

VALUE-LINE SEEDER SYSTEM

BY BERRY SEEDER CO., INC.

OPERATING INSTRUCTIONS

Congratulations on your purchase of the Berry Value-Line Seeder System. Berry Seeder Co. has been providing state-of-the-art seeding equipment to the greenhouse industry for over ten years and remains the # 1 Name in Affordable Seeding Equipment.

The Berry Value-Line Seeder System is a high-speed seeding device with capabilities of over 500 trays per hour. To best utilize these capabilities, the seeder operator has to provide a high volume of trays to the machine as well as provide for the removal of seeded trays from the seeding area. This can best be accomplished by the utilization of conveyors.

The principle of operation involves a vacuum power source which supplies vacuum to the seeder body (plenum). This vacuum serves to "hold onto" the seeds until they are in the appropriate position over the growing tray. At which time, the vacuum air-flow valve is closed and the seeds fall by gravity onto the growing tray. The seeded growing tray is then moved forward and the next growing tray is indexed into position to be seeded.

The following controls should be located and their function understood before attempting to operate the seeder:

1. The vacuum ON/OFF switch is located on top of the vacuum.
2. The seeder plate tapper (optional) angle actuator levers are located on the end of the metal box on the back side of the seeder plate near the hinges. They are clear plastic and can be moved to actuate the tapping device at the desired angle so as to help eliminate multiple seeds.
3. The seeder has a stop-bolt which is located below and between the hinges. It can be adjusted so as to control the downward tilting angle of the seeder plate. Too great an angle may result in seeds bouncing out. Too little an angle results in excess time for the seed to roll down the plate.
4. Vacuum hose connections are located at the hinge edge of the polycarbonate seeder body and the end of the vacuum.
5. The ON/OFF valve is located on the corner of the seeder body adjacent to the vacuum hose connection. It is used to cut on and off the air flow to the vacuum. With the valve open, the seeder holds on to the seed. When the valve is closed, the pressure equalizes in the seeder body and the seed fall via gravity. A technique which will increase productivity involves closing the valve a split second before the seeder plate contacts the tray stop bolts on the top of the table. This is due to the fact that it takes a certain amount of time for the pressure to equalize and the seed to start to drop onto the tray.
6. The tube and sliding gate valve located at the opposite end from the vacuum ON/OFF valve is the vacuum bypass valve. It is used to set the vacuum level inside the seeder box. A setting of about 1/8-1/3" open works well for pelleted seed. If the bypass valve is left closed, it will take a considerable amount of time for the pressure to equalize

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thus releasing the seed. If the bypass valve is set too far open, this results in misses and/or greater time required to seed the tray.

7. The two mounting bolts are used for height adjustment as well as leveling of the seeder plate. The height adjustment should be made so the growing tray is 1/4" to 3/8" below the surface of the seeder plate. *In order for the seeder to function properly, it must be level!* Locate a level area to place the seeder. The seeder plate can best be leveled by tilting the plate up and down completely 10 times, noting the direction of the migration of seed. The leveling bolts on the end of the seeder frame that correspond to the direction of seed movement should be adjusted so as to raise that end of the seeder. *Note: adjustment should be made on both the leveling bolt and the stop bolt at that end, otherwise, the frame will be twisted and the seeder plate will not make proper contact with the stop bolts.* The process should be repeated until seed migration is minimal. A small amount of seed migration can be corrected via brushing the seed to the high side of the plate periodically. An alternative way of leveling is to simply shim the legs of the table.

8. Included is a seed recovery jar which is used to empty or change seed from the seeder plate. To operate, first open the vacuum bypass valve and insert the jar nozzle into the tube. With the vacuum on, use the tube to vacuum seed from the seeder plate.

9. Periodically, clean the back edge of the seeder plate of accumulated debris with a "dust-buster" or similar vacuum. *Avoid using the seeder vacuum for this purpose as it causes accelerated clogging of the vacuum bag and hence lower vacuum performance.* Periodically check, clean, and/or replace vacuum bag as needed.

Please Note: ELECTRICITY CAN KILL; ALWAYS UNPLUG BEFORE CHANGING PLATES OR SERVICING! REFER TO A QUALIFIED INDIVIDUAL FOR SERVICE.

ANY QUESTIONS? CALL: 1 (800) 327-3239, (252) 330-2227

BERRY SEEDER COMPANY, INC.
1231 SALEM CHURCH ROAD
ELIZABETH CITY, NC 27909