

# Helpful Tips and Quick Start Guide

## Truax FlexII-88 No-Till Drill

### Missoula Conservation District

#### SAFETY FIRST:

- Read the operations manual before transporting or operating the drill
- **Never work in or near seed boxes while tractor is running**

#### Towing:

- Trailer and drill must be hauled by a truck with 6,500+ lbs. towing capacity
- Trailer connects with a 2 <sup>5</sup>/<sub>16</sub>" ball hitch provided with the rental, if needed
- Always attach tow chains & ensure trailer lights are working properly

#### Loading/Unloading: (Please watch the online tutorial video for a demonstration of loading/unloading)

- Ensure the drill/planting wheels are completely raised before loading or unloading (referred to as raising or lifting the drill in the tutorial video)
- Ensure the drive wheel pin is disengaged before loading or unloading
- Hook up the drill on the deck of the trailer
- Be sure to line up with the drill when loading. CAUTION: *There is a small margin of error.*
- Load and unload the drill on flat ground to avoid the hitch from getting kinked

#### After Attaching the Drill:

- Adjust the center link so the drill sits as horizontal as possible. This will reduce stress on the drill and ensure that the drill plants at the correct depth and covers the seed as it passes.
- Calibrate each seed box to be used  
(See reference sheet inside seed box lids or refer to the operations manual)
- **Never put fertilizer through the drill**

#### Operating the Drill:

- Requires a 40 hp tractor weighing over 3,000 lbs. with universal hydraulic ports
- Ensure no-till blades have similar contact points
- Run the no-till blades only deep enough to cut through residue and scratch soil surface
- Do not dig a furrow with the no-till blades
- **Raise the drill when turning and do not make sharp turns!**
- Do not exceed **5 MPH** when planting
- Do not back up the drill when in seeding position
- **The drill must be lubricated/greased at the end of each day**

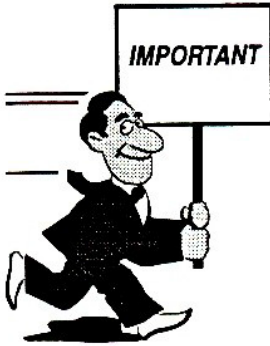
## CLEANING

Please complete the following steps to ensure the drill is clean before returning it.

Watch the online tutorial video for a demonstration of cleaning and calibrating.

1. Clean out dirt and debris from the seed box lid hinges.
2. Vacuum and/or use an air compressor to clean seed out from the seed boxes, paying special attention to the seed box cups and flutes.  
**\*IMPORTANT: Do NOT use water to spray out seed boxes or tubes. This may cause mold and clogging. Any water that gets inside of the seed boxes or tubes must be reported!**
3. Remove the cool season box row dividers and clean out the bottom of the box.
4. Use a screwdriver to clean stems from the transitions (where the seed tubes connect to the cups on the bottom of the seed box).
5. Clean the **outside** of the drill with a high-pressure washer or water hose with a spray nozzle to remove any mud or debris.  
**\*Do not directly spray any bearings or hubs that contain bearings.**
6. Use an air-compressor to blow all the water off the drill, including the outside of the seed boxes. Any water that gets inside of the seed boxes or tubes must be reported!
7. To prevent the spread of noxious weeds, clean any mud or debris from the trailer tires or frame with a high-pressure washer or water hose with a spray nozzle.

# CALIBRATING THE DRILL



*The procedures provided for the calibration of Truax drills are to be used as a guide only - as several factors could affect the rate at which the seed will flow through the seedway passages.*

*The operator of the equipment must constantly monitor the seed delivery and placement!*

## Preliminaries to Calibration Procedure (lbs/acre)

1. Attach the drill to the tractor. Park on a level surface, set parking brake, lower the drill with the hydraulics (raise the planting wheels), and shut off the tractor.
2. Block the driver side wheel of the drill, both front and back.
3. Using a jack, lift the frame of the drill so that the drive wheel is off the ground.
4. Remove **four seed tubes** from the seed box being calibrated and place a bag or can under these seed box openings (“transitions”). Seed must be collected from all 4 tubes but will only be weighed from 3 of the 4 tubes.
5. Place seed in the seed box **only over the seed tubes previously removed**. Use enough seed to fill to the top of the agitators in the box being calibrated.
6. Engage the drive wheel pin, turn the drive wheel, and check to be sure all mechanisms are working. Check to see that seed falls from the transitions (where the seed tubes were removed).

## Calibration Procedure (lbs/acre)

Note: To avoid errors in calculation, calibrate each seed box individually. Calibrating one box does not affect the others.

1. Place a bag or can under each of the four transitions to catch seed.  
**\*Only measure three of the four and be sure to measure the same three each time.**
2. Turn the drive wheel 19 times, and collect seed from 3 tubes.  
*Use the valve stem or draw a chalk line on the tire to keep track of rotations.*
3. Weigh the collected seeds in ounces and multiply the by 10.
4. This result is the seeding rate in bulk pounds per acre. This is not Pure Live Seed (PLS).
5. Repeat at least three times to determine average output per box.

## ADJUSTING THE SEEDING RATE

### **Small Seed and Cool/Grain Seed Boxes:**

Use the flute adjuster to increase or decrease the amount of seed accordingly. **Repeat calibration until the recommended planting rate is attained.** This may require multiple calibration attempts depending on who used the drill before you.

### **Fluffy Seed Box:**

Adjust the sprocket chains to increase or decrease the amount of seed accordingly by opening the sprocket cover at the drill's front.

- **Increase** the seed amount by moving the chain to a smaller front sprocket and larger rear sprocket.
- **Decrease** the seed amount by moving the chain to a larger front sprocket and smaller rear sprocket.

**Repeat calibration until the recommended planting rate is attained.** This may require multiple calibration attempts depending on who used the drill before you.

## SEEDING CHARTS

It is recognized that calibration is a time consuming process and that standardized seeding charts are desirable. However, due to wide variation in seed sizes and factors affecting calibration, it is impractical for Missoula Conservation District to provide standardized seeding rate charts for the no-till drill. The Truax FlexII Operations Manual does provide additional information on calibration beginning on page 30-3, including very limited seeding chart examples beginning on page 30-11. We always recommend taking the time to calibrate the no-till drill before you use it to ultimately save money by ensuring you do not over or under seed your planting area.