

Agricultural Beet

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Planter Recommendations for 2020

Given the opportunity for shop time, it is worth giving an extra look over of your planter. If we are comparing our recent history, it appears we could be in for an early spring. With a plethora of new aftermarket planter add-ons becoming available in recent years, the diversity in planter configurations has grown exponentially. I see this as a good thing as long as a given operator understands the benefits and drawbacks of their planter components. Everyone can handle the routine maintenance and setup of their planter, but it is sometimes necessary to give one more look to understand the dynamics of how each individual wear part and setting may affect field performance.

Before the Field: Each type of planter has various wear components that need to be checked and potentially replaced. Parts like tires, wheels, hubs, bearings, bushings, planter bar structural steel, hydraulic cylinders and lines, and other components that have a less direct impact on the row unit, still need to be checked over closely for wear. Worn row unit parts have a direct impact on depth and spacing. These parts include; opening disks, gauge wheels and their arm components, parallel linkage components, row cleaner wheels, drive chains or cables, springs, airbags, hydraulics, closing disks/wheels, and any bushings associated with them should all be checked for excessive wear. Electrical components such as seed tube sensors should also be tested.

JD opening disks that are worn below 14.75" from 15" should be replaced and CIH disks worn to 13.5" from 14" should be replaced. Set preliminary depth in the shop using blocks of same thickness as desired planting depth. Place blocks under the gauge wheels and adjust the depth as necessary.

Meters need to be checked every year whether on a test stand, or run normally on the planter in the shop. Air leaks need to be addressed for both vacuum and positive pressure planters, as variations from row to row can cause noticeable differences in singulation.



- JD meter covers and seals should be checked and be replaced if you are unable to achieve uniform vacuum. Plates and knockouts/scrapers should turn smoothly through the full rotation. Singulators should be set in the second position or higher.
- Case IH Early Riser meter covers and plates should be checked for excessive wear. Uneven vacuum can occur well before the plastic reaches the full depth of the wear mark indicators. If you cannot achieve uniform vacuum through the full plate rotation, the covers should be resurfaced or replaced. Set singulators to position 4 or lower.
- White planter positive pressure meters require properly shimmed plates to eliminate excess blow by and achieve cell fill. Replace cutoff brushes if they pull or retain seed from cells. Singulator/tickler brushes should be replaced if worn. Brass bristle brushes can help with static.
- Precision Planting meters and their components also have typical wear in varying locations. Please consult your Precision dealer for maintenance advice.



Plant Population: There remains a trend of increasing populations in the recent past. Most SMBSC growers have settled in to populations of around 57,000 seeds/acre, with given ranges from 51,000 to 65,000. In general, I urge growers to use caution below 53,000, and above 60,000. If the field conditions do not justify low or high populations, the results can be devastating. There is limited data and practice using variable rate planting prescriptions, but they can return well on highly variable fields. Our observations are that slightly higher populations in low OM/high ground, and slightly lower populations in high OM/low ground, tend to perform better than static rates. Keep in mind that the population is only part of the equation. Maintaining uniform spacing and emergence are crucial to a good crop. We don't need any extra social distancing between beet seedlings!

Making the First Pass: When you hit the field, the initial steps you take in checking and adjusting your planter have significant revenue consequences for the entire crop year, which can be both positive and negative. The best way to check depth and spacing is a method I observed from one of our shareholders. Using a small ratchet strap to tie up the rear closing system so the seed trench remains open, the performance of everything else on the row unit becomes very evident. Speaking of closing systems, I've had more calls than ever about them this off season. Spiked wheels? Smooth wheels? Offset wheels? Single wheel? Chains? The answer is ultimately patience and our necessity for a better planting season. Many of these closing systems work well, but when it comes to planting beet seed between 1" and 1.5", the soil conditions are a bigger factor.

Your planter is capable of achieving 200+ final harvest stand counts. However, it will be your level of patience and willingness to address important planter adjustments that could make the difference between just planting for a 200+ stand of beets versus obtaining a uniformly spaced 200+ sugarbeet stand. The latter being far more likely to maximize sugar yield and profitability while also facilitating proper defoliation and scalping to assure quality beets for storage. The SMBSC Agricultural staff is highly knowledgeable and dedicated to a strong start for your 2020 sugarbeet crop. Please contact your agriculturalist or your equipment dealer with any questions. Have a safe and successful spring!