

SEED METER OPERATION/MAINTENANCE

GENERAL PLANTING RATE INFORMATION

These planting rate charts are applicable to KINZE® Model 3400 EdgeVac® Twin-Line® Planters. See “Tire Pressure” for recommended tire pressures.

IMPORTANT: The sprocket combinations listed in these charts are best for average conditions. Changes in sprocket combinations may be required to obtain desired planting population. TO PREVENT PLANTING MISCALCULATIONS, MAKE FIELD CHECKS TO BE SURE YOU ARE PLANTING AT THE DESIRED RATE.

The size and shape of seed may affect the planting rate.

The following seed discs are available for use with the KINZE® EdgeVac® Seed Metering System:

Corn/Popcorn: 39 cell. Light blue color-coded. For all seed corn grades from 35 to 70 pounds per 80,000 kernel count unit or popcorn seed size range from 2210 to 4200 seeds per pound. *When planting popcorn this seed disc requires use of seed baffle. See “Seed Meter” on pages 7-2 and 7-3 for additional information.*

Low-Rate Corn/Popcorn: 24 cell. Light green color-coded. For all seed corn grades from 35 to 70 pounds per 80,000 kernel count unit or popcorn seed size range from 2210 to 4200 seeds per pound. *When planting popcorn this seed disc requires use of seed baffle. See “Seed Meter” on pages 7-2 and 7-3 for additional information.*

Soybean: 60 cell. Black color-coded. Seed size range from 2200 to 4000 seeds per pound. *This seed disc requires use of seed baffle. See “Seed Meter” on pages 7-2 and 7-3 for additional information.*

Soybean, High-Rate: 120 cell. Dark blue color-coded. Seed size range from 2200 to 4000 seeds per pound. *This seed disc requires use of seed baffle. See “Seed Meter” on pages 7-2 and 7-3 for additional information.*

Milo/Grain Sorghum: 60 cell. Yellow color-coded. Seed size range from 10,000 to 20,000 seeds per pound. *This seed disc requires use of seed baffle and cleanout brush. See “Seed Meter” on pages 7-2 and 7-3 for additional information.*

Hill-Drop Cotton, Acid-Delinted (3 Seeds Per Cell): 20 cell. Brown color-coded. Cotton seed size range from 3800 to 5200 seeds per pound. *This seed disc requires use of cleanout brush w/ball-type ejector. See “Seed Meter” on pages 7-2 and 7-3 for additional information.*

Cotton, Acid-Delinted/Small Dry Edible Bean: 54 cell. Dark green color-coded. Cotton seed size range from 3800 to 5200 seeds per pound or dry edible bean seed size range from 1200 to 2500 seeds per pound. *This seed disc requires use of cleanout brush w/ball-type ejector. See “Seed Meter” on pages 7-2 and 7-3 for additional information.*

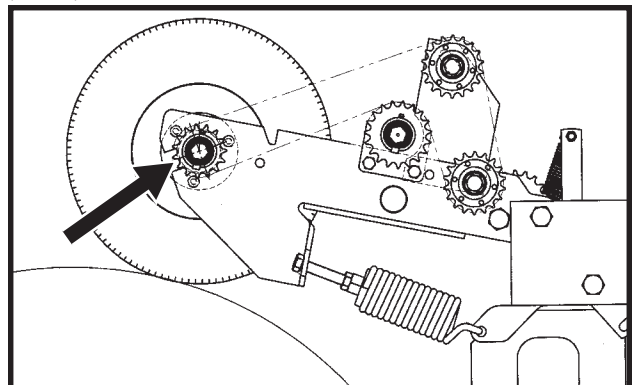
Large Dry Edible Bean: 54 cell. Tan color-coded. Seed size range from 800 to 1200 seeds per pound.

NOTE: Due to a multitude of variables, seed spacing can be adversely affected at speeds above 5.5 MPH.

NOTE: See “Seed Meter Singulator Brush And Vacuum Level Adjustments” on page 7-23.

NOTE: 15, 19 and 38 tooth drive sprockets are NOT applicable to all rate charts. Check chart titles to ensure the proper rate chart is selected. 15 and 19 tooth sprockets required use of 92 pitch No. 40 chains and 38 tooth sprockets required use of 104 pitch No. 40 chains.

(TWL310)

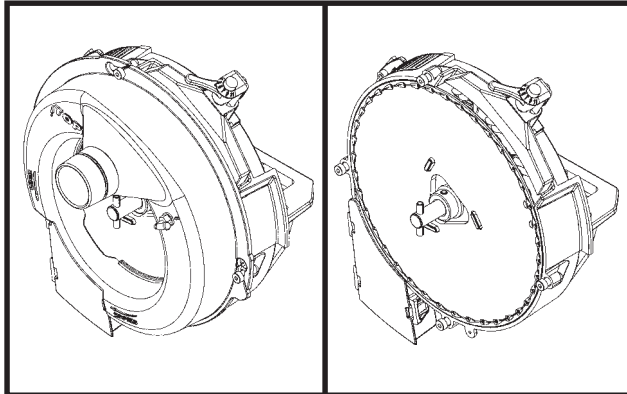


NOTE: Contact wheel drive sprocket referenced at top of each rate chart.

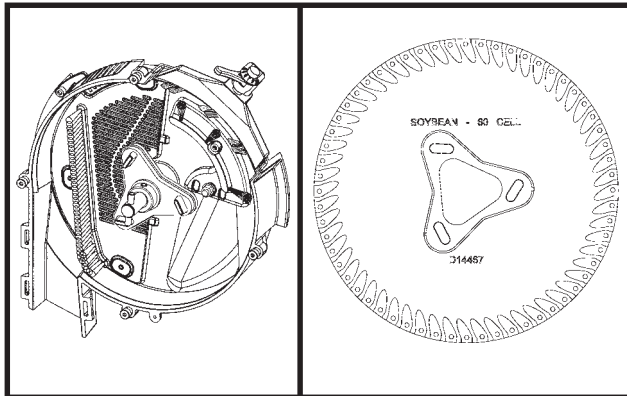
SEED METER OPERATION/MAINTENANCE

SEED METER

(METR71/METR71a)

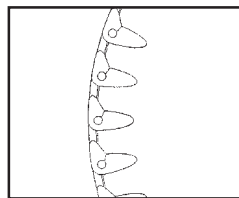


(METR70/D14467a)

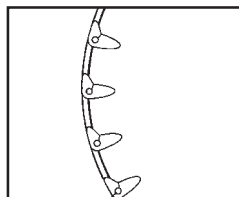


The seed discs below and at right are available for use with the KINZE® EdgeVac® Seed Metering System:

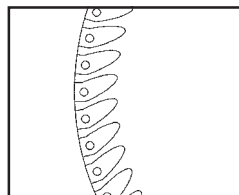
Corn/Popcorn: 39 cell. For all seed corn grades from 35 to 70 pounds per 80,000 kernel count unit. Popcorn seed size range from 2210 to 4200 seeds per pound (*Light blue color-coded.*) (D14465)



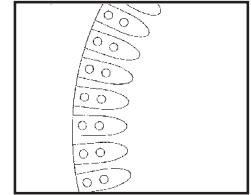
Low-Rate Corn/Popcorn: 24 cell. For all seed corn grades from 35 to 70 pounds per 80,000 kernel count unit. Popcorn seed size range from 2210 to 4200 seeds per pound. (*Light green color-coded.*) (D16734a)



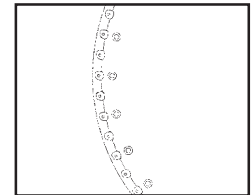
Soybean: 60 cell. Seed size range from 2200 to 4000 seeds per pound. (*Black color-coded.*) (D14467a)



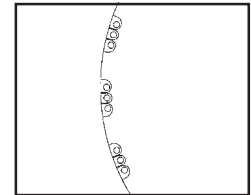
Soybean, High-Rate: 120 cell. Seed size range from 2200 to 4000 seeds per pound. (*Dark blue color-coded.*) (D14468a)



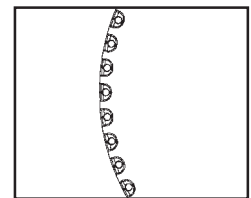
Milo/Grain Sorghum: 60 cell. Seed size range from 10,000 to 20,000 seeds per pound. (*Yellow color-coded.*) (D17050)



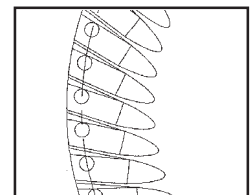
Hill-Drop Cotton, Acid-Delinted (3 Seeds Per Cell): 20 cell. Cotton seed size range from 3800 to 5200 seeds per pound. (*Brown color-coded.*) (D17187)



Cotton, Acid-Delinted/Small Dry Edible Bean: 54 cell. Cotton seed size range from 3800 to 5200 seeds per pound. Dry edible bean seed size range from 1200 to 2500 seeds per pound. (*Dark green color-coded.*) (D17186)



Large Dry Edible Bean: 54 cell. Seed size range from 800 to 1200 seeds per pound. (*Tan color-coded.*) (D14477)



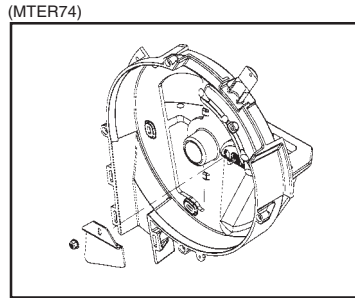
Install the selected seed disc. Position the vacuum cover on the meter by aligning the keyhole slots over the bolt heads. Push the cover on the meter and turn counter clockwise to lock in place. **See following page for additional components required with specific seed discs.**

NOTE: Use of damaged seed or seed containing foreign material will cause plugging of seed disc orifices and require more frequent seed meter cleanout to prevent underplanting.

SEED METER OPERATION/MAINTENANCE

SEED BAFFLE

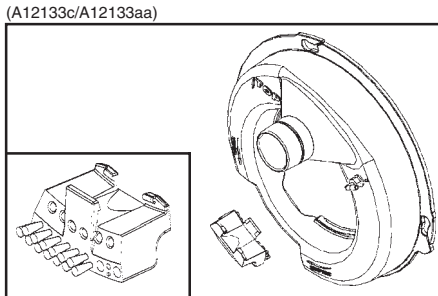
- Milo/Grain Sorghum
- Soybeans
- Popcorn



The **seed baffle** is designed to prevent excessive seed in the meter from restricting air flow through the seed. **Used with 60 Cell Milo/Grain Sorghum Disc, 60 Cell Soybean Disc, 120 Cell High-Rate Soybean Disc and 39 Cell and 24 Cell Popcorn Discs.**

CLEANOUT BRUSH

- Milo/Grain Sorghum

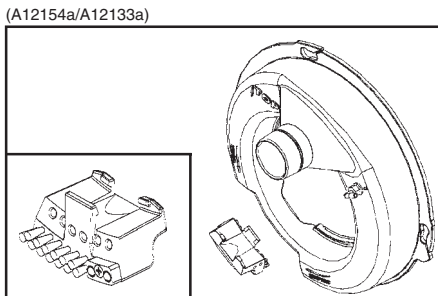


The **cleanout brush** is designed to remove foreign material and seed remnants to help prevent plugging of seed disc orifices.

Used with 60 Cell Milo/Grain Sorghum Disc.

CLEANOUT BRUSH W/BALL-TYPE EJECTOR

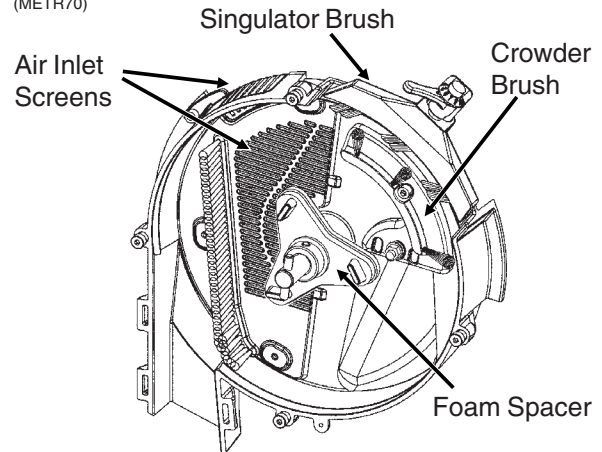
- Cotton
- Small Edible Beans



The **cleanout brush w/ball-type ejector** is designed to eject seed remnants from the seed disc orifices. **Used with 20 Cell Hill-Drop Cotton, Acid-Delinted (3 Seeds Per Cell) Disc and 54 Cell Acid-Delinted Cotton/Small Dry Edible Bean Disc.**

NOTE: Foreign material in seed disc orifices, such as seed chips, hulls, stems, etc., may affect seed delivery. Clean seed is required to ensure accurate seed metering from the vacuum seed meter. Seed discs should be removed daily to check for buildup of foreign material in the seed disc orifices.

(METR70)

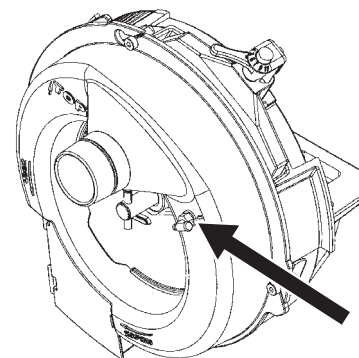


The crowder brush aids in the singulation of small flat seeds by (a) crowding seeds to the outer perimeter of the seed disc and (b) orienting seeds to allow the singulator brush to be more effective.

The air inlet screens allow air to enter the system and aids in keeping field residue or other foreign material out of the meter.

The foam spacer gently preloads the seed disc against the vacuum cover when no vacuum is present.

(METR71)



The $\frac{3}{16}$ " hose barb elbow on the seed meter vacuum cover allows measurement of vacuum level at each meter. A customer-supplied vacuum gauge is required.

See "Seed Meter Singulator Brush And Vacuum Level Adjustments", "Seed Meter Maintenance" and "Preparation For Storage" for additional EdgeVac® Seed Metering System information.

SEED METER OPERATION/MAINTENANCE

One tablespoon of **powdered graphite** should be mixed with the seed each time the hoppers are filled. Regular graphite use will prolong the life of the vacuum seed meter components, improve seed spacing, and may reduce buildup of seed treatments. Apply graphite around the outer perimeter of the hopper as shown below.

D05300104b



NOTE: DO NOT apply graphite only in the center of the hopper. It will filter too quickly through the seed and not distribute as evenly as desired.

NOTE: Additional graphite or talc may be required to retard buildup of seed treatments on meter components. More frequent cleaning of monitor seed tubes may be necessary due to use of additional graphite or talc.

Talc seed lubricant may be used in lieu of or in addition to graphite to improve seed release from the meter. Fill hopper $\frac{1}{2}$ full of seed, add $\frac{1}{4}$ cup of talc and **mix thoroughly**. Finish filling hopper, add another $\frac{1}{4}$ cup of talc and **mix thoroughly**. Adjust rate of talc use as needed so all seeds are coated, while avoiding a buildup of talc in the bottom of the hopper. Humid conditions and/or small sized seeds with extra seed treatment may require as much as one cup of talc per hopper to maintain meter performance.

NOTE: Some liquid seed treatments or inoculants may create buildup on the seed disc or brushes. Check frequently for proper population and/or seed delivery when using any liquid seed treatment. All seed treatment should be thoroughly mixed with the seed per the manufacturers' recommendations. Seed treatment dumped on top of the seed after the hopper is filled, and not mixed properly may cause bridging of the seed in the meter, reducing population or stopping the meter from planting.

SEED METER CLEANOUT

To maintain genetic purity, thorough seed meter cleanout is important.

To clean the seed meter, disengage the seed drive and remove the seed hopper and meter. Lay the hopper on it's right side.

Disassemble seed meter by rotating vacuum cover clockwise to align keyhole slots with bolt heads. Lift off cover. Remove seed disc. Empty the meter and hopper by allowing the seed to run out of the meter. Inspect brushes in meter to ensure all seed is removed. Replace seed disc and install vacuum cover.

NOTE: Use of damaged seed or seed containing foreign material will cause plugging of seed cell orifices and require more frequent seed meter cleanout to prevent underplanting.

SEED METER OPERATION/MAINTENANCE

**PLANTING RATES FOR CORN/POPCORN 39 CELL DISC
15 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS**

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
37,181	33,801	15	28	4 to 6	8.4
38,559	35,053	15	27	4 to 6	8.1
40,042	36,401	15	26	4 to 6	7.8
41,643	37,858	15	25	4 to 6	7.5
42,139	38,308	17	28	4 to 6	7.4
43,378	39,435	15	24	4 to 6	7.2
43,700	39,727	17	27	4 to 6	7.2
45,264	41,149	15	23	4 to 6	6.9
45,380	41,255	17	26	4 to 6	6.9
47,097	42,815	19	28	4 to 6	6.7
47,196	42,905	17	25	4 to 6	6.6
48,841	44,401	19	27	4 to 6	6.4
49,162	44,693	17	24	4 to 6	6.4
50,719	46,109	19	26	4 to 6	6.2
51,300	46,636	17	23	4 to 6	6.1
52,748	47,953	19	25	4 to 6	5.9
54,794	49,813	15	19	4 to 6	5.7
54,946	49,951	19	24	4 to 6	5.7
57,012	51,829	23	28	4 to 6	5.5
57,335	52,123	19	23	4 to 6	5.5
59,123	53,748	23	27	4 to 6	5.3
59,490	54,082	24	28	4 to 6	5.3
61,240	55,673	15	17	4 to 6	5.1
61,694	56,085	24	27	4 to 6	5.1
62,100	56,454	17	19	4 to 6	5.1
63,853	58,048	23	25	4 to 6	4.9
64,448	58,589	26	28	4 to 6	4.9
66,514	60,467	23	24	4 to 6	4.7
66,629	60,572	24	25	4 to 6	4.7
66,927	60,842	27	28	4 to 6	4.7
69,405	63,096	23	23	4 to 6	4.5
71,976	65,433	28	27	4 to 6	4.4
72,075	65,523	27	26	4 to 6	4.4
72,423	65,839	24	23	4 to 6	4.3
74,744	67,949	28	26	4 to 6	4.2
74,958	68,144	27	25	4 to 6	4.2
75,441	68,582	25	23	4 to 6	4.2
77,571	70,519	19	17	4 to 6	4.0
78,081	70,983	27	24	4 to 6	4.0
78,458	71,326	26	23	4 to 6	4.0
80,973	73,612	28	24	4 to 6	3.9
81,476	74,069	27	23	4 to 6	3.8
84,017	76,379	23	19	4 to 6	3.7
84,494	76,812	28	23	4 to 6	3.7
87,670	79,700	24	19	4 to 6	3.6
91,323	83,021	25	19	4 to 6	3.4
93,901	85,365	23	17	4 to 6	3.3
94,976	86,342	26	19	4 to 6	3.3
97,984	89,077	24	17	4 to 6	3.2
98,629	89,663	27	19	4 to 6	3.2
102,067	92,788	25	17	4 to 6	3.1
102,282	92,983	28	19	4 to 6	3.1
106,150	96,500	26	17	4 to 6	3.0
106,422	96,747	23	15	4 to 6	2.9
110,232	100,211	27	17	4 to 6	2.8

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

**PLANTING RATES FOR CORN/POPCORN 39 CELL DISC
19 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS**

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
47,097	42,815	15	28	4 to 6	6.7
48,841	44,401	15	27	4 to 6	6.4
50,719	46,109	15	26	4 to 6	6.2
52,748	47,953	15	25	4 to 6	5.9
53,376	48,524	17	28	4 to 6	5.9
54,946	49,951	15	24	4 to 6	5.7
55,353	50,321	17	27	4 to 6	5.7
57,335	52,123	15	23	4 to 6	5.5
57,482	52,256	17	26	4 to 6	5.5
59,656	54,232	19	28	4 to 6	5.3
59,781	54,347	17	25	4 to 6	5.2
61,865	56,241	19	27	4 to 6	5.1
62,272	56,611	17	24	4 to 6	5.0
64,245	58,404	19	26	4 to 6	4.9
64,980	59,072	17	23	4 to 6	4.8
66,814	60,740	19	25	4 to 6	4.7
69,405	63,096	15	19	4 to 6	4.5
69,598	63,271	19	24	4 to 6	4.5
72,215	65,650	23	28	4 to 6	4.3
72,624	66,022	19	23	4 to 6	4.3
74,889	68,081	23	27	4 to 6	4.2
75,354	68,504	24	28	4 to 6	4.2
77,571	70,519	15	17	4 to 6	4.0
78,145	71,041	24	27	4 to 6	4.0
78,660	71,509	17	19	4 to 6	4.0
80,880	73,528	23	25	4 to 6	3.9
81,634	74,213	26	28	4 to 6	3.8
84,251	76,591	23	24	4 to 6	3.7
84,397	76,725	24	25	4 to 6	3.7
84,774	77,067	27	28	4 to 6	3.7
87,914	79,921	23	23	4 to 6	3.6
91,170	82,881	28	27	4 to 6	3.4
91,295	82,995	27	26	4 to 6	3.4
91,736	83,396	24	23	4 to 6	3.4
94,676	86,069	28	26	4 to 6	3.3
94,947	86,315	27	25	4 to 6	3.3
95,558	86,871	25	23	4 to 6	3.3
98,256	89,324	19	17	4 to 6	3.2
98,903	89,912	27	24	4 to 6	3.2
99,381	90,346	26	23	4 to 6	3.2
102,566	93,242	28	24	4 to 6	3.1
103,203	93,821	27	23	4 to 6	3.0
106,422	96,747	23	19	4 to 6	2.9
107,025	97,296	28	23	4 to 6	2.9
111,049	100,953	24	19	4 to 6	2.8
115,676	105,160	25	19	4 to 6	2.7
118,942	108,129	23	17	4 to 6	2.6
120,303	109,366	26	19	4 to 6	2.6
124,113	112,830	24	17	4 to 6	2.5
124,930	113,573	27	19	4 to 6	2.5
129,285	117,532	25	17	4 to 6	2.4
129,557	117,779	28	19	4 to 6	2.4
134,456	122,233	26	17	4 to 6	2.3
134,801	122,546	23	15	4 to 6	2.3
139,627	126,934	27	17	4 to 6	2.2

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

PLANTING RATES FOR LOW-RATE CORN/POPCORN 24 CELL DISC

15 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)

APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
22,881	20,801	15	28	4 to 6	13.7
23,728	21,571	15	27	4 to 6	13.2
24,641	22,401	15	26	4 to 6	12.7
25,627	23,297	15	25	4 to 6	12.2
25,932	23,574	17	28	4 to 6	12.1
26,694	24,268	15	24	4 to 6	11.7
26,892	24,447	17	27	4 to 6	11.7
27,855	25,323	15	23	4 to 6	11.3
27,926	25,388	17	26	4 to 6	11.2
28,982	26,348	19	28	4 to 6	10.8
29,044	26,403	17	25	4 to 6	10.8
30,056	27,324	19	27	4 to 6	10.4
30,254	27,503	17	24	4 to 6	10.4
31,212	28,374	19	26	4 to 6	10.0
31,569	28,699	17	23	4 to 6	9.9
32,460	29,509	19	25	4 to 6	9.7
33,719	30,654	15	19	4 to 6	9.3
33,813	30,739	19	24	4 to 6	9.3
35,084	31,895	23	28	4 to 6	8.9
35,283	32,075	19	23	4 to 6	8.9
36,383	33,076	23	27	4 to 6	8.6
36,609	33,281	24	28	4 to 6	8.6
37,686	34,260	15	17	4 to 6	8.3
37,965	34,514	24	27	4 to 6	8.3
38,215	34,741	17	19	4 to 6	8.2
39,294	35,722	23	25	4 to 6	8.0
39,660	36,055	26	28	4 to 6	7.9
40,931	37,210	23	24	4 to 6	7.7
41,003	37,275	24	25	4 to 6	7.6
41,186	37,442	27	28	4 to 6	7.6
42,711	38,828	23	23	4 to 6	7.3
44,293	40,266	28	27	4 to 6	7.1
44,354	40,322	27	26	4 to 6	7.1
44,568	40,516	24	23	4 to 6	7.0
45,997	41,815	28	26	4 to 6	6.8
46,128	41,934	27	25	4 to 6	6.8
46,425	42,205	25	23	4 to 6	6.8
47,736	43,396	19	17	4 to 6	6.6
48,050	43,682	27	24	4 to 6	6.5
48,282	43,893	26	23	4 to 6	6.5
49,830	45,300	28	24	4 to 6	6.3
50,139	45,581	27	23	4 to 6	6.3
51,703	47,003	23	19	4 to 6	6.1
51,996	47,269	28	23	4 to 6	6.0
53,951	49,046	24	19	4 to 6	5.8
56,199	51,090	25	19	4 to 6	5.6
57,786	52,532	23	17	4 to 6	5.4
58,447	53,133	26	19	4 to 6	5.4
60,298	54,816	24	17	4 to 6	5.2
60,695	55,177	27	19	4 to 6	5.2
62,810	57,100	25	17	4 to 6	5.0
62,943	57,221	28	19	4 to 6	5.0
65,323	59,384	26	17	4 to 6	4.8
65,490	59,537	23	15	4 to 6	4.8
67,835	61,668	27	17	4 to 6	4.6

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

PLANTING RATES FOR LOW-RATE CORN/POPCORN 24 CELL DISC

19 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)

APPROXIMATE HILLS/ACRE FOR VARIOUS ROW WIDTHS

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
28,982	26,348	15	28	4 to 6	10.8
30,056	27,324	15	27	4 to 6	10.4
31,212	28,374	15	26	4 to 6	10.0
32,460	29,509	15	25	4 to 6	9.7
32,847	29,861	17	28	4 to 6	9.5
33,813	30,739	15	24	4 to 6	9.3
34,063	30,967	17	27	4 to 6	9.2
35,283	32,075	15	23	4 to 6	8.9
35,374	32,158	17	26	4 to 6	8.9
36,711	33,374	19	28	4 to 6	8.5
36,788	33,444	17	25	4 to 6	8.5
38,071	34,610	19	27	4 to 6	8.2
38,321	34,838	17	24	4 to 6	8.2
39,535	35,941	19	26	4 to 6	7.9
39,987	36,352	17	23	4 to 6	7.8
41,117	37,379	19	25	4 to 6	7.6
42,711	38,828	15	19	4 to 6	7.3
42,830	38,936	19	24	4 to 6	7.3
44,440	40,400	23	28	4 to 6	7.1
44,692	40,629	19	23	4 to 6	7.0
46,086	41,896	23	27	4 to 6	6.8
46,372	42,156	24	28	4 to 6	6.8
47,736	43,396	15	17	4 to 6	6.6
48,089	43,718	24	27	4 to 6	6.5
48,406	44,005	17	19	4 to 6	6.5
49,773	45,248	23	25	4 to 6	6.3
50,236	45,669	26	28	4 to 6	6.2
51,846	47,133	23	24	4 to 6	6.0
51,937	47,215	24	25	4 to 6	6.0
52,168	47,426	27	28	4 to 6	6.0
54,101	49,182	23	23	4 to 6	5.8
56,104	51,004	28	27	4 to 6	5.6
56,181	51,074	27	26	4 to 6	5.6
56,453	51,321	24	23	4 to 6	5.6
58,262	52,966	28	26	4 to 6	5.4
58,429	53,117	27	25	4 to 6	5.4
58,805	53,459	25	23	4 to 6	5.3
60,465	54,969	19	17	4 to 6	5.2
60,863	55,330	27	24	4 to 6	5.2
61,157	55,598	26	23	4 to 6	5.1
63,117	57,379	28	24	4 to 6	5.0
63,509	57,736	27	23	4 to 6	4.9
65,490	59,537	23	19	4 to 6	4.8
65,862	59,874	28	23	4 to 6	4.8
68,338	62,125	24	19	4 to 6	4.6
71,185	64,714	25	19	4 to 6	4.4
73,195	66,541	23	17	4 to 6	4.3
74,032	67,302	26	19	4 to 6	4.2
76,377	69,434	24	17	4 to 6	4.1
76,880	69,891	27	19	4 to 6	4.1
79,560	72,327	25	17	4 to 6	3.9
79,727	72,479	28	19	4 to 6	3.9
82,742	75,220	26	17	4 to 6	3.8
82,954	75,413	23	15	4 to 6	3.8
85,925	78,113	27	17	4 to 6	3.7

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

PLANTING RATES FOR SOYBEAN AND MILO/GRAIN SORGHUM 60 CELL DISCS

15 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)

APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS

10" Rows	11" Rows	20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
				Drive	Driven		
114,405	104,004	57,202	52,002	15	28	4 to 6	5.5
118,642	107,856	59,321	53,928	15	27	4 to 6	5.3
123,205	112,004	61,602	56,002	15	26	4 to 6	5.1
128,133	116,485	64,067	58,242	15	25	4 to 6	4.9
129,659	117,871	64,829	58,936	17	28	4 to 6	4.8
133,472	121,338	66,736	60,669	15	24	4 to 6	4.7
134,461	122,237	67,230	61,119	17	27	4 to 6	4.7
139,275	126,614	69,638	63,307	15	23	4 to 6	4.5
139,632	126,938	69,816	63,469	17	26	4 to 6	4.5
144,912	131,739	72,456	65,869	19	28	4 to 6	4.3
145,218	132,016	72,609	66,008	17	25	4 to 6	4.3
150,280	136,618	75,140	68,309	19	27	4 to 6	4.2
151,268	137,517	75,634	68,758	17	24	4 to 6	4.1
156,060	141,872	78,030	70,936	19	26	4 to 6	4.0
157,845	143,496	78,923	71,748	17	23	4 to 6	4.0
162,302	147,547	81,151	73,774	19	25	4 to 6	3.9
168,596	153,269	84,298	76,635	15	19	4 to 6	3.7
169,065	153,695	84,532	76,848	19	24	4 to 6	3.7
175,420	159,473	87,710	79,737	23	28	4 to 6	3.6
176,415	160,377	88,208	80,189	19	23	4 to 6	3.6
181,917	165,379	90,959	82,690	23	27	4 to 6	3.4
183,047	166,407	91,524	83,203	24	28	4 to 6	3.4
188,431	171,301	94,216	85,650	15	17	4 to 6	3.3
189,827	172,570	94,913	86,285	24	27	4 to 6	3.3
191,076	173,705	95,538	86,853	17	19	4 to 6	3.3
196,471	178,610	98,235	89,305	23	25	4 to 6	3.2
198,301	180,274	99,151	90,137	26	28	4 to 6	3.2
204,657	186,052	102,329	93,026	23	24	4 to 6	3.1
205,013	186,375	102,507	93,188	24	25	4 to 6	3.1
205,928	187,208	102,964	93,604	27	28	4 to 6	3.0
213,555	194,141	106,778	97,071	23	23	4 to 6	2.9
221,465	201,332	110,732	100,666	28	27	4 to 6	2.8
221,769	201,608	110,884	100,804	27	26	4 to 6	2.8
222,840	202,582	111,420	101,291	24	23	4 to 6	2.8
229,983	209,075	114,991	104,538	28	26	4 to 6	2.7
230,640	209,672	115,320	104,836	27	25	4 to 6	2.7
232,125	211,023	116,063	105,511	25	23	4 to 6	2.7
238,679	216,981	119,340	108,491	19	17	4 to 6	2.6
240,250	218,409	120,125	109,204	27	24	4 to 6	2.6
241,410	219,464	120,705	109,732	26	23	4 to 6	2.6
249,148	226,498	124,574	113,249	28	24	4 to 6	2.5
	227,905	125,348	113,952	27	23	4 to 6	2.5
	235,013	129,257	117,506	23	19	4 to 6	2.4
	236,346	129,990	118,173	28	23	4 to 6	2.4
	245,231	134,877	122,615	24	19	4 to 6	2.3
		140,497	127,724	25	19	4 to 6	2.2
		144,464	131,331	23	17	4 to 6	2.2
		146,117	132,833	26	19	4 to 6	2.1
NOTE: Planting rates over 250,000 seeds/acre are not recommended with subject seed discs and/or drive ratio.		150,745	137,041	24	17	4 to 6	2.1
		151,737	137,942	27	19	4 to 6	2.1
		157,026	142,751	25	17	4 to 6	2.0
		157,356	143,051	28	19	4 to 6	2.0
		163,307	148,461	26	17	4 to 6	1.9
		163,726	148,842	23	15	4 to 6	1.9
		169,588	154,171	27	17	4 to 6	1.8

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

**PLANTING RATES FOR SOYBEAN AND MILO/GRAIN SORGHUM 60 CELL DISCS
19 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS**

10" Rows	11" Rows	20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
				Drive	Driven		
144,912	131,739	72,456	65,869	15	28	4 to 6	4.3
150,280	136,618	75,140	68,309	15	27	4 to 6	4.2
156,060	141,872	78,030	70,936	15	26	4 to 6	4.0
162,302	147,547	81,151	73,774	15	25	4 to 6	3.9
164,234	149,304	82,117	74,652	17	28	4 to 6	3.8
169,065	153,695	84,532	76,848	15	24	4 to 6	3.7
170,317	154,834	85,158	77,417	17	27	4 to 6	3.7
176,415	160,377	88,208	80,189	15	23	4 to 6	3.6
176,868	160,789	88,434	80,394	17	26	4 to 6	3.5
183,556	166,869	91,778	83,434	19	28	4 to 6	3.4
183,942	167,220	91,971	83,610	17	25	4 to 6	3.4
190,354	173,049	95,177	86,525	19	27	4 to 6	3.3
191,607	174,188	95,803	87,094	17	24	4 to 6	3.3
197,675	179,705	98,838	89,852	19	26	4 to 6	3.2
199,937	181,761	99,969	90,881	17	23	4 to 6	3.1
205,583	186,893	102,791	93,447	19	25	4 to 6	3.1
213,555	194,141	106,778	97,071	15	19	4 to 6	2.9
214,148	194,680	107,074	97,340	19	24	4 to 6	2.9
222,199	201,999	111,100	101,000	23	28	4 to 6	2.8
223,459	203,145	111,730	101,572	19	23	4 to 6	2.8
230,429	209,481	115,214	104,740	23	27	4 to 6	2.7
231,860	210,782	115,930	105,391	24	28	4 to 6	2.7
238,679	216,981	119,340	108,491	15	17	4 to 6	2.6
240,447	218,589	120,224	109,294	24	27	4 to 6	2.6
242,029	220,027	121,015	110,013	17	19	4 to 6	2.6
248,863	226,239	124,432	113,120	23	25	4 to 6	2.5
	228,347	125,591	114,173	26	28	4 to 6	2.5
	235,666	129,616	117,833	23	24	4 to 6	2.4
	236,076	129,842	118,038	24	25	4 to 6	2.4
	237,130	130,421	118,565	27	28	4 to 6	2.4
	245,912	135,252	122,956	23	23	4 to 6	2.3
		140,261	127,510	28	27	4 to 6	2.2
		140,454	127,685	27	26	4 to 6	2.2
		141,132	128,302	24	23	4 to 6	2.2
		145,656	132,414	28	26	4 to 6	2.2
		146,072	132,793	27	25	4 to 6	2.1
		147,013	133,648	25	23	4 to 6	2.1
		151,164	137,421	19	17	4 to 6	2.1
		152,158	138,326	27	24	4 to 6	2.1
		152,893	138,994	26	23	4 to 6	2.1
		157,794	143,449	28	24	4 to 6	2.0
		158,774	144,340	27	23	4 to 6	2.0
		163,726	148,842	23	19	4 to 6	1.9
		164,654	149,686	28	23	4 to 6	1.9
		170,844	155,313	24	19	4 to 6	1.8
		177,963	161,784	25	19	4 to 6	1.8
		182,988	166,352	23	17	4 to 6	1.7
		185,081	168,256	26	19	4 to 6	1.7
		190,944	173,585	24	17	4 to 6	1.6
		192,200	174,727	27	19	4 to 6	1.6
		198,899	180,818	25	17	4 to 6	1.6
		199,318	181,198	28	19	4 to 6	1.6
		206,855	188,050	26	17	4 to 6	1.5
		207,386	188,533	23	15	4 to 6	1.5
		214,811	195,283	27	17	4 to 6	1.5

NOTE: Planting rates over 250,000 seeds/acre are not recommended with subject seed discs and/or drive ratio.

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

**PLANTING RATES FOR SOYBEAN 60 CELL DISC
38 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS**

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
144,912	131,739	15	28	4 to 6	2.2
150,280	136,618	15	27	4 to 6	2.1
156,060	141,872	15	26	4 to 6	2.0
162,302	147,547	15	25	4 to 6	1.9
164,234	149,304	17	28	4 to 6	1.9
169,065	153,695	15	24	4 to 6	1.9
170,317	154,834	17	27	4 to 6	1.8
176,415	160,377	15	23	4 to 6	1.8
176,868	160,789	17	26	4 to 6	1.8
183,556	166,869	19	28	4 to 6	1.7
183,942	167,220	17	25	4 to 6	1.7
190,354	173,049	19	27	4 to 6	1.6
191,607	174,188	17	24	4 to 6	1.6
197,675	179,705	19	26	4 to 6	1.6
199,937	181,761	17	23	4 to 6	1.6
205,583	186,893	19	25	4 to 6	1.5
213,555	194,141	15	19	4 to 6	1.5
214,148	194,680	19	24	4 to 6	1.5
222,199	201,999	23	28	4 to 6	1.4
223,459	203,145	19	23	4 to 6	1.4
230,429	209,481	23	27	4 to 6	1.4
231,860	210,782	24	28	4 to 6	1.4
238,679	216,981	15	17	4 to 6	1.3
240,447	218,589	24	27	4 to 6	1.3
242,029	220,027	17	19	4 to 6	1.3
248,863	226,239	23	25	4 to 6	1.3
	228,347	26	28	4 to 6	1.2
	235,666	23	24	4 to 6	1.2
	236,076	24	25	4 to 6	1.2
	237,130	27	28	4 to 6	1.2
	245,912	23	23	4 to 6	1.2
		28	27	4 to 6	1.1
		27	26	4 to 6	1.1
		24	23	4 to 6	1.1
		28	26	4 to 6	1.1
		27	25	4 to 6	1.1
		25	23	4 to 6	1.1
		19	17	4 to 6	1.0
		27	24	4 to 6	1.0
		26	23	4 to 6	1.0
		28	24	4 to 6	1.0
NOTE: Planting rates over 250,000 seeds/acre are not recommended with subject seed disc and/or drive ratio.		28	24	4 to 6	1.0
		27	23	4 to 6	1.0
		23	19	4 to 6	1.0
		28	23	4 to 6	1.0
		24	19	4 to 6	0.9
		25	19	4 to 6	0.9
		23	17	4 to 6	0.9
		26	19	4 to 6	0.8
		24	17	4 to 6	0.8
		27	19	4 to 6	0.8
		25	17	4 to 6	0.8
		28	19	4 to 6	0.8
		26	17	4 to 6	0.8
		23	15	4 to 6	0.8
		27	17	4 to 6	0.7

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

**PLANTING RATES FOR HIGH-RATE SOYBEAN 120 CELL DISC
15 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS**

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
114,405	104,004	15	28	4 to 6	2.7
118,642	107,856	15	27	4 to 6	2.6
123,205	112,004	15	26	4 to 6	2.5
128,133	116,485	15	25	4 to 6	2.4
129,659	117,871	17	28	4 to 6	2.4
133,472	121,338	15	24	4 to 6	2.3
134,461	122,237	17	27	4 to 6	2.3
139,275	126,614	15	23	4 to 6	2.3
139,632	126,938	17	26	4 to 6	2.2
144,912	131,739	19	28	4 to 6	2.2
145,218	132,016	17	25	4 to 6	2.2
150,280	136,618	19	27	4 to 6	2.1
151,268	137,517	17	24	4 to 6	2.1
156,060	141,872	19	26	4 to 6	2.0
157,845	143,496	17	23	4 to 6	2.0
162,302	147,547	19	25	4 to 6	1.9
168,596	153,269	15	19	4 to 6	1.9
169,065	153,695	19	24	4 to 6	1.9
175,420	159,473	23	28	4 to 6	1.8
176,415	160,377	19	23	4 to 6	1.8
181,917	165,379	23	27	4 to 6	1.7
183,047	166,407	24	28	4 to 6	1.7
188,431	171,301	15	17	4 to 6	1.7
189,827	172,570	24	27	4 to 6	1.7
191,076	173,705	17	19	4 to 6	1.6
196,471	178,610	23	25	4 to 6	1.6
198,301	180,274	26	28	4 to 6	1.6
204,657	186,052	23	24	4 to 6	1.5
205,013	186,375	24	25	4 to 6	1.5
205,928	187,208	27	28	4 to 6	1.5
213,555	194,141	23	23	4 to 6	1.5
221,465	201,332	28	27	4 to 6	1.4
221,769	201,608	27	26	4 to 6	1.4
222,840	202,582	24	23	4 to 6	1.4
229,983	209,075	28	26	4 to 6	1.4
230,640	209,672	27	25	4 to 6	1.4
232,125	211,023	25	23	4 to 6	1.4
238,679	216,981	19	17	4 to 6	1.3
240,250	218,409	27	24	4 to 6	1.3
241,410	219,464	26	23	4 to 6	1.3
249,148	226,498	28	24	4 to 6	1.3
	227,905	27	23	4 to 6	1.3
	235,013	23	19	4 to 6	1.2
	236,346	28	23	4 to 6	1.2
	245,231	24	19	4 to 6	1.2
		25	19	4 to 6	1.1
		23	17	4 to 6	1.1
		26	19	4 to 6	1.1
		24	17	4 to 6	1.0
		27	19	4 to 6	1.0
		25	17	4 to 6	1.0
		28	19	4 to 6	1.0
		26	17	4 to 6	1.0
		23	15	4 to 6	1.0
		27	17	4 to 6	0.9

NOTE: Planting rates over 250,000 seeds/acre are not recommended with subject seed disc and/or drive ratio.

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

**PLANTING RATES FOR HIGH-RATE SOYBEAN 120 CELL DISC
19 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS**

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
144,912	131,739	15	28	4 to 6	2.2
150,280	136,618	15	27	4 to 6	2.1
156,060	141,872	15	26	4 to 6	2.0
162,302	147,547	15	25	4 to 6	1.9
164,234	149,304	17	28	4 to 6	1.9
169,065	153,695	15	24	4 to 6	1.9
170,317	154,834	17	27	4 to 6	1.8
176,415	160,377	15	23	4 to 6	1.8
176,868	160,789	17	26	4 to 6	1.8
183,556	166,869	19	28	4 to 6	1.7
183,942	167,220	17	25	4 to 6	1.7
190,354	173,049	19	27	4 to 6	1.6
191,607	174,188	17	24	4 to 6	1.6
197,675	179,705	19	26	4 to 6	1.6
199,937	181,761	17	23	4 to 6	1.6
205,583	186,893	19	25	4 to 6	1.5
213,555	194,141	15	19	4 to 6	1.5
214,148	194,680	19	24	4 to 6	1.5
222,199	201,999	23	28	4 to 6	1.4
223,459	203,145	19	23	4 to 6	1.4
230,429	209,481	23	27	4 to 6	1.4
231,860	210,782	24	28	4 to 6	1.4
238,679	216,981	15	17	4 to 6	1.3
240,447	218,589	24	27	4 to 6	1.3
242,029	220,027	17	19	4 to 6	1.3
248,863	226,239	23	25	4 to 6	1.3
	228,347	26	28	4 to 6	1.2
	235,666	23	24	4 to 6	1.2
	236,076	24	25	4 to 6	1.2
	237,130	27	28	4 to 6	1.2
	245,912	23	23	4 to 6	1.2
		28	27	4 to 6	1.1
		27	26	4 to 6	1.1
		24	23	4 to 6	1.1
		28	26	4 to 6	1.1
		27	25	4 to 6	1.1
		25	23	4 to 6	1.1
		19	17	4 to 6	1.0
		27	24	4 to 6	1.0
		26	23	4 to 6	1.0
		28	24	4 to 6	1.0
		27	23	4 to 6	1.0
		23	19	4 to 6	1.0
		28	23	4 to 6	1.0
		24	19	4 to 6	0.9
		25	19	4 to 6	0.9
		23	17	4 to 6	0.9
		26	19	4 to 6	0.8
		24	17	4 to 6	0.8
		27	19	4 to 6	0.8
		25	17	4 to 6	0.8
		28	19	4 to 6	0.8
		26	17	4 to 6	0.8
		23	15	4 to 6	0.8
		27	17	4 to 6	0.7

NOTE: Planting rates over 250,000 seeds/acre are not recommended with subject seed disc and/or drive ratio.

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

PLANTING RATES FOR ACID-DELINTED HILL-DROP COTTON, 3 SEEDS PER CELL, 20 CELL DISC

15 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)

APPROXIMATE HILLS/ACRE FOR VARIOUS ROW WIDTHS

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Hill Spacing In Inches
		Drive	Driven		
19,067	17,334	15	28	4 to 6	16.4
19,774	17,976	15	27	4 to 6	15.9
20,534	18,667	15	26	4 to 6	15.3
21,356	19,414	15	25	4 to 6	14.7
21,610	19,645	17	28	4 to 6	14.5
22,245	20,223	15	24	4 to 6	14.1
22,410	20,373	17	27	4 to 6	14.0
23,213	21,102	15	23	4 to 6	13.5
23,272	21,156	17	26	4 to 6	13.5
24,152	21,956	19	28	4 to 6	13.0
24,203	22,003	17	25	4 to 6	13.0
25,047	22,770	19	27	4 to 6	12.5
25,211	22,919	17	24	4 to 6	12.4
26,010	23,645	19	26	4 to 6	12.1
26,308	23,916	17	23	4 to 6	11.9
27,050	24,591	19	25	4 to 6	11.6
28,099	25,545	15	19	4 to 6	11.2
28,177	25,616	19	24	4 to 6	11.1
29,237	26,579	23	28	4 to 6	10.7
29,403	26,730	19	23	4 to 6	10.7
30,320	27,563	23	27	4 to 6	10.3
30,508	27,734	24	28	4 to 6	10.3
31,405	28,550	15	17	4 to 6	10.0
31,486	28,623	23	26	4 to 6	10.0
31,638	28,762	24	27	4 to 6	9.9
31,779	28,890	25	28	4 to 6	9.9
31,846	28,951	17	19	4 to 6	9.8
32,745	29,768	23	25	4 to 6	9.6
32,855	29,868	24	26	4 to 6	9.5
32,956	29,960	25	27	4 to 6	9.5
33,050	30,046	26	28	4 to 6	9.5
34,110	31,009	23	24	4 to 6	9.2
34,169	31,063	24	25	4 to 6	9.2
34,224	31,112	25	26	4 to 6	9.2
34,274	31,158	26	27	4 to 6	9.2
34,321	31,201	27	28	4 to 6	9.1
35,593	32,357	23	23	4 to 6	8.8
36,911	33,555	28	27	4 to 6	8.5
36,961	33,601	27	26	4 to 6	8.5
37,076	33,705	25	24	4 to 6	8.5
37,140	33,764	24	23	4 to 6	8.4
38,330	34,846	28	26	4 to 6	8.2
38,440	34,945	27	25	4 to 6	8.2
38,688	35,170	25	23	4 to 6	8.1
39,780	36,164	19	17	4 to 6	7.9
39,864	36,240	28	25	4 to 6	7.9
40,042	36,401	27	24	4 to 6	7.8
40,235	36,577	26	23	4 to 6	7.8
41,525	37,750	28	24	4 to 6	7.6
41,783	37,984	27	23	4 to 6	7.5
43,086	39,169	23	19	4 to 6	7.3
43,330	39,391	28	23	4 to 6	7.2
44,959	40,872	24	19	4 to 6	7.0
46,832	42,575	25	19	4 to 6	6.7
48,155	43,777	23	17	5 to 6	6.5

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

PLANTING RATES FOR ACID-DELINTED HILL-DROP COTTON, 3 SEEDS PER CELL, 20 CELL DISC
19 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
 APPROXIMATE HILLS/ACRE FOR VARIOUS ROW WIDTHS

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Hill Spacing In Inches
		Drive	Driven		
24,152	21,956	15	28	4 to 6	13.0
25,047	22,770	15	27	4 to 6	12.5
26,010	23,645	15	26	4 to 6	12.1
27,050	24,591	15	25	4 to 6	11.6
27,372	24,884	17	28	4 to 6	11.5
28,177	25,616	15	24	4 to 6	11.1
28,386	25,806	17	27	4 to 6	11.0
29,403	26,730	15	23	4 to 6	10.7
29,478	26,798	17	26	4 to 6	10.6
30,593	27,811	19	28	4 to 6	10.3
30,657	27,870	17	25	4 to 6	10.2
31,726	28,842	19	27	4 to 6	9.9
31,934	29,031	17	24	4 to 6	9.8
32,946	29,951	19	26	4 to 6	9.5
33,323	30,294	17	23	4 to 6	9.4
34,264	31,149	19	25	4 to 6	9.2
35,593	32,357	15	19	4 to 6	8.8
35,691	32,447	19	24	4 to 6	8.8
37,033	33,667	23	28	4 to 6	8.5
37,243	33,857	19	23	4 to 6	8.4
38,405	34,913	23	27	4 to 6	8.2
38,643	35,130	24	28	4 to 6	8.1
39,780	36,164	15	17	4 to 6	7.9
39,882	36,256	23	26	4 to 6	7.9
40,075	36,431	24	27	4 to 6	7.8
40,253	36,594	25	28	4 to 6	7.8
40,338	36,671	17	19	4 to 6	7.8
41,477	37,707	23	25	4 to 6	7.6
41,616	37,833	24	26	4 to 6	7.5
41,744	37,949	25	27	4 to 6	7.5
41,864	38,058	26	28	4 to 6	7.5
43,205	39,278	23	24	4 to 6	7.3
43,281	39,346	24	25	4 to 6	7.2
43,350	39,409	25	26	4 to 6	7.2
43,414	39,467	26	27	4 to 6	7.2
43,474	39,522	27	28	4 to 6	7.2
45,084	40,985	23	23	4 to 6	7.0
46,754	42,503	28	27	4 to 6	6.7
46,818	42,562	27	26	4 to 6	6.7
46,962	42,693	25	24	4 to 6	6.7
47,044	42,767	24	23	4 to 6	6.7
48,552	44,138	28	26	4 to 6	6.5
48,691	44,264	27	25	4 to 6	6.4
49,004	44,549	25	23	4 to 6	6.4
50,388	45,807	19	17	4 to 6	6.2
50,494	45,904	28	25	4 to 6	6.2
50,719	46,109	27	24	4 to 6	6.2
50,964	46,331	26	23	4 to 6	6.2
52,598	47,816	28	24	4 to 6	6.0
52,925	48,113	27	23	4 to 6	5.9
54,575	49,614	23	19	4 to 6	5.7
54,885	49,895	28	23	4 to 6	5.7
56,948	51,771	24	19	4 to 6	5.5
59,321	53,928	25	19	4 to 6	5.3
60,996	55,451	23	17	5 to 6	5.1

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

PLANTING RATES FOR ACID-DELINTED COTTON/SMALL DRY EDIBLE BEAN 54 CELL DISC

15 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)

APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS

10" Rows	11" Rows	20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
				Drive	Driven		
102,964	93,604	51,482	46,802	15	28	4 to 6	6.1
106,778	97,071	53,389	48,535	15	27	4 to 6	5.9
110,884	100,804	55,442	50,402	15	26	4 to 6	5.7
115,320	104,836	57,660	52,418	15	25	4 to 6	5.4
116,693	106,084	58,346	53,042	17	28	4 to 6	5.4
120,125	109,204	60,062	54,602	15	24	4 to 6	5.2
121,015	110,013	60,507	55,007	17	27	4 to 6	5.2
125,348	113,952	62,674	56,976	15	23	4 to 6	5.0
125,669	114,245	62,835	57,122	17	26	4 to 6	5.0
130,421	118,565	65,211	59,282	19	28	4 to 6	4.8
130,696	118,814	65,348	59,407	17	25	4 to 6	4.8
135,252	122,956	67,626	61,478	19	27	4 to 6	4.6
136,141	123,765	68,071	61,882	17	24	4 to 6	4.6
140,454	127,685	70,227	63,843	19	26	4 to 6	4.5
142,061	129,146	71,030	64,573	17	23	4 to 6	4.4
146,072	132,793	73,036	66,396	19	25	4 to 6	4.3
151,737	137,942	75,868	68,971	15	19	4 to 6	4.1
152,158	138,326	76,079	69,163	19	24	4 to 6	4.1
157,878	143,526	78,939	71,763	23	28	4 to 6	4.0
158,774	144,340	79,387	72,170	19	23	4 to 6	4.0
163,726	148,842	81,863	74,421	23	27	4 to 6	3.8
164,743	149,766	82,371	74,883	24	28	4 to 6	3.8
169,588	154,171	84,794	77,085	15	17	4 to 6	3.7
170,844	155,313	85,422	77,656	24	27	4 to 6	3.7
171,968	156,335	85,984	78,167	17	19	4 to 6	3.6
176,824	160,749	88,412	80,374	23	25	4 to 6	3.5
178,471	162,247	89,236	81,123	26	28	4 to 6	3.5
184,191	167,447	92,096	83,723	23	24	4 to 6	3.4
184,512	167,738	92,256	83,869	24	25	4 to 6	3.4
185,335	168,487	92,668	84,243	27	28	4 to 6	3.4
192,200	174,727	96,100	87,364	23	23	4 to 6	3.3
199,318	181,198	99,659	90,599	28	27	4 to 6	3.1
199,592	181,447	99,796	90,724	27	26	4 to 6	3.1
200,556	182,324	100,278	91,162	24	23	4 to 6	3.1
206,984	188,168	103,492	94,084	28	26	4 to 6	3.0
207,576	188,705	103,788	94,353	27	25	4 to 6	3.0
208,913	189,921	104,456	94,960	25	23	4 to 6	3.0
214,811	195,283	107,406	97,642	19	17	4 to 6	2.9
216,225	196,568	108,112	98,284	27	24	4 to 6	2.9
217,269	197,517	108,635	98,759	26	23	4 to 6	2.9
224,233	203,848	112,117	101,924	28	24	4 to 6	2.8
225,626	205,114	112,813	102,557	27	23	4 to 6	2.8
232,663	211,512	116,331	105,756	23	19	4 to 6	2.7
233,982	212,711	116,991	106,356	28	23	4 to 6	2.7
242,779	220,708	121,389	110,354	24	19	4 to 6	2.6
	229,904	126,447	114,952	25	19	4 to 6	2.5
	236,395	130,017	118,198	23	17	4 to 6	2.4
	239,100	131,505	119,550	26	19	4 to 6	2.4
	246,673	135,670	123,337	24	17	4 to 6	2.3
	248,296	136,563	124,148	27	19	4 to 6	2.3
		141,323	128,476	25	17	4 to 6	2.2
		141,621	128,746	28	19	4 to 6	2.2
		146,976	133,615	26	17	4 to 6	2.1
		147,353	133,957	23	15	4 to 6	2.1
		152,629	138,754	27	17	4 to 6	2.1

NOTE: Planting rates over 250,000 seeds/acre are not recommended with subject seed disc and/or drive ratio.

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

PLANTING RATES FOR ACID-DELINTED COTTON/SMALL DRY EDIBLE BEAN 54 CELL DISC

19 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)

APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS

10" Rows	11" Rows	20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
				Drive	Driven		
130,421	118,565	65,211	59,282	15	28	4 to 6	4.8
135,252	122,956	67,626	61,478	15	27	4 to 6	4.6
140,454	127,685	70,227	63,843	15	26	4 to 6	4.5
146,072	132,793	73,036	66,396	15	25	4 to 6	4.3
147,811	134,373	73,905	67,187	17	28	4 to 6	4.2
152,158	138,326	76,079	69,163	15	24	4 to 6	4.1
153,285	139,350	76,643	69,675	17	27	4 to 6	4.1
158,774	144,340	79,387	72,170	15	23	4 to 6	4.0
159,181	144,710	79,590	72,355	17	26	4 to 6	3.9
165,200	150,182	82,600	75,091	19	28	4 to 6	3.8
165,548	150,498	82,774	75,249	17	25	4 to 6	3.8
171,319	155,744	85,659	77,872	19	27	4 to 6	3.7
172,446	156,769	86,223	78,384	17	24	4 to 6	3.6
177,908	161,734	88,954	80,867	19	26	4 to 6	3.5
179,944	163,585	89,972	81,793	17	23	4 to 6	3.5
185,024	168,204	92,512	84,102	19	25	4 to 6	3.4
192,200	174,727	96,100	87,364	15	19	4 to 6	3.3
192,734	175,212	96,367	87,606	19	24	4 to 6	3.3
199,979	181,799	99,990	90,900	23	28	4 to 6	3.1
201,113	182,830	100,557	91,415	19	23	4 to 6	3.1
207,386	188,533	103,693	94,266	23	27	4 to 6	3.0
208,674	189,704	104,337	94,852	24	28	4 to 6	3.0
214,811	195,283	107,406	97,642	15	17	4 to 6	2.9
216,403	196,730	108,201	98,365	24	27	4 to 6	2.9
217,826	198,024	108,913	99,012	17	19	4 to 6	2.9
223,977	203,615	111,988	101,808	23	25	4 to 6	2.8
226,063	205,512	113,032	102,756	26	28	4 to 6	2.8
233,309	212,099	116,655	106,050	23	24	4 to 6	2.7
233,715	212,468	116,857	106,234	24	25	4 to 6	2.7
234,758	213,417	117,379	106,708	27	28	4 to 6	2.7
243,453	221,321	121,726	110,660	23	23	4 to 6	2.6
	229,518	126,235	114,759	28	27	4 to 6	2.5
	229,833	126,408	114,917	27	26	4 to 6	2.5
	230,944	127,019	115,472	24	23	4 to 6	2.5
	238,346	131,090	119,173	28	26	4 to 6	2.4
	239,027	131,465	119,513	27	25	4 to 6	2.4
	240,566	132,311	120,283	25	23	4 to 6	2.4
	247,359	136,047	123,679	19	17	4 to 6	2.3
	248,986	136,942	124,493	27	24	4 to 6	2.3
		137,604	125,094	26	23	4 to 6	2.3
		142,014	129,104	28	24	4 to 6	2.2
		142,896	129,906	27	23	4 to 6	2.2
		147,353	133,957	23	19	4 to 6	2.1
		148,189	134,717	28	23	4 to 6	2.1
		153,760	139,782	24	19	4 to 6	2.0
		160,166	145,606	25	19	4 to 6	2.0
		164,689	149,717	23	17	4 to 6	1.9
		166,573	151,430	26	19	4 to 6	1.9
		171,849	156,227	24	17	4 to 6	1.8
		172,980	157,254	27	19	4 to 6	1.8
		179,010	162,736	25	17	4 to 6	1.8
		179,386	163,079	28	19	4 to 6	1.7
		186,170	169,245	26	17	4 to 6	1.7
		186,647	169,679	23	15	4 to 6	1.7
		193,330	175,755	27	17	4 to 6	1.6

NOTE: Planting rates over 250,000 seeds/acre are not recommended with subject seed disc and/or drive ratio.

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

**PLANTING RATES FOR LARGE DRY EDIBLE BEAN 54 CELL DISC
15 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS**

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
51,482	46,802	15	28	4 to 6	6.1
53,389	48,535	15	27	4 to 6	5.9
55,442	50,402	15	26	4 to 6	5.7
57,660	52,418	15	25	4 to 6	5.4
58,346	53,042	17	28	4 to 6	5.4
60,062	54,602	15	24	4 to 6	5.2
60,507	55,007	17	27	4 to 6	5.2
62,674	56,976	15	23	4 to 6	5.0
62,835	57,122	17	26	4 to 6	5.0
65,211	59,282	19	28	4 to 6	4.8
65,348	59,407	17	25	4 to 6	4.8
67,626	61,478	19	27	4 to 6	4.6
68,071	61,882	17	24	4 to 6	4.6
70,227	63,843	19	26	4 to 6	4.5
71,030	64,573	17	23	4 to 6	4.4
73,036	66,396	19	25	4 to 6	4.3
75,868	68,971	15	19	4 to 6	4.1
76,079	69,163	19	24	4 to 6	4.1
78,939	71,763	23	28	4 to 6	4.0
79,387	72,170	19	23	4 to 6	4.0
81,863	74,421	23	27	4 to 6	3.8
82,371	74,883	24	28	4 to 6	3.8
84,794	77,085	15	17	4 to 6	3.7
85,422	77,656	24	27	4 to 6	3.7
85,984	78,167	17	19	4 to 6	3.6
88,412	80,374	23	25	4 to 6	3.5
89,236	81,123	26	28	4 to 6	3.5
92,096	83,723	23	24	4 to 6	3.4
92,256	83,869	24	25	4 to 6	3.4
92,668	84,243	27	28	4 to 6	3.4
96,100	87,364	23	23	4 to 6	3.3
99,659	90,599	28	27	4 to 6	3.1
99,796	90,724	27	26	4 to 6	3.1
100,278	91,162	24	23	4 to 6	3.1
103,492	94,084	28	26	4 to 6	3.0
103,788	94,353	27	25	4 to 6	3.0
104,456	94,960	25	23	4 to 6	3.0
107,406	97,642	19	17	4 to 6	2.9
108,112	98,284	27	24	4 to 6	2.9
108,635	98,759	26	23	4 to 6	2.9
112,117	101,924	28	24	4 to 6	2.8
112,813	102,557	27	23	4 to 6	2.8
116,331	105,756	23	19	4 to 6	2.7
116,991	106,356	28	23	4 to 6	2.7
121,389	110,354	24	19	4 to 6	2.6
126,447	114,952	25	19	4 to 6	2.5
130,017	118,198	23	17	4 to 6	2.4
131,505	119,550	26	19	4 to 6	2.4
135,670	123,337	24	17	4 to 6	2.3
136,563	124,148	27	19	4 to 6	2.3
141,323	128,476	25	17	4 to 6	2.2
141,621	128,746	28	19	4 to 6	2.2
146,976	133,615	26	17	4 to 6	2.1
147,353	133,957	23	15	4 to 6	2.1
152,629	138,754	27	17	4 to 6	2.1

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

**PLANTING RATES FOR LARGE DRY EDIBLE BEAN 54 CELL DISC
19 TOOTH CONTACT WHEEL DRIVE SPROCKET (See Page 7-1)
APPROXIMATE SEEDS/ACRE FOR VARIOUS ROW WIDTHS**

20" Rows	22" Rows	Transmission Sprockets		Recomm. Speed Range (MPH)	Average Seed Spacing In Inches
		Drive	Driven		
65,211	59,282	15	28	4 to 6	4.8
67,626	61,478	15	27	4 to 6	4.6
70,227	63,843	15	26	4 to 6	4.5
73,036	66,396	15	25	4 to 6	4.3
73,905	67,187	17	28	4 to 6	4.2
76,079	69,163	15	24	4 to 6	4.1
76,643	69,675	17	27	4 to 6	4.1
79,387	72,170	15	23	4 to 6	4.0
79,590	72,355	17	26	4 to 6	3.9
82,600	75,091	19	28	4 to 6	3.8
82,774	75,249	17	25	4 to 6	3.8
85,659	77,872	19	27	4 to 6	3.7
86,223	78,384	17	24	4 to 6	3.6
88,954	80,867	19	26	4 to 6	3.5
89,972	81,793	17	23	4 to 6	3.5
92,512	84,102	19	25	4 to 6	3.4
96,100	87,364	15	19	4 to 6	3.3
96,367	87,606	19	24	4 to 6	3.3
99,990	90,900	23	28	4 to 6	3.1
100,557	91,415	19	23	4 to 6	3.1
103,693	94,266	23	27	4 to 6	3.0
104,337	94,852	24	28	4 to 6	3.0
107,406	97,642	15	17	4 to 6	2.9
108,201	98,365	24	27	4 to 6	2.9
108,913	99,012	17	19	4 to 6	2.9
111,988	101,808	23	25	4 to 6	2.8
113,032	102,756	26	28	4 to 6	2.8
116,655	106,050	23	24	4 to 6	2.7
116,857	106,234	24	25	4 to 6	2.7
117,379	106,708	27	28	4 to 6	2.7
121,726	110,660	23	23	4 to 6	2.6
126,235	114,759	28	27	4 to 6	2.5
126,408	114,917	27	26	4 to 6	2.5
127,019	115,472	24	23	4 to 6	2.5
131,090	119,173	28	26	4 to 6	2.4
131,465	119,513	27	25	4 to 6	2.4
132,311	120,283	25	23	4 to 6	2.4
136,047	123,679	19	17	4 to 6	2.3
136,942	124,493	27	24	4 to 6	2.3
137,604	125,094	26	23	4 to 6	2.3
142,014	129,104	28	24	4 to 6	2.2
142,896	129,906	27	23	4 to 6	2.2
147,353	133,957	23	19	4 to 6	2.1
148,189	134,717	28	23	4 to 6	2.1
153,760	139,782	24	19	4 to 6	2.0
160,166	145,606	25	19	4 to 6	2.0
164,689	149,717	23	17	4 to 6	1.9
166,573	151,430	26	19	4 to 6	1.9
171,849	156,227	24	17	4 to 6	1.8
172,980	157,254	27	19	4 to 6	1.8
179,010	162,736	25	17	4 to 6	1.8
179,386	163,079	28	19	4 to 6	1.7
186,170	169,245	26	17	4 to 6	1.7
186,647	169,679	23	15	4 to 6	1.7
193,330	175,755	27	17	4 to 6	1.6

IMPORTANT: See "General Planting Rate Information" and "Checking Seed Population" pages for additional information. Always check seed population in the field to ensure planting rates are correct.

SEED METER OPERATION/MAINTENANCE

DRY INSECTICIDE APPLICATION RATES APPROXIMATE POUNDS/ACRE AT 5 MPH FOR VARIOUS ROW WIDTHS

Meter Setting	20" Rows	22" Rows
CLAY GRANULES		
10	7.4	6.7
11	8.1	7.3
12	9.2	8.3
13	10.4	9.4
14	11.6	10.5
15	12.8	11.6
16	14.4	13.1
17	16.1	14.6
18	17.1	15.5
19	19.7	17.8
20	21.3	19.3
21	23.3	21.1
22	24.6	22.3
23	25.8	23.4
24	28.2	25.6
25	31.4	28.4
26	34.5	31.3
27	36.2	32.8
28	38.1	34.5
29	41.7	37.8
30	44.4	40.3
SAND GRANULES		
5	4.4	3.9
6	7.4	6.7
7	8.0	7.2
8	9.5	8.6
9	11.7	10.6
10	13.4	12.1
11	15.3	13.9
12	16.8	15.2
13	18.9	17.1
14	21.2	19.2
15	23.3	21.1
16	26.6	23.8
17	29.1	26.4
18	32.7	29.7
19	36.5	33.1
20	38.6	35.0
21	41.4	37.5
22	44.4	40.3
23	48.0	43.5
24	51.6	46.8
25	55.4	50.2

NOTE: The above chart represents average values and should be used only as a starting point. The granular chemical flows through the given meter opening at a nearly uniform rate regardless of roller speed. Your actual rate will vary depending upon the insecticide you are using, your planting speed and your plant population. Planting speed/ground speed has the greatest effect on application rate.

Your actual rate must be checked in the field with the actual insecticide that you are using and at the speed and population at which you will be planting. See "Checking Granular Chemical Application Rate" page for additional information.



WARNING: Agricultural chemicals can be dangerous if not selected and handled with care. Always read and follow directions supplied by the chemical manufacturer.

SEED METER OPERATION/MAINTENANCE

DRY HERBICIDE APPLICATION RATES

APPROXIMATE POUNDS/ACRE AT 5 MPH FOR VARIOUS ROW WIDTHS

CLAY GRANULES

Meter Setting	20" Rows	22" Rows
10	7.1	6.4
11	7.8	7.1
12	8.7	7.9
13	9.8	8.8
14	11.0	9.9
15	12.3	11.2
16	13.5	12.2
17	14.9	13.5
18	16.1	14.6
19	17.4	15.8
20	18.9	17.1
21	20.4	18.5
22	21.9	19.9
23	23.6	21.4
24	25.5	23.1
25	27.2	24.6
26	29.1	26.4
27	31.4	28.4
28	33.9	30.7
29	36.5	33.1
30	40.1	36.3

NOTE: The chart above represents average values and should be used only as a starting point. The granular chemical flows through the given meter opening at a nearly uniform rate regardless of roller speed. Your actual rate will vary depending upon the herbicide you are using, your planting speed and your plant population. Planting speed/ground speed has the greatest effect on application rate.

Your actual rate must be checked in the field with the actual herbicide that you are using and at the speed and population at which you will be planting. See "Checking Granular Chemical Application Rate" page for additional information.



WARNING: Agricultural chemicals can be dangerous if not selected and handled with care. Always read and follow directions supplied by the chemical manufacturer.

SEED METER OPERATION/MAINTENANCE

**See “Liquid Fertilizer Rate Chart”
in Machine Operation section.**

SEED METER OPERATION/MAINTENANCE

SEED METER SINGULATOR BRUSH AND VACUUM LEVEL ADJUSTMENTS

SEED DISC SELECTION

CROP	CELLS	SEED SIZE RANGE	COLOR-CODE
Corn	39	35 To 70 Lbs./80,000 Kernel Count Unit	Light Blue
Low-Rate Corn	24	35 To 70 Lbs./80,000 Kernel Count Unit	Light Green
Popcorn	39	2210 To 4200 Seeds/Lb.	Light Blue
Low-Rate Popcorn	24	2210 To 4200 Seeds/Lb.	Light Green
Soybean	60	2200 To 4000 Seeds/Lb.	Black
High-Rate Soybean	120	2200 To 4000 Seeds/Lb.	Dark Blue
Milo/Grain Sorghum	60	10,000 To 20,000 Seeds/Lb.	Yellow
Hill-Drop Cotton, Acid-Delinted (3 Seeds Per Cell)	20	3800 To 5200 Seeds/Lb.	Brown
Cotton, Acid-Delinted	54	3800 To 5200 Seeds/Lb.	Dark Green
Dry Edible Bean (Small)	54	1200 To 2500 Seeds/Lb.	Dark Green
Dry Edible Bean (Large)	54	800 To 1200 Seeds/Lb.	Tan

EDGEVAC® INITIAL SETTINGS

CROP	SIZE	SEED DISC	SINGULATOR BRUSH SETTING	VACUUM SETTING (H ₂ O)	SEE NOTES
Corn	35-45 Lbs./80K	Corn/Popcorn	7	20	4, 5
	45-60 Lbs./80K	Corn/Popcorn	6	20	4, 5
	60-70 Lbs./80K	Corn/Popcorn	5	20	4, 5
Popcorn	2210-4200 Seeds/Lb.	Corn/Popcorn	9	18	1, 4, 5
Soybeans	2200-4000 Seeds/Lb.	Soybean	5	10	1
Milo/Grain Sorghum	10,000-20,000 Seeds/Lb.	Milo/Grain Sorghum	7	18	1, 2
Hill-Drop Cotton	3800-5200 Seeds/Lb.	Hill-Drop Cotton	8	23	3
Cotton	3800-5200 Seeds/Lb.	Cotton	8	20	3
Edible Beans	800-1200 Seeds/Lb.	Large Edible Bean	5	18	5
	1200-2500 Seeds/Lb.	Small Edible Bean	6	18	3, 5

NOTES:

- Requires use of seed meter baffle. Refer to page 7-3 for additional information.
- Requires use of cleanout brush. Refer to page 7-3 for additional information.
- Requires use of cleanout brush w/ball-type ejector. Refer to page 7-3 for additional information.
- For flat seeds, higher vacuum level may be required.
- Larger seeds may require a lower numbered singulator brush setting from the initial setting. Smaller seeds may require a higher numbered setting.

Refer to the planting rate charts in this manual for seed drive transmission sprocket combinations.

IMPORTANT: See “General Planting Rate Information” and “Checking Seed Population” pages for additional information. Always check seed population in the field to ensure planting rates are correct.

NOTE: Singulator brush settings are marked from 1 thru 11. The lower the singulator brush setting, the less aggressive. The higher singulator brush settings are the most aggressive. Refer to illustrations on page 7-24.

NOTE: Optimum meter performance will be attained with consistent seed size and shape. A mixture of seed sizes and shapes will affect meter performance.

NOTE: Use 1 tablespoon powdered graphite with each hopper fill of seed. Seed treatment, foreign material, dirt or seed chaff may cause gradual reduction of seed disc fill (population). See “Seed Meter”.

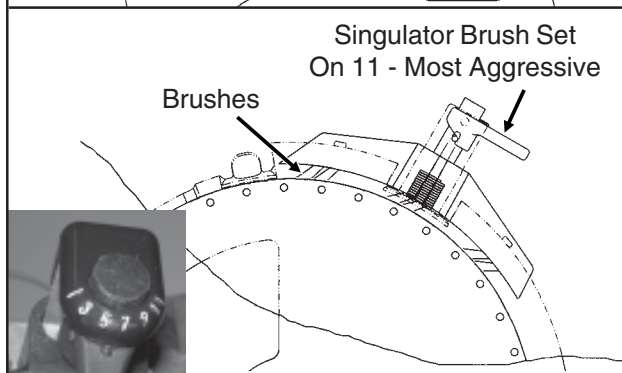
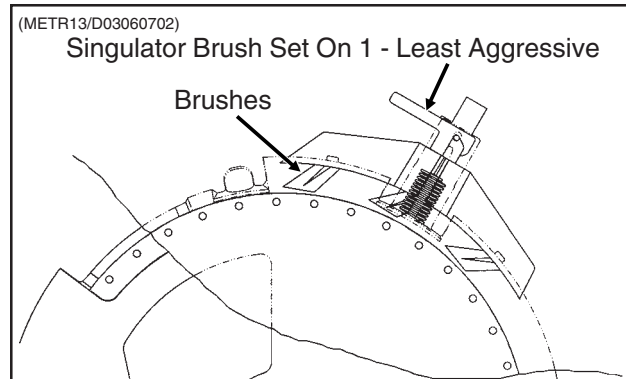
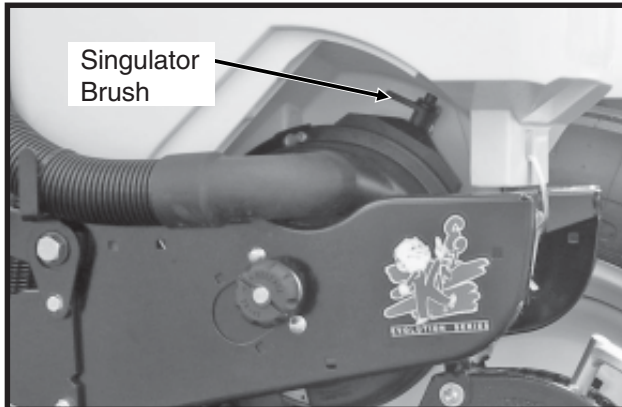
NOTE: Excessive seed treatment, humidity and light-weight seed can affect meter performance. Use 1/2 cup of talc with each hopper fill of seed and mix thoroughly so that all seeds are coated, adjust rates as needed. Use of talc will aid the seed flow into the meter, singulation and seed drop from the disc.

SEED METER OPERATION/MAINTENANCE

STEP 1 Select seed disc (and seed meter baffle, cleanout brush and/or cleanout brush w/ball-type ejector if applicable) to match crop and population.

STEP 2 Adjust the singulator brush to initial setting. Note that seed size, seed shape, seed treatments, travel speed and planting rate will all affect meter performance.

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STEP 3 With vacuum fan running, lower planter to planting position and drive forward a short distance to load seed into the seed disc cells.

Adjust vacuum level to the initial setting according to the tables on preceding page. Note that seed size, seed shape, seed treatments, travel speed and planting rate will all affect meter performance.

NOTE: Vacuum reading will be much lower when seed disc cells are empty. Prior to setting vacuum level, load all seed cells.

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See “Digital Vacuum Gauge Operation” in Machine Operation section

NOTE: Operate vacuum fan 3-5 minutes to bring oil up to normal operating temperature prior to making the final vacuum level adjustment.

STEP 4 Perform optional seed disc fill check.

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With vacuum hose connected and vacuum fan operating, remove vacuum cover and seed disc as an assembly. Inspect seed discs for proper seed fill.

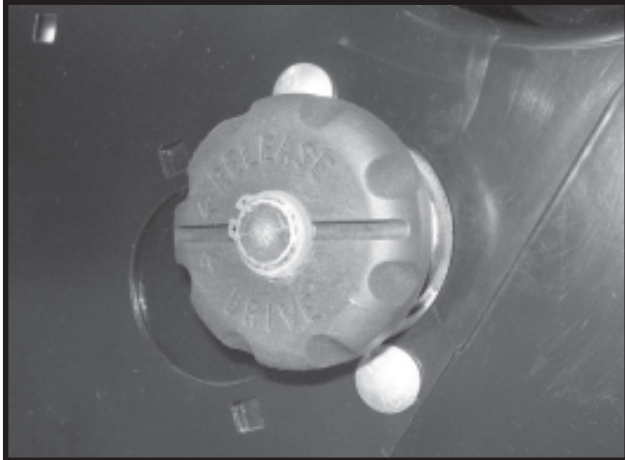
See “Seed Metering System Troubleshooting” at the end of this section.

SEED METER OPERATION/MAINTENANCE

SEED METER DRIVE RELEASE

The seed meter drive is equipped with a clutch release mechanism that allows the drive to be disengaged from the seed metering unit for removal of the seed meter and mount or hopper. Disconnecting the drive allows the operator to check granular chemical application rates without dropping seed. It also allows the drive to one or more of the rows to be disconnected when finishing fields.

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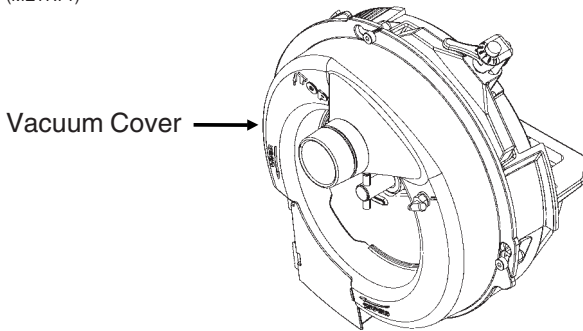


To disengage the drive, turn the knob $\frac{1}{4}$ turn counter-clockwise. To engage the drive, turn the knob $\frac{1}{4}$ turn clockwise.

SEED METER OPERATION/MAINTENANCE

SEED METER MAINTENANCE

(METR71)



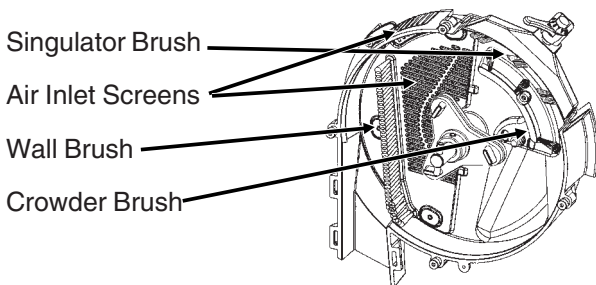
Clean, high quality seed should be used for maximum meter accuracy. Damaged or cracked seed, hulls or foreign material may become lodged in the seed disc orifices and greatly reduce meter accuracy.

It is suggested that the seed disc be inspected and cleaned daily, checking for any buildup of foreign material or any blocked orifices. Clean the seed disc by washing it with soap and water as needed. Dry thoroughly.

Inspect singulator brush for wear and replace if necessary following every 200 acres per row of operation.

The seed disc and/or vacuum cover should be replaced if abnormally high vacuum is required for consistent operation or if consistent operation can not be achieved. If adjustment of the singulator brush does not affect performance of the meter or if the brushes appear frayed, the singulator brush may need to be replaced. If the seed disc orifices are plugged frequently with seed remnants, the cleanout brush or cleanout brush with ball-type ejector (if applicable) may need to be replaced. High quality seed should be used to attain best performance.

(METR70)



Prior to each planting season, inspect seed discs, singulator brush, crowder brush, wall brush and air inlet screens and clean or replace as needed.

See "Preparation For Storage" for additional EdgeVac® Seed Metering System maintenance.

IMPORTANT: Replace hopper lids after hoppers are filled to prevent accumulation of dust or dirt in the seed meter which will cause premature wear.

NOTE: Remove seed discs from meters for annual storage and store the seed discs vertically on a dowel or pipe.

VACUUM MANIFOLD MAINTENANCE

In the course of normal operation, dust will accumulate in manifolds and hoses. Manifolds should be cleaned annually. More frequent cleaning may be necessitated by abnormally dusty planting conditions.

Remove vacuum hose from each seed meter. Operate the vacuum fan at full hydraulic flow from the tractor for two minutes to clear manifolds, hoses and fittings of dust and debris.

SEED METER OPERATION/MAINTENANCE

SEED METERING SYSTEM TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Low seed count.	Meter RPM too high.	Reduce planting rate or planting speed.
	Singulator brush setting too aggressive.	Adjust singulator brush.
	Vacuum level too low.	Increase fan speed.
	Seed sensor not picking up all seeds dropped.	Clean seed tube. Move meter to different row.
	Seeds sticking to seed disc.	Use graphite or talc to aid release.
	Seed treatment buildup in seed disc recesses.	Reduce amount of treatment used and or mix thoroughly. Add talc.
	Seed size too large for disc used.	Use appropriate disc for seed size.
	Wrong transmission setting.	Change transmission to desired rate.
	Wrong seed disc.	Use appropriate disc for seed type and size.
	Drive wheel slippage.	Compensate by adjusting transmission sprockets.
	Low tire pressure.	Adjust tire pressure to correct level.
	Failed/worn drive components.	Inspect and replace parts as required.
	Plugged orifices in seed disc.	Inspect and clean disc. Check cleanout brush. (If Applicable)
	Loss of vacuum at meter.	Check for foreign material between vacuum cover and disc. Inspect parts for wear/damage. Clean or replace as required.
	Seed bridging in hopper.	Add graphite to improve seed flow.
	Faulty vacuum gauge reading.	Repair/replace gauge.
	Dirt in vacuum manifold.	Check vacuum manifold for dirt and clean.
	Seed baffle (If Applicable) not allowing seed flow due to bridging of seed.	Thoroughly mix talc to coat all seeds. Remove seed baffle. See "Seed Meter" in Seed Meter Operation/Maintenance section.
	60 cell soybean disc not filling properly due to excessive RPM.	Replace with 120 cell soybean disc.
	Seed disc worn.	Replace.
Vacuum cover worn.	Replace.	
Not planting seed.	Seed hoppers empty.	Fill seed hopper.
	Seed tube plugged/damaged.	Clean or replace tube.
	Meter drive damaged.	Repair/replace drive components.
	Low/no vacuum.	Inspect vacuum system and repair as necessary.
	Singulator brush setting too aggressive.	Adjust singulator brush.
	Faulty vacuum gauge.	Repair/replace vacuum gauge.
	Seed bridging in hopper.	Add graphite to improve seed flow.
	Loss of vacuum at meter.	Check for foreign material between vacuum cover and disc. Inspect parts for wear/damage. Clean and/or replace as required.
	Wrong seed disc.	Use appropriate disc for seed type and size.
	Meter drive clutch not engaged.	Engage drive clutch.
	Fan not running.	Start fan.
	Dirt in vacuum manifold.	Check vacuum manifold for dirt and clean.

(Continued On Following Page)

SEED METER OPERATION/MAINTENANCE

SEED METERING SYSTEM TROUBLESHOOTING (Continued)

PROBLEM	POSSIBLE CAUSE	SOLUTION
Not planting seed. (Continued)	Seed baffle (If Applicable) not allowing seed flow due to bridging of seed.	Thoroughly mix talc to coat all seeds. Remove seed baffle. See "Seed Meter" in Seed Meter Operation/Maintenance section.
	60 cell soybean disc not filling properly due to excessive RPM.	Replace with 120 cell soybean disc.
High seed count.	Wrong transmission setting.	Change transmission to desired rate.
	High vacuum.	Adjust vacuum level to appropriate level.
	Wrong seed disc.	Replace seed disc.
	Singulator brush setting not aggressive enough.	Adjust singulator brush.
	Worn singulator brush.	Inspect brush and replace as required.
	Seed leaking past wall brush.	Inspect wall brush condition and installation. Replace as necessary.
	Faulty vacuum gauge.	Check gauge line for dirt/obstruction. Repair/replace vacuum gauge.
Poor seed spacing.	Obstruction in seed tube.	Clean seed tube.
	Dirty/damaged seed disc.	Inspect seed disc for damage, foreign material in orifices or seed treatment buildup in recesses. Clean or replace as required.
	Wrong vacuum setting.	Adjust vacuum to appropriate level.
	Excess foreign material in seed.	Inspect and clean meter and seed discs. Use clean, undamaged seed.
	Incorrect singulator brush setting.	Adjust singulator brush to appropriate setting.
	Inconsistent driveline.	Inspect drive components for rust, misalignment, worn or damaged parts. Replace/repair as required.
	Toolbar not level or wrong height.	Adjust hitch to level toolbar and row units.
	Planting too fast for conditions.	Reduce speed.
	Rough field conditions.	Reduce speed.
Irregular seed population.	Driving too fast.	Reduce speed.
	Drive wheels slipping.	Reduce speed. Decrease row unit down pressure spring settings.
Unable to achieve desired vacuum level.	Tractor hydraulic flow set too low.	Increase flow to fan motor.
	Incorrect hydraulic connections.	Check all hydraulic connections and hose routings.
	Damaged fan components.	Inspect motor and impeller for wear/damage and repair/replace as necessary.
	Vacuum hose pinched/kinked/ blocked.	Inspect air lines for any damage or obstruction. Clean air lines and manifold by removing end cap from manifold and running fan at high speed.
	Vacuum hose loose/disconnected.	Inspect and reattach all air hoses.
	Tractor not producing required hydraulic flow/pressure.	Have tractor serviced by qualified technician.
	Dirt in vacuum gauge line.	Check gauge line for dirt/obstruction and clean.