



MX Series Seed Treater Quick Reference Sheet



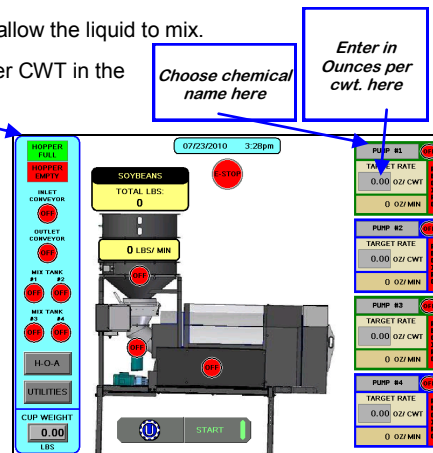
SEED FLOW CALIBRATION

1. Use the cup, funnel, funnel stand, and scale that are supplied with the MX series seed treater to find the cup weight for the seed you are to be treating.
2. Always make sure to put the cup on the stand and **zero out the weight of the cup** before getting the seed weight.
3. While plugging the bottom of the funnel with your hand, fill it with the desired seed. Then remove your hand and let it fill the cup. **(Always use the funnel for getting weight. Scooping the seed by hand will give you inconsistent weights.)**
4. Strike off the excess seed with a flat edge so that it is even with the top of the cup.
5. Weigh the seed on the provided scale. **Ensure the scale is on a level and smooth surface.**
6. On the main screen of the treater, press the "CUP WEIGHT" button and enter in the weight of the seed. **(If operating a treater without a bin site, then the cup weight button is located at the bottom left of the screen. If operating a treater with a bin site the cup weight button is located on the bottom right side of the screen.)**
7. To complete your seed flow calibration, you must now enter the rate of seed (lbs/min) that you would like to treat at. Press the "UTILITIES" button on the treater main screen and then select the button on the top left of the utilities screen titled "DESIRED TREATING RATE". Type in your desired rate and then hit enter.
8. You have now completed your MX series seed flow calibration!

PUMP CALIBRATION

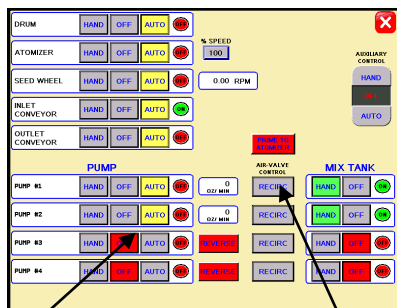
1. Run the pump tubing through peristaltic pump heads and clamp the heads down on to the tubing.
2. Premix enough liquid for the amount of seed you are treating and pour into the 50 gallon stainless steel tank. It is always a good practice to mix a half gallon extra to help fill all the lines.
3. Under the "H-O-A" screen press the "HAND" button on the desired mix tank to allow the liquid to mix.
4. On the treater main screen enter in your chemical name and desired ounces per CWT in the pump control modules located on the right side of the screen. **EX:**
5. You have now calibrated your chemical pumps.

- With the MX Series treaters, the flow of the seed and chemical pump speed is automatically calibrated and adjusted throughout the day to ensure accurate rates and eliminate over or under application of chemicals.
- You may also adjust the flow rate of seed while the machine is running and the system will automatically recalibrate itself to adjust to match the new chemical flow rate needs during the run.



TREATING SEED

1. Under the H-O-A Screen, place the "DRUM", "ATOMIZER", "SEED WHEEL", "INLET CONVEYOR", "OUTLET CONVEYOR", and desired pumps in "AUTO".
2. Next, prime the chemical line to the atomizer. Press and hold the "PRIME TO ATOMIZER" button. The atomizer will turn on and liquid will begin pumping up to the atomizer. When liquid reaches the atomizer, release the "PRIME TO ATOMIZER" button



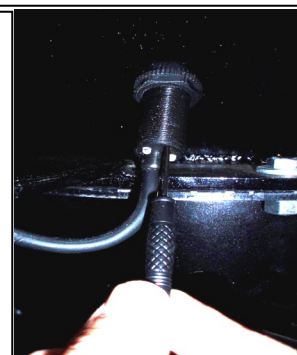
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PROXIMITY SWITCH ADJUSTMENT GUIDE

The proximity switches mounted in the extension ring and in the seed wheel on the seed treater detect when seed is present. The extension ring sensor is used to shut off the inlet conveyor when the surge hopper is full. The seed wheel sensors are used to automatically shut off the pump when all seed has left the hopper. Sometimes the sensitivity of these switches needs to be adjusted. Below are instructions and a picture of how to adjust the sensitivity of these switches when not working properly.

Using the small screw driver shipped inside the main control panel, you can adjust the proximity switch by turning the adjusting screw.

- Turn Clockwise for more sensitive.
- Turn Counterclockwise for less sensitive.



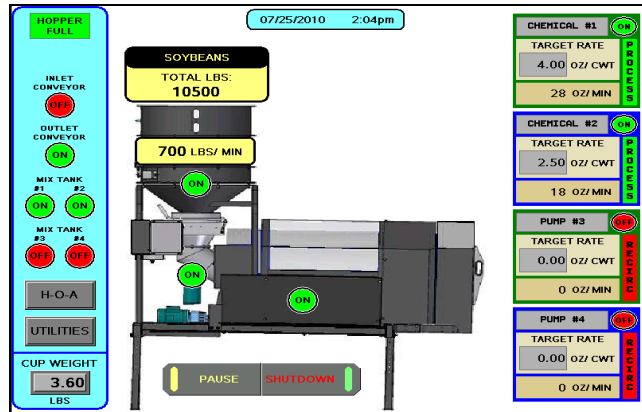


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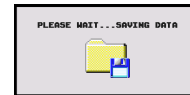
- Advance back to the main screen and press the "STARTUP" button. The drum, atomizer, inlet and outlet conveyors will activate. The pump will turn on and recirculate until it reaches the desired flow rate needed to match the target treating rate that was entered.
- When the pumps flow rate has been reached, the air actuated 3-way valve will open and allow liquid to pump up to the atomizer. Simultaneously, the seed wheel will turn on and the seed treating process will begin. **(There must be at least 90 psi supplied to the air actuated valve.)**
- You will notice that the "HOPPER EMPTY" indicator light will disappear when the proximity switches in the seed wheel are covered with seed. When the hopper is full the "HOPPER FULL" indicator light will come on and the inlet conveyor will shut off.
- As the seed is being treated, the main screen will display the pounds per minute, the total pounds, and the liquid flow rate. If the system needs to be stopped for a moment because of a problem, the "PAUSE" button can be pressed to halt the process. When ready to begin again, the "CONTINUE" button is pressed.
- When all seed passes through the seed wheel, the seed wheel will turn off and the pump will switch to recirculate. When more seed is fed into the treater, the treating process will continue.
- After all seed has been treated, the "SHUTDOWN" button can be pressed. After the button has been pressed, a window will appear notifying the operator that the system will shut down after a specified amount of time.



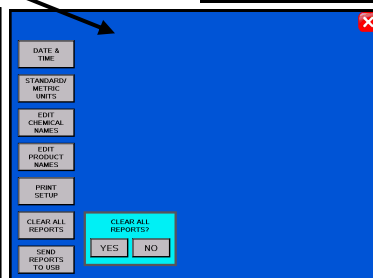
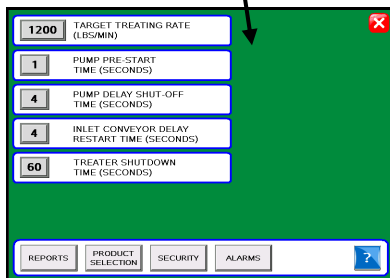
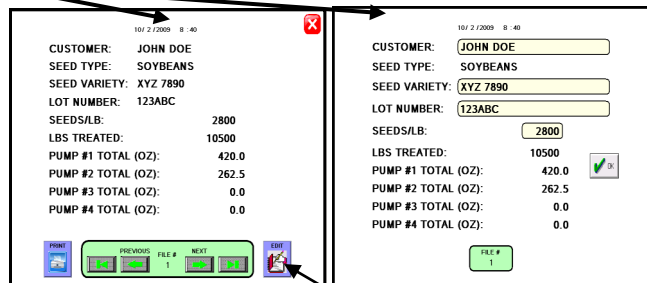
Reports

How to enter your reports after your run has been completed

- After the "SHUTDOWN" button has been pressed, a dialog box will appear (right), notifying the operator that the data from the run is being saved
- Once the data has been saved, the operator will be brought to a reports screen (left). Under the reports screen, the customers information and seed information can be recorded and saved for later use. Press the "EDIT" button to change the customer name, seed variety, and lot number. Pressing the cells next to each piece of information will bring up a keypad which will allow the operator to enter in the desired information. When finished the operator can press the "OK" button to save the data. The "PRINT" button can be pressed to print the data for the operator's records. Then, press the "X" in the top right corner of the screen to exit back to the main screen. **EX:**



- Once the data has been saved, the reports can be accessed later through the utilities screen (bottom left). If you would like to erase the reports, press the "SECURITY" button under the utilities screen to advance to the security screen (bottom right). Enter in the password of "USC". The "CLEAR ALL REPORTS" button will appear allowing the operator to erase all saved reports. **EX:**



Edit Button

For more info on operation, troubleshooting, and maintenance of equipment please refer to your equipment manual.