

## TROUBLESHOOTING - AT500H AUTO TREATER

Below is a table describing the most frequent problems and solutions with the USC AT500H Treater . For further assistance, contact the USC Service department at (785) 431-7900.

Problem	Possible Cause	Solution
Seed Gate Actuator will not move.	<ol style="list-style-type: none"> <li>1. Adjustable Chamber mechanism jammed with debris.</li> <li>2. One or both of the two connectors linking the actuator to the control panel are not connected.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clear all debris and make sure mechanism moves freely.</li> <li>2. Make sure both connectors are properly engaged.</li> </ol>
Seed Gate Actuator will not return to the closed position after all seed has emptied from the box.	<ol style="list-style-type: none"> <li>1. Proximity switch is dirty.</li> <li>2. Proximity switch is set too sensitive.</li> <li>3. The system is running in HAND mode.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean proximity switch.</li> <li>2. Adjust the pump proximity switch sensitivity (see page 4).</li> <li>3. Change to AUTO mode.</li> </ol>
Seed Gate Actuator will not move in AUTO.	<ol style="list-style-type: none"> <li>1. Proximity switch is not staying covered.</li> <li>2. Proximity switch is not set sensitive enough.</li> <li>3. HMI screen not set to AUTO.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure proximity switch is staying covered with seed.</li> <li>2. Adjust pump proximity switch sensitivity by turning the adjustment screw clockwise.</li> <li>3. Set HMI screen to AUTO.</li> </ol>
Seed Gate Actuator will not close completely.	<ol style="list-style-type: none"> <li>1. Debris may be keeping it from closing completely.</li> </ol>	<ol style="list-style-type: none"> <li>1. Open the seed gate, remove debris and power cycle the entire system. When the system is turned back on, the gate will automatically close and find it's Home position.</li> </ol>
Auger overload keeps tripping	<ol style="list-style-type: none"> <li>1. Seed flow is too high.</li> <li>2. Too much liquid being applied.</li> </ol>	<ol style="list-style-type: none"> <li>1. Slow down seed flow.</li> <li>2. Lower the liquid rate.</li> </ol>

Problem	Possible Cause	Solution
Flow Meter is fluctuating	<ol style="list-style-type: none"> <li>1. Pump is sucking air.</li> <li>2. Restriction in the line.</li> <li>3. Flow meter is not full of liquid</li> </ol>	<ol style="list-style-type: none"> <li>1. Check and tighten all hose connections.</li> <li>1. Check filter to see if gasket is missing or cracked.</li> <li>2. Clean out filter and lines to check for any debris.</li> <li>3. The meter will fluctuate if there is nothing pumping and there is some liquid left in the meter. Drain out liquid.</li> </ol>
Flow meter won't turn on	<ol style="list-style-type: none"> <li>1. Improper power going to flow meter.</li> <li>2. Loose connection.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check incoming power to flow meter.</li> <li>2. Check connections inside the control panel and inside the flow meter.</li> </ol>
Flow Meter is reading too low or too high.	<ol style="list-style-type: none"> <li>1. Restriction in Flow Meter or in line.</li> <li>2. Air in treatment. This can cause the flow meter to read lower than calibrating it using a measuring cup.</li> <li>3. Seed flow has changed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Flush the flow meter with water or use compressed air and blow air backwards through the meter.</li> <li>2. Check and tighten all hose connections.</li> <li>2. Check filter to see if gasket is missing or cracked.</li> <li>3. Recheck seed flow rate.</li> </ol>
Flow meter will not zero	<ol style="list-style-type: none"> <li>1. Improper wiring</li> <li>2. Wrong parameter programmed into flow meter</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring schematic.</li> <li>2. Check flow meter parameters. Call local dealer.</li> </ol>



Problem	Possible Cause	Solution
Pump will not turn off in AUTO when seed runs out.	<ol style="list-style-type: none"> <li>1. Proximity switch is dirty.</li> <li>2. Proximity switch is set too sensitive.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean proximity switch</li> <li>2. Adjust the pump proximity switch sensitivity by turning adjustment screw counter-clockwise (page 4).</li> </ol>
Pump will not turn on in AUTO	<ol style="list-style-type: none"> <li>1. Proximity switch is not staying covered.</li> <li>2. Proximity switch is not sensitive enough.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure proximity switch is staying covered with seed.</li> <li>2. Adjust pump proximity switch sensitivity by turning the adjustment screw clockwise (page 4).</li> </ol>
Pump is fluctuating.	<ol style="list-style-type: none"> <li>1. Restriction in tubing</li> <li>2. Filter is plugged or missing gasket.</li> <li>3. Hoses are worn out.</li> </ol>	<ol style="list-style-type: none"> <li>1. Flush tubing and check filter for any restrictions.</li> <li>2. Clean filter and check for gasket.</li> <li>3. Replace hoses.</li> </ol>

## PROXIMITY SWITCH ADJUSTMENT GUIDE

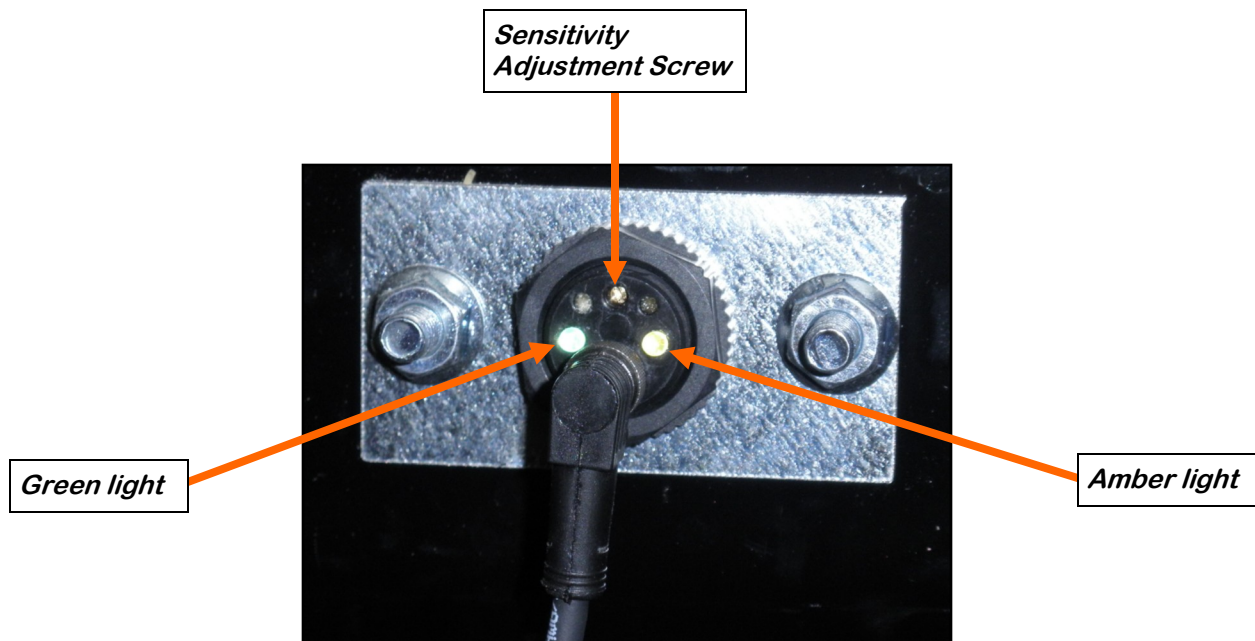
If the proximity switch is not working properly, this can be caused by wear, dust, or even moisture. The first step is to clean the lens of the proximity switch. If this does not solve the problem, the next step would be to adjust the sensitivity of the proximity switch.

The green light indicates the power status. If it is active the device is powered.

The amber light indicates when seed is being detected. If it is active it detects seed, if inactive it does not detect seed.

Using the small screwdriver provided inside the control panel, you can adjust the proximity switch by turning the adjusting screw on the back of the proximity switch.

- Turn Clockwise to make the proximity switch more sensitive.
- Turn Counterclockwise to make the proximity switch less sensitive.



*Proximity Switch Screwdriver*