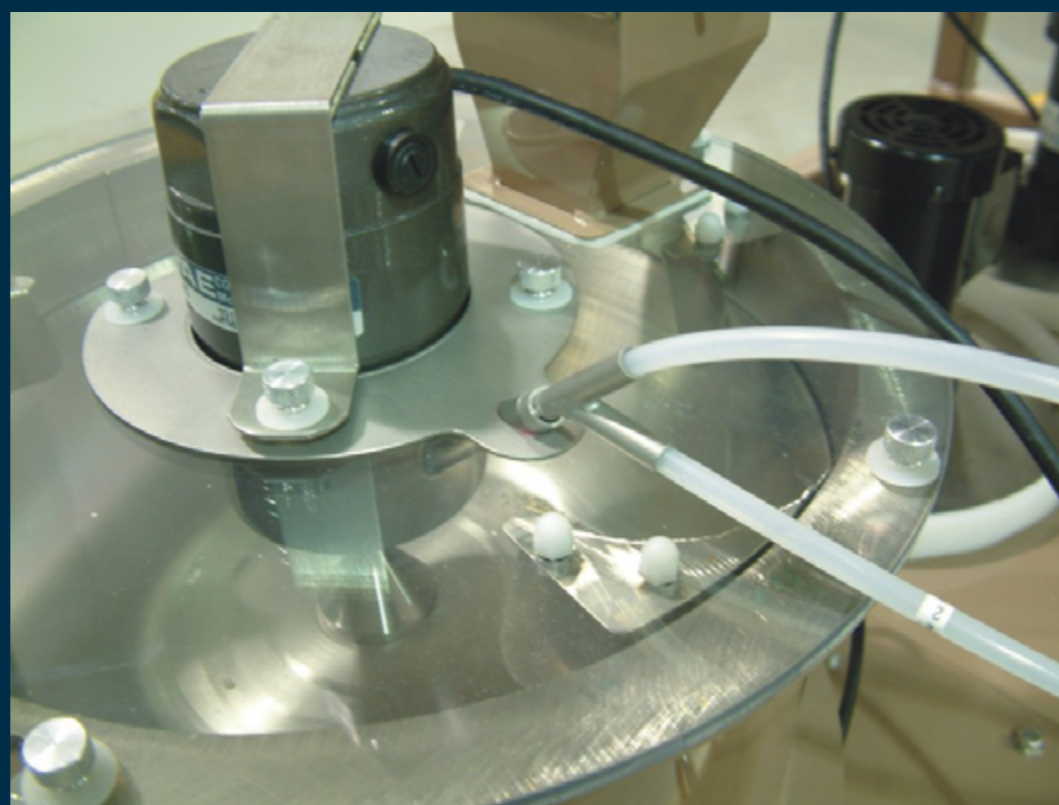




BMC MAINTNENANCE AUTOMATIC & MANUAL SYSTEMS





MENU



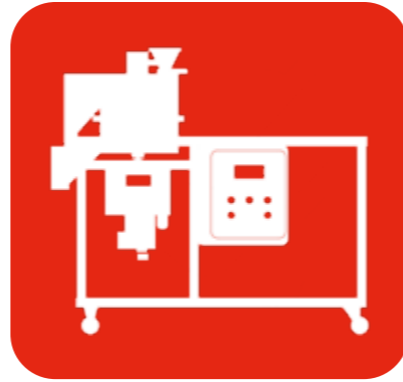
This is an interactive PDF. Click on an icon tile and navigate to a chapter of interest.



Legal & Safety



Automatic



Manual



Pictograms

Users can advance or go back single pages by using quick navigation links shown below, right.

Users can navigate to the Menu by clicking on the Menu icon shown below, left.





LEGAL & SAFETY

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.

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.

Any person who is involved in the installation or periodic maintenance of this equipment should be suitably skilled or instructed and supervised using a safe system of work. Isolate the treater before removing guards for maintenance.





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.



Note: Exposure Control signs and labels conform to the requirements of ANSI Z535.4 or ISO 3864.



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.



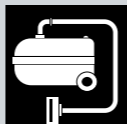
Calibration

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



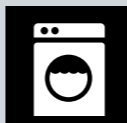
Clean seed

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



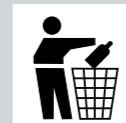
Cleaning

Use a vacuum to clean machines. Avoid using compressed air for cleaning.



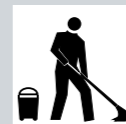
Laundry

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.





REFERENCE SYMBOLS

Symbols and signal words are used to identify the level of hazard and help avoid personal injury.



Note: Safety signs and labels conform to the requirements of ANSI Z535.4 or ISO 3864.



Shock Hazard

Alerts that dangerous voltage may be present.



Warning

Alerts that a hazard may cause serious injury or death.



Caution

Alerts that a hazard may cause minor or moderate injury.



Hand crush - moving parts

Alerts crushing is possible.



Pinch point

Keep hands away from pinch points.



Rotating shaft

Do not wear loose clothing around turning parts.



Disconnect

Disconnect to de-energize before opening.



Use guards

Keep guards in place. Do not remove during operation.



Lifting

Requires two people to safely lift an item.



Lift points

Requires the use of proper rigging and lifting techniques based on the lift plan.



Center of gravity

Indicates the center of gravity of the machine to help assist when rigging and lifting.



Tools

Required tools for installation and maintenance.



Parts

Required parts for installation and maintenance.



Tip

Calls attention to special information.



Note

Emphasizes general information worthy of attention.



Example

Provides a problem or exercise that illustrates a method or principle.

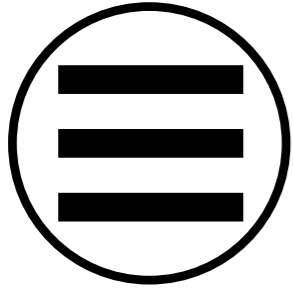




PICTOGRAMS



Each Signifier displayed here is specific to this User Manual.



Menu



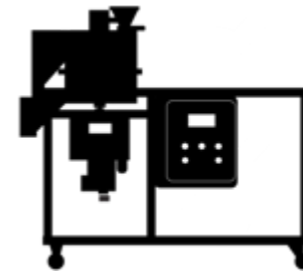
Previous



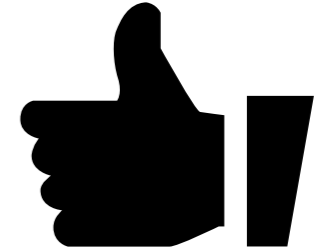
Advance



BMC Auto



BMC Manual



Like

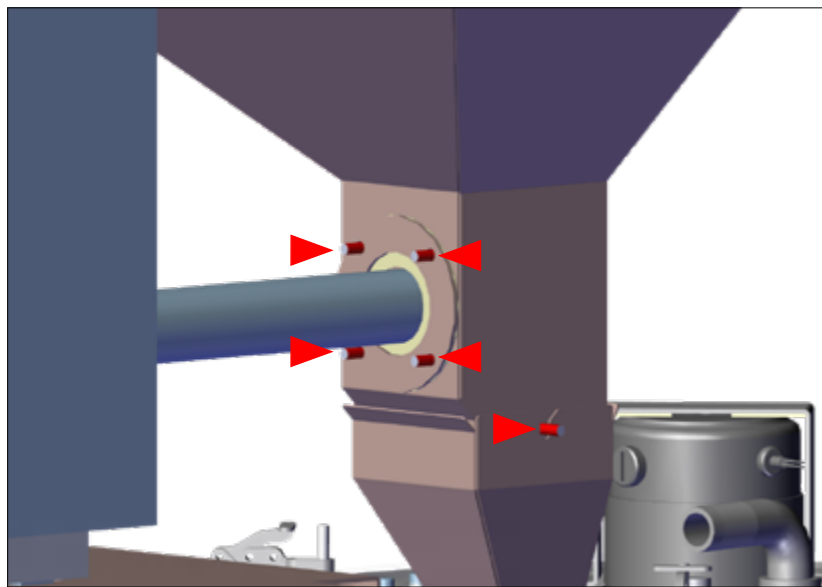




AUTOMATIC SYSTEM



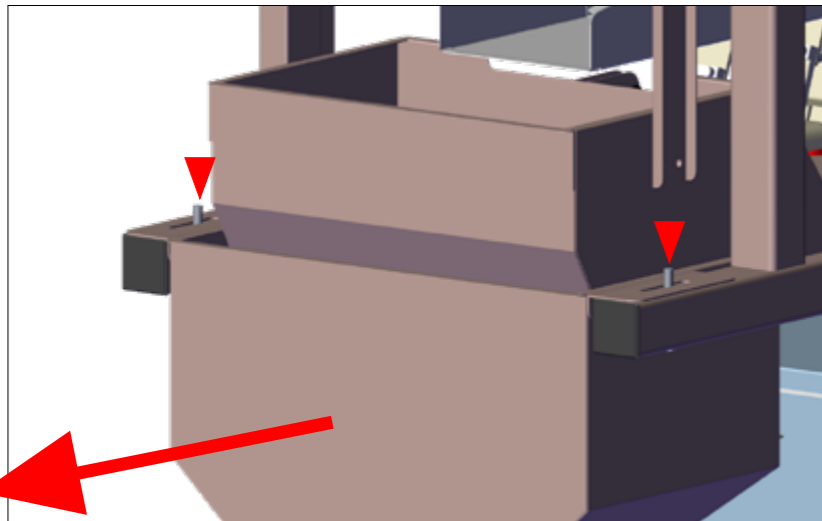
Warning! Exercise extreme caution when working with chemicals! Wear proper PPE >>



Mixing Bowl Replacement

Step 1: Loosen the two wing nuts connecting the Seed Transition to the Bowl Transition.

- Loosen the four nuts on the Powder Tube Gasket (on the backside of the Seed Transition).

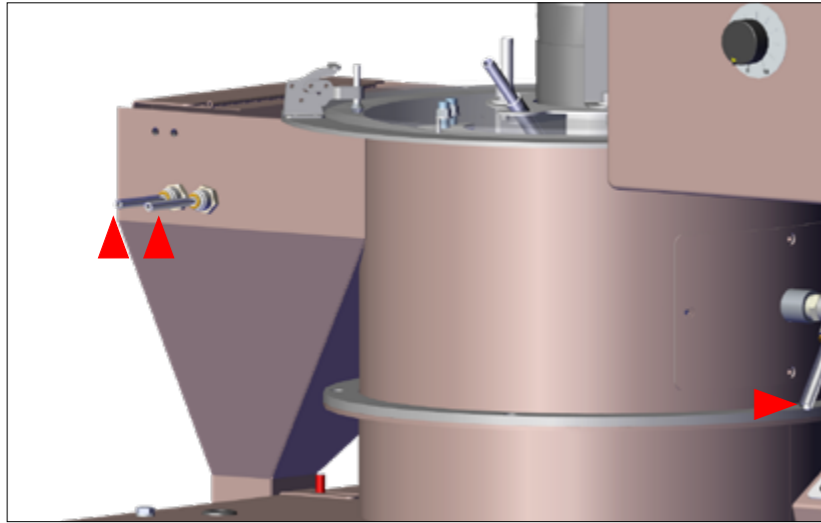


Step 2: Loosen the two wing nuts on top of the Seed Transition.

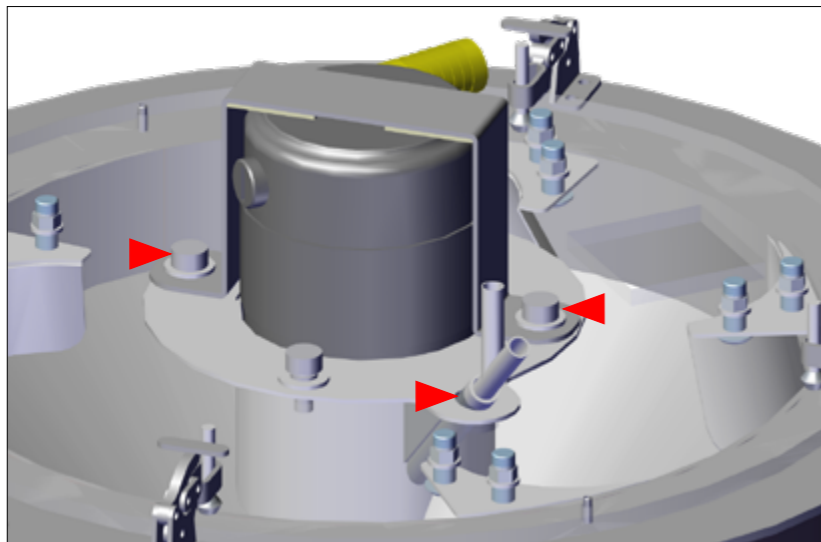
- Remove the Seed Transition.

Continued ➡



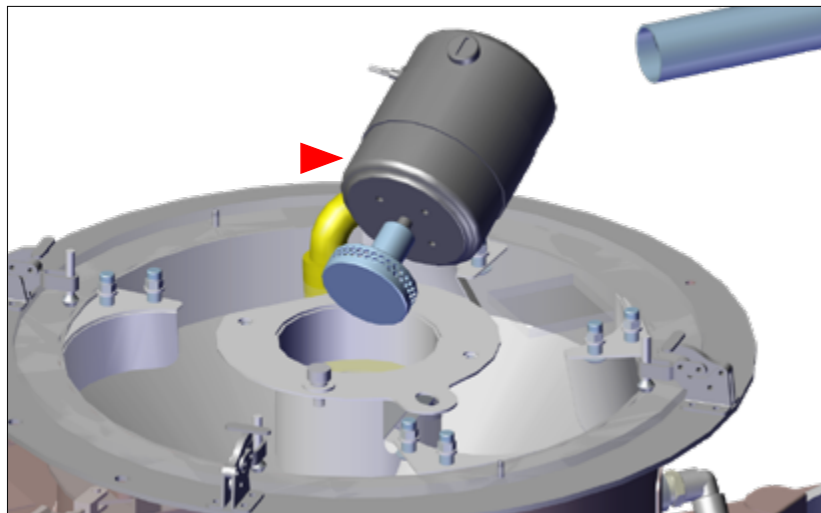


Step 3: Disconnect Air Lines (blue & black) from the side of the Discharge P-lock fittings and the Mixing Bowl Air Line from the side of the Mixing Bowl (push in red tab, then pull tubing out).



Step 4: Remove the Atomizer Strap over the Atomizer and remove the knurled screws.

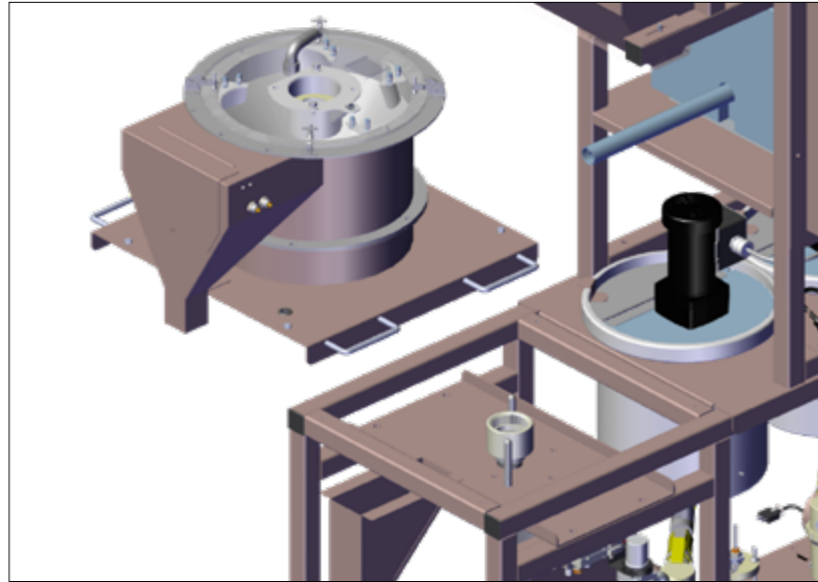
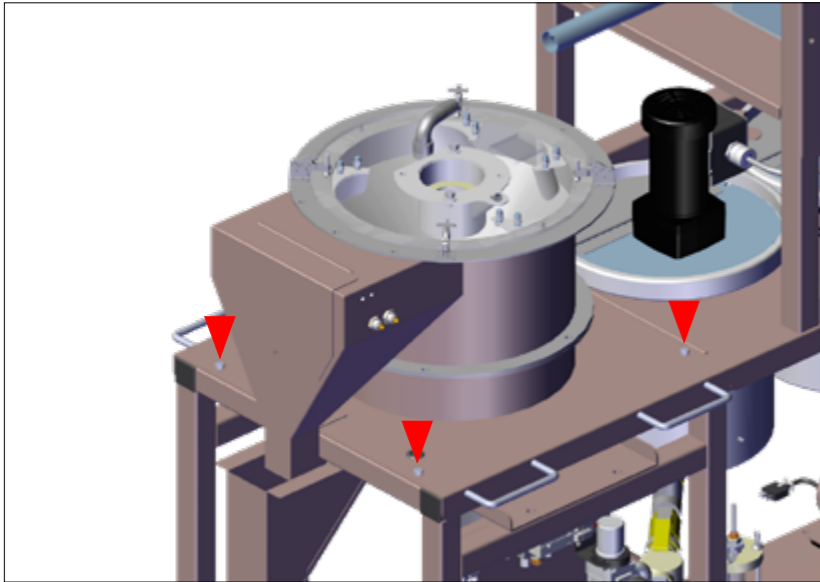
- Remove the Chemical Inlet Tube Assembly from the Mixing Bowl Cover.



Step 5: Remove the Atomizer from the Mixing Bowl Cover.

Continued ➔

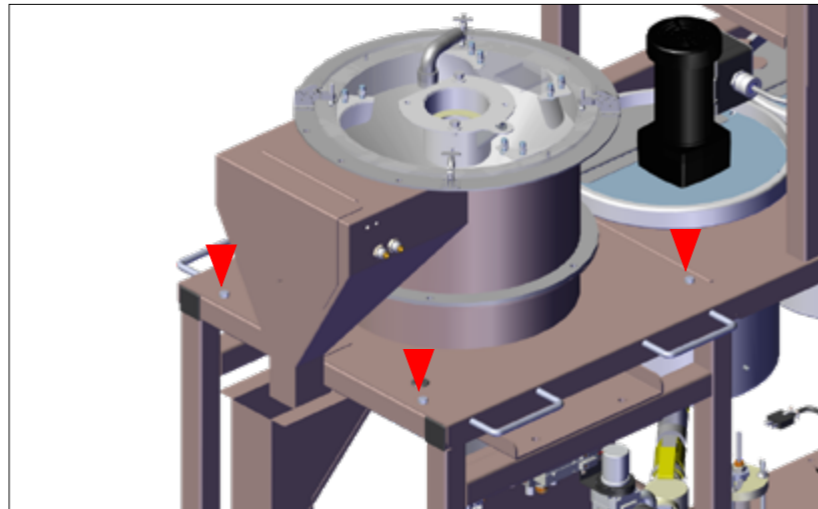
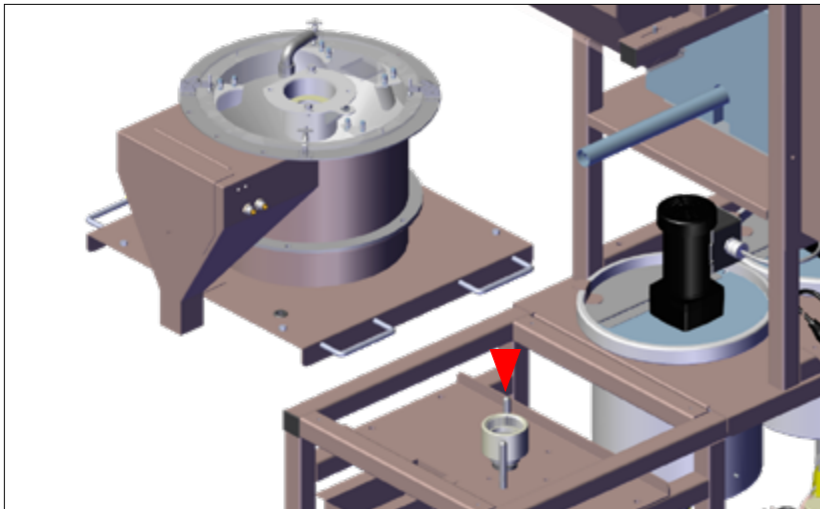




Step 6: Loosen and remove 4 bolts holding the existing Mixing Bowl onto the frame.

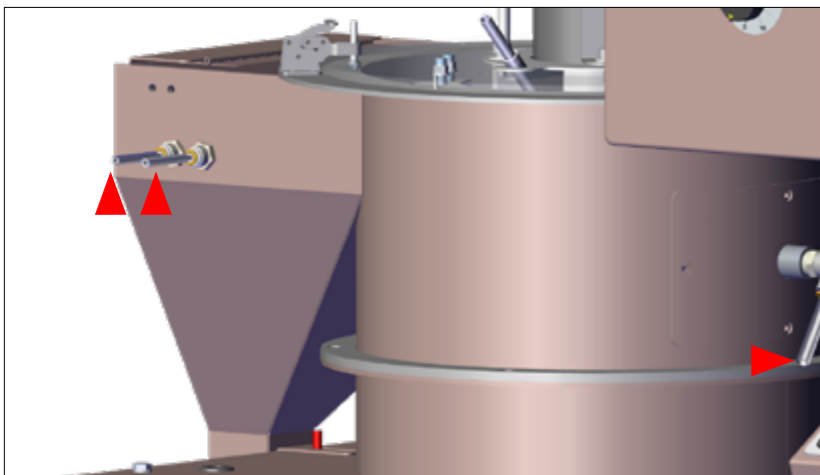
- Use the Grab Handles on the sides of the Mixing Bowl Body Plate and lift* the existing Mixing Bowl Assembly off the frame.

*This may require two people.



Step 7: Place the new Mixing Bowl on the Coupling Sleeve and Alignment Rods.

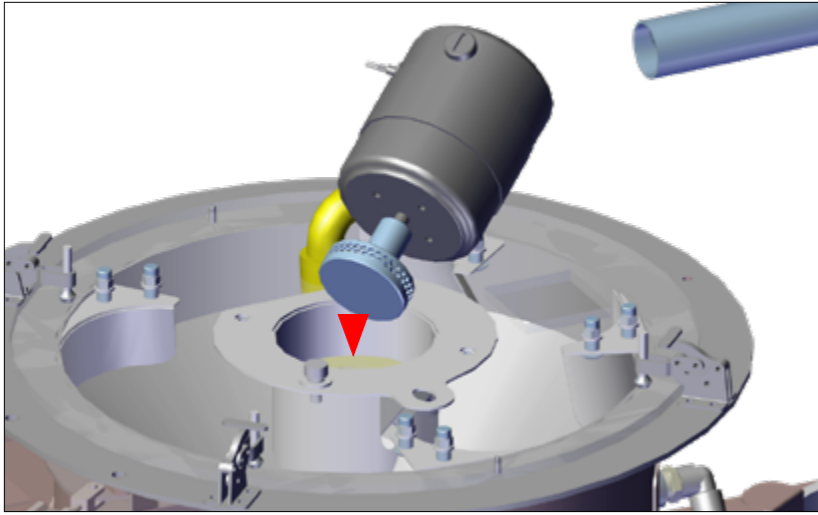
- Use the 4 bolts to fasten the Mixing Bowl to the frame.



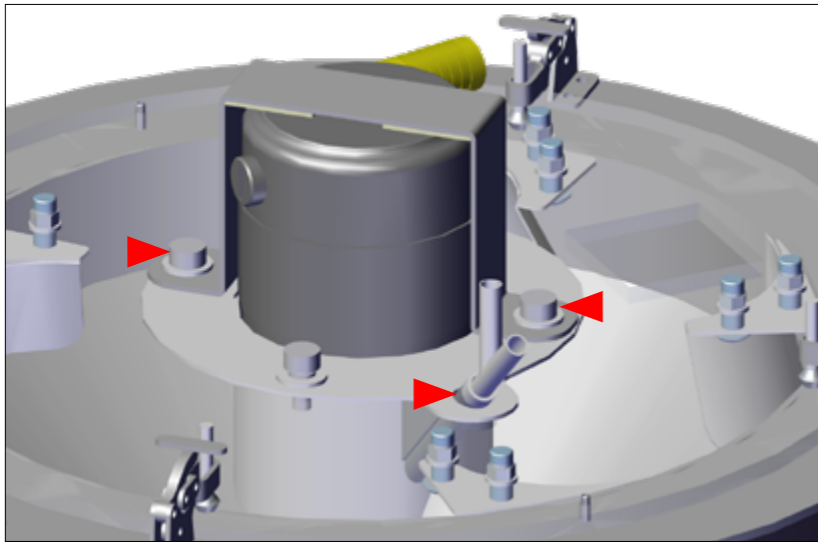
Step 8: Connect Air Lines (blue & black) to the side of the Discharge P-lock fittings and the Mixing Bowl Air Line to the side of the Mixing Bowl.

Continued ➞



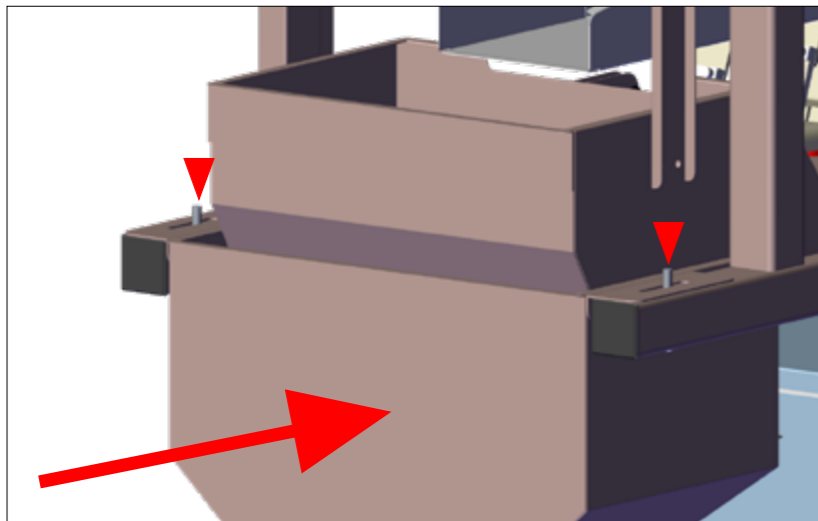


Step 9: Place the Atomizer in the Mixing Bowl Cover.



Step 10: Place the Atomizer Strap over the Atomizer and hand tighten knurled screws.

- Place the Chemical Inlet Tube Assembly into the Mixing Bowl Cover.

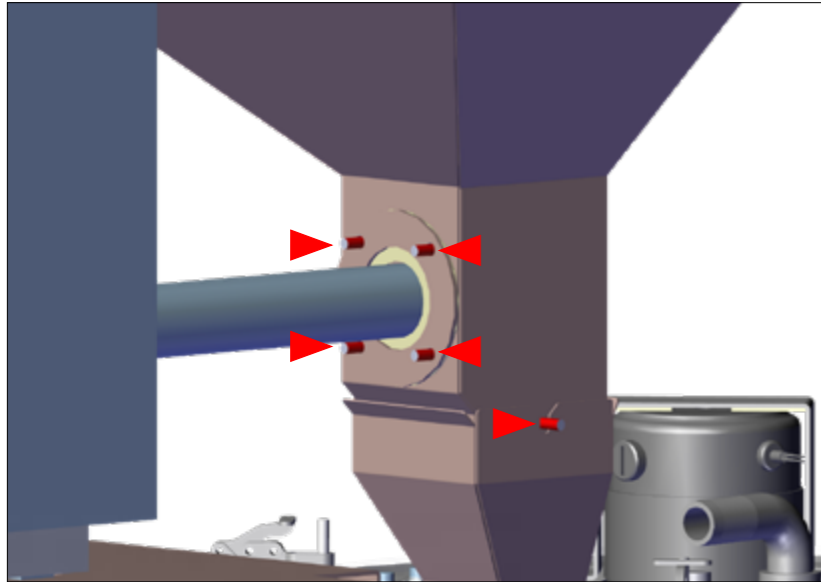


Step 11: Replace the Seed Transition.

- Tighten the two wing nuts on top of the Seed Transition.

Continued ➞

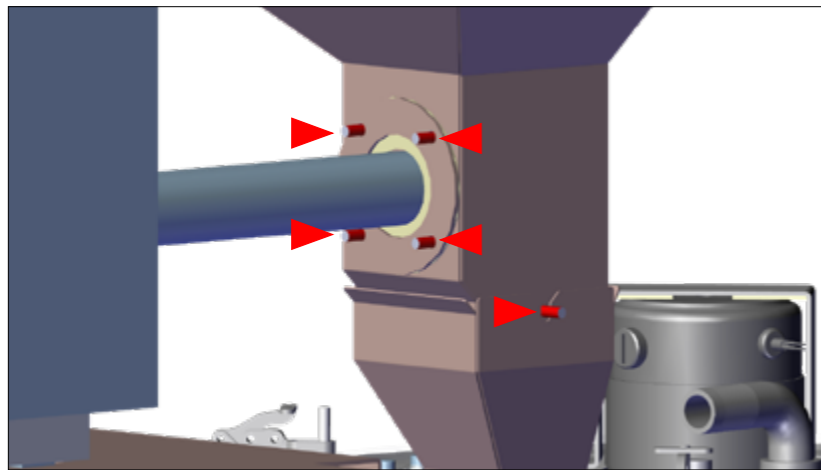




Step12: Tighten the four nuts on the Powder Tube Gasket (on the backside of the Seed Transition).

- Tighten the two wing nuts connecting the Seed Transition to the Bowl Transition.

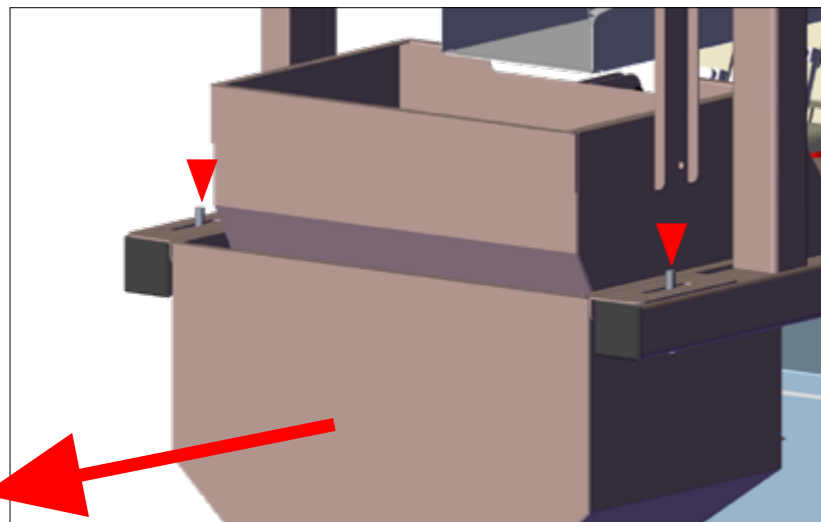
This completes the **BMC Automatic Mixing Bowl Replacement procedure**.



End of Season Shut-down

Step1: Loosen the two wing nuts connecting the Seed Transition to the Bowl Transition.

- Loosen the four nuts on the Powder Tube Gasket (on the backside of the Seed Transition).

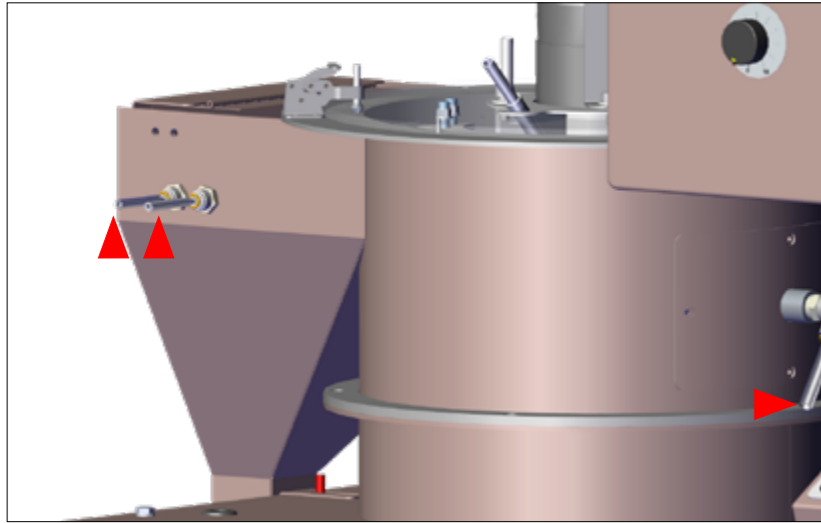


Step 2: Loosen the two wing nuts on top of the Seed Transition.

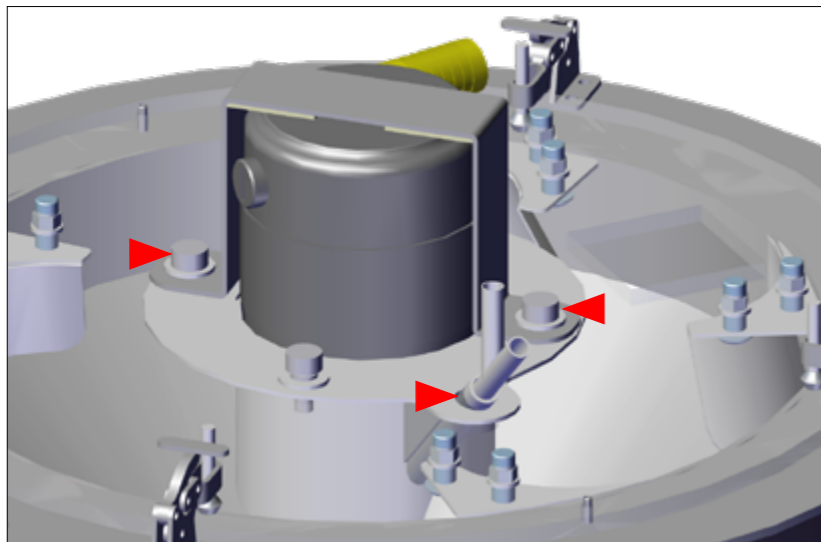
- Remove the Seed Transition.

Continued ➞



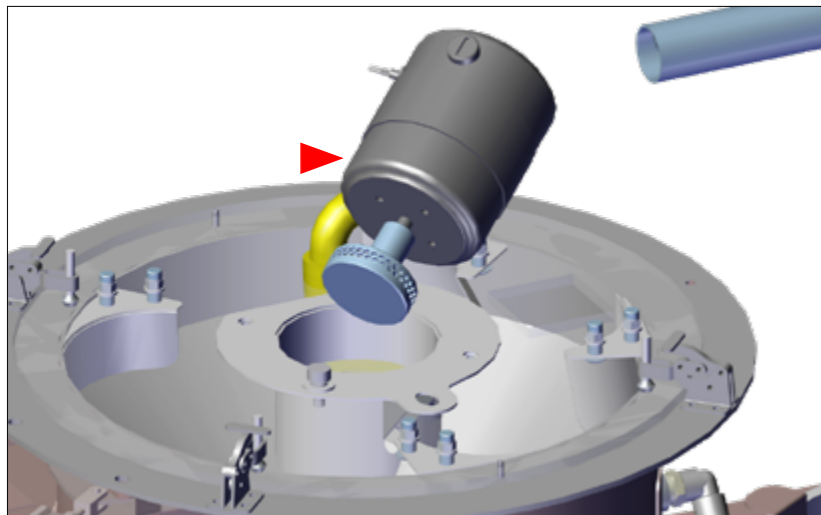


Step 3: Disconnect Air Lines (blue & black) from the side of the Discharge P-lock fittings and the Mixing Bowl Air Line from the side of the Mixing Bowl (push in red tab, then pull tubing out).



Step 4: Remove the Atomizer Strap over the Atomizer and remove the knurled screws.

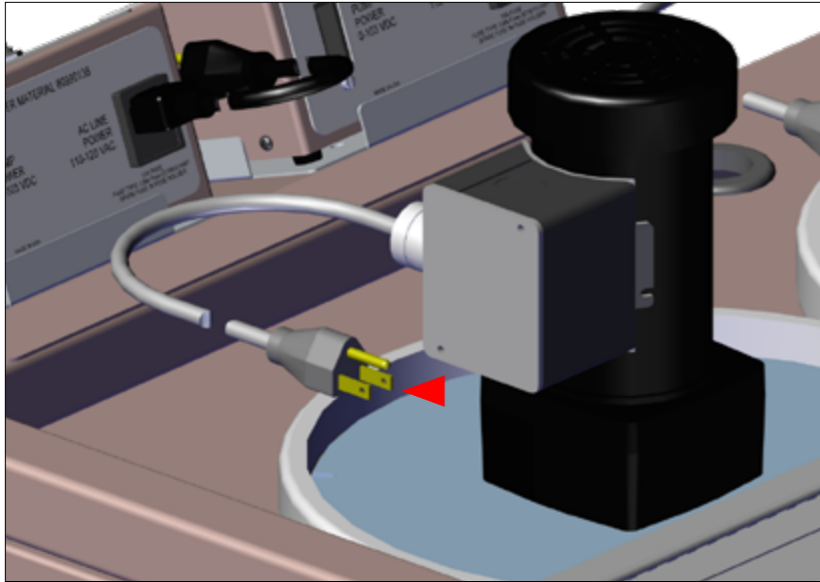
- Remove the Chemical Inlet Tube Assembly from the Mixing Bowl Cover.



Step 5: Remove the Atomizer from the Mixing Bowl Cover.

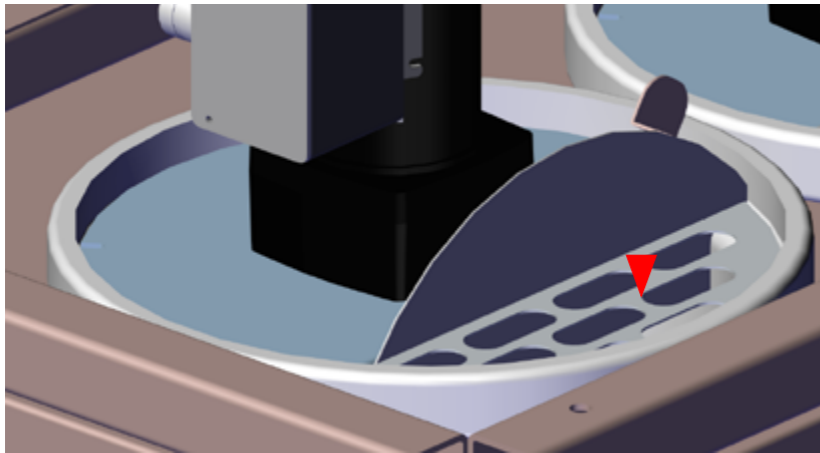
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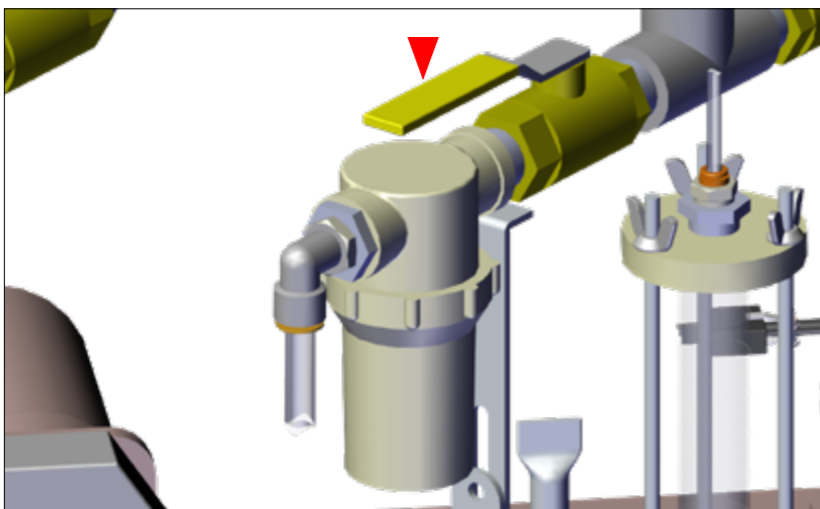


Step 6: Plug in **TANK 1** Agitation 115VAC power cord to external power source.

- Agitation will begin.



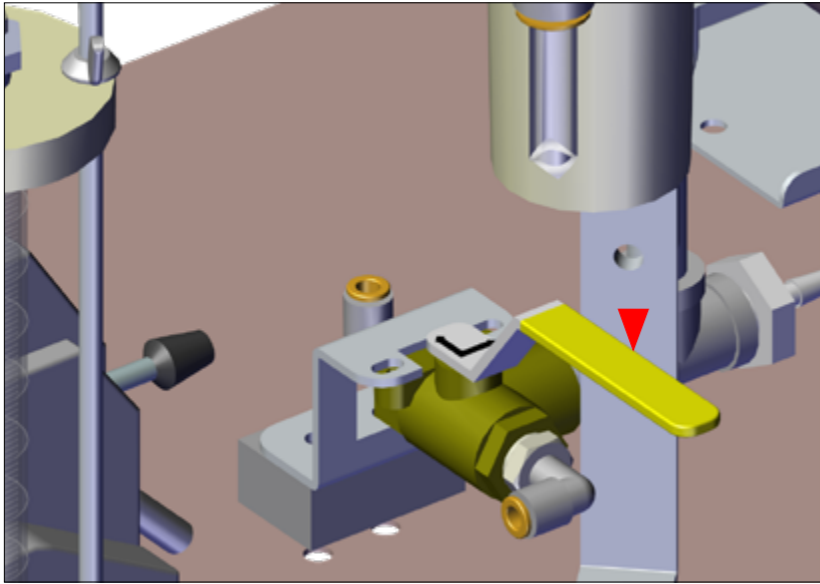
Step 7: Open **TANK 1** lid and fill with clean water.



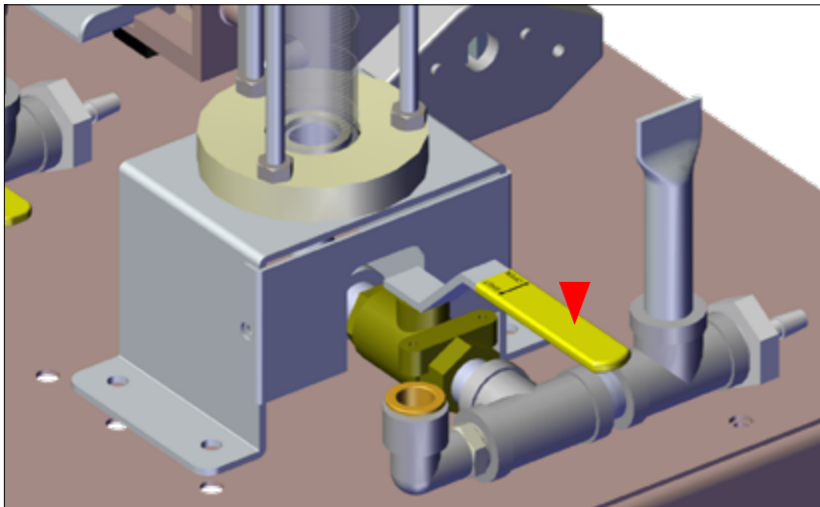
Step 8: Open **TANK 1** Main Valve, as shown.

Continued ➔





Step 9: Open **PUMP 1** Recirculation Valve, as shown.



Step 10: Open **PUMP 1** Calibration Valve, as shown.

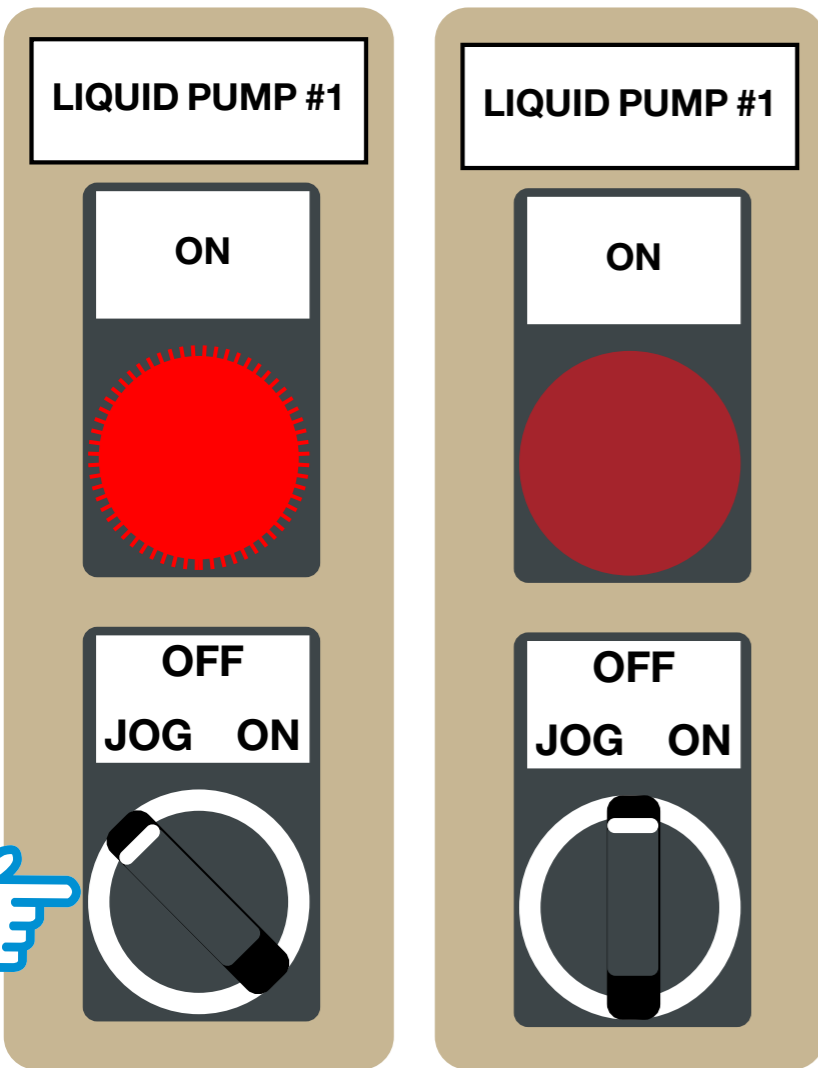


Step 11: Push the LS Pump Control switch to **FWD**.

- The green Power light will also indicate that the power is **ON** when lit.
- Adjust the LS Pump Control Speed Indicator Dial to increase or decrease Pump dispersion rate / output speed.
- Faster = more roduct pumped, slower = less.

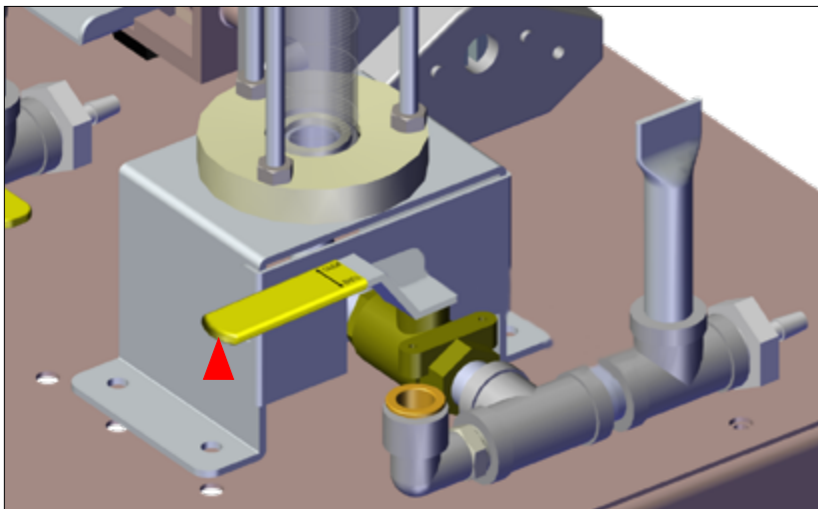
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Step 12: Turn and hold the **Liquid Pump #1** Switch (on the Control Panel) to **JOG** for about five minutes to circulate water through pump and calibration for about five minutes.

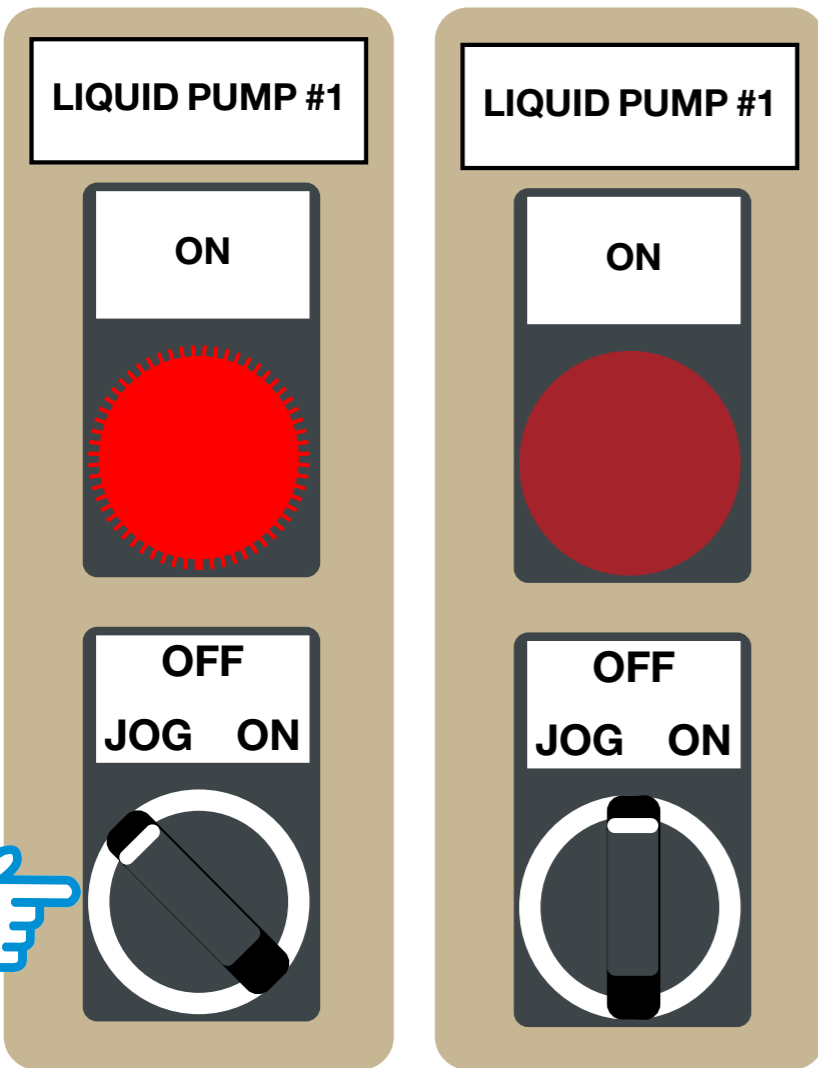
- The **ON** light above the switch turns on while the Jog switch is held in that position.
- Release the **Liquid Pump #1** Switch (returns to **OFF** position) and the **ON** light turns off.



Step 13: Close **PUMP 1** Calibration Valve, as shown.

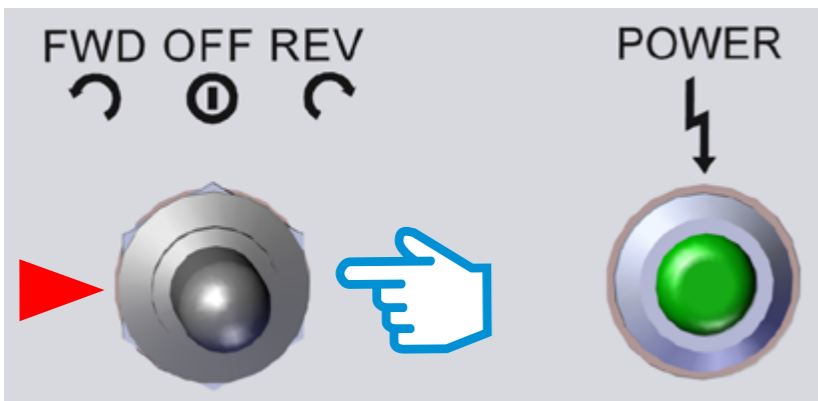
Continued ➔





Step 14: Turn and hold the **Liquid Pump #1** Switch (on the Control Panel) to **JOG** to empty water into a receptacle.

- The **ON** light above the switch turns on while the Jog switch is held in that position.
- Release the **Liquid Pump #1** Switch (returns to **OFF** position) and the **ON** light turns off.
- Repeat process for **Liquid Pump #2** if used.
- Dispose of rinse water according to local regulations or keep and reuse for the next batch treating cycle slurry mix.



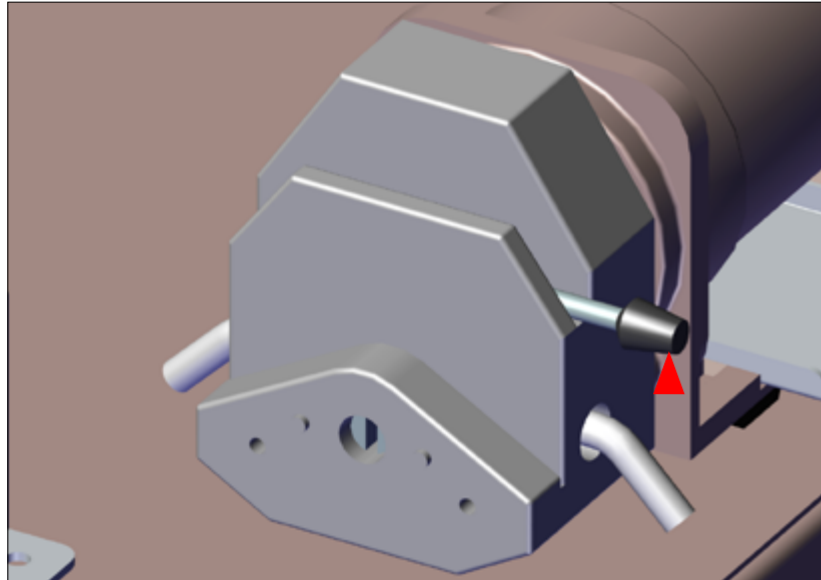
Step 15: Turn the Pump Drive Switch **OFF**.

Continued ➔



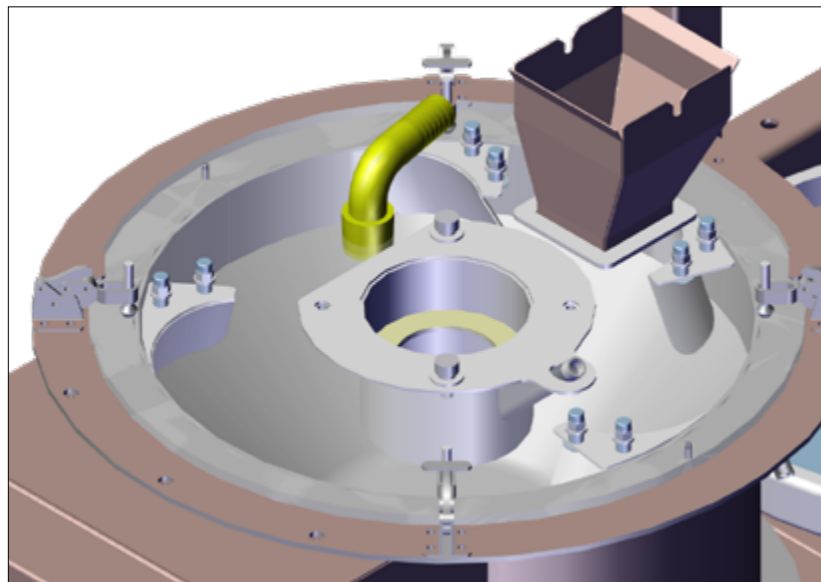


Warning! Leaving the pump element in the pump head in the closed position over a duration of time will permanently leave a flat spot on the pump element.



Step 16: Open both pump heads (lift Pump Handle to the left) to relieve pressure on pump elements.

- Remove Pump Elements, if desired.



Step 17: Loosen the 6 hold-down clamps on top of the Mixing Bowl Cover. Remove the Mixing Bowl Cover. Wipe down and thoroughly clean the cover and the inside of the Mixing Bowl.

This completes the BMC Automatic End of Season Shut-down procedure.

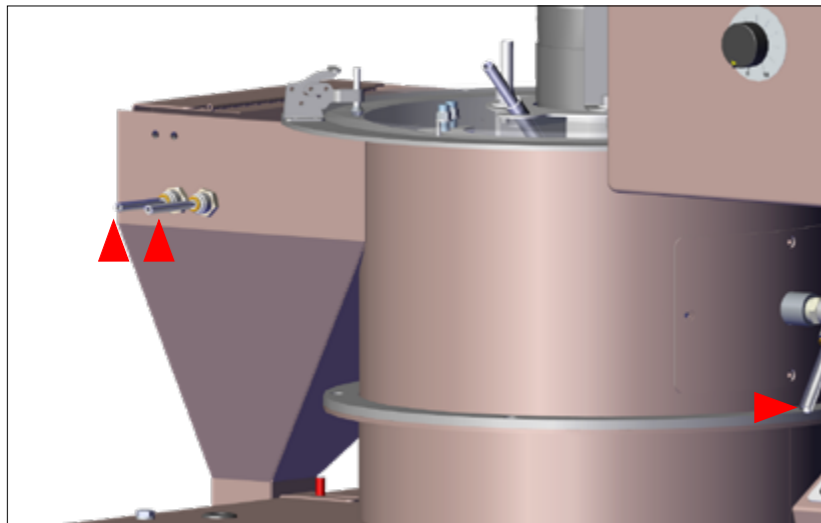




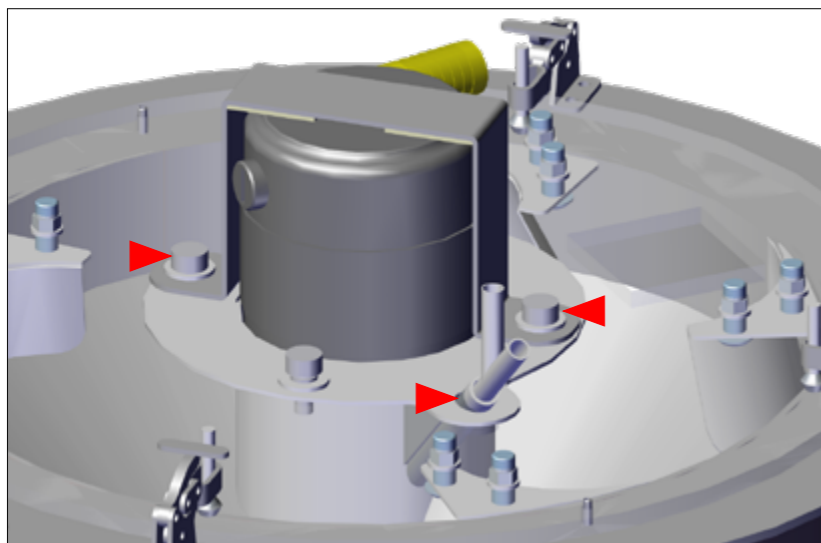
MANUAL SYSTEM



Warning! Exercise extreme caution when working with chemicals! Wear proper PPE >>



Step 1: Disconnect Air Lines (blue & black) from the side of the Discharge P-lock fittings and the Mixing Bowl Air Line from the side of the Mixing Bowl (push in red tab, then pull tubing out).

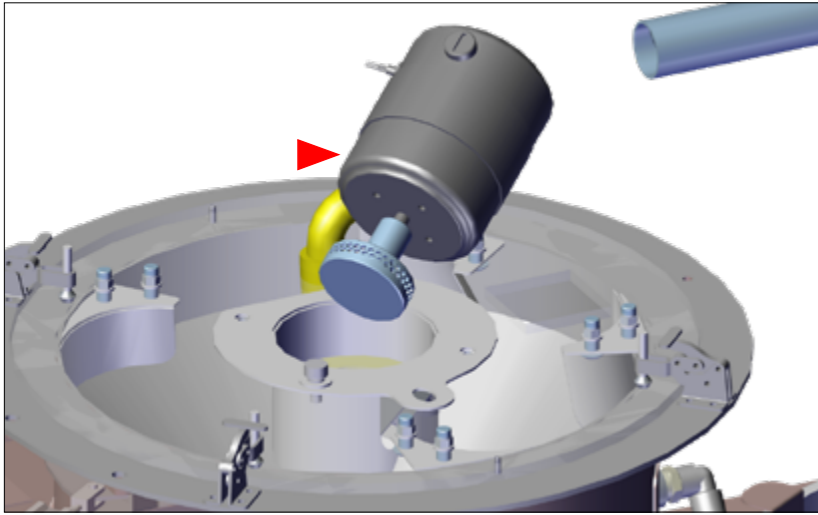


Step 2: Remove the Atomizer Strap over the Atomizer and remove the knurled screws.

- Remove the Chemical Inlet Tube Assembly from the Mixing Bowl Cover.

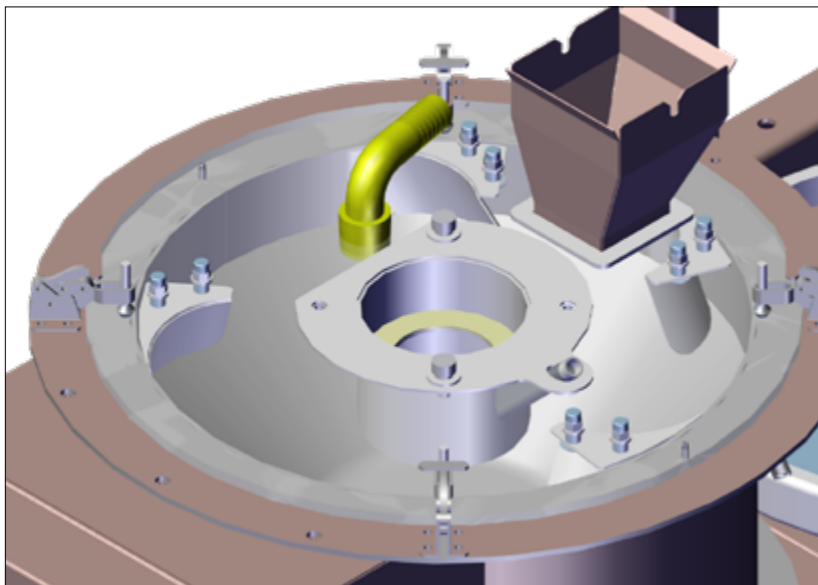
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Step 3: Remove the Atomizer from the Mixing Bowl Cover.

- Clean thoroughly.



Step 4: Loosen the 6 hold-down clamps on top of the Mixing Bowl Cover. Remove the Mixing Bowl Cover. Wipe down and thoroughly clean the cover and the inside of the Mixing Bowl.

This completes the BMC Manual End of Season Shut-down procedure.





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