

# Planter Operation, Maintenance and Storage

Establishing an optimal plant population in late April or early May is a critical Gold Standard Agronomy practice leading to profitable sugarbeet production (see Fact Sheet). Proper operation of a well maintained and cared for planter is essential to effective stand establishment. Growers must give careful attention to details of planter storage and maintenance if they expect it to operate properly. Planters are precision tools... treat them as such. Planter downtime can seriously delay planting. Planter malfunction or incorrect operation can significantly reduce stand establishment.



## Planter off Season Storage

- Clean planter with a pressure washer or high pressure air especially important to wash off all starter fertilizer to prevent corrosion
- Remove plates and store on a wood dowel hung horizontally
- Remove seed plate doors – do not stack on top of each other, use original boxes for storage
- Release tension on press wheel springs
- Check for missing insecticide spoons or banders
- Make a list of needed repairs and parts
- Mouse proof seed tubes (fabric softener sheets in seed hoppers)
- Save all new planter plate boxes for warranty use referral
- Keep track of how many acres are seeded on a set of plates (write the date of purchase in owners manual or on the plates themselves).

Following these steps should eliminate nearly all warped plates, damaged doors and hinges, ruined gaskets and metal corrosion by starter fertilizer. These procedures will extend life of the planter and seeding mechanism and maintain optimum stand establishment.

## Preparing Seed Hoppers for a Test Stand Clinic

- Number each seeding unit
- Number each plate for each unit
- Number each door for each seeding unit
- Mark position of each plate when installed on seed unit
- If new plates were installed, use 1/16 inch drill bit to clean out seed plate holes (drill from the back side of the plate)
- Ensure the proper brush is in use
- Make sure knocker wheels are installed not wiper bars
- Ensure the black plastic door inside the unit is in the closed position
- Clean each seed tube and seed hopper with high pressure air
- Leave hopper lids off (leave at home)
- Keep planter units dry during transport to test stand locations
- Don't forget planter plates for each seed size ordered and to be evaluated
- Bring vacuum gauges for calibration

## Planter Preparation and Maintenance Checklist

- Have planter plate and vacuum chart available – page 3
- Is starter fertilizer equipment calibrated and working properly
- Calibrate insecticide applicator units
- Check seed hoppers, drives and chains
- Be sure disk openers are clean and turn freely
- Be sure row markers are set properly or precision guidance system is ready
- Plant at 3.0 to 4.5 mph for best results, slower for older plate planters
- Check each row for press wheel pressure, using a digital fish scale – Figure 1
- Level the tool bar in the field – Figure 2
- Check planting depth in the field – Figure 3
- Select desired seed spacing – Figure 4
- Are press wheels set properly for sugarbeet row closure – Figure 5
- Have tarp ready for covering seed and insecticide hoppers when it rains – Figure 6



Figure 1



Figure 2



Figure 3

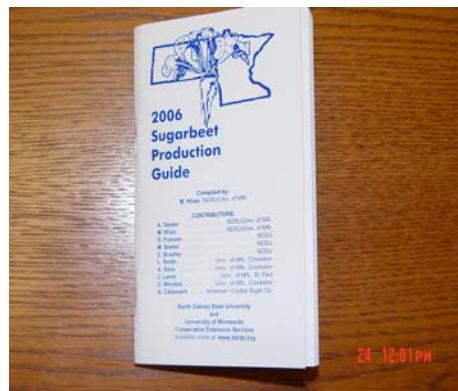


Figure 4



Figure 5

## Factors Influencing Seed Spacing Choices

- Variety vigor
- Variety emergence potential
- Is the seedbed ideal, average, fair or poor
- Are crop residues excessive, about right, or too low to prevent blowing and erosion
- Is soil moisture excellent, good, fair or poor
- Insecticide method of application



Figure 6