TROUBLESHOOTING
SIMPLE BIN SITE

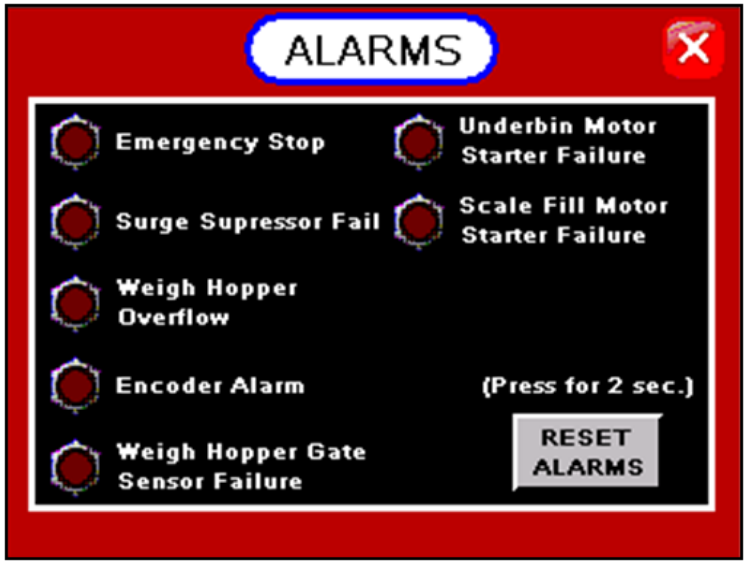
Below is a table describing the most frequent problems and solutions with the USC Simple Bin Site system. For further assistance, contact USC at (785) 431-7900.

Problem	Possible cause	Solution
System is not consistently calibrating correctly.	1. Bin slides gates or manual gates have been moved. 2. Underbin conveyor belt is slipping. 3. Bin slide gate is not consistently opening to the same point. 4. The operator is pressing the EARLY SHUTDOWN button before the run ends. 5. System is being paused during the run.	1. Ensure that the slide gate collar and manual gate is locked into place. Then recalibrate. 2. Tighten the underbin conveyor belt. 3. Check for any obstruction that may be restricting the movement of the slide gate. 4. Allow the system to shutdown on its own. 5. Make another run without pausing system.
System calibration for currently selected bin is incorrect.	1. System is too far out of calibration to recalibrate automatically.	1. Recalibrate the system. (see page 30)
Weight display not reading steady (Bouncing)	1. Bad load cell. 2. Wind Drafts.	1. Replace load cell. 2. Close doors.
No scale reading on the weigh hopper indicator on the touch screen.	1. Ethernet cable is disconnected. 2. Scale head is unplugged.	1. Check all Ethernet cables for connectivity and damage. 2. Ensure that the scale head has power and is turned on.
Scale is reading incorrect weight.	1. Something is touching the scale. 2. Scale needs recalibrated. 3. Ethernet cable may be damaged or receiving electrical interference	1. Ensure that the area around the scale is clean and that nothing is leaning on or resting on the hopper. 2. Zero scale. If still incorrect, have a professional scale technician recalibrate the scale. 3. Ensure that Ethernet cable is not located directly next to any electrical lines.

Problem	Possible Cause	Solution
No bin slide gates will open or close when their corresponding button is pressed on the touch screen.	1. No air or not enough air is being supplied to the solenoid bank on the side of the bin site control panel. 2. The bin site PLC may be off.	1. Ensure that at least 100 psi of air is being supplied to the solenoid bank. 2. Ensure that the bin site control panel has power to it, is on and that all of the breakers inside the panel are on as well.
Air gate will not close fully.	1. Something is obstructing the air gate from closing. 2. Air pressure to the gate is not strong enough.	1. Remove obstruction. 2. Ensure that the bin slide gate has at least 100 psi of air being supplied to it.
Air gate is opening when it should be closing and vice versa.	1. Air lines to the air gate are reversed.	1. Exchange air line for the proper solenoid on the back of the solenoid bank.
Diverter is leaking seed through bypass side while in TREAT mode of operation.	1. Too low of air pressure to actuate the diverter. 2. An obstruction in the diverter is stopping correct placement of the diverter plate.	1. Ensure that at least 100 psi of air pressure is present at the diverter. 2. Remove obstruction.
Solenoids are making a buzzing sound when air gates are actuated.	1. Moisture in the air system. 2. Electric actuator on solenoid bank may be faulty.	1. Remove moisture from the air lines. 2. Replace the electronic actuator on the solenoid.
Conveyor will not start in HAND or AUTO mode.	1. Conveyor motor starter is tripped. 2. Conveyor is clogged.	1. Reset motor starter. 2. Remove obstruction or debris.

SYSTEM ALARMS - FAULTS

The table below and on the following pages provides a general description of all the system alarms of the Simple Bin Site system. When a warning condition is detected by the system, the ALARMS screen will pop-up and the particular alarm will be flashing back and forth from white to red indicating which condition needs correction. If running, the system will then progress to the Pause state. The alarms are reset when the fault condition is cleared and the Reset Alarm button is pressed. For further assistance, contact USC at (785) 431-7900.



Alarm - Fault	Possible Cause	Solution
Emergency Stop	The Emergency Stop button on the front of the control panel has been pressed.	Pull the Emergency button back out and push the Emergency Stop Reset button.
SURGE SUPRESSOR FAIL	L1 of the Surge protector will no longer protect the electrical panel against voltage surges.	Replace the Surge Protector.
Weigh Hopper Overflow	The current weight in the Weigh Hopper is above the number entered into the maximum scale weight in the Utilities screen.	Verify the number entered into the maximum scale weight box is correct. If yes, then recalibrate and rerun system.

Alarm - Fault	Possible Cause	Solution
Encoder Alarm	1. Belt is out of alignment. 2. Belt is clogged and not moving freely. 3. Encoder cable is not communicating with the control panel.	1. Alignment the belt. 2. Turn off the system and disconnect power. Locate clog and remove. 3. Check to see that the cable is connected and there is no damage to it.
Weigh Hopper Gate Sensor Failure	1. Slide gate sensor is not positioned properly. 2. Slide gate solenoid failed to actuate.	1. Verify that the slide gate sensor is properly positioned. 2. Check air supply and signal to solenoid.
Underbin Motor Starter Fault	1. Underbin motor auxiliary contact was not sensed after being energized to run. 2. Underbin motor has been shutdown while in Auto mode of operation.	1. Verify that the motor starter has power, is turned on and that the overload is not tripped. 2. Verify that the Underbin was not turned OFF while the system was in Auto mode of operation.
Scale Fill Motor Starter Fault	1. Scale Fill motor auxiliary contact was not sensed after being energized to run. 2. Scale Fill motor has been shutdown while in Auto mode of operation.	1. Verify that the motor starter has power, is turned on and that the overload is not tripped. 2. Verify that the Scale Fill was not turned OFF while the system was in Auto mode of operation.