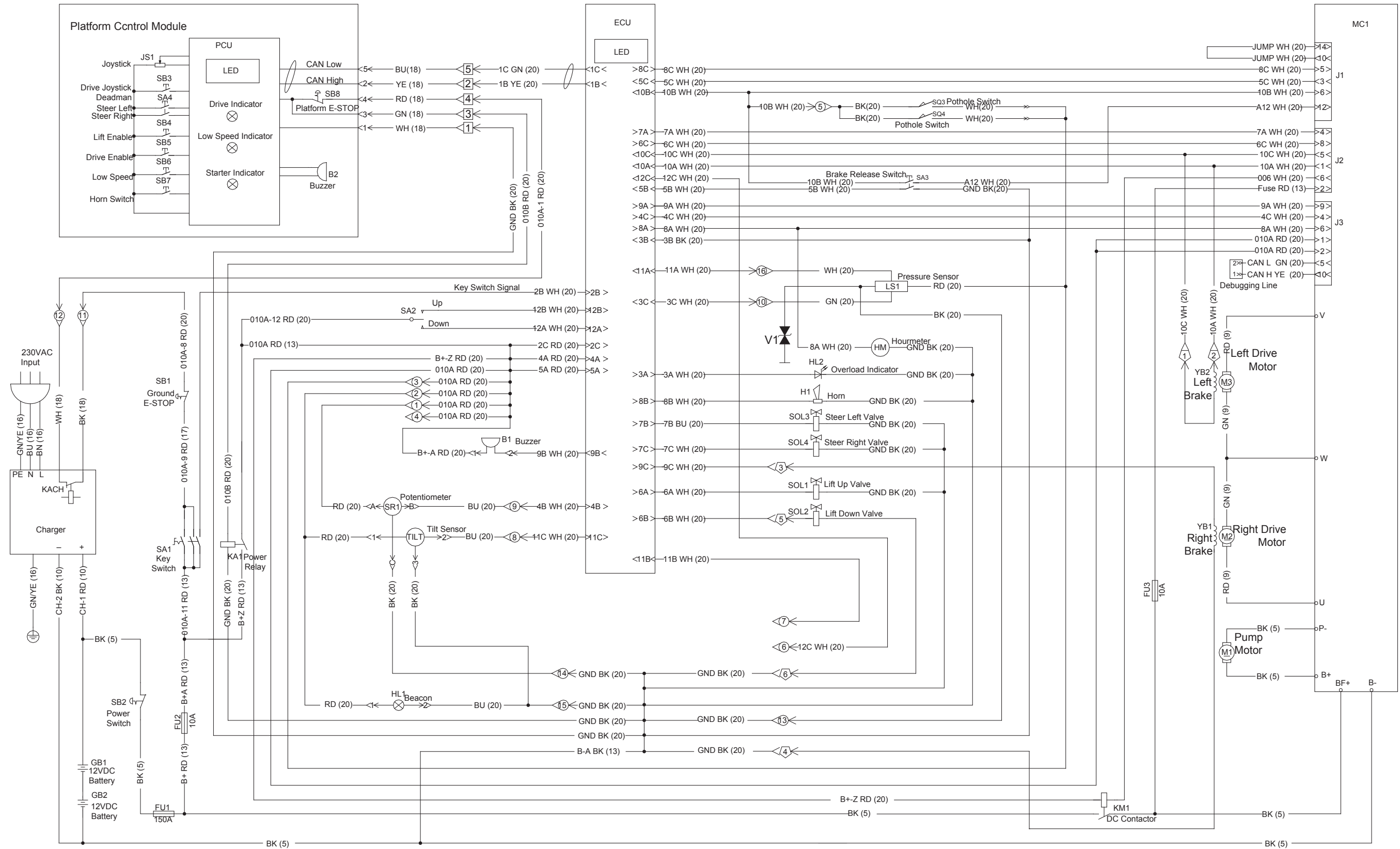
Hydraulic Schematic



Hydraulic Unit



ELECTRICAL SCHEMATIC



1330SE / MICRO13-XD
ELECTRICAL SCHEMATIC

◁ = 6 Position Connector LOC1
 ▷ = 16 Position Connector
 ◁ = 5 Position Connector LOC2