



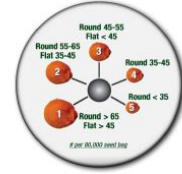
NHACD Cover Crop Roller & No-till Planter CIG No-till Planter & Roller Setup Tips

This guide should help you avoid common mistakes using the Pequea no-till corn planter and Dawn Biologics cover crop roller system. It is not a replacement for the user's manual.

Remember, mistakes made at planting can seldom be fixed later in the season.

Before Planting

- ❑ **Level the planter.** Be sure the parallel arms connecting the row units to the frame are level with the ground when the planter is fully engaged in the soil. This will ensure proper ground pressure is applied, seeding depth is correct, and there is proper seed-soil contact. The height of the drawbar and/or planter clevis must be adjusted to level the parallel arms. This adjustment is FAR more critical in no-till.
- ❑ **Adjust the seed brush.** On the side of the seed meter, you'll notice the seed size chart (at right) and adjustment t-handle. Move the handle to match the size seed you're planting. Be gentle! It's easy to pull the handle out of the meter. Size 3 is the same as the factory John Deere brush.
- ❑ **Fill the liquid fertilizer tanks.** Even if you do not plan to use liquid pop-up fertilizer, you should fill the tanks at least half way with water to provide ballast (weight) for the planter to function properly. Without enough weight, the planter will not reach the desired planting depth.
- ❑ **Fill the foam marker tank.** Add 1oz. of foam marker solution for each gallon of water. The tank can be removed from the planter with the bungee cords for easy filling. The full 5 gallon tank should last approximately 2 hrs of planting. The row markers raise and lower automatically when you raise and lower the planter hydraulics. The row markers alternate sides, which means you may need to raise and lower the hydraulics twice if you raise the planter in the middle of a row.
- ❑ **Add graphite powder to the seed hopper.** Add one tablespoon of powder to the top of every fourth hopper of corn. The graphite lubricates the finger pickup seed meter.



When Planting

- ❑ **Set the down pressure on the rollers.** Fully lower the rollers with the hydraulics and make sure the front of the planter does not raise off the ground. If it does, reduce the hydraulic pressure on the system using the knob and pressure gauge. Re-lower the hydraulics and adjust until the right balance is found. Generally, less pressure is better than too much, which will impact seed depth.





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- ❑ **Adjust the row cleaner disks.** The row cleaner disks, located in front of the the rollers, should just graze the ground. They can be raised or lowered by turning the square locking cap at the top of the mount. Do not allow the discs to dig a trench through the field.
- ❑ **Attach the GPS Speed Sensor.** Place the magnetic GPS speed sensor high on the tractor in clear view of the sky. Both the GPS Lock (Green Light) and WAAS Lock (Red Light) should illuminate steady for the best accuracy.
- ❑ **Watch the population monitor.** The monitor is set at a population of 32k seeds/acre. A high/low alarm will sound if any row deviates from that population by $\pm 3k$ seeds/acre. It can take a minute for the population to read on the monitor screen. If the monitor reads an abnormality, stop and investigate!

Seed Monitor Screen

Top Row: Avg. Population (thousands seeds/acre)

Middle Row: Field Acreage

Lower Row: GPS Ground Speed (mph)

Bottom: Bar graph with current and target populations



- ❑ **Monitor your ground speed.** The planter is designed to plant at 3.5 - 5 mph. Do NOT exceed the maximum speed. This causes doubles and triples, as well as wear on the planter. Planting too slow can cause skips. The population monitor has a GPS based speedometer in the upper display. You can also use your tractor speedometer if you prefer, but the GPS speed sensor is used by the monitor to measure population.

GET OFF THE TRACTOR

- ❑ **Check the seed depth.** It is recommended to plant silage corn 2+ inches deep. Do not plant shallower than 1.5 inches deep. Shallow seed depth results in reduced crop vigor all season long due to poor root structure and uneven emergence. Adjust the depth as needed on the top of the row unit, beneath the seed hopper. Moving the lever toward the back of the planter will increase depth.
- ❑ **Check the seed slot.** The slot must be fully closed and firmed. The seed slot sidewalls created by the double disk openers should be broken apart. You should NOT see seed in the slot. If the seed slot is not closing, apply more ground pressure to the closing wheels using the lever on the closing wheel arm. Pull the lever toward the back of the planter to apply more pressure. If the wheels are sinking too deeply, apply less pressure. The wheels should not come in contact with the seed in the trench.

After planting, kill the cover crop with herbicide within 1-2 days

