The planter pass is the most important pass of the season. It sets the stage for everything else. Equally important is the time spent doing planter maintenance, prep, and set up. Each planter or row unit manufacturer has specific guidelines as to how to set and adjust specific equipment, so always reference the owner's manual, but the following holds true for most planting implements.

**FRAME:** A level planter bar puts all row units on a level plane to be adjusted independently.

- Check planter bar is level front to back and left to right.
- Planters running nose-down will:
  - Cause row cleaners to plow
  - Cause no-till coulters to run at a depth below the disc openers
- May lose gauge wheel contact
- Put the closing system in a position that will not allow it to function properly

- Adjust level by changing the hitch height.

**PARALLEL LINKAGE:** When the parallel arm components become worn, it allows the row unit to move, potentially causing meter chatter (causing skips/doubles) erratic seed placement, open seed trenches, and air pockets within the furrow.

- With the planter in the plant position, check for movement on the row unit:
  - Side-to-side movement
  - Ensure units move up and down freely

- Tighten bolts or replace the bushing on each arm.

**DISC OPENERS, NO-TILL COULTERS, AND ROW CLEANERS:** Opening systems that do not have adequate contact between the discs will not form a proper V-shaped seed furrow. Worn and misadjusted disc blades will form a seed furrow that resembles a W, where seeds can fall on either side of the ridge in the furrow.

- 15 in. disc openers should be replaced if they are worn to 14.5 in.
  - Adjust disc openers – there should be about 1.5 in. between the blades

- No-till coulters should maintain 0.25 in. clearance above the disc openers’ depth.

- Row cleaners should only move clods and debris from the row.

- Properly adjusted row cleaners only spin 50 to 60 percent of the time when planting, unless in heavy residue.
CLOSING UNIT: Properly closing the seed trench provides good seed to soil contact without causing sidewall compaction. Closing wheels set too close together or too wide will not adequately close the trench and will leave air pockets above the seed.

Closing wheels trail directly behind the disc openers — test by dropping the planter and pulling ahead a few feet.

BULK DELIVERY SYSTEMS: Bulk seed systems are great for quick fill and easy seed handling, but if not properly serviced, can cause numerous planting issues. Check the:

- Hopper and the seal for wear or cracks that would cause a lack of tank pressure;
- Agitator inside is functioning properly to avoid seed bridging issues in the tank;
- Manifold is below the bulk tank and the seed delivery hoses are clear of debris and connect/seal properly.

When filling a bulk fill planter for the first time of the season, use 2 to 3X rate of talc. By doing so, there will be enough talc to be distributed in the tank, hoses, row units, and meters!

GENERAL MAINTENANCE:

- Inspect the hydraulic system for leaks and wear on the hose, block, and remotes.
- Check the hydraulic cylinders for leaks and wear, and that the planter raises and lowers smoothly.
- Check tires for proper PSI and wear, especially on mechanically driven planters. Proper PSI will make sure the planter is level as it travels through the field.

TECHNOLOGY/MONITORS: Monitor and technology issues have quickly emerged as the number one cause of planting delays on the first day of planting.

- Update all software to the latest version.
- Connect all technology and make sure that they are communicating with each other and with the planter.
- Clear out last year’s information to avoid confusion when planting the new crop.
- Upload new prescriptions and check over farm and field names.
- Check over planting prescription for proper field, crop type, seeding rate, and starter fertilizer blends, and upload to the monitor.