

PLANTER MAINTENANCE CHECKLIST

1. Check the condition of hoppers, disks, drives, and chains.
2. Be sure disc furrow openers are clean and turn freely.
3. Check seed ejection tubes for restrictions or blockage.
4. Be sure row spacing's are correct, equal, and row markers adjusted.
5. Lubricate the planter properly.
6. Clean seed hoppers daily.
7. Match seed sizes and planter plates carefully.
8. Test the planter on a hard surface to check the seed distribution pattern.
9. Number plates to match planter units.

PLANTER OFF SEASON STORAGE

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

Sugarbeet Seed Specifications

Size	Company	Diameter	Units/Case	Bulk (Units)
Medium (Pink or Red Label)	Hilleshog	8 - 9 /64	6	150-450
	Seedex	8 - 9 /64	10	
	SESVanderHave/Holly	8 - 9 /64	10	
S1 (Tan Label)	Hilleshog	8 - 11 /64	6	150-225
Gem50 (Tan Label)	Crystal/ACH	8 -10/64	4	
Gem100 (Turquoise Label)	Crystal/ACH	9.75 -11.5/64	4	100
Mini Pellets (Orange Label)	Betaseed	8 - 10 /64	4	
	Crystal	8 - 10 /64	6	
	SESVanderHave/Holly	8 - 10 /64	6	6
Agracoat (Green Label)	Seedex	8 - 10 /64	6	

Sugarbeet Seed Specifications

Size	Company	Diameter	Units/Case	Bulk (Units)
Regular Pellets (White Label)	Betaseed	9.5-11.5 /64	4	125-175
	Crystal	9.5-11.5 /64	4	
	ACH	9.5-11.5 /64	4	
	Hilleshog	9.5-11.5 /64	3	
	Seedex	9.5-11.5 /64	4	
	SESVanderHave/Holly	9.5-11.5 /64	4	
XTREME (Light Blue)	Crystal	10.5 -13.5/64	3	
S2 (Yellow)	Hilleshog	11 -14/64	3	125-150
Pro 200 ELS (Gray Label)	Betaseed	11.5 -13.5/64	4	
	ACH	11.5 -13.5/64	4	
Ag S (Yellow Label)	Seedex	11 -13/64	3	
LP Pellets (Green Label)	SESVanderHave/Holly	11 - 13.5/64	3	

Recommendations for John Deere Maxi II Planter *

Medium Plate - (H 136445)

Medium Seed	3/4 - 1 inch of vacuum
Mini Pellets.....	2 inches of vacuum
Regular Pellets.....	Not Recommended
Gem50	2 inches of vacuum
Gem100.....	2 inches of vacuum
S1.....	2 - 3 inches of vacuum
Agracoat.....	2 - 3 inches of vacuum

Large Plate - (A 51713)

Medium Seed.....	Not Recommended
Mini Pellets.....	2 - 3 inches of vacuum
Regular Pellets	2 - 3 inches of vacuum
Gem50	2 inches of vacuum
Gem100	2 - 3 inches of vacuum
Agracoat.....	2 - 3 inches of vacuum
LP Pellets	2 - 3 inches of vacuum
XTREME.....	3 - 4 inches of vacuum

Sorghum Plate - (A 43066)

Mini Pellets	Not Recommended
Regular Pellets.....	3 - 4 inches of vacuum
Pro200	3 - 5 inches of vacuum
ELS	3 - 5 inches of vacuum
XTREME.....	3 - 5 inches of vacuum
LP Pellets.....	3 - 4 inches of vacuum
Gem100.....	3 - 4 inches of vacuum
S2	3 - 4 inches of vacuum
Ag S	3 - 5 inches of vacuum

* Central delivery system: Vacuum may need to be higher

Consult your agriculturist or seed representative prior to updating your planting equipment.

VACUUM PLANTER COMMENTS

Before purchasing a new planter or different planter plates contact your agriculturist, Norm Cattanach, or your seed salesman to discuss advantages or disadvantages.

JOHN DEERE:

- 1) These are the best plate combinations. Other combinations will work but may result in more skips or multiples. Adjust vacuum as necessary.
 - Do not use medium seed with small plate.
- 2) It is common for some of the new plates to have the air holes partially blocked with plastic residue from the production process. This causes skips and lower than desired population readings on the monitor. Before installing new plates, clean out obstructions by hand with a 1/16 inch drill bit. **Do not enlarge air hole.**
- 3) Some new planters have small rough areas on casting from production process, file down as necessary.
- 4) Run units with all seals in place. Without all seals in place a variation in vacuum levels from unit to unit will be experienced. Replace worn seals.
- 5) Check monitor eye in drop tube to make sure it is properly positioned. Seed may bounce off monitor eye assembly if it is twisted slightly out of position.
- 6) In large tank remove fuse that controls agitation in tank. If not removed, seeds may be damaged.
- 7) In large tank use sorgum inserts.
- 8) When unfolding, check to see that all tubes have refilled with seed.

Monosem Planter Plates Recommendation

Plate 4016	Plate 4020	Plate 4025	Plates 3622
Medium	Gem50	Gem50	Regular Pellets
Gem50	Agracoat	Agracoat	Ag S
Mini Pellets	S1	S1	S2
Agracoat	Mini Pellets	Mini Pellets	Pro200
S1	Regular Pellets	Regular Pellets	ELS
	Gem100	Gem100	LP Pellets
		S2	Gem100
		Ag S	XTREME
		ELS	
		Pro 200	
		LP Pellets	
		XTREME	

White Planter Plates Recommendation

854047	N 857115	N 856067
Gem50	Gem100	Pro200
Mini Pellets	Regular Pellets	ELS
Agracoat		LP Pellets
		Ag S
		S2
		XTREME

VACUUM PLANTER COMMENTS

MONSEM NG+:

- 1) Using plates smaller than recommended may result in seed falling off plate when planter bounces in field.
- 2) 36 cell plates with the appropriate hole diameter will work though increased plate turning speed may require higher vacuum levels to avoid seed falling off plate.
- 3) When starting out in field, monitor seed discs to ensure seed is staying on plate. Increase vacuum if necessary.

WHITE SEED BOSS:

- 1) Use shims to obtain proper air gap between plant and meter.
- 2) Adjustment and/or modification of the tickler brush will improve performance.
- 3) Sugarbeet cutoff brush with metallic bristles helps remove static electricity.

CASE PLANTER ISSUES:

- 1) Case planter - singulators should be adjusted properly to percentage of hole showing and lubricated to work very freely.
- 2) Case planter may be better to run at a higher vacuum pressure
- 3) Case planter has no agitation in large tank; to compensate run 10% extra talc powder.

Plate Recommendation

Pellet Size	Plate No.	Vacuum
Mini	8020	16-18"
Regular	8020	20-22"
XTREME	8023	23-25"

Plate Planters					
Size	Planter	Metal	Plastic	Thickness (In.)	Cell Dia. (In.)
Medium	John Deere Milton	B 13304	Blue	0.105	10 /64 11 x 7 /64
Gem50	John Deere Milton		Tan / Orange		12 x 9 /64
Large	John Deere Milton	B 13931	Green	0.105	11 /64 12 ½ x 7 ½ /64
Gem100	John Deere Milton		Light Green		14 x 11 /64
Extra Large	John Deere John Deere	B 29402 B 12733	Brown	0.125 0.125	12 /64 11 /64 Drill to 12 /64
Mini Pellets Agracoat	John Deere Milton		Orange		12 x 9 /64
Regular Pellets	John Deere Milton		Light Green		14 x 11 /64

John Deere Plate Planters

- 1) Plastic plates turn harder than steel, so lubricate the plate, false ring and hopper bottom lightly with talc. Plate should turn easily by hand.
- 2) Monitor spring on drop tube and keep free of soil. Drop tubes should move freely up and down.

SEEDING RATE AND PLANT POPULATION ESTABLISHMENT (22 INCH ROWS)

Plant Establishment*	Seed Spacing (Inches)					
	3	4	5	6 **	7 **	8 **
------(Plants per 100 feet of 22 inch row)-----						
90	360	270	216	180	155	135
80	320	240	192	160	138	120
70	280	210	168	140	120	105
60	240	180	144	120	103	90
50	200	150	120	100	86	75
40	160	120	96	80	69	60
30	120	90	72	60	52	45

* Average stand establishment is about 68%

** Not recommended

PLANT POPULATION

Plants per 100 ft. of row		75	100	125	150	175	200	225
Plants/Acre	22 inch rows	17,852	23,803	29,754	35,705	41,397	47,607	53,894
Plants/Acre	30 inch rows	13,068	17,424	21,780	26,136	30,302	34,848	39,450

TRACTOR SPEED CALIBRATION CHART

-----Time in seconds required to travel a given distance-----

mph	100 ft.	200 ft.	300 ft.
2.5	28	55	82
3.0	23	45	68
3.5	20	39	58
4.0	17	34	51