

# BETWEEN THE ROWS<sup>®</sup>

## Optimizing Plantability

Wyffels.com

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### Optimize Plantability

Accurate singulation and seed placement are critical to maximizing corn yield. A planter that is properly maintained and set up will help optimize accuracy but changing field conditions and seed sizes will require in-field adjustments. To help farmers optimize planter performance we have compiled these recommendations from several equipment manufacturers.

### Vacuum Settings

One of the most important in-field adjustments that influences singulation is planter vacuum settings. Seed size and weight varies by hybrid, but any seed can be planted accurately when adjusted properly. In general, too much vacuum results in doubles while not enough vacuum results in skips. The increased prevalence of accurate seed monitoring sensors on planters means singulation issues are identified in real-time, allowing the operator to fine-tune settings on the fly to improve singulation and maximize yield potential. A summary of manufacturer recommended settings can be found in Table 2.

### Seed Lubricant

Most planter manufacturers recommend using a seed lubricant like talc or graphite. Seed lubricants should be added in layers while loading the planter to ensure even coverage.

Talc is good at attracting moisture and preventing clumping or bridging due to moisture while also providing some dry lubrication.

Graphite is a dry lubricant helpful for metal on metal meter components. Graphite is also conductive, meaning it helps to prevent clumping due to static electricity buildup in the plastic center fill hoses.

Equipment suggestions for seed lubricants are listed in Table 1. Consulting your owner's manual is important to ensure proper use and rates.

### Seed Storage Prior to Planting

Another important factor to ensure accurate and trouble-free planting is weather and seed storage conditions. While it is always important to store seed in a dry place, high humidity can still cause issues with flowability at planting.

Some key considerations about weather and seed storage:

- In humid conditions, additional talc is required to help dry seed and minimize bridging and flowability problems.
- The most severe issues occur when planting occurs in warm, humid conditions when the seed is still cool. If seed is cool when it comes out of storage, the humid conditions will cause condensation on the seed, creating flowability problems.
  - Steps to acclimate seed in these conditions will help minimize issues. Staging seed in a heated shop or in warm sunshine helps to warm seed and prevent condensation or evaporate any condensation that has formed.
  - In severe instances additional talc helps but too much can create bread dough. In these severe cases graphite is required to improve flowability.

**Table 1. Manufacturer Lubricant Recommendations**

Brand	Meter	Lubricant
Precision Planting	vSet / mSet	eFlow seed lubricant (or 80/20 talc/graphite mixture): 1/4 cup per 80k unit
	eSet	
Case IH	1200 series	Graphite: 1 cup per 16 units. Use higher rates of 50/50 talc/graphite mixture if issues with center fill flowability
	2000 series	eFlow seed lubricant (or 80/20 talc/graphite mixture): 1/4 cup per 80k unit
John Deere	ExactEmerge	Talc/graphite mix: 2.5 oz / 80k unit Double rate in humid conditions and heavy seed treatments
	MaxEmerge 5	Talc: 2.5 oz / 80k unit Double rate in humid conditions and heavy seed treatments
	Finger Pickup	Graphite with each fill
Kinze	True Rate	Graphite: 1 lb / 50 unit fill or 1Tbsp / fill with conventional hoppers. 80/20 talc-graphite mixture at 4-8 lbs / 50 unit fill is to be used with treated seed.
	True Speed	
	Finger Pickup	Graphite with each fill
White	Positive Air	Talc with center fill systems and treated seed

**Table 2. Manufacturer Recommended Planter Settings**

Brand	Meter	Seed Tube	Disk #	Vacuum Pressure Setting														Notes	
				>67 lbs	62 lbs	57 lbs	53 lbs	50 lbs	47 lbs	44 lbs	42 lbs	40 bs	38 lbs	36 lbs	35 lbs	<33 lbs	>2400		
Precision Planting	vSet / mSet	Standard	730079	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	Baffle Position: 2
		SpeedTube		20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	Singulator: Floating; Lower Brush and Extractor: Regular; Deflector: Up
	eSet	Standard	720003	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	
Case IH	1200 series	Standard	2455/3655/4855 2450/3650/4850	20-22	20-22	20-22	20-22	20-22	20-22	20-22	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	Baffle Setting: 2 Singulator Dial Setting: 3
	2000 series	Standard	47779568	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	Baffle Position: 2
		Speed Tube		20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	
John Deere	ExactEmerge		A92777	23	22	22	21	20	19	19	18	18	17	17	17	17	17	16	
	MaxEmerge 5		A50617	8-16	8-16	8-16	8-16	6-14	6-14	6-14	6-14	6-10	6-10	6-10	6-10	6-10	1-7	1-7	Double Eliminator: 0; Knockout Wheel Wiper Blade: AA79993
			A43215	13-17	13-17	13-17	13-17	11-15	11-15	11-15	11-15	9-13	9-13	9-13	9-13	4-10	4-10	4-10	
			A52391 ProMax 40	14-18	14-18	14-18	14-18	13-17	13-17	13-17	13-17	11-15	11-15	11-15	11-15	9-13	9-13	9-13	Double Eliminator: 5; Knockout Wheel: A52389
	Finger Pickup		Operate at 3 - 6mph. Slower ground speeds should be used with smaller seed sizes to minimize doubles.																
Kinze	True Rate		B1219 (light blue)	18-21	18-21	18-21	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	18-20	Singulator Zone Setting: 2
	True Speed		G10347701 (light blue)	15-19	13-19	13-19	11-19	11-19	11-19	11-19	11-19	11-19	11-19	11-19	11-17	11-17	11-17	Blue Ejector Wheel; Baffle Setting: 1	
	Finger Pickup			Operate at 3 - 6mph. Slower ground speeds should be used with smaller seed sizes to minimize doubles.															
White	Positive Air		Small (852436)	2.5-4	2-4	2-4	2-4	2-4	1.5-4	1.5-4	1.5-2	1.5-2	1.5-2	1.5	1.5	1.5	1.5		
			Medium (852435)	1-3	1-2.5	1-2.5	1-2	1-2	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5	1-1.5		

**FINETUNING SETTINGS**

If too many skips → increase pressure | If too many doubles → decrease pressure



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