



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

Indiana
Conservation Tillage
Initiative
Technical
Note No.3

Nov, 2004

This is the third note in a series of Soil Agronomy-No-Till Management technical notes on the Management techniques for successful adoption of No-Till Cropping systems. This information is applicable to most Indiana soils and cropping conditions and covers broad application.

AGRONOMY

Technical Note No.3

No-Till Management- Planter Settings

No- Till Planter Adjustment Guide

Planter maintenance and set up is one of the most critical management aspects of a No-Till system. Remember our goal should be a higher ear count, not a higher seed count. To achieve this we must strive for a “picket fence” stand, where every plant is evenly spaced and every seedling emerges the same day.

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

- Adjust hitch so that planter is level with ground. Parallel linkage and frame should be level with the surface of the field.
- For most planters, the frame should be approximately 20 inches from ground when lowered into planting position.
- Check to see that all row units run true to the direction of travel and that they are not skewed from bent linkage arms or worn bushings.
- To adjust down pressure on row units, lower planter into planting position. You should just be able to turn the gauge wheels by hand.
- To adjust no-till coulter depth, lower each unit onto a hard surface, and set coulter to run one-quarter inch higher than seed opening disks.
- Make sure that seed opening disks are sharp and no smaller than 14 ½ inches.
- Seed disks should be adjusted to maintain 2 to 2 1/2 inches of contact with a doubled sheet of writing paper held between them.
- Check seed drop tubes for wear every year. Replace if tips are worn. Make sure to use standard size tubes for corn and not the large size for cotton. Check the inside of new seed tubes for plastic burs.
- Adjust depth gauge wheels to maintain contact with seed disks when lifted up to their normal planting depth.
- Replace any worn chains, idlers, sprockets and clutches. Lube chains.

- Check bearings on seed drives. Replace if any cause chatter.
- 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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status.