United States Department of Agriculture

NRCS Natural Resources Conservation Service

NO-TILL CORN-PLANTER ADJUSTMENT GUIDE

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AGRONOMY TECHNICAL NOTE – Quality No-Till Series

The *Quality No-Till Series* provides management techniques for the successful adoption of Quality No-till Cropping Systems. This information is applicable to most Indiana soils and cropping conditions and covers broad application.

Planter maintenance and set up is one of the most critical management aspects of a Quality No-till system. The goal is a higher ear count, not a higher seed count. To achieve this, strive for a "picket fence" stand, where every seedling emerges the same day, every plant is evenly spaced and has equal access to the resources it needs. Every seed should be placed exactly the same depth at exactly the same spacing and in exactly the same environment.

The following checklist should be completed at least annually with a quick check at every fill during the planting season.

- Adjust the hitch so that the planter is level with the ground. In the operating position, the frame should be level with the surface of the field at the recommended operating height. The adjustment is easily lost when transporting from field to field.
- Check to see that all row units run true vertically and to the direction of travel and that they are not skewed from bent linkage arms or worn bushings.
- Assure all fertilizer openers are exactly the same distance off the row, operating at desired depth and delivering the same volume of product.
- To adjust down pressure on row units, lower the planter into planting position. You should just be able to turn the gauge wheels by hand. Excessive down pressure will increase sidewall compaction and too little will result in poor depth control.
- If used, adjust the no-till coulter depth by lowering each unit onto a hard surface. Set the coulters to run one-quarter inch higher than seed opening disks.
- Make sure that seed opening disks are sharp and no smaller than manufacturer recommendations.
- Most disc openers should be adjusted to maintain 2 to 2½ inches of contact on the cutting edge.
- Check seed drop tubes for wear every year. Replace if tips are worn. Use standard size tubes for corn and not the large size for cotton. Check the inside of new seed tubes for plastic burs.
- Check depth gage wheel arms for excessive play. Adjust depth gauge wheels to maintain contact with seed disks when lifted up to their normal planting depth.
- Replace any worn chain idlers and inspect for worn or sticking chains. Lube chains.
- Check bearings and clutches on seed drives. Replace if any cause chatter or fail to engage properly.
- If using row cleaners, run them only deep enough to move residue, not soil.
- Seed metering units should be calibrated every year with worn parts replaced.
- Align closing wheels so that they are spaced equally outside the seed slot.
- Refer to your operator's manual for manufacturer's recommended settings.