



CALIBRATION KIT #79689837



This manual contains technical information regarding Bayer SeedGrowth™ Equipment. Please read and understand these instructions completely before proceeding to install and operate the equipment. Bayer reserves the right to change specifications, models, components, or materials at any time without notice. For additional equipment information contact us at 1.800.634.6738. Please have this manual available when contacting Bayer.

This manual uses signal words and symbols to help avoid personal injury. Danger, Warning, and Caution are signal words used to identify the level of hazard.



Danger alerts that an extreme hazard will cause serious injury or death if operators or installers do not follow the recommended precautions.



Warning alerts that a hazard may cause serious injury or death if operators or installers do not follow the recommended precautions.



Caution alerts that a hazard may cause minor or moderate injury if operators or installers do not follow the recommended precautions.



Tip: calls attention to special information.



Note: emphasizes general information worthy of attention.



Example: gives a problem or exercise that illustrates a method or principle.

Always use caution and common sense when working with any chemical. Read the product label and SDS carefully and follow their instructions exactly as described.

Optimal operating conditions for this piece of equipment requires an ambient temperature 32° F to +104° F (0° C to +40° C), relative humidity less than 90% (minimum condensation). Make necessary provisions to protect this piece of equipment against excessive dust, particles containing iron, moisture and against corrosive and explosive gases.

Our technical information is based on extensive testing and is, to the best of our current knowledge, true and accurate but given without warranty as the conditions of use and storage are beyond our control. Variables, such as humidity, temperature, change in seed size or variety and viscosity of chemical products can all affect the accuracy of the chemical application and seed coverage. To ensure the desired

application rate and optimum seed coverage, check the calibration periodically throughout the day, and make adjustments as needed.

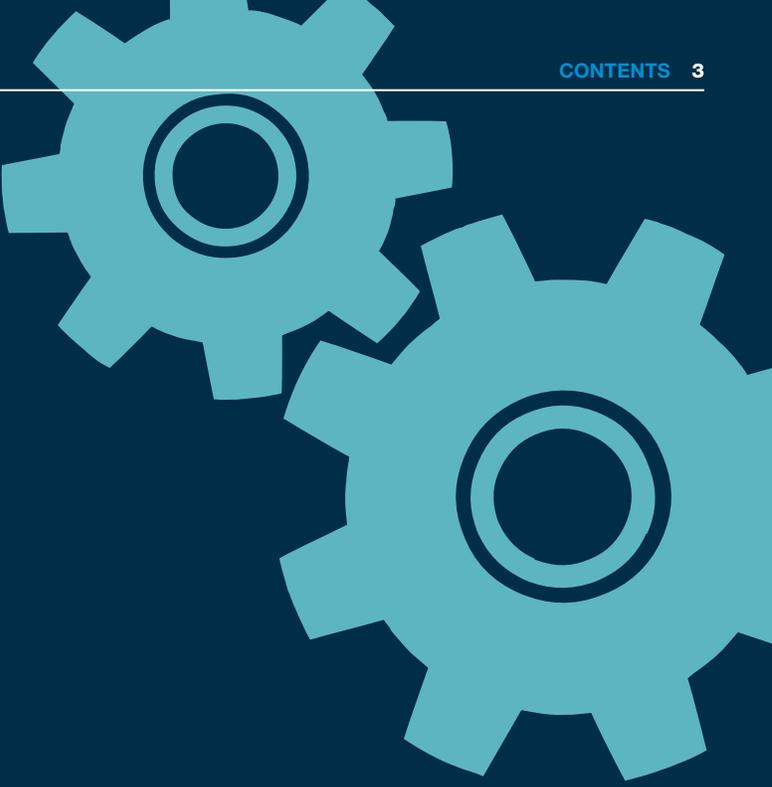


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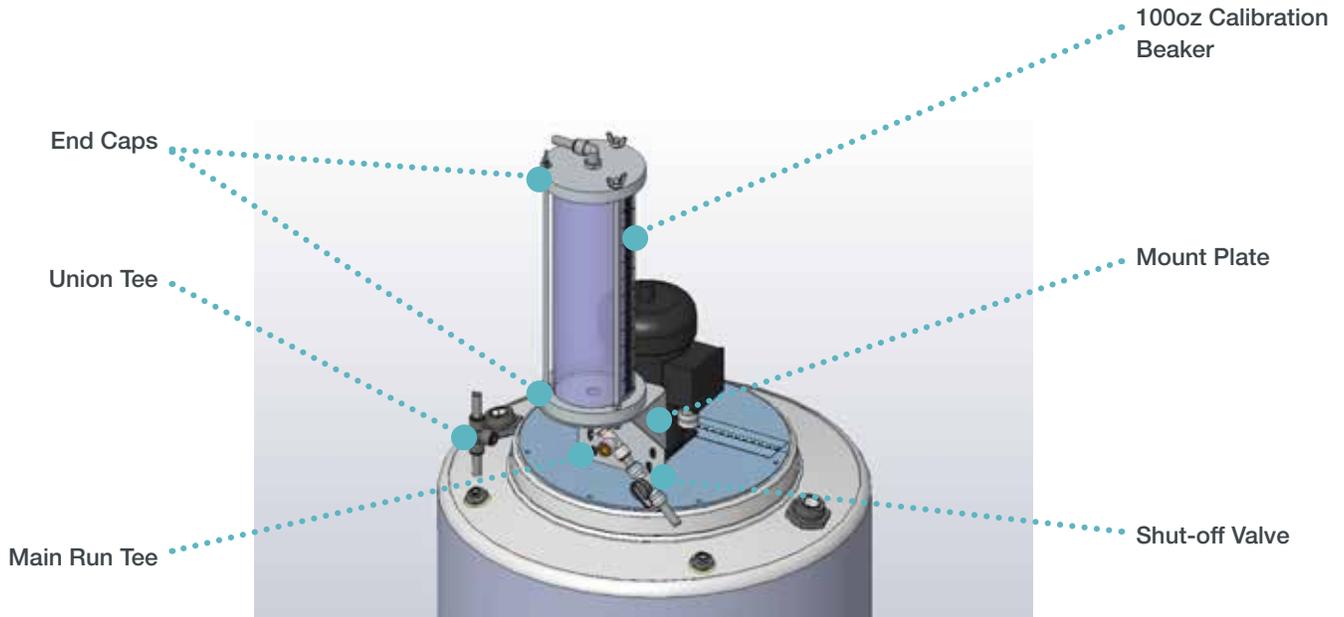


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SYSTEM DIAGRAM

TOP MOUNT CALIBRATION KIT



EXPLANATORY NOTES

Dry Weight
8.2lbs [3.7kg]

Overall Height
22.28" [566mm]

Capacity:
100oz [3L]

INSTALLATION



Required assembly tools

- Hose Cutter (1)
- 7/16" Wrench (1)
- 1/2" Wrench (1)

Installation on CBP Tank without a Flow Meter

Step 1: Connect the Calibration Mount Plate to the Tank Agitation Motor Base with factory supplied hardware in this order: bolt+[Tank Motor Mount + Calibration Mount Plate]+wiz nut. Tighten securely.



Step 2: Cut a 3" piece of the factory supplied 1/2" Tubing. Press it into the Male Run Tee (attached to the bottom of the Calibration Cylinder).



Step 3: Connect the Shutoff Valve to the piece of 1/2" Tubing.



Step 4: Remove the Calibration Port Plug from the top of the Tank. Cut to fit a piece of the factory supplied 1/2" Tubing. Press it into the Shutoff Valve. Press the other end into the 90° Elbow Press-lock Fitting and install on top of the CBP Tank.



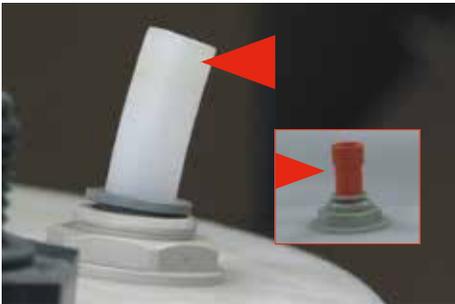
Step 5: Connect one end of the factory supplied 1/2" Recirculation Tube to the Male Run Tee located underneath the Calibration Tube.



Step 6: Cut to fit and connect the other end of the Vent Tube to the Press-lock Fitting on the pump, located underneath the CBP Tank.



Step 7: Remove the second Vent Plug from the top of the CBP Tank. Cut a 2" piece of Tubing. Press it into the Vent Press-lock Fitting.



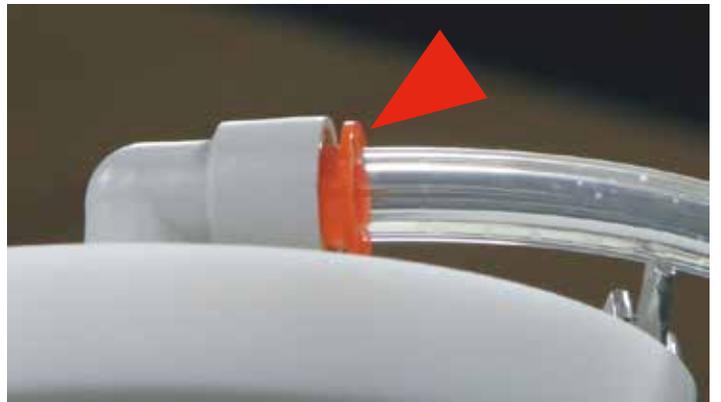
Step 8: Press the Union Tee onto the 2" piece of tubing.



Step 9: Press in the remaining Tubing into the Union Tee.



Step 10: Cut to fit and connect the remaining piece of Tubing to the 90° elbow press-lock fitting, located on top of the Calibration Tube.



Step 11: Connect one end of the remaining 20' Vent Tube to the Union Tee.



Step 12: Cut to fit and connect the other end of the Vent Tube to the Press-lock Fitting on the pump, located underneath the CBP Tank.



Step 13: Connect one end of the Transfer Tube to the Press-lock Fitting on the pump, located underneath the CBP Tank.



Step 14: Insert the other end of the Tubing into the Treater Chemical Inlet Assembly Press Lock Fitting.



Top Calibration installed without a Flow Meter

Installation on CBP Tank with a Flow Meter

Step 1: Connect the Calibration Mount Plate to the Tank Agitation Motor Base with factory supplied hardware in this order: bolt+[Tank Motor Mount + Calibration Mount Plate]+wiz nut. Tighten securely.



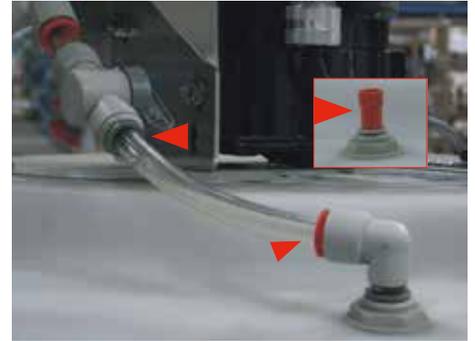
Step 2: Cut a 3" piece of the factory supplied 1/2" Tubing. Press it into the Male Run Tee (attached to the bottom of the Calibration Cylinder).



Step 3: Connect the Shutoff Valve to the piece of 1/2" Tubing.



Step 4: Remove the Calibration Port Plug from the top of the Tank. Cut to fit a piece of the factory supplied 1/2" Tubing. Press it into the Shutoff Valve. Press the other end into the 90° Elbow Press-lock Fitting and install on top of the CBP Tank.



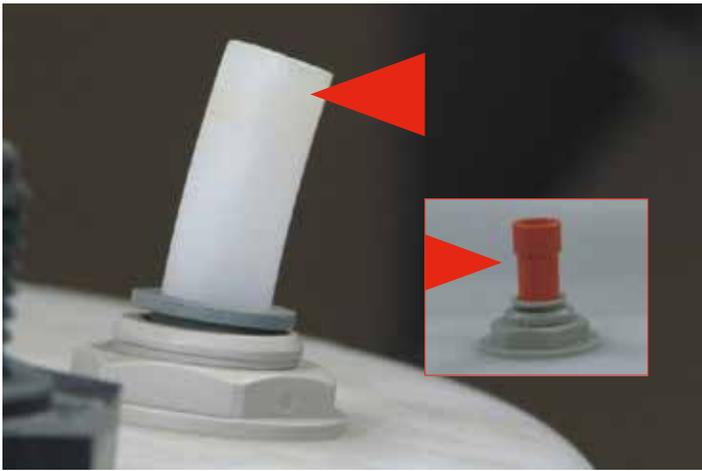
Step 5: Connect one end of the factory supplied 1/2" Recirculation Tube to the Male Run Tee located underneath the Calibration Tube.



Step 6: Connect the other end of the Recirculation Tube to the 1/2" Press-lock Fitting on the Flow Meter Assembly (right side).



Step 7: Remove the second Vent Plug from the top of the CBP Tank. Cut a 2" piece of Tubing. Press it into the Vent Press-lock Fitting.



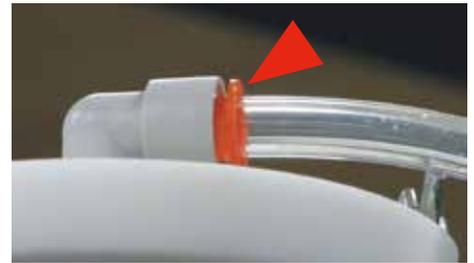
Step 8: Press the Union Tee onto the 2" piece of tubing.



Step 9: Press in the remaining Tubing into the Union Tee.



Step 10: Cut to fit and connect the remaining piece of Tubing to the 90° elbow press-lock fitting, located on top of the Calibration Tube.



Step 11: Connect one end of the remaining 20' Vent Tube to the Union Tee.



Step 12: Cut to fit and connect the other end of the Vent Tube to the Press-lock Fitting on the pump, located underneath the CBP Tank.



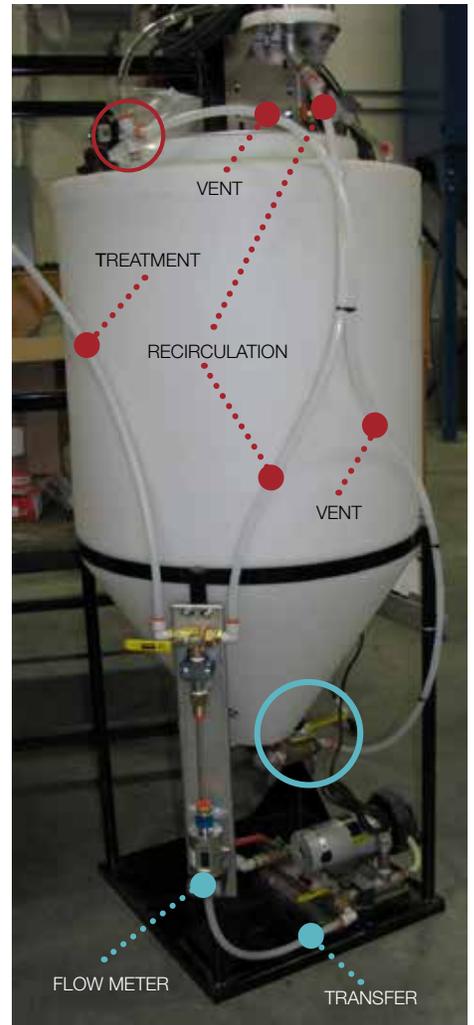
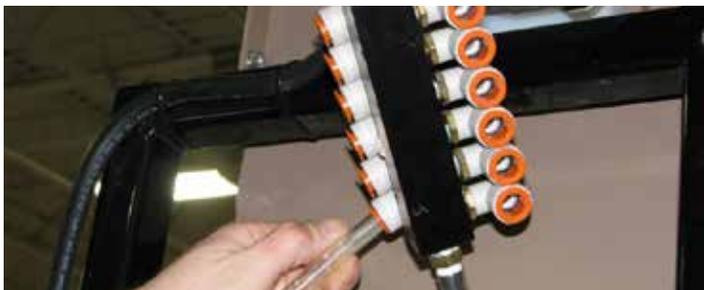
Step 13: Cut to fit and connect the other end of the Transfer Tube to the Press-lock Fitting underneath the Flow Meter.



Step 14: Connect one end of the Treatment Tube to the Press-lock Fitting on the Flow Meter Assembly (left side).



Step 15: Insert the other end of the Tubing into the Treater Chemical Inlet Assembly Press Lock Fitting.



Top Calibration installed with a Flow Meter



Note:

Use the same instructions to install a Calibration Kit onto a PSD Tank. LP300 Tanks are assembled and shipped from the factory with the Calibration Kit installed.

EXPOSURE CONTROL

Always use caution and common sense when working with chemicals. Read the product label and SDS carefully and follow their instructions exactly as described. The following Personal Protective Equipment (PPE) recommendations and best practices help promote safe use in seed treatment.



Wear protective clothing

Wear disposable or reusable coveralls with long sleeves.



Hand protection required

Wear chemical-resistant gloves.



Wear rubber boots

Wear chemical resistant rubber boots.



Labels

Label recommendations and directions for handling must be followed, including treatment procedure (use of sticker) as well as the safety requirements.



Treatment products

Keep products in a locked room that has been approved for crop protection products.



Wear a mask

Wear respiratory protection.



Eye protection required

Wear protective eyewear.



Calibration

Seed treatment equipment must be checked and calibrated regularly to ensure accurate and safe application.



Clean seed

Use well cleaned seed to avoid creation of polluted dust that will contaminate the treating facility, workers, farmers and the environment during sowing.



Cleaning

Use a vacuum to clean machines and coveralls. Never use compressed air.



Laundry

Wash soiled reusable clothing separately. Workers must take a shower after each shift.



Empty containers

Non-returnable empty containers must be triple rinsed before they can be disposed. For others the recommendation of the producer must be followed.



Spillage

Spillage must be avoided; it must be thoroughly cleaned up to avoid contaminating the environment and waterways.



Maintenance

Keep machinery clean between treating sessions.

CALIBRATION

Required calibration tools

- Stopwatch or watch with a second hand.



Calibration - CBP Tank with I/P Pump & RH Basic

Step 1: Connect the Tank Agitation Power Cord to an external 115VAC power source. Tank agitation begins when power cord is plugged into power source.



Step 2: Open the Tank Cover Lid and pour in desired chemicals. Allow chemicals to agitate for a few minutes.



Step 3: Ensure the Pump Head is clamped down onto the Pump Element!



Step 4: Ensure the Main Flow Valve underneath the CBP Supply Tank from the Filter is in the TREAT mode.



Step 5: Ensure the Recirculation Valve is in the recirculation mode.



Step 6: Ensure the Tank Valves are in the TREAT mode.



Step 7: Turn the Drain Valve underneath the calibration Tube to the right.



Step 8: Set the Pump Control to the FORWARD position.



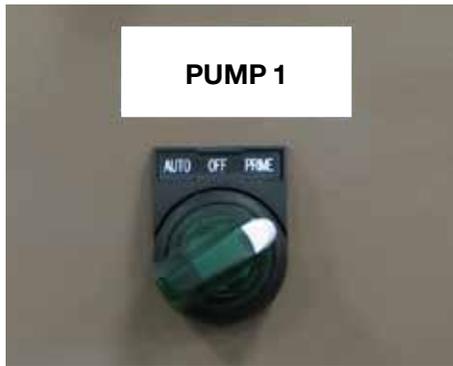
Step 9: Ensure the RH Basic Main Power Switch is in the ON position (UP) Power light will also indicate that the power is ON when lit.



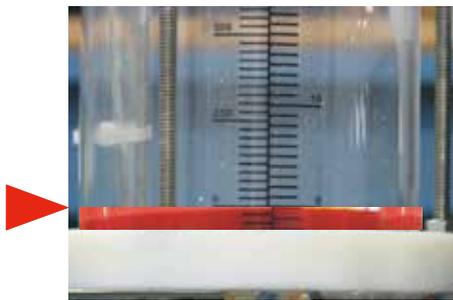
Step 10: Turn the RH Basic PUMP #1 Switch to the PRIME position. The Pump will run, purging the treatment lines of air and fill with chemical. Then turn PUMP #1 Switch to OFF position. Repeat for all Pumps used (1-4).



Step 11: Turn the RH Basic PUMP #1 Switch to the PRIME position.



Step 12: The Pump will run, filling the Calibration Graduated Beaker with chemical just up to the ZERO mark.



Step 13: Turn the RH Basic PUMP #1 Switch to OFF position.



Step 14: Turn the RH Basic PUMP #1 Switch to the PRIME position.



Step 15: The Pump will run, filling the Calibration Graduated Beaker with chemical for one minute.



Step 16: Turn the RH Basic PUMP #1 Switch to OFF position. Ensure chemical does not drain from the graduated cylinder! If required, open and close the Drain Valve to ensure the Valve properly seals!



Step 17: Note the amount (ounces) of chemical added to the Beaker in one minute. Compare that number to the chemical product label requirement. Adjust the Dial on the LS Pump Control (increase or decrease) to achieve desired Pump output speed.



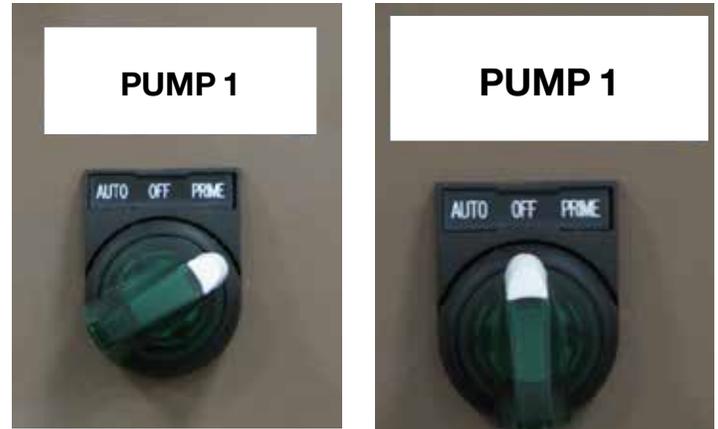
Step 18: Turn the Drain Valve underneath the calibration Tube to the right. Chemical will drain from the Beaker back into the Supply Tank. Repeat these calibration steps for each Supply Tank used until desired calibration results are achieved.



Step 19: When calibration is complete, turn the Recirculation Valve in the TREAT mode.



Step 20: Turn the RH Basic PUMP #1 Switch to the PRIME position. The Pump will run, purging the treatment lines of air and fill with chemical. Then turn PUMP #1 Switch to OFF position. Repeat for all Pumps used (1-4).



Note:

Check pump calibration on each lot of seed. If extremely high or low temperatures exist, the viscosity and flow of certain treatment products may be affected. A typical example would be treating early in the morning at colder temperatures compared to treating in the afternoon when the temperature has increased.



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For fast and easy access to our website scan the code with your smartphone and an appropriate app.

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