**Operating Instructions for Esch 5612 No-till Drill**

* **NEVER back up with the drill down.**
* **Do not turn sharply with the drill in the ground.** Always lift drill at the headlands, as turning sharply with drill down puts tremendous pressure on the coulters. Your seed will not be covered if you turn sharply with the drill down.
* Always be on level ground to swing from transport mode to field mode or vice-versa. **Release the yellow safety lock behind the front frame before swinging to field mode.**
* Leave tractor in neutral and do not engage brake when swinging. The tractor may move slightly as the drill swings.
* When planting a seed mix, please mix your seed before pouring into the seed bins. **DO NOT MIX SEED IN THE BINS** with a shovel or other sharp tool, as this could damage components in the bottom of the bins.
* To adjust planting depth, first set the depth of the opener coulters. It is suggested to set the opener coulters to a depth of 1/2" - 1" deeper than you want your seed placed. This is done by allowing the field wheels to retract only enough to allow the coulters to engage to the desired depth in the ground. A set of hydraulic ram stroke control collars has been provided with the Esch for this purpose. They snap over the hydraulic ram and remain in place until the drill is to be transported. Always put the exact same size collar(s) on each side. Once the correct collar, or combination of collars, has been determined, you are ready to set your seed delivery depth.
* To adjust planting depth, set the T-knobs on the rear depth wheels forward for shallow or back for deeper planting.
* To calibrate seed delivery:
	1. Refer to the chart under box lid for recommended setting for your seed variety. Set the big seed box adjustment lever located in front of the box above the drive wheel. Set the small seed box adjustment at the back of the small box.
	2. Retrieve the tarp from the front frame tube and spread it under the seed tubes. Hand-turn the drive wheel **counterclockwise** 66 times. Pour the seed from the tarp into a bucket or bag and weigh it. Multiply the number of pounds collected by 10 to determine the pounds per acre. (Example: Turning the wheel 66 times dropped 2.4 pounds of seed. 2.4 lbs x 10 = 24 pounds/ac.)
	3. Make fine adjustments to the seed box adjustment knobs to achieve your desired pounds/ac.
* The acre meter is located above the drive wheel. Check the acre meter before you start planting and write the acres and date in the record book provided. Write down acres and date when you finish planting. You may want to take pictures of the acre meter, as well.
* Thoroughly clean out seed bins and tubes with a vacuum or compressed air before returning the drill.
* **Remove all ram control collars to allow maximum ground clearance of the field wheels.**
* Check to see that the tarp is returned to its storage tube in the frame; 7-pin adapter, digital scale, ram control collars and other accessories are back in the toolbox; and the operator’s manual is in its tube.
* When swinging the drill from field to transport position, the tongue will latch before the machine is ready for transport. Continue to apply hydraulic pressure until the drill is level and field wheels are raised completely.
* **Check to see that the yellow safety lock is in the forward locked position for transport.**