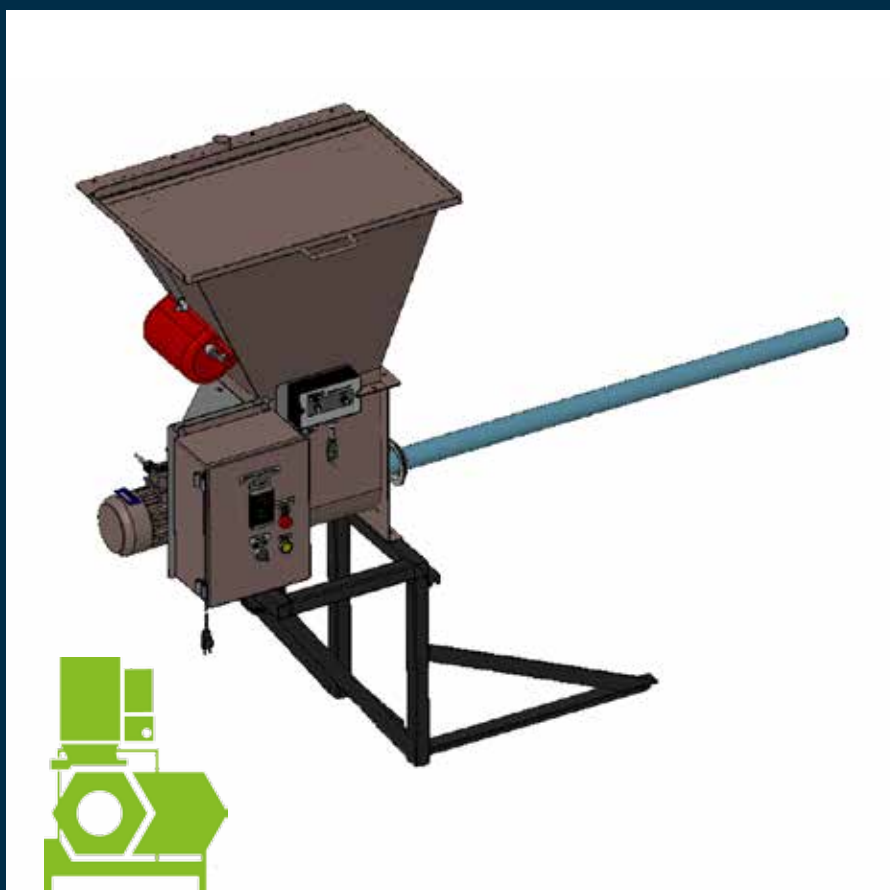




POWDER FEEDER #79661746



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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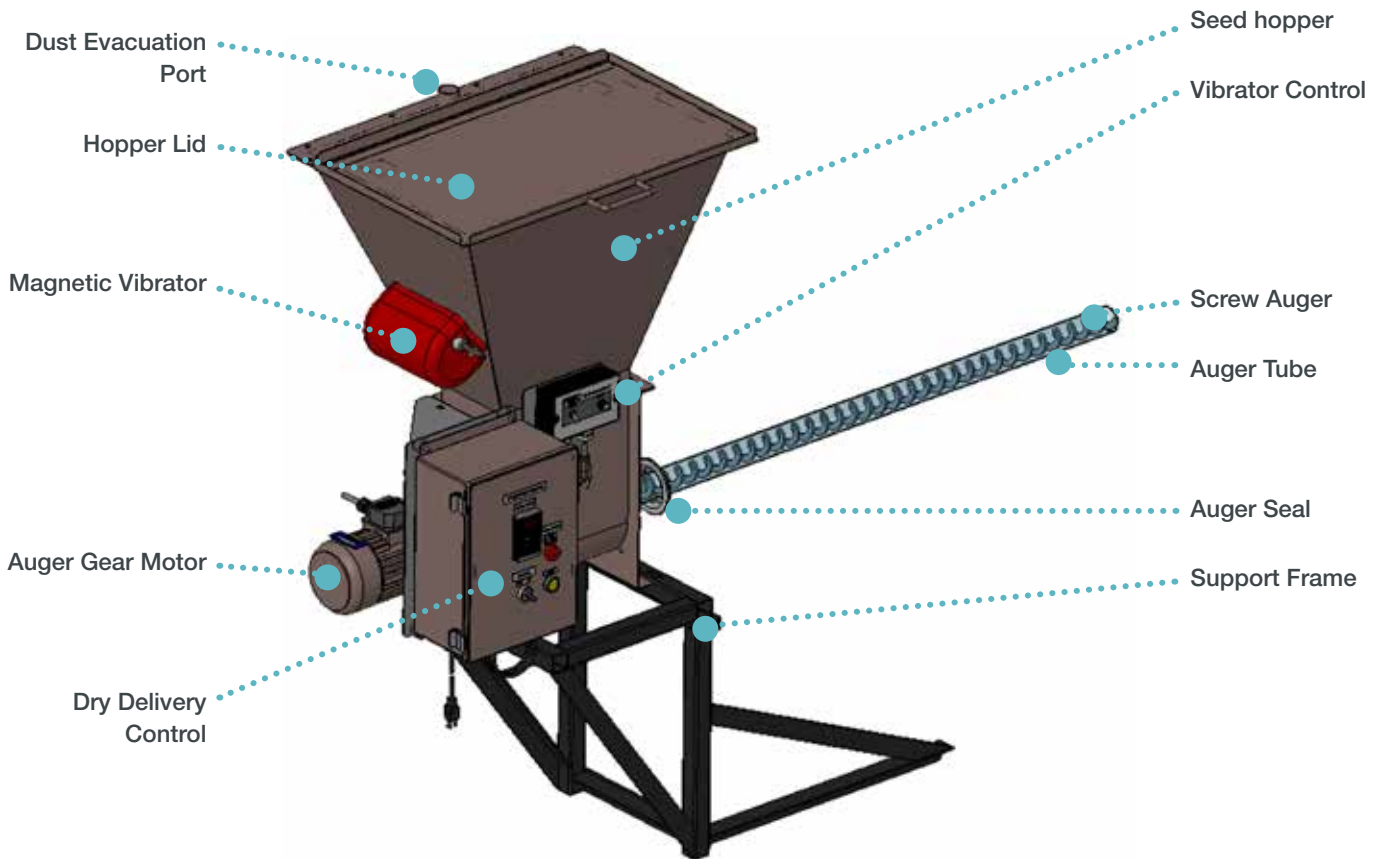


CONTENT

#1 SYSTEM DIAGRAM	04
#2 EQUIPMENT INSTALLATION	05
RH Commercial Treater	05
#4 OPERATION	10
Dry Delivery Control	10
#5 CALIBRATION	12
#3 EXPOSURE CONTROL	15
#6 MAINTENANCE	16

SYSTEM DIAGRAM

POWDER FEEDER ASSEMBLY



EXPLANATORY NOTES

Dry Weight
86kg (190lbs)

Service Required
115V AC, 1ph

Capacity:
up to 3cu ft

Dust Evacuation 30cfm
Max. Recommended

EQUIPMENT INSTALLATION

Several basic requirements are necessary to ensure proper equipment installation. Read through and understand this manual.

RH Commercial Treater

Step 1: Remove the rubber cap plug from the Doghouse.



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It is highly recommended to apply petroleum jelly on the Auger Tube Seal prior to inserting it into the Doghouse.

Step 2: Insert the Auger Tube Seal into the Doghouse.



Step 3: Use the Quarter Turn Key shipped with the RH machine to remove the Doghouse Door.



Step 4: Use 1/2" wrench to remove the existing 5/16-18 bolt from the bottom of the RH Drum Frame.



Step 5: Fasten the Powder/Doghhouse Bracket to the Powder Hopper Support Frame (as shown below) using two 5/16-18 x 2.25 Hex Bolts, Washers, Lock washers and Nuts in the following order: bolt+flat washer+[spacer plate+frame]+lock washer+nut. **Tighten hardware.**



Note: the orientation of the Bracket (facing down towards bottom and in relation to the slot holes on top of the Frame!)



Step 6: Have one person lift and hold the Support Frame in place and another align the Support Angle with the drilled holes on the Drum Frame.



Step 7: Bolt in place with two 5/16-18 x 2.75 Hex Bolts, Washers, Lock washers and Nuts in the following order: bolt+flat washer+[frame]+lock washer+nut. **Hand tighten hardware in place for now.**



Step 8: Fasten the bottom of the Support Frame to the Doghouse Frame (as shown below) using one 5/16-18 x 3.00 Hex Bolt, Washer and serrated Nut on the left side and one 5/16-18 x 2.25 Hex Bolt, Washer and serrated Nut on the right side in the following order: bolt+flat washer+[spacer plate+frame]+lock washer+nut.

Hand tighten hardware in place for now.



Step 9: Use a 5/16" drill bit. Drill two 5/16" holes in the Doghouse to connect the Powder/Doghhouse Bracket to the Doghouse. Fasten the Powder/Doghhouse Bracket to the Doghouse with two 5/16-18 x .75 Hex Bolts, Washers and serrated Nut in the following order: bolt+flat washer+[bracket+doghouse]+Serrated Nut. **Tighten securely in place. Tighten all hardware used with the frame securely in place.**



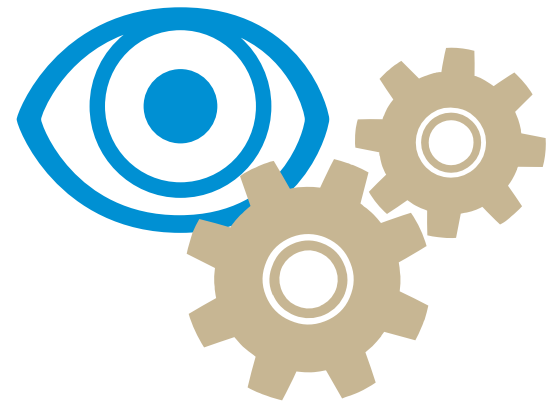
Step 10: Apply a petroleum jelly to the Auger Tube Seal.



Step 11: Remove shipping bolts that hold the Powder Feeder Assembly onto the pallet.



Step 12: Use proper rigging and lifting techniques to ensure safety when installing the Powder Feeder onto the RH Drum & Frame Assembly. Open the Powder Feeder Lid and connect rigging to each side. Approximate dry weight: 190lbs./ 86Kg.



Step 13: Use an overhead hoist to lift the Powder Feeder Assembly. Carefully insert the Auger Tube into the Auger Tube Seal on the Doghouse Door Plate.



Step 14: Connect the Powder Feeder Assembly to the Powder Hopper Support Frame using four 5/16-18 x 2.50 Hex Bolt, Washer and serrated Nut and 1/2" socket. Align with the four drilled holes on the Powder Body. Fasten in place with supplied hardware and in this order: bolt+flat washer+[frame]+Serrated nut.

Tighten securely in place.



Required assembly tools

- Lifting device
- 1/2" Wrench (2)
- Drill
- 1/2" Bit Index



30cfm max. recommended.

Integrated Aspiration System

An exhaust unit with slide gate supplied by the customer must be connected to a central aspiration system.

A 1.5" Dust Evacuation Port is available on top of the Powder Feeder Hopper. Connect to shop aspiration system.



Step 15: Replace the Doghouse Door/Window and use the Quarter Turn Key to lock it in place.



Fastener Kit*

Installation bag #1 (leg braces)

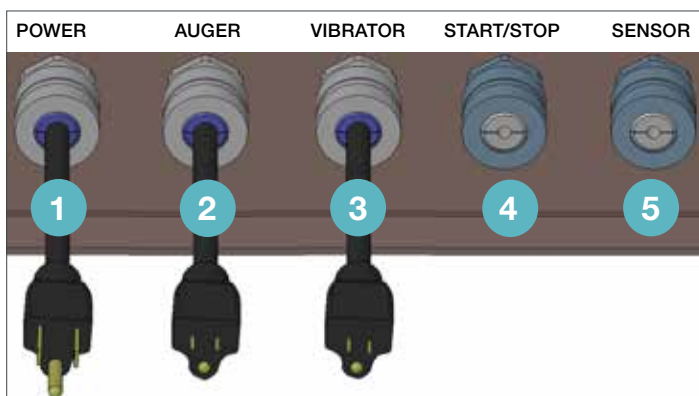
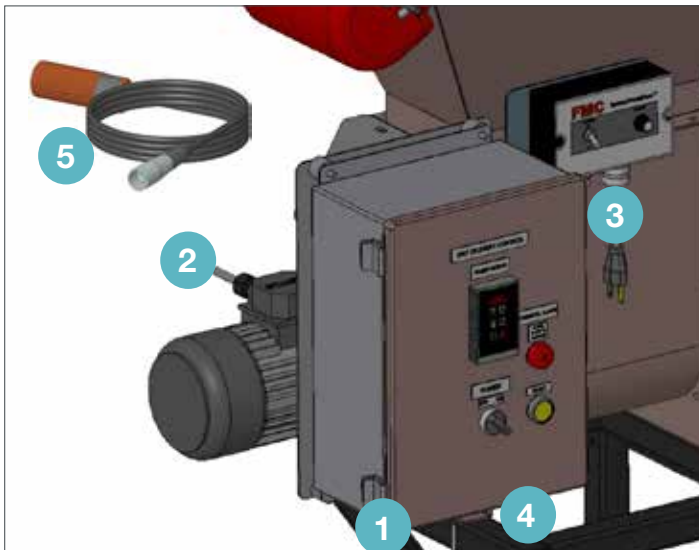
- 5/16-18 x .75 hex bolt - zinc (2)
- 5/16-18 x 2.00 hex bolt - zinc (2)
- 5/16-18 x 2.25 hex bolt - zinc (2)
- 5/16-18 x 2.75 hex bolt - zinc (2)
- 5/16-18 hex nut - zinc (8)
- 5/16-18 lockwasher - zinc (8)
- 5/16-18 flatwasher - zinc (12)

* Shipped in cloth bag

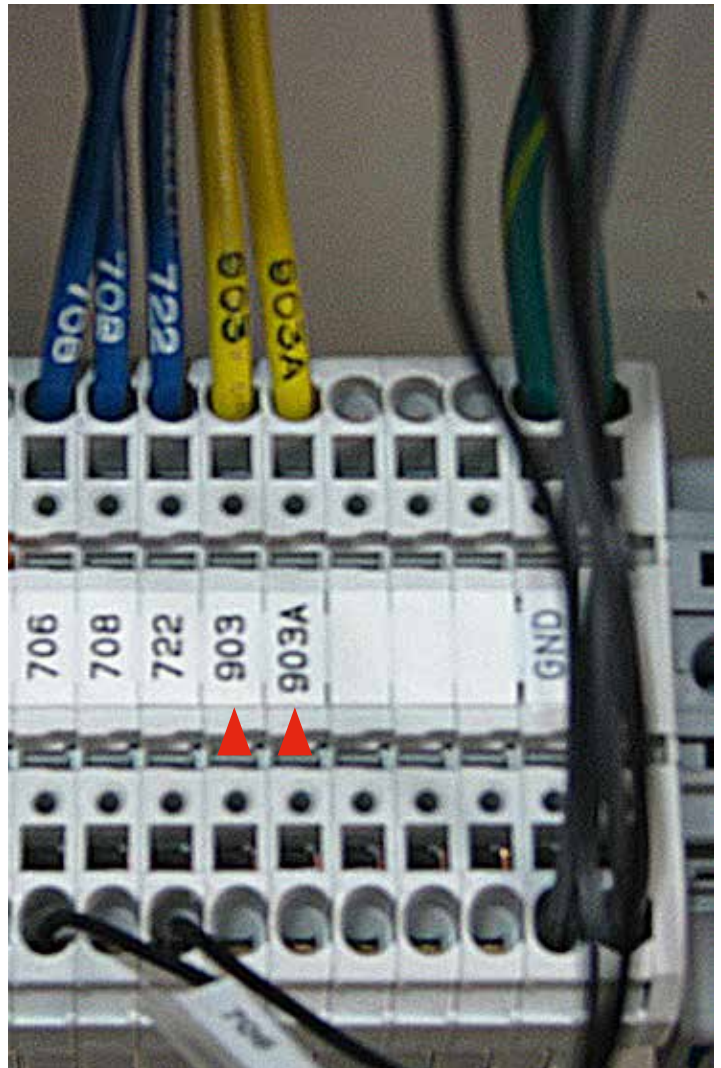


Step 16:

- ❶ Connect the Dry Delivery Control Box Power Male Cord Grip (bottom of the Dry Delivery Control Box marked **POWER**) to an external 115V AC power source.
- ❷ Connect the Auger Motor Power Cord to the Female Cord Receptacle on the bottom of the Dry Delivery Control Box marked **AUGER**.
- ❸ Connect the Vibrator Power Cord to the Female Cord Receptacle on the bottom of the Dry Delivery Control Box marked **VIBRATOR**.
- ❹ Have a licensed electrician connect the **START / STOP** Cable to the Main Control Panel (see next step 17) ➔
- ❺ Connect the Chemical Sensor 4-pin Connector to the bottom of the Dry Delivery Control Box marked **SENSOR**.



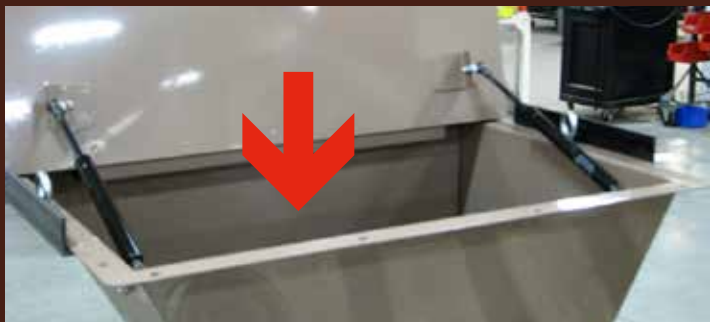
- Step 17:** Connect the **START / STOP** Signal Cable through the wire connector, on the bottom of the Main Control Panel, inside to the terminal block marked **903 & 903A**.



OPERATION

Dry Delivery Control

Step 1: Open the Powder Hopper Lid and add an adequate amount of powder in the Hopper (capacity: 3cu ft).



Step 2: Turn **ON** the Powder Power Switch.



Step 3: Press the **UP** or **DOWN** arrow to **INCREASE** or **DECREASE** the speed of the auger.

The faster the auger runs, the more product output, the slower the auger runs, the less product output. Adjust accordingly.

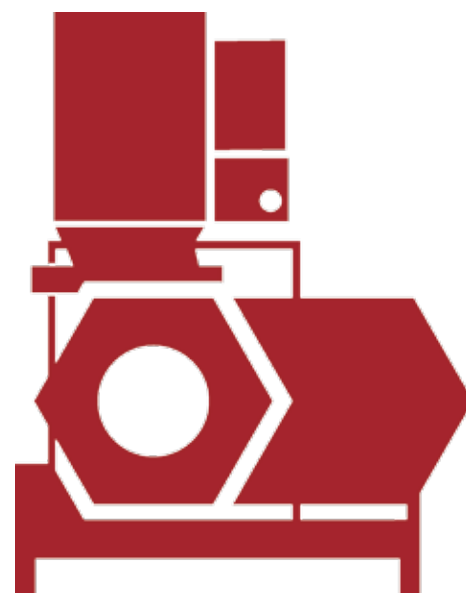
DRY DELIVERY CONTROL



Step 4: Turn **ON** the Vibrator Power Switch. When left **ON**, the Powder Feeder will begin dispensing product when the Treater Hopper senses seed flow.



Step 5: When powder product dispenses below the sensor, an alarm will light up and sound. Push the red **ALARM PUSH TO SILENCE** button. Open the hopper lid, fill the hopper with more product, then push the yellow **RESET** button. This will activate the alarm and the sensor. Turn **OFF** the Powder Power Switch when done treating with powder product.



CALIBRATION



Warning! Do NOT run seed or chemical at this time!

Required seed calibration tools

- Collection Bin
- Stopwatch



Step 1: Use the Quarter Turn Key to remove the Doghouse Door. Place a collection bin inside the Drum underneath the end of the Powder Feeder Auger Tube to catch the delivered powder.



Step 2: Open the Powder Hopper Lid and add an adequate amount of powder in the Hopper (capacity: 3cu ft).



Step 3: Turn **ON** the Powder Power Switch. Press the **UP** or **DOWN** arrow to **INCREASE** or **DECREASE** the speed of the auger. The faster the auger runs, the more product output, the slower the auger runs, the less product output. Adjust accordingly.



Step 4: Turn **ON** the Vibrator Power Switch. Use the Range Dial to adjust the vibration intensity.



Step 5: Turn the main power switch **ON** (handle in DOWN position). Ensure the E-STOP button is pulled **OUT** (deactivated). Turn the CONTROL POWER switch **ON**.

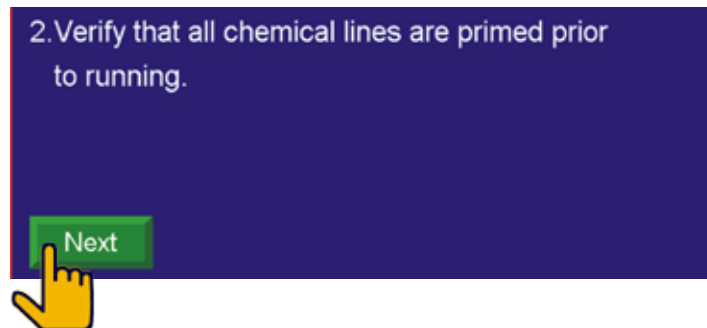
The HMI Seed Coater will initiate the program (boot up): navigates to the STARTUP WIZARD SCREEN.



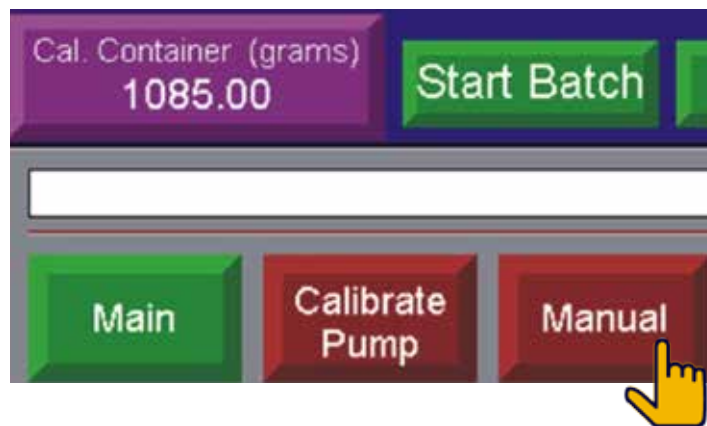
Step 6: Touch the green **NEXT** button icon: navigates to the REMINDER SCREEN.



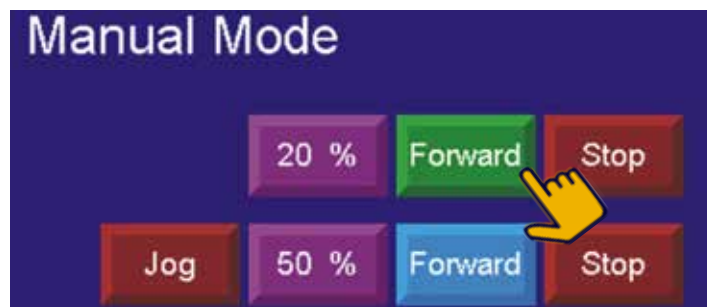
Step 7: Touch the green **NEXT** button icon: navigates to the MAIN SCREEN.



Step 8: Touch the **MANUAL** button icon (located along the bottom of the touch screen).



Step 9: The Manual screen will appear. Next touch the green Seed Wheel **FORWARD** button icon.





Warning! Exercise extreme caution when working with chemicals! Refer to the Exposure Control Guide on page 15.

Step 10: Run the Powder Feeder for one minute. Then touch the red Seed Wheel **STOP** button icon.



Step 11: Remove the collection bin from the Drum. Weigh the dispensed powder and compare that amount to the desired rate. If more or less powder is needed, increase or decrease the speed of the Auger on the Dry Delivery Control panel (Use UP/DOWN arrows, refer to page 12).



It may be necessary to calibrate two or more times to achieve an accurate reading. Variables, such as humidity, temperature, change in powder variety and powder density, changes in the counterweight speed, Drum angle & speed, and liquid product applied can all affect the accuracy of powder calibration and application!

To ensure the desired application rate, check powder calibration periodically throughout the day and make adjustments as needed.



Note: Refer to the Treatment Product Label on the chemical jug for the regulated application rate. Follow the direction exactly as stated on the label!

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.



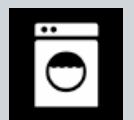
Clean seed

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



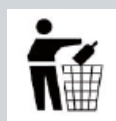
Cleaning

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.

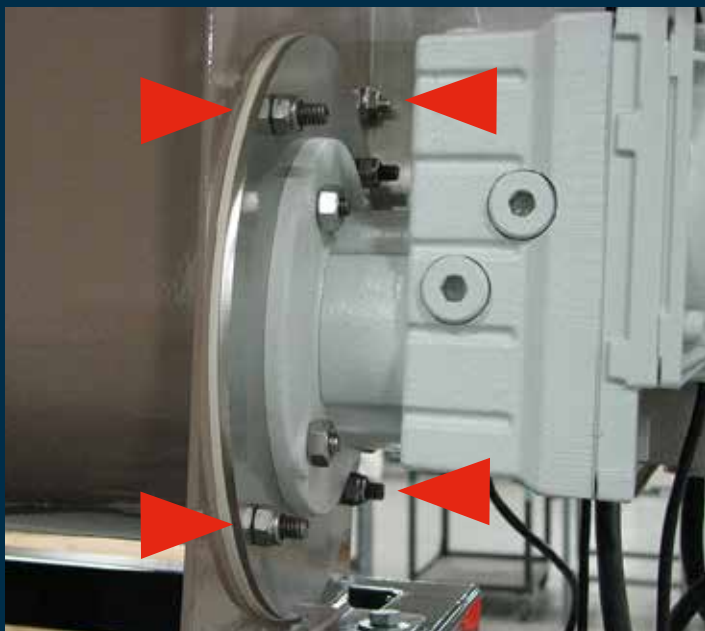
MAINTENANCE



Step 1: At end of each treating session or whenever the operator needs to change powder product, run all of the powder out of the Powder Feeder. Since powder absorbs ambient air moisture and solidifies if left over time, cleaning helps prevent “caking up”. Have a licensed electrician open the Gear Motor conduit box and disconnect the power cord.



Step 2: Use 1/2” wrench to remove the four bolts that hold the Adapter Plate, Gasket and Gear Motor onto the backside of the Powder Base. Slide the Gear Motor (with the Auger and gasket still attached) from the Powder Body and set aside.

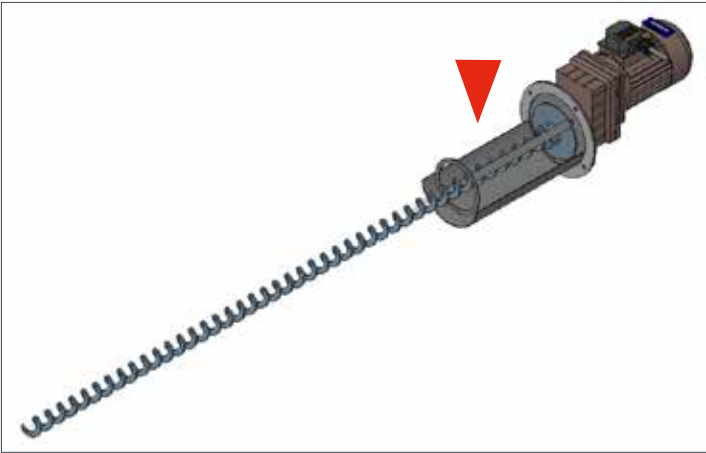


Step 3: Always use a vacuum cleaner (not compressed air) to safely clean the machine. Wear appropriate Personal Protective Equipment when working with dust and chemicals: goggles, dust mask, gloves and coveralls.

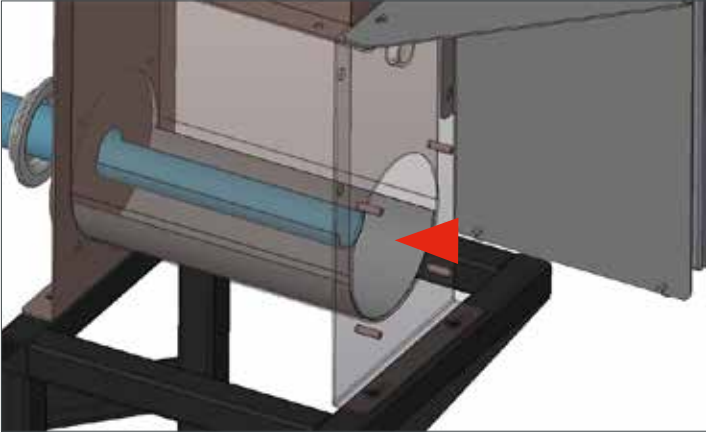




Step 4: Thoroughly clean the Auger Assembly of dry product and residue.



Step 5: Clean the Powder Body interior of any powder build-up.



Step 6: Open the Hopper Lid and clean the interior of any powder build-up. When ready to use, replace the Gear Motor and Auger. Tighten hardware securely. Connect the Gear Motor power cord and replace the conduit box cover.





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