Great Plains No-Till Drill Manual

Lake County Conservation District

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How to Use Great Plains 706NT No-Till Drill

Introduction:

The following text is a condensed instruction manual of how to properly use the Great Plains 706NT no-till drill, owned by Lake County Conservation District. Please contact the Conservation District if you have any questions or need further instructions, or visit www.lakecountyconservationdistrict.org/ for instructional videos. In order to promote the greatest success in planting, please read and implement the following steps in the preparation and use of the seed drill.

Remember, YOU are responsible for any damage to the drill.

Figure 1: Locking hub diagram

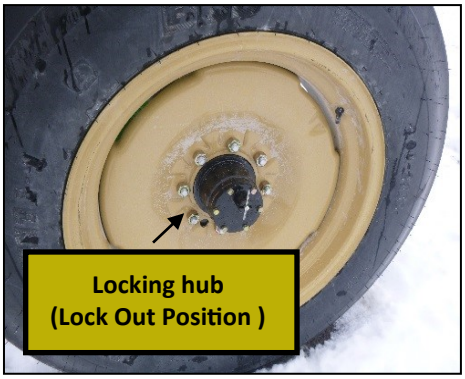

Figure 2: Locking hub travelling position

Overview:

No-till seeding is implemented by using a coulter to split or open the ground. Next, a double disc opener widens the openings that will become the seed bed. The no-till drill then places the seeds in the bottom of the new seed bed. Lastly, the gauge/packer wheels will pack the seed into the ground around the seed for optimal soil contact. These wheels also function as depth control for the seed placement.

Transportation:

1. Attach the no-till drill to the trailer hitch.

- Ensure that all towing lights are operational and that safety chains are attached and functional.

2. Ensure that left-side hub is in the lock out position for transportation (**See Figures 1 and 2.**)

3. Make sure the RED transportation block has been placed on the Hydraulic Cylinder and the drill has been lowered onto the block (**See Figure 3.**)

4. Begin transport, ensuring not to exceed 55 MPH.

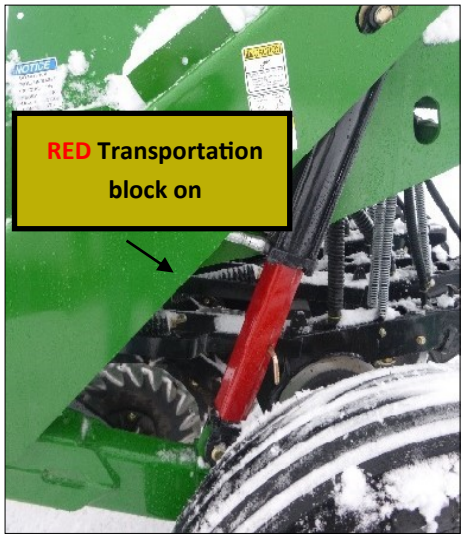

Figure 3: Red transportation block road travel placement

Before You Start:

1. Hitch tractor to drill.

- Adjust hitch height if needed (drill tongue should run level in field position.)

2. Attach hydraulic and electrical components.

- Handle grips are color coded. (Hoses with the same remote valve are marked with the same color.)

  - BLUE: transport lift cylinders (raise/lower drill.)
- Make sure hydraulic adapters on drill fit your tractor. If not, purchase new adapters.

3. Walk around the drill and check for worn or damaged parts.

- Check for any leaks.
- Check to make sure tires are properly inflated.
- Check all bolts, pins, and fasteners
- Ensure that all towing lights are operational and that safety chains are attached and functional.

4. If any damage is found, record it and contact Lake County Conservation District or Lake County Weed District

5. Transport to field.

- Maximum field transport speed is 20 MPH.
- Ensure **RED** transportation blocks are still on during transportation to field.

6. After making it to the field, remove transportation blocks and lower drill.

- Move **RED** transportation blocks to storage spot on drill **(See Figure 4.)**

7. Engage the locking hub by moving it to lock in position for planting **(See Figures 5 and 6.)**

8. Before planting, record acres from acre counter, in order to keep track of acreage seeded **(See Figure 7.)**

Figure 4: RED transportation block storage placement

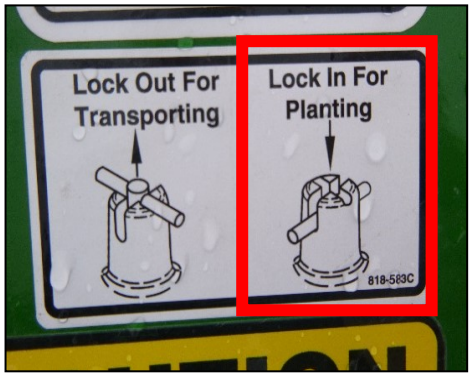

Figure 5: Locking hub diagram

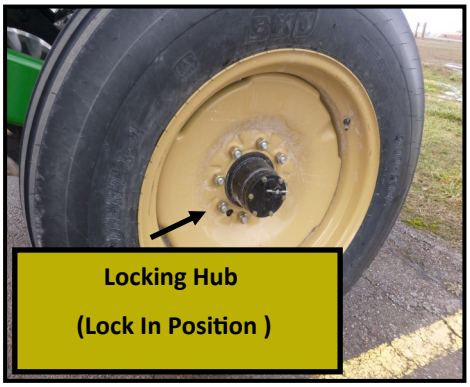

Figure 6: Locking hub planting position

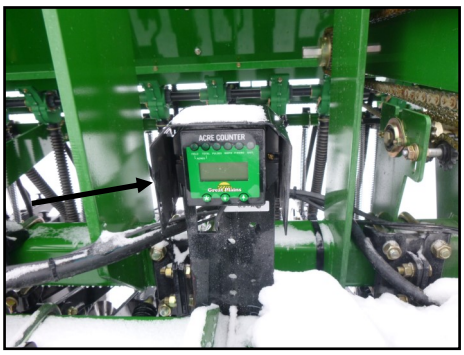

Figure 7: Acre counter location

9. Run test calibration and set seeding rate.
   - See "Planting Rates and Calibration of Lake County CD No-Till Drill" document.
   - Watch out for water in seeding tubes, use compressed air to remove water before pouring seed
   - Adjust seed rate handles to desired seed rate **(See Figures 8, 9, 10, 11, 12, and 13.)**
   - Be sure to re-connect seeding hoses after performing calibration.
   - DO NOT put fertilizer into any seed boxes.

10. Do not adjust any settings not listed in this manual.

11. Set desired seeding depth by adjusting handles above packer wheels in back of drill. This can also be done when drill is raised **(See Figures 14, 15, 16, 17, 18 .)**

12. Load seeding box(es) with clean seed.

13. Raise drill to transport to desired spot for first row.

14. Lower drill and drive forward to start planting.

15. Do a short test run of about 20 feet to make sure feed cups, seed tubes, and drives are working properly and free from foreign material by looking for seed flow under each opener.

Field Operation:

1. ALWAYS lift drill out of the ground when turning at row ends or for other short-radius turns.
   - Seeding stops automatically as drill is raised.

2. Speed and RPM vary depending on tractor attached, soil type, and ground cover.

3. Check frequently to make sure seed is feeding and tubes are unclogged.

4. Occasionally check wingnut on seed rate handle to insure proper seeding rate

After Planting:

1. Clean remaining seed out of drill.
   - Applies for both seed boxes.
   - Can be accomplished using a shop vacuum or air compressor.

2. Ensure that locking hub, on left wheel, is changed back to lock out position for transporting. (**See Figure 1 and 2.**)

3. Raise drill.

4. Put RED transportation blocks back on hydraulics for transport **(See Figure 3.)**

5. Unhook No Till Drill from tractor.

6. Record final acres from acre counter.

Seed Rate Handle Setting

Main or Large Seed Box

Figure 8: Location of seed rate handle on front of no-till drill

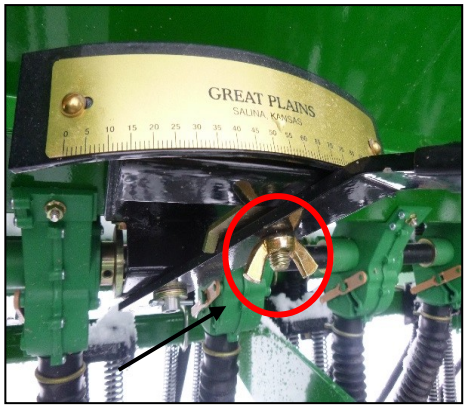

Figure 10: Wingnut under the front seed rate handle that is loosened to move handle and then retightened after adjusting the rate

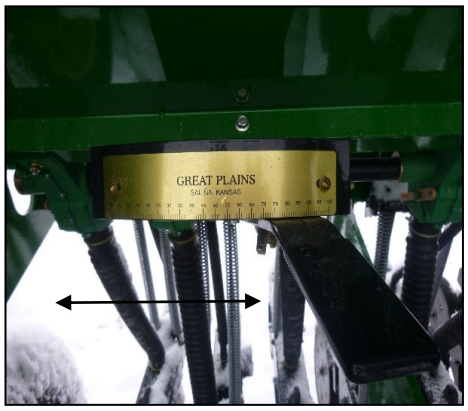

Figure 12: Front handle that is moved back and forth to the desired seeding rate

Small Seed Box

Figure 9: Location of seed rate handle on back of no-till drill

Figure 11: Wingnut under the back seed rate handle that is loosened to move handle and then retightened after adjusting the rate

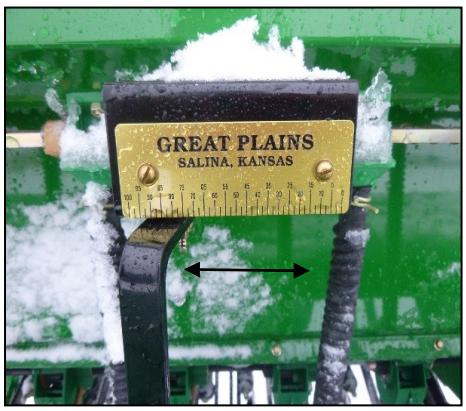

Figure 13: Back handle that is moved back and forth to the desired seeding rate

Press Wheel Adjustment Handle

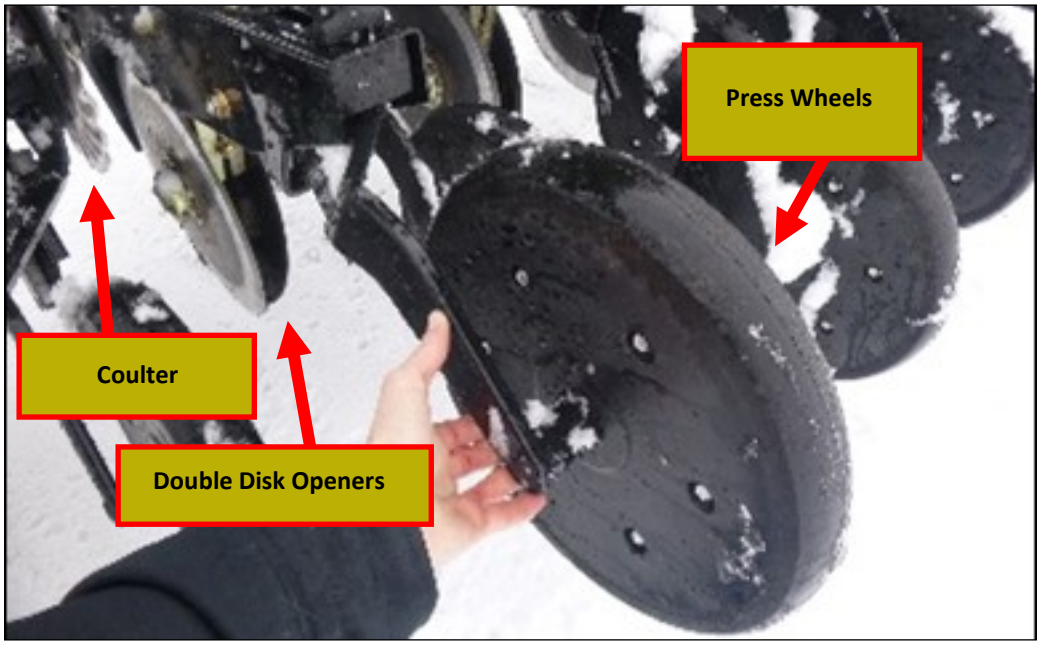

Figure 14: Labeled parts of the no-till drill including coulter, double disk opener, and press wheels

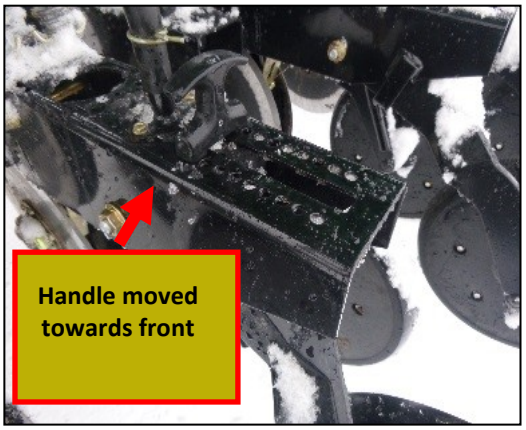

Figure 15: Handle position for shallow planting

Figure 16: Wheel position for shallow planting

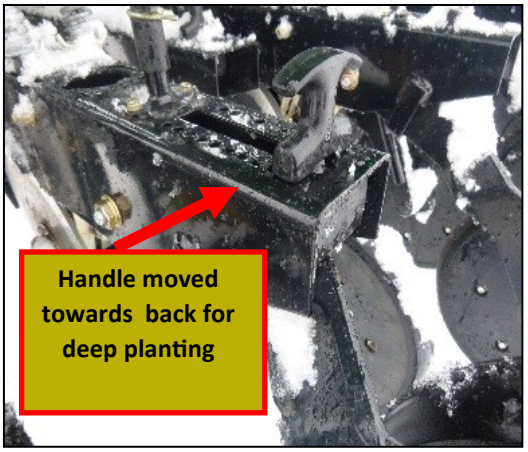

Figure 17: Handle position for deep planting

Figure 18: Wheel position for deep planting