Great Plains
Manufacturing, Inc.
www.greatplainsmfg.com

Seed and Fertilizer Rate Charts for the YP625PD (Pull-Type), and YP625TD and YP925TD (3-Point) 6- and 9-Row Yield-Pro® Air Planters with Air-Pro® Seed Meters

The following pages are to assist in the proper setting of seeding and fertilizer rates for the 6- and 9-Row Yield-Pro® Air Planters. To assure the most accurate seeding rates, Great Plains recommends checking singulated seed rates, and calibrating for fertilizer application rate at the time of planting.

EN

Printed 06/19/2019 401-754B

Table of Contents

Introduction

This manual covers the following tasks for both pull-type and three-point 6- and 9-Row Yield-Pro® Air Planters equipped with Air-Pro® Seed Meters:

- setting and checking seed rate for singulated crops
- applying fertilizer from the dry fertilizer system.

This manual is your guide to planter adjustments for achieving specific seed population and fertilizer application rate targets.

Although some setup/adjustment material herein is repeated from the Operator's Manual, you need to be thoroughly familiar with planter operations and adjustments before applying this Seed Rate Manual and its table data.

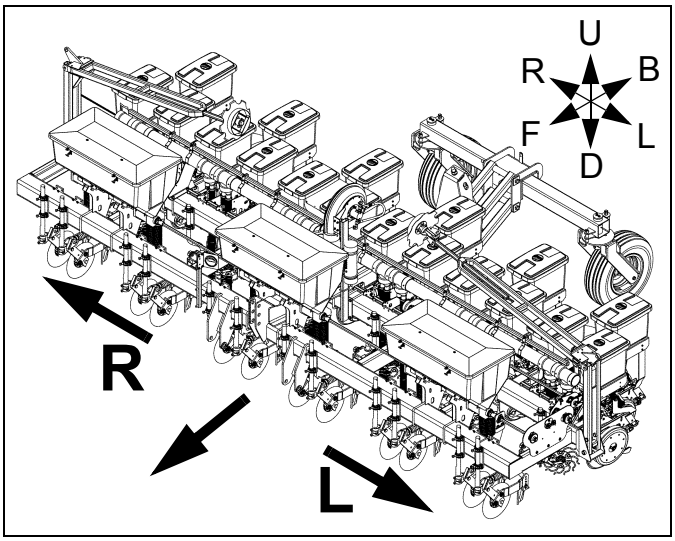


Figure 1 31793
YP625TD Planter

Setting Planting Rate

Begin at section:
"**Planting Rate Overview**" on page 2
and complete the setup using section:
"**Seed Rate Charts**" on page 14.

Setting Fertilizer Rate

This topic is covered beginning at:
"**Fertilizer Rate**" on page 33.

Models Covered

Pull-Type:

YP625PD18TP110	Yield-Pro® Model 625, Pull-Type, Dry Fertilizer, 18-Row (6 triplets), Triple-Row, 110 cm triplet row spacing

3-Point:

YP625TD12TR110	Yield-Pro® Model 625, 3-Point, Dry Fertilizer, 12-Twin-Row (6 pair), 110 cm pair-to-pair row spacing
YP625TD18TP110	Yield-Pro® Model 625, 3-Point, Dry Fertilizer, 18-Row (6 triplets), Triple-Row, 110 cm triplet row spacing
YP925TD0965	Yield-Pro® Model 925, 3-Point, Dry Fertilizer, 9-Row, 65 cm row spacing

Document Family

401-754M	YP625PD Operator Manual
401-755M	YP625TD/925TD Operator Manual
401-754B	Seed Rate Manual (this document)
401-754P	YP625PD Parts Manual
401-755P	YP625TD/925TD Parts Manual
11001-1372	DICKEY-john® PM400 Manual

Planting Rate Overview

The information in this section covers important setup and checking information that applies to the Air-Pro® Meter in singulated planting.

Singulated Rate Setting Summary

1. For your crop, determine your intended population, in seeds/hectare. If you know only the seed spacing or population in kg/ha, consult the conversion formula below.
2. For your crop, population and desired field speed, select the correct seed disk:
   "**Air-Pro® Meter Disk Selection**" on page 3
3. Set meter rate (page 12).
4. For staggered twin row, time row pairs using:
   "**Sprocket Indexing (Stagger)**" on page 25
5. Set initial seed inlet shutter per seed rate chart.
6. Set initial meter pressurization per page 7, 8.
7. Verify your planting rate per the instructions at:
   "**Checking Planting Rate**" on page 9. If the results are consistent with your setup, plant the crop.

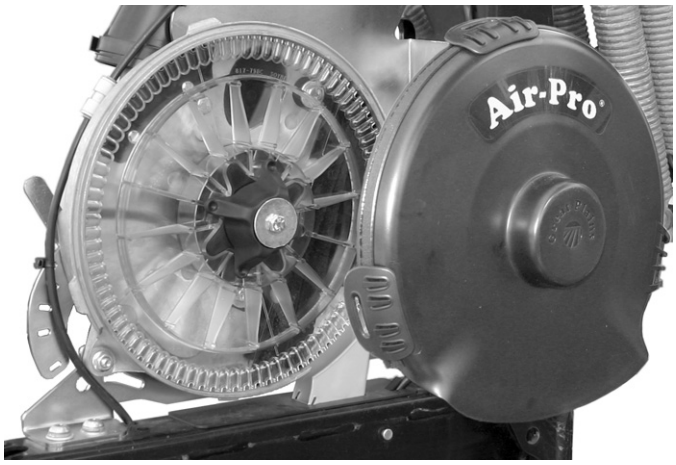


Figure 2 29626
Air-Pro® Seed Meter

Example: Corn

Target rate:	21.3 kg/ha
Seed density:	3500 seeds/kg
Population:	= Rate x Density = 21.3 x 3500, or: 74550 seeds/ha

Population Reference Information

Seeds per Unit

If only population weight (kilograms/hectare) is known, obtain the population count by multiplying the population weight by the "Kernels per kg" value from the seed container.

Seed Spacing

If only seed spacing is known, use the seed rate chart (pages 15 to 24) to determine population.

Air-Pro® Meter Disk Selection

CORN
24 Cell Disk
817 - 794C Corn Round Large
837 - 126C Corn Round Med
817 - 795C Corn Round Small
817 - 836C Corn Flat Large

CORN
40 Cell Disk
817 - 796C Corn Round Large
837 - 127C Corn Round Med
817 - 797C Corn Round Small
817 - 838C Corn Flat Large

(Sweet Corn plants in Round Corn disks)

Seed Size Recommendations	*Seeds/lb*	*Unit Weight*	*Seeds/kg*
Corn Round Large	**1300 (or fewer)**	61.5 lb (or heavier)	**2865 (or fewer)**
Corn Round Med	**1300 to 2000**	61.5 to 40 pounds	**2865 to 4410**
Corn Round Small	**2000 (or more)**	40 pounds (or lighter)	**4410 (or more)**
Corn Flat Large	**1650 (or fewer)**	48.5 pounds (or heavier)	**3640 (or fewer)**
Corn Flat Small	**1650 (or more)**	48.5 pounds (or lighter)	**3640 (or more)**
ATTENTION: This Corn is planted with the Corn Round Small Disks!!!!!!			

	Seeds/acre @ 5.5 mph	*Seeds/ha @ 8.9 kph*	*Recommended*
40 in (101.6 cm) Rows	*Below 19 400* *Above 19 400*	*Below 52 500* *Above 52 500*	24 Cell Disk 40 Cell Disk
38 in (96.5 cm) Rows	*Below 20 500* *Above 20 500*	*Below 50 600* *Above 50 600*	24 Cell Disk 40 Cell Disk
36 in (91.4 cm) Rows	*Below 21 600* *Above 21 600*	*Below 53 400* *Above 53 400*	24 Cell Disk 40 Cell Disk
30 in (76.2 cm) Rows **75 cm Rows**	*Below 25 900* *Above 25 900*	*Below 64 000* *Above 64 000*	24 Cell Disk 40 Cell Disk
70 cm Rows	*Below 28 200* *Above 28 200*	*Below 69 700* *Above 69 700*	24 Cell Disk 40 Cell Disk
22 in (55.9 cm) Rows	*Below 35 300* *Above 35 300*	*Below 87 300* *Above 87 300*	24 Cell Disk 40 Cell Disk
Twin Row 40 in (101.6 cm) **20 in (50.8cm) Rows**	*Below 38 900* *Above 38 900*	*Below 96 100* *Above 96 100*	24 Cell Disk 40 Cell Disk
Twin Row 38 in (96.5 cm)	*Below 40 900* *Above 40 900*	*Below 101 000* *Above 101 000*	24 Cell Disk 40 Cell Disk
Twin Row 36 in (91.4cm)	*Below 43 200* *Above 43 200*	*Below 106 700* *Above 106 700*	24 Cell Disk 40 Cell Disk
Twin Row 30 in (76.2 cm) **15 in (38.1 cm Rows)**	*Below 51 800* *Above 51 800*	*Below 129 000* *Above 129 000*	24 Cell Disk 40 Cell Disk
Twin Row 70 cm	*Below 56 400* *Above 56 400*	*Below 139 400* *Above 139 400*	24 Cell Disk 40 Cell Disk
Twin Row 20 in (50.8 cm) **10 in (25.4 cm) Rows**	*Below 77 700* *Above 77 700*	*Below 192 100* *Above 192 100*	24 Cell Disk 40 Cell Disk

Medium Edible Bean
60 Cell Disk
837 - 065C
Seed Size Recommendations

1000 seeds per pound or more	**2200 seeds per kg or more**
(a smaller bean)	***(a smaller bean)***
This disk should plant medium peanuts.	
ATTENTION: This disk is for Hopper Style Planters only. Do not use with an Air Delivery type planter.	

68251A

Air-Pro® Meter Disk Selection (continued)

Large Edible Bean

56 Cell Disk
817 - 967C

Seed Size Recommendations

1000 seeds per pound or fewer	**2200 seeds per kg or fewer**
(a larger bean)	***(a larger bean)***

This disk should plant medium peanuts.

ATTENTION: This disk is for Hopper Style Planters only. Do not use with an Air Delivery type planter.

CANOLA

150 Cell Disk		250 Cell Disk
837 - 148C	Seed Size Recommendations	817 - 991C

This disk should plant all seed sizes and row spacings for Canola & Mustard

Population @ 6 mph	Population @ 9.7 kph	Recommended
Below 125 000	*Below 200 000*	*150 Cell Disk*
Above 125 000	*Above 200 000*	*250 Cell Disk*

COTTON

60 Cell Disk
817 - 857C

Seed Size Recommendations

This disk should plant all seed sizes and row spacings for Cotton.

MILO / PELLETIZED SUGAR BEET

30 Cell Disk	65 Cell Disk	130 Cell Disk
837 - 057C	817 - 849C	817 - 800C

Seed Size Recommendations

These disks should plant all seed sizes of Milo, Pelletized Sugar Beets, and Tillage Radish

	Seeds/acre @ 6 mph	*Seeds/ha @ 9.7 kph*	*Recommended*
40 in (101.6 cm) Rows	*Below 48 300*	*Below 119 300*	30 Cell Disk
	Above 48 300	*Above 119 300*	65 Cell Disk
38 in (96.5 cm) Rows	*Below 50 800*	*Below 125 500*	30 Cell Disk
	Above 50 800	*Above 125 500*	65 Cell Disk
36 in (91.4 cm) Rows	*Below 53 600*	*Below 132 500*	30 Cell Disk
	Above 53 600	*Above 132 500*	65 Cell Disk
30 in (76.2 cm) Rows **75 cm Rows**	*Below 64 300*	*Below 159 000*	30 Cell Disk
	Above 64 300	*Above 159 000*	65 Cell Disk
70 cm Rows	*Below 70 100*	*Below 173 100*	30 Cell Disk
	Above 70 100	*Above 173 100*	65 Cell Disk
22 in (55.9 cm) Rows	*Below 87 700*	*Below 216 800*	30 Cell Disk
	Above 87 700	*Above 216 800*	65 Cell Disk
Twin Row 40 in (101.6 cm) **20 in (50.8 cm) Rows**	*Below 96 500*	*Below 238 500*	30 Cell Disk
	Above 96 500	*Above 238 500*	65 Cell Disk
Twin Row 30 in (76.2 cm) **15 in (38.1 cm) Rows**	*Below 24 000*	*Below 58 000*	30 Cell Disk
	Below 128 700	*Below 318 000*	65 Cell Disk
	Above 128 700	*Above 318 000*	130 Cell Disk
Twin Row 70 cm **35 cm Rows**	*Below 25 100*	*Below 62 000*	30 Cell Disk
	Below 140 100	*Below 346 200*	65 Cell Disk
	Above 140 100	*Above 346 200*	130 Cell Disk
Twin Row 20 in (50.8 cm) **10 in (25.4 cm) Rows**	*Below 34 000*	*Below 84 000*	30 Cell Disk
	Below 193 000	*Below 477 000*	65 Cell Disk
	Above 193 000	*Above 477 000*	130 Cell Disk

68251B

Air-Pro® Meter Disk Selection (continued)

SOYBEAN

84 Cell Disk — **817 - 798C**

(Small Edible Beans)

Seed Size Recommendations

168 Cell Disk — **403 - 551D**

These disks should plant all seed sizes of Soybeans.
Small edible beans (navy, black jack, black eye peas, etc) will plant with this disk also.

	Seeds/acre @ 6 mph	*Seeds/ha @ 9.7 kph*	*Recommended*
40 in (101.6 cm) Rows	*Below 76 900*	*Below 190 100*	84 Cell Disk
	Above 76 900	*Above 190 100*	168 Cell Disk
38 in (96.5 cm) Rows	*Below 81 000*	*Below 200 100*	84 Cell Disk
	Above 81 000	*Above 200 100*	168 Cell Disk
36 in (91.4 cm) Rows	*Below 85 500*	*Below 211 200*	84 Cell Disk
	Above 85 500	*Above 211 200*	168 Cell Disk
30 in (76.2 cm) Rows **75 cm Rows**	*Below 102 500*	*Below 253 400*	84 Cell Disk
	Above 102 500	*Above 253 400*	168 Cell Disk
70 cm Rows	*Below 111 600*	*Below 275 900*	84 Cell Disk
	Above 111 600	*Above 275 900*	168 Cell Disk
22 in (55.9 cm) Rows	*Below 139 800*	*Below 345 600*	84 Cell Disk
	Above 139 800	*Above 345 600*	168 Cell Disk
Twin Row 40 in (101.6 cm) **20 in (50.8 cm) Rows**	*Below 153 800*	*Below 380 100*	84 Cell Disk
	Above 153 800	*Above 380 100*	168 Cell Disk
Twin Row 38 in (96.5 cm)	*Below 161 900*	*Below 400 200*	84 Cell Disk
	Above 161 900	*Above 400 200*	168 Cell Disk
Twin Row 36 in (91.4 cm)	*Below 170 900*	*Below 422 400*	84 Cell Disk
	Above 170 900	*Above 422 400*	168 Cell Disk
Twin Row 30 in (76.2 cm) **15in (38.1 cm) Rows**	*Below 205 100*	*Below 506 900*	84 Cell Disk
	Above 205 100	*Above 506 900*	168 Cell Disk
Twin Row 70 cm **35 cm Rows**	*Below 223 300*	*Below 551 800*	84 Cell Disk
	Above 223 300	*Above 551 800*	168 Cell Disk
Twin Row 20 in (50.8 cm) **10 in (25.4 cm) Rows**	*Below 307 700*	*Below 760 300*	84 Cell Disk
	Above 307 700	*Above 760 300*	168 Cell Disk

SUNFLOWER OIL SMALL / MEDIUM

60 CELL DISK — **837-234C SMALL**

60 CELL DISK — **837-235C MEDIUM**

Sunflower Oil Small	**6 500 - 8 500 Seeds per Pound**	**14 300 - 18 700 Seeds per Kilogram**
ATTENTION: This disk is for Hopper Style Planters only. Do not use with an Air Delivery type planter.		

Sunflower Oil Medium	**4 500 - 6 500 Seeds per Pound**	**9 900 - 14 300 Seeds per Kilogram**
ATTENTION: This disk is for Hopper Style Planters only. Do not use with an Air Delivery type planter.		

SUNFLOWER OIL LARGE / POPCORN

24 Cell Disk

817 - 851C

Seed Size Recommendations

Sunflower Oil Large	**Seeds/lb**	**Seeds/kg**	**Popcorn**
2's - most 3's **And a few of the larger 4's**	**4 500 (or fewer)**	**9 900 (or fewer)**	**This disk should plant all seed sizes of Popcorn.**

Air-Pro® Meter Disk Selection (continued)

VIRGINIA PEANUTS
48 CELL DISK
403-959D

This disk should plant all seed sizes and row spacings for Virginia Peanuts.
ATTENTION: This disk is for Hopper Style Planters only. Do not use with an Air Delivery type planter.

GEORGIA PEANUTS
46 CELL DISK
837-137C

This disk should plant all seed sizes and row spacings for Georgia Peanuts.
ATTENTION: This disk is for Hopper Style Planters only. Do not use with an Air Delivery type planter.

Air Meter Blank Disk
817 - 841C

These disks are used in (Off Row Meters) when changing from 15 in to 30 in Rows.
Twin Row 30 in to 30 in Rows, (etc)
These disks are used in (Off Row Meters) when changing from 35 cm to 70 cm Rows, (etc)

Industrial Hemp

5 Cell Disk	30 Cell Disk
837-364C	837-386C

Seed Size Recommendations

This disk should plant all seed sizes and wide row spacings for Industrial Hemp.

Meter Pressurization

Refer to the Operator Manual for the procedure for fine tuning meter pressurization.

Start with pressures from below and on page 8, which are based on crop, and for corn, seed shape and density.

Note: These are suggested initial (starting) pressures. Adjust them up or down per the procedure in the Operator Manual.

Corn: Reading a Pressure Chart (below, next page)

1. Pick the chart based on seed shape (flat, round).
   Example: round corn
2. Pick a line based on seed size (large, small).
   Example: large round corn, the right line below
3. Find the seed density on the bottom scale.
   Example: 2800 seeds/kg
4. Read the suggested starting pressure on the left scale, where the line (example shown as dotted gray) intersects the density.
   Example: 3.4 inches of water

Initial seed inlet Shutter for corn is: 3

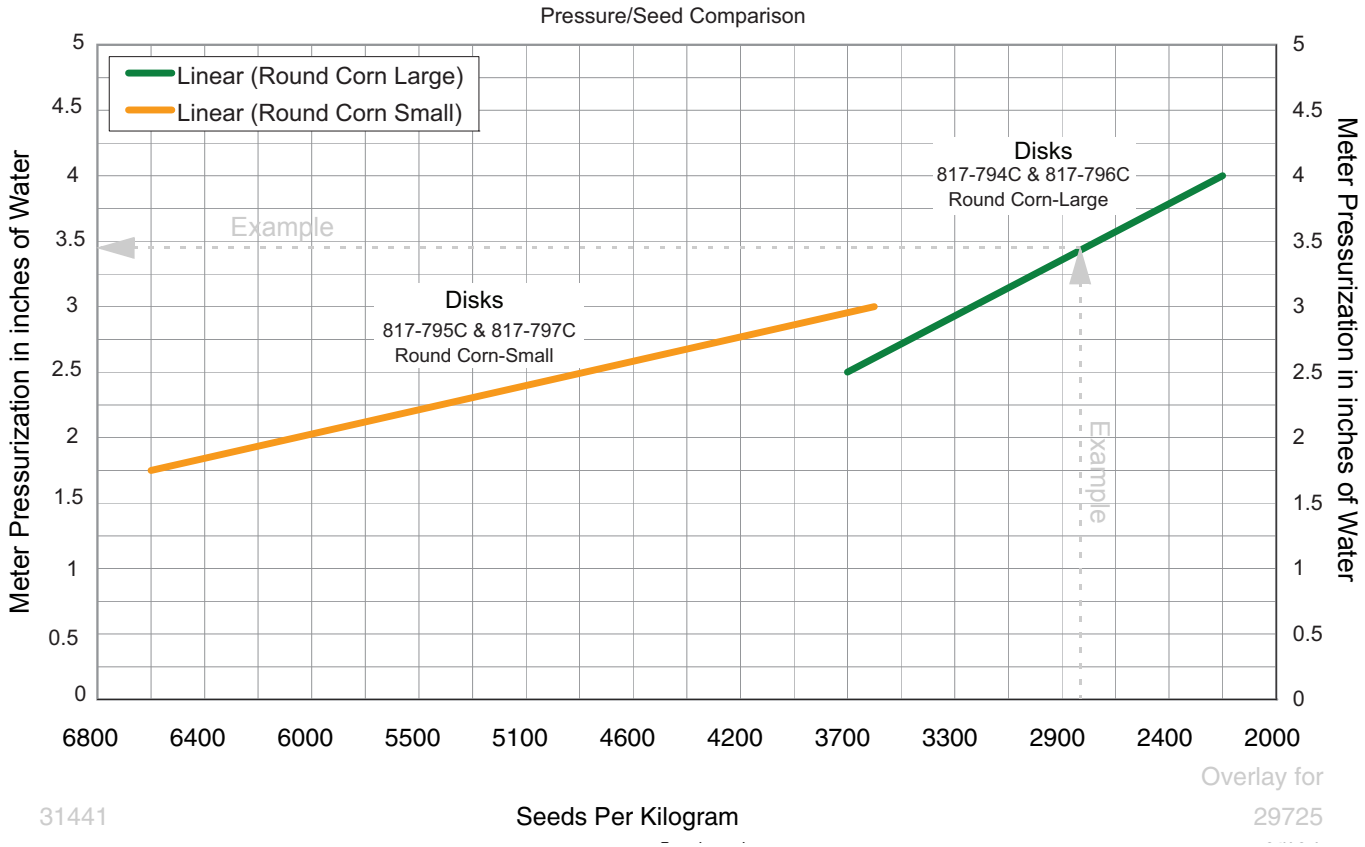
Initial Meter Pressurization: Milo

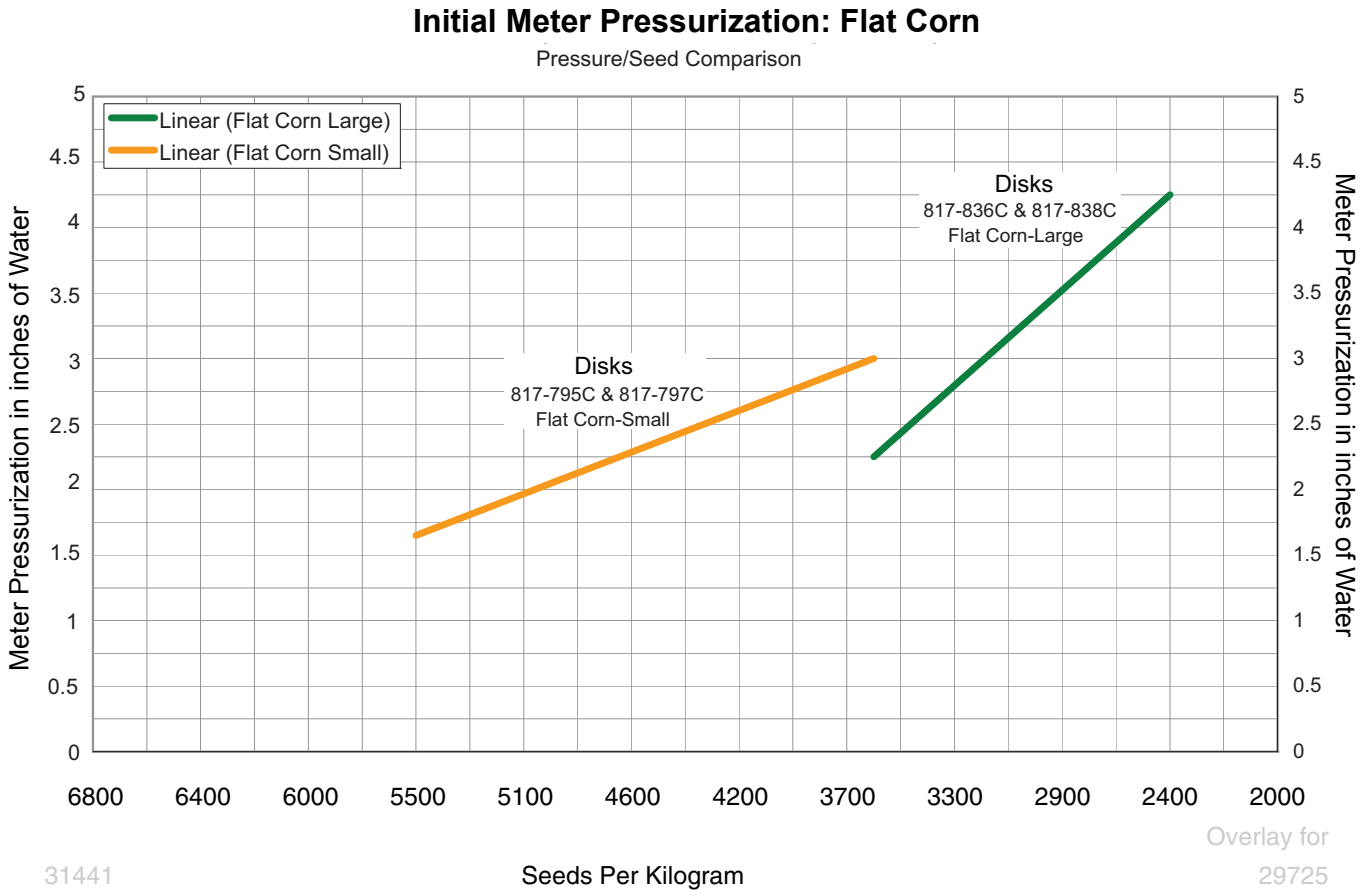
1.5 inches of water (all disk, any seed density)
Initial seed inlet Shutter: 1

Initial Meter Pressurization: Soybeans

2.0 inches of water (84 cell disk, any seed density)
3.0 inches of water (168 cell disk, any seed density)
Initial seed inlet Shutter: 2

Initial Meter Pressurization: Round Corn




Initial Meter Pressurization: Flat Corn
Pressure/Seed Comparison
Linear (Flat Corn Large)
Linear (Flat Corn Small)
Disks
817-836C & 817-838C
Flat Corn-Large
Disks
817-795C & 817-797C
Flat Corn-Small
Meter Pressurization in inches of Water
Meter Pressurization in inches of Water
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
6800
6400
6000
5500
5100
4600
4200
3700
3300
2900
2400
2000
Seeds Per Kilogram
31441
Overlay for
29725

Checking Planting Rate

Singulated seed charts are based on cleaned and sized seed singulated with the recommended disk. Extreme seed size variations, foreign material and tire pressure can affect the planting rate.

Any material difference between chart and field rates implies a mechanical malfunction, a planter setup error, unsuitable planting conditions (such as excessive tire slippage) or extremely worn planter components. You can verify your setup and planter performance by measuring seed placement and spacing over a relatively short distance.

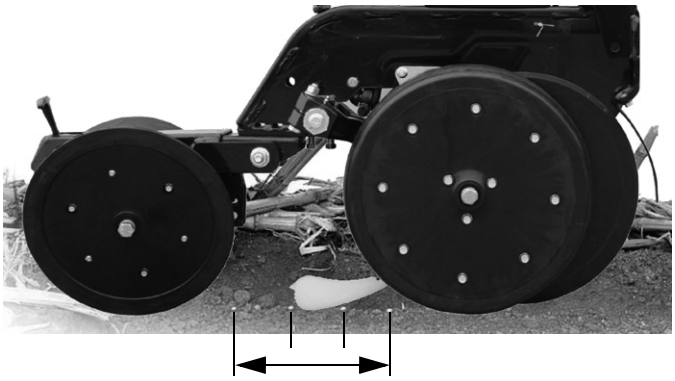


Figure 3
Furrow Check

29247

The columns to the right provide example data for a rate check.

Planter: YP625TD-12TR-110
Crop: Corn
Density: 3500 seeds/kg
Seed Disk: 817-797C, 40 cell
Target Population:
80 000 seeds/hectare

Range Sprockets:
DRIVING: 20T
DRIVEN: 30T
Transmission Sprockets:
DRIVING: 23T
DRIVEN: 19T

Maximum Planting Speed:
10.5 kph

Chart Seed Spacing:
22.6 cm

Checking Singulated Rates

1. Determine the sample distance to check. Find your row spacing in the table at right.
2. Note the number of rows to sample. Adjust the planting depth to a shallow setting on one or two outside rows (per table). Tie up the press wheel arms with wire or bungee to prevent furrow closure.
3. Configure the planter for the chart rate, using the chart settings for sprockets.
4. Plant at the desired planting speed for slightly more than the computed sample run length.
5. Measure off the sample distance, balanced in between where seeding started and stopped.
6. Count the number of seeds over the distance measured. Also note the consistency of the seed spacing.
7. Compute the rate for a full hectare.

   For a 1/1000th sample, multiply the counted seeds by 1000.
8. If the field and chart rates vary by more than a few percent, re-check planter setup, including meter disk or cell count, air system, tire size, tire pressures, sprocket setup, chain slack, etc. If seed spacing is irregular, this suggests a seed delivery problem, and not a rate setup problem.
9. While planting, pay attention to the seed monitor. In addition to confirming the single-row furrow check, it will also provide field rate data on all the other rows, and alert you to any irregularities or stoppages.

Rows to Sample Row Spacing*	Row Count	Length of Sample Run 1/1000th Hectare
65cm Single	2	7.69 m
110cm Single	1	9.09 m
110cm Twin	1 pair	9.09 m
110cm Triple	1 triplet	9.09 m

* Not all spacings may be offered on implements covered by this manual.

31805

Sample size:
1/1000th ha
Plant for approximately:
10 meters
Measure the central:
4.55 meters

Seeds counted:
79[a]
Computed for full hectare:
79 x 1000 = 79,000
This differs from chart by:
2%

a If the sample size is less than 100 seeds, you may want to double or triple the number of rows sampled, so as to increase the precision of the count.

Planting Rate

Setting the seeding rate requires the following steps:

1. monitor setup
2. seed disk selection,
3. drive speed Range sprockets,
4. Transmission sprockets,
5. inlet shutters
6. meter pressurization,
7. checking seeding rate.

All rate adjustments are performed at the left end of the planter. There are no adjustments at the ground drive assembly. Changes in seed rate do not affect fertilizer rate.

1. Rate: Monitor configuration:

The seed monitor must be set up with the

- correct row count,
- correct row spacing,
- speed calibration and;
- expected population limits, in order to have accurate rate reports and useful alarms.

See the DICKEY-john® Planter Monitor operator (PM) Manual.

If you only plant with the factory configuration of the planter, you never need to update row count and spacing. If any rows are unused, adjust the monitor setup.

Speed calibration must be done prior to first use, and re-calibration is recommended periodically, particularly if soil conditions change.

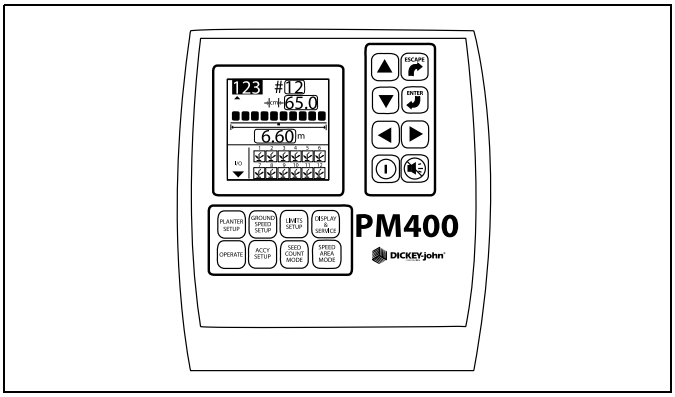


Figure 4 31809
Monitor Setup Screen

2. Rate: Disk Selection:

Select seed disks per page 3 and page 4. See Operator manual for installation. Disks are specific to crops. Some crops have multiple disks available, to cover both seed varieties, and different populations within disk rpm limits. Disks have a high and low rpm limit, which also corresponds to a high and low field speed limit. The charts account for these limits.

See “**Air-Pro® Meter Disk Installation**” in the Operator Manual.

If any rows are unused, install special blank disks. See “**Row Unit Shut-Off**” in Operator Manual.

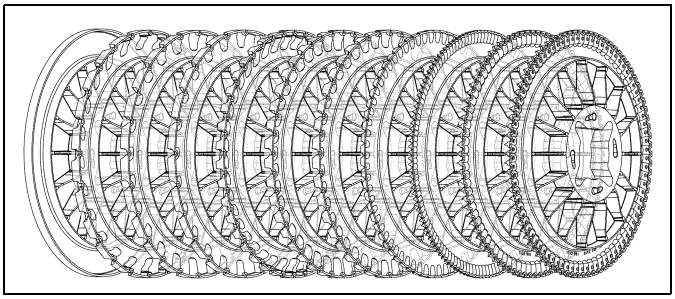


Figure 5 29594
Air-Pro® Seed Disks

3. Rate: Range Sprockets

Range sprockets provide coarse control of seed rate.

Refer to Figure 6 and Figure 7

All Seed Rate charts specify a DRIVING and DRIVEN sprocket combination for the Range. Crops with more than one range are noted as “LOW RANGE” or “HIGH RANGE” at the top of the chart.

To change Range:

a. Rotate the idler plate against the spring ③ to disengage the idler.
Remove the chain.

b. Remove pins from shaft ends at DRIVING and DRIVEN sprockets, as well as at storage shaft.

c. Exchange sprockets so that new DRIVING and DRIVEN sprocket tooth counts (stamped on sprocket face) match chart. Re-pin all shafts.

d. Remount chain. Re-engage idler spring.

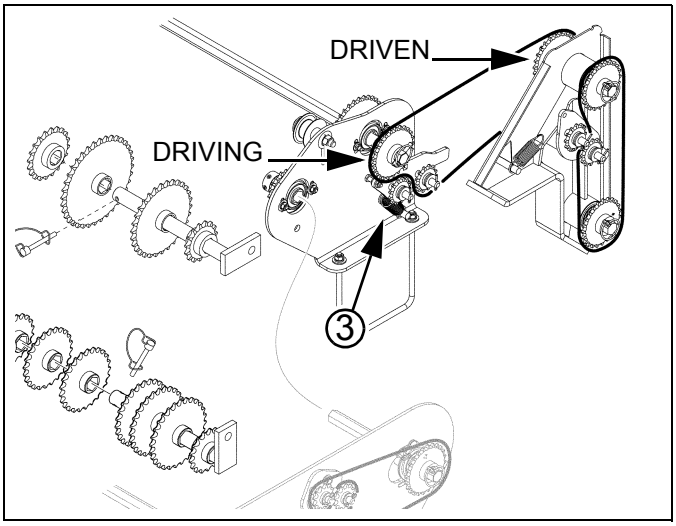


Figure 6 31870
Range Sprockets

4. Rate: Transmission Sprockets

Transmission sprockets provide fine control of seed rate. Each chart row provides a rate adjustment of 2 to 3%.

Refer to Figure 7

Each Seed Rate chart row has a unique pairing of DRIVING and DRIVEN Transmission sprocket.

To change Transmission:

a. Rotate the idler plate against the spring ④ to disengage the idler.
Remove the chain.

b. Remove pins from shaft ends at DRIVING and DRIVEN sprockets, as well as at storage shaft.

c. Exchange sprockets so that new DRIVING and DRIVEN sprocket tooth counts (stamped on sprocket face) match chart. Re-pin all shafts.

d. Remount chain. Re-engage idler spring.

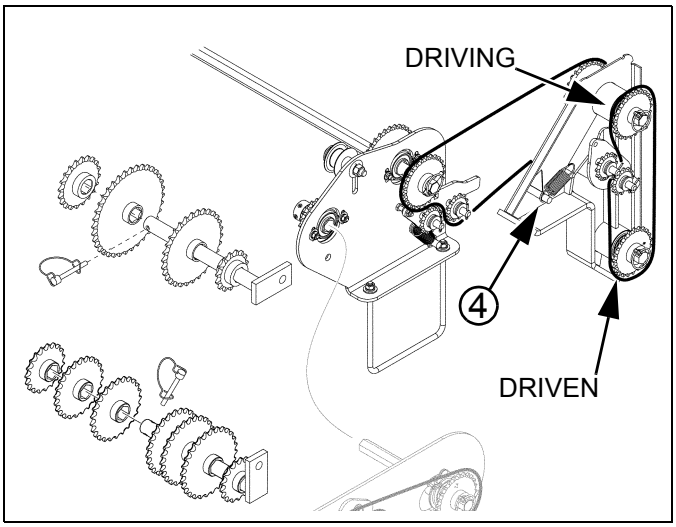


Figure 7 31870
Transmission Sprockets

5. Rate: Seed Inlet Shutter

A consistent seed rate requires: a consistent number of seeds (usually one) in each pocket of the seed disk; avoiding “skips” (fewer seeds per pocket); and, avoiding “doubles” (excess seed per pocket).

Refer to Figure 8

One of the factors that affects seed pickup at the disk is having an optimal seed pool (see Operator manual). The depth of the seed pool is controlled by the seed inlet shutter ⑤.

Each Seed Rate chart specifies a suggested initial shutter setting. See “**Seed Inlet Shutter Adjustment**” in Operator manual for setting details, and further adjustment.

At unused rows, set the shutter to zero/closed to prevent loss of meter pressurization air, and install a blank seed disk. See the “**Row Unit Shut Off**” topic in the Operator Manual.

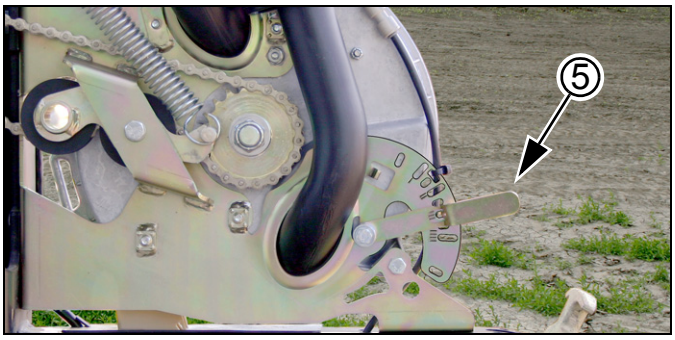


Figure 8 29607
Seed Inlet Shutter: Setting III

6. Rate: Meter Pressurization

Refer to Figure 9
(which depicts a typical reading for some densities of corn)

A major factor that affects seed pickup at the disk is optimal meter pressurization. Fan air holds the seed in the disk pockets until they pass the drop brush.

The Seed Rate manual has a section with suggested initial meter pressures, which may be a single value, or a graph based on seed density.

Meter pressure is set by a combination of tractor circuit lever and fan butterfly valve. See “**Air System Operation**” in Operator Manual.

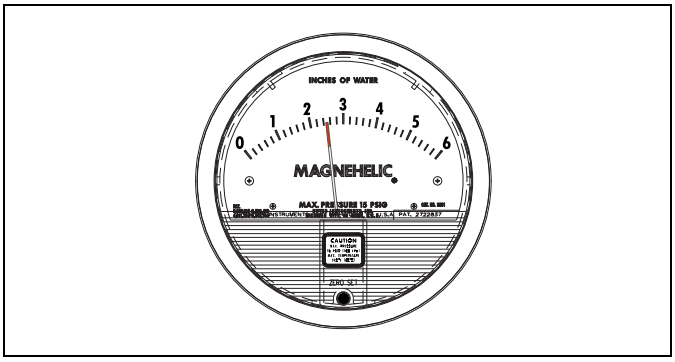


Figure 9 29842
Meter Pressure Gauge

7. Rate: Checking

Although the seed monitor reports a computed population based on seeds sensed, only an actual furrow check provides certainty about the actual seeding rate. See “**Checking Planting Rate**” on page 9.

Seed Rate Charts

How to Read a Chart

NOTICE

The rate charts are estimations of maximum seed rates. Actual results will vary based on conditions and machine maintenance. Maintain your machine regularly for optimum performance.

Consult the chart for your crop, row spacing, disk cell count, and population. Some charts have two pages.

1. Find the charts for your crop.
2. If there are separate charts based on row spacing, find the charts for that spacing.
3. If there are separate charts by population range, find the chart that covers the rate or seed spacing you intend.

Note: If planting with every other row shut off, the actual population is half the Twin Row chart rate.

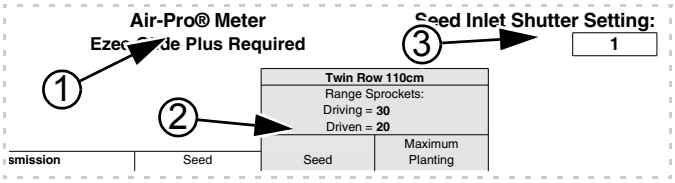
4. Check what disk cell count, and which disk part numbers are required for/covered by that chart.
5. Note that Ezee Glide Plus seed lubricant is required.

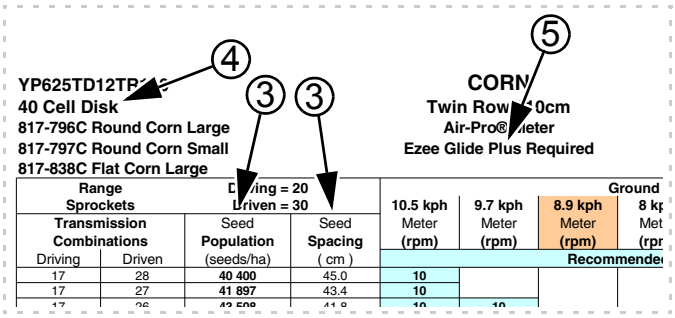
NOTICE

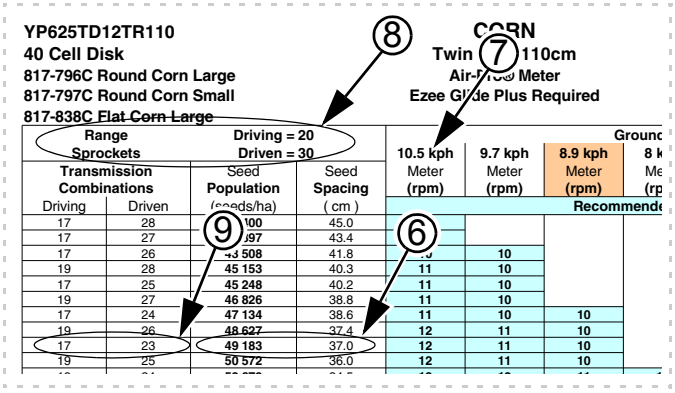
Skip/Double/Blockage Risk:
Ezee Glide Plus seed lubricant is required for all operations with Air-Pro® meters. See "Seed Lubricants" on page 38 for seed lubricant information.

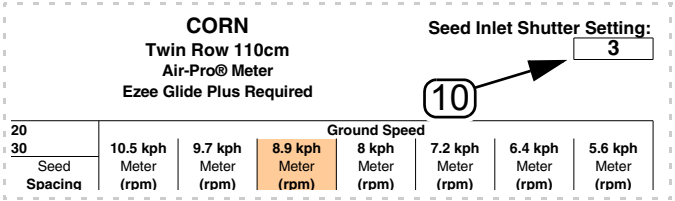
6. Find the desired seed population range (or seed spacing).
7. Note the maximum ground speed for that population. This is based on the maximum disk rpm[a] for that disk and crop.
8. The Range sprockets are at the top left of the single-spacing charts, and at the top of the columns for charts covering multiple row spacings.
9. The Transmission sprockets are in the table rows, found to the left of the Population.
10. Note the suggested initial setting for the seed inlet shutter.

Seed Disk	Chart Page Range
Corn Disks	15 - 17
Milo Disks	18 - 21
Soybean Disks	22 - 24









a. The meter rpm information is not required for Air-Pro® ground drive planter operations. It is not reported by the PM400 seed monitor.

YP925TD0965
40 Cell Disk
817-796C Round Corn Large
817-797C Round Corn Small
817-838C Flat Corn Large

CORN

65cm Rows
Air-Pro® Meter
Ezee Glide Plus Required

Seed Inlet Shutter Setting: 3

Range Sprockets		Driving = 25 Driven = 30		Ground Speed						
				10.5 kph Meter (rpm)	9.7 kph Meter (rpm)	8.9 kph Meter (rpm)	8 kph Meter (rpm)	7.2 kph Meter (rpm)	6.4 kph Meter (rpm)	5.6 kph Meter (rpm)
Transmission Combinations		Seed Population	Seed Spacing	Recommended Meter RPM						
Driving	Driven	(seeds/ha)	(cm)							
17	28	**42 731**	36.0	**12**	**11**	**10**				
17	27	**44 314**	34.7	**13**	**12**	**11**	**10**	Not Recommended		
17	26	**46 018**	33.4	**13**	**12**	**11**	**10**			
19	28	**47 758**	32.2	**14**	**12**	**11**	**10**			
17	25	**47 859**	32.1	**14**	**13**	**11**	**10**			
19	27	**49 527**	31.1	**14**	**13**	**12**	**11**	**10**		
17	24	**49 853**	30.9	**14**	**13**	**12**	**11**	**10**		
19	26	**51 432**	29.9	**15**	**13**	**12**	**11**	**10**		
17	23	**52 021**	29.6	**15**	**14**	**12**	**11**	**10**		
19	25	**53 489**	28.8	**15**	**14**	**13**	**12**	**10**		
19	24	**55 718**	27.6	**16**	**15**	**13**	**12**	**11**	**10**	
23	28	**57 813**	26.6	**16**	**15**	**14**	**13**	**11**	**10**	
19	23	**58 141**	26.5	**16**	**15**	**14**	**13**	**11**	**10**	
23	27	**59 954**	25.7	**17**	**16**	**14**	**13**	**12**	**10**	
24	28	**60 326**	25.5	**17**	**16**	**14**	**13**	**12**	**11**	
23	26	**62 260**	24.7	**18**	**16**	**15**	**14**	**12**	**11**	
24	27	**62 561**	24.6	**18**	**16**	**15**	**14**	**12**	**11**	**10**
25	28	**62 840**	24.5	**18**	**16**	**15**	**14**	**12**	**11**	**10**
17	19	**62 972**	24.4	**18**	**16**	**15**	**14**	**12**	**11**	**10**
23	25	**64 750**	23.8	**18**	**17**	**16**	**14**	**13**	**11**	**10**
24	26	**64 967**	23.7	**18**	**17**	**16**	**14**	**13**	**11**	**10**
25	27	**65 167**	23.6	**18**	**17**	**16**	**14**	**13**	**11**	**10**
26	28	**65 354**	23.5	**19**	**17**	**16**	**14**	**13**	**11**	**10**
23	24	**67 448**	22.8	**19**	**18**	**16**	**15**	**13**	**12**	**10**
24	25	**67 566**	22.8	**19**	**18**	**16**	**15**	**13**	**12**	**10**
25	26	**67 674**	22.7	**19**	**18**	**16**	**15**	**13**	**12**	**10**
26	27	**67 774**	22.7	**19**	**18**	**16**	**15**	**13**	**12**	**10**
27	28	**67 867**	22.7	**19**	**18**	**16**	**15**	**13**	**12**	**10**
23	23	**70 381**	21.9	**20**	**18**	**17**	**15**	**14**	**12**	**11**
28	27	**72 987**	21.1	**21**	**19**	**17**	**16**	**14**	**13**	**11**
27	26	**73 088**	21.0	**21**	**19**	**18**	**16**	**14**	**13**	**11**
26	25	**73 196**	21.0	**21**	**19**	**18**	**16**	**14**	**13**	**11**
25	24	**73 313**	21.0	**21**	**19**	**18**	**16**	**14**	**13**	**11**
24	23	**73 441**	20.9	**21**	**19**	**18**	**16**	**14**	**13**	**11**
28	26	**75 795**	20.3	**21**	**20**	**18**	**17**	**15**	**13**	**12**
27	25	**76 011**	20.2	**22**	**20**	**18**	**17**	**15**	**13**	**12**
26	24	**76 246**	20.2	**22**	**20**	**18**	**17**	**15**	**13**	**12**
25	23	**76 501**	20.1	**22**	**20**	**18**	**17**	**15**	**13**	**12**
19	17	**78 661**	19.6	**22**	**21**	**19**	**17**	**15**	**14**	**12**
28	25	**78 826**	19.5	**22**	**21**	**19**	**17**	**15**	**14**	**12**
27	24	**79 178**	19.4	**22**	**21**	**19**	**17**	**16**	**14**	**12**
26	23	**79 561**	19.3	**23**	**21**	**19**	**17**	**16**	**14**	**12**
28	24	**82 111**	18.7	**23**	**21**	**20**	**18**	**16**	**14**	**13**
27	23	**82 621**	18.6	**23**	**22**	**20**	**18**	**16**	**14**	**13**
23	19	**85 198**	18.1	**24**	**22**	**20**	**19**	**17**	**15**	**13**
28	23	**85 681**	18.0	**24**	**22**	**21**	**19**	**17**	**15**	**13**
24	19	**88 902**	17.3	**25**	**23**	**21**	**19**	**17**	**15**	**14**
25	19	**92 606**	16.6	**26**	**24**	**22**	**20**	**18**	**16**	**14**
23	17	**95 221**	16.2	**27**	**25**	**23**	**21**	**19**	**17**	**15**
26	19	**96 311**	16.0	**27**	**25**	**23**	**21**	**19**	**17**	**15**
24	17	**99 361**	15.5	**28**	**26**	**24**	**22**	**19**	**17**	**15**
27	19	**100 015**	15.4	**28**	**26**	**24**	**22**	**20**	**17**	**15**
25	17	**103 501**	14.9	**29**	**27**	**25**	**23**	**20**	**18**	**16**
28	19	**103 719**	14.8	**29**	**27**	**25**	**23**	**20**	**18**	**16**
26	17	**107 641**	14.3	**30**	**28**	**26**	**23**	**21**	**19**	**16**
27	17	**111 781**	13.8		**29**	**27**	**24**	**22**	**19**	**17**
28	17	**115 921**	13.3		**30**	**28**	**25**	**23**	**20**	**18**

31799G

YP625TD12TR110
24 Cell Disk
817-794C Round Corn Large
817-795C Round Corn Small
817-836C Flat Corn Large

CORN

Twin Row 110cm
Air-Pro® Meter
Ezee Glide Plus Required

Seed Inlet Shutter Setting: 3

Range Sprockets		Driving = 30 Driven = 25		Ground Speed						
				10.5 kph Meter (rpm)	9.7 kph Meter (rpm)	8.9 kph Meter (rpm)	8 kph Meter (rpm)	7.2 kph Meter (rpm)	6.4 kph Meter (rpm)	5.6 kph Meter (rpm)
Transmission Combinations		Seed Population	Seed Spacing	Recommended Meter RPM						
Driving	Driven	(seeds/ha)	(cm)							
17	28	43 632	41.7	17	16	15	13	12	11	
17	27	45 248	40.2	18	17	15	14	13	11	10
17	26	46 989	38.7	19	17	16	14	13	12	10
19	28	48 766	37.3	19	18	16	15	13	12	10
17	25	48 868	37.2	20	18	17	15	14	12	11
19	27	50 572	36.0	20	19	17	16	14	12	11
17	24	50 905	35.7	20	19	17	16	14	13	11
19	26	52 517	34.6	21	19	18	16	15	13	11
17	23	53 118	34.2	21	20	18	16	15	13	11
19	25	54 618	33.3	22	20	18	17	15	13	12
19	24	56 893	32.0	23	21	19	17	16	14	12
23	28	59 032	30.8	24	22	20	18	16	15	13
19	23	59 367	30.6	24	22	20	18	16	15	13
23	27	61 218	29.7	24	23	21	19	17	15	13
24	28	61 599	29.5	25	23	21	19	17	15	13
23	26	63 573	28.6	25	23	21	20	18	16	14
24	27	63 880	28.5	26	24	22	20	18	16	14
25	28	64 165	28.3	26	24	22	20	18	16	14
17	19	64 300	28.3	26	24	22	20	18	16	14
23	25	66 116	27.5	26	24	22	20	18	16	14
24	26	66 337	27.4	27	24	22	20	18	16	14
25	27	66 542	27.3	27	25	22	20	18	16	14
26	28	66 732	27.2	27	25	23	21	18	16	14
23	24	68 871	26.4	28	25	23	21	19	17	15
24	25	68 991	26.4	28	25	23	21	19	17	15
25	26	69 101	26.3	28	25	23	21	19	17	15
26	27	69 204	26.3	28	26	23	21	19	17	15
27	28	69 299	26.2	28	26	23	21	19	17	15
23	23	71 865	25.3	29	27	24	22	20	18	15
28	27	74 527	24.4	30	27	25	23	21	18	16
27	26	74 629	24.4	30	28	25	23	21	18	16
26	25	74 740	24.3	30	28	25	23	21	18	16
25	24	74 860	24.3	30	28	25	23	21	18	16
24	23	74 990	24.2	30	28	25	23	21	18	16
28	26	77 393	23.5		29	26	24	21	19	17
27	25	77 614	23.4		29	26	24	21	19	17
26	24	77 854	23.4		29	26	24	22	19	17
25	23	78 114	23.3		29	26	24	22	19	17
19	17	80 320	22.6		30	27	25	22	20	17
28	25	80 489	22.6		30	27	25	22	20	17
27	24	80 848	22.5		30	27	25	22	20	17
26	23	81 239	22.4		30	27	25	22	20	17
28	24	83 843	21.7			28	26	23	21	18
27	23	84 363	21.6			29	26	23	21	18
23	19	86 995	20.9			29	27	24	21	19
28	23	87 488	20.8			30	27	24	22	19
24	19	90 777	20.0				28	25	22	20
25	19	94 559	19.2				29	26	23	20
23	17	97 229	18.7				30	27	24	21
26	19	98 342	18.5	Not Recommended			30	27	24	21
24	17	101 457	17.9					28	25	22
27	19	102 124	17.8					28	25	22
25	17	105 684	17.2					29	26	23
28	19	105 907	17.2					29	26	23
26	17	109 911	16.5					30	27	24
27	17	114 139	15.9						28	25
28	17	118 366	15.4						29	25

31799B

YP625TD12TR110
40 Cell Disk
817-796C Round Corn Large
817-797C Round Corn Small
817-838C Flat Corn Large

CORN

Twin Row 110cm
Air-Pro® Meter
Ezee Glide Plus Required

Seed Inlet Shutter Setting: 3

Range Sprockets		Driving = 20 Driven = 30		Ground Speed						
				10.5 kph Meter (rpm)	9.7 kph Meter (rpm)	8.9 kph Meter (rpm)	8 kph Meter (rpm)	7.2 kph Meter (rpm)	6.4 kph Meter (rpm)	5.6 kph Meter (rpm)
Transmission Combinations		Seed Population	Seed Spacing	Recommended Meter RPM						
Driving	Driven	(seeds/ha)	(cm)							
17	28	40 400	45.0	10						
17	27	41 897	43.4	10						
17	26	43 508	41.8	10	10					
19	28	45 153	40.3	11	10					
17	25	45 248	40.2	11	10			Not Recommended		
19	27	46 826	38.8	11	10					
17	24	47 134	38.6	11	10	10				
19	26	48 627	37.4	12	11	10				
17	23	49 183	37.0	12	11	10				
19	25	50 572	36.0	12	11	10				
19	24	52 679	34.5	13	12	11	10			
23	28	54 659	33.3	13	12	11	10			
19	23	54 969	33.1	13	12	11	10			
23	27	56 684	32.1	14	13	11	10			
24	28	57 036	31.9	14	13	12	11			
23	26	58 864	30.9	14	13	12	11	10		
24	27	59 148	30.7	14	13	12	11	10		
25	28	59 412	30.6	14	13	12	11	10		
17	19	59 537	30.5	14	13	12	11	10		
23	25	61 218	29.7	15	14	12	11	10		
24	26	61 423	29.6	15	14	12	11	10		
25	27	61 613	29.5	15	14	12	11	10		
26	28	61 789	29.4	15	14	13	11	10		
23	24	63 769	28.5	15	14	13	12	11		
24	25	63 880	28.5	15	14	13	12	11		
25	26	63 983	28.4	15	14	13	12	11		
26	27	64 077	28.4	15	14	13	12	11		
27	28	64 165	28.3	15	14	13	12	11		
23	23	66 542	27.3	16	15	13	12	11	10	
28	27	69 006	26.3	17	15	14	13	11	10	
27	26	69 101	26.3	17	15	14	13	11	10	
26	25	69 204	26.3	17	15	14	13	11	10	
25	24	69 314	26.2	17	15	14	13	12	10	
24	23	69 435	26.2	17	15	14	13	12	10	
28	26	71 660	25.4	17	16	15	13	12	11	
27	25	71 865	25.3	17	16	15	13	12	11	
26	24	72 087	25.2	17	16	15	13	12	11	
25	23	72 328	25.1	17	16	15	13	12	11	
19	17	74 370	24.4	18	16	15	14	12	11	10
28	25	74 527	24.4	18	16	15	14	12	11	10
27	24	74 860	24.3	18	17	15	14	12	11	10
26	23	75 221	24.2	18	17	15	14	12	11	10
28	24	77 632	23.4	19	17	16	14	13	11	10
27	23	78 114	23.3	19	17	16	14	13	12	10
23	19	80 551	22.6	19	18	16	15	13	12	10
28	23	81 007	22.4	19	18	16	15	13	12	10
24	19	84 053	21.6	20	19	17	15	14	12	11
25	19	87 555	20.8	21	19	18	16	15	13	11
23	17	90 027	20.2	22	20	18	17	15	13	12
26	19	91 057	20.0	22	20	18	17	15	13	12
24	17	93 941	19.4	23	21	19	17	16	14	12
27	19	94 559	19.2	23	21	19	17	16	14	12
25	17	97 856	18.6	23	22	20	18	16	14	13
28	19	98 062	18.5	24	22	20	18	16	14	13
26	17	101 770	17.9	24	23	21	19	17	15	13
27	17	105 684	17.2	25	23	21	19	18	16	14
28	17	109 598	16.6	26	24	22	20	18	16	14

31799C

YP925TD0965
130 Cell Disk
817-800C MILO

MILO
Air-Pro® Meter
Ezee Glide Plus Required

Low Range
Seed Inlet Shutter Setting: **1**

Transmission Combinations		Seed Population	65cm Rows Range Sprockets: Driving = **15** Driven = **36**	
Driving	Driven	(seeds/ha)	Seed Spacing (cm)	Maximum Planting Speed (kph)
17	28	**69 438**	22.2	13
17	27	**72 010**	21.4	13
17	26	**74 780**	20.6	13
19	28	**77 607**	19.8	13
17	25	**77 771**	19.8	13
19	27	**80 482**	19.1	13
17	24	**81 011**	19.0	13
19	26	**83 577**	18.4	13
17	23	**84 533**	18.2	13
19	25	**86 920**	17.7	13
19	24	**90 542**	17.0	13
23	28	**93 946**	16.4	13
19	23	**94 479**	16.3	13
23	27	**97 425**	15.8	13
24	28	**98 030**	15.7	13
23	26	**101 172**	15.2	13
24	27	**101 661**	15.1	13
25	28	**102 115**	15.1	13
17	19	**102 330**	15.0	13
23	25	**105 219**	14.6	13
24	26	**105 571**	14.6	13
25	27	**105 897**	14.5	13
26	28	**106 200**	14.5	13
23	24	**109 603**	14.0	13
24	25	**109 794**	14.0	13
25	26	**109 970**	14.0	13
26	27	**110 133**	14.0	13
27	28	**110 284**	13.9	13
23	23	**114 369**	13.5	13
28	27	**118 605**	13.0	13
27	26	**118 768**	13.0	13
26	25	**118 944**	12.9	13
25	24	**119 134**	12.9	13
24	23	**119 341**	12.9	13
28	26	**123 166**	12.5	13
27	25	**123 518**	12.5	13
26	24	**123 900**	12.4	13
25	23	**124 314**	12.4	13
19	17	**127 824**	12.0	13
28	25	**128 093**	12.0	13
27	24	**128 665**	12.0	13
26	23	**129 286**	11.9	13
28	24	**133 430**	11.5	13
27	23	**134 259**	11.5	13
23	19	**138 446**	11.1	13
28	23	**139 232**	11.0	13
24	19	**144 466**	10.6	13
25	19	**150 485**	10.2	13
23	17	**154 734**	9.9	13
26	19	**156 505**	9.8	13
24	17	**161 462**	9.5	13
27	19	**162 524**	9.5	13
25	17	**168 189**	9.1	13
28	19	**168 543**	9.1	13
26	17	**174 917**	8.8	13
27	17	**181 645**	8.5	13
28	17	**188 372**	8.2	13

31799H

YP925TD0965
130 Cell Disk
817-800C MILO

MILO
Air-Pro® Meter
Ezee Glide Plus Required

High Range
Seed Inlet Shutter Setting:
1

Transmission Combinations		Seed Population	65cm Rows Range Sprockets: Driving = **25** Driven = **25**	
Driving	Driven	(seeds/ha)	Seed Spacing (cm)	Maximum Planting Speed (kph)
17	28	**166 652**	9.2	13
17	27	**172 824**	8.9	13
17	26	**179 471**	8.6	13
19	28	**186 258**	8.3	13
17	25	**186 650**	8.2	13
19	27	**193 156**	8.0	13
17	24	**194 427**	7.9	13
19	26	**200 585**	7.7	13
17	23	**202 880**	7.6	13
19	25	**208 609**	7.4	13
19	24	**217 301**	7.1	13
23	28	**225 470**	6.8	13
19	23	**226 749**	6.8	13
23	27	**233 821**	6.6	13
24	28	**235 273**	6.5	13
23	26	**242 814**	6.3	13
24	27	**243 987**	6.3	13
25	28	**245 076**	6.3	13
17	19	**245 592**	6.3	13
23	25	**252 526**	6.1	13
24	26	**253 371**	6.1	13
25	27	**254 153**	6.1	13
26	28	**254 879**	6.0	13
23	24	**263 048**	5.8	13
24	25	**263 506**	5.8	13
25	26	**263 928**	5.8	13
26	27	**264 319**	5.8	13
27	28	**264 682**	5.8	13
23	23	**274 485**	5.6	13
28	27	**284 651**	5.4	11
27	26	**285 042**	5.4	11
26	25	**285 465**	5.4	11
25	24	**285 922**	5.4	11
24	23	**286 419**	5.4	11
28	26	**295 599**	5.2	11
27	25	**296 444**	5.2	11
26	24	**297 359**	5.2	11
25	23	**298 353**	5.2	11
19	17	**306 777**	5.0	11
28	25	**307 423**	5.0	11
27	24	**308 796**	5.0	11
26	23	**310 288**	5.0	11
28	24	**320 233**	4.8	10
27	23	**322 222**	4.8	10
23	19	**332 271**	4.6	10
28	23	**334 156**	4.6	10
24	19	**346 718**	4.4	10
25	19	**361 165**	4.3	10
23	17	**371 362**	4.1	10
26	19	**375 611**	4.1	8
24	17	**387 508**	4.0	8
27	19	**390 058**	3.9	8
25	17	**403 655**	3.8	8
28	19	**404 504**	3.8	8
26	17	**419 801**	3.7	8
27	17	**435 947**	3.5	8
28	17	**452 093**	3.4	6

31799J

YP625TD12TR110
65 Cell Disk
817-849C MILO

MILO
Air-Pro® Meter
Ezee Glide Plus Required

Low Range
Seed Inlet Shutter Setting:
1

Transmission Combinations		Seed Population	Twin Row 110cm Range Sprockets: Driving = **20** Driven = **30**	
Driving	Driven	(seeds/ha)	Seed Spacing (cm)	Maximum Planting Speed (kph)
17	28	**65 651**	27.7	13
17	27	**68 082**	26.7	13
17	26	**70 701**	25.7	13
19	28	**73 374**	24.8	13
17	25	**73 529**	24.7	13
19	27	**76 092**	23.9	13
17	24	**76 592**	23.7	13
19	26	**79 018**	23.0	13
17	23	**79 923**	22.7	13
19	25	**82 179**	22.1	13
19	24	**85 603**	21.2	13
23	28	**88 821**	20.5	13
19	23	**89 325**	20.4	13
23	27	**92 111**	19.7	13
24	28	**92 683**	19.6	13
23	26	**95 654**	19.0	13
24	27	**96 116**	18.9	13
25	28	**96 545**	18.8	13
17	19	**96 748**	18.8	13
23	25	**99 480**	18.3	13
24	26	**99 813**	18.2	13
25	27	**100 121**	18.2	13
26	28	**100 407**	18.1	13
23	24	**103 625**	17.5	13
24	25	**103 805**	17.5	13
25	26	**103 972**	17.5	13
26	27	**104 126**	17.5	13
27	28	**104 269**	17.4	13
23	23	**108 130**	16.8	13
28	27	**112 135**	16.2	13
27	26	**112 289**	16.2	13
26	25	**112 456**	16.2	13
25	24	**112 636**	16.1	13
24	23	**112 832**	16.1	13
28	26	**116 448**	15.6	13
27	25	**116 781**	15.6	13
26	24	**117 141**	15.5	13
25	23	**117 533**	15.5	13
19	17	**120 852**	15.0	13
28	25	**121 106**	15.0	13
27	24	**121 647**	14.9	13
26	23	**122 234**	14.9	13
28	24	**126 152**	14.4	13
27	23	**126 936**	14.3	13
23	19	**130 895**	13.9	13
28	23	**131 637**	13.8	13
24	19	**136 586**	13.3	13
25	19	**142 277**	12.8	13
23	17	**146 294**	12.4	13
26	19	**147 968**	12.3	13
24	17	**152 655**	11.9	13
27	19	**153 659**	11.8	13
25	17	**159 015**	11.4	13
28	19	**159 350**	11.4	13
26	17	**165 376**	11.0	11
27	17	**171 737**	10.6	11
28	17	**178 097**	10.2	11

31799D

YP625TD12TR110
65 Cell Disk
817-849C MILO

MILO
Air-Pro® Meter
Ezee Glide Plus Required

High Range
Seed Inlet Shutter Setting: 1

Transmission Combinations		Seed Population	Twin Row 110cm Range Sprockets: Driving = **30** Driven = **20**	
Driving	Driven	(seeds/ha)	Seed Spacing (cm)	Maximum Planting Speed (kph)
17	28	**147 714**	12.3	13
17	27	**153 185**	11.9	13
17	26	**159 077**	11.4	13
19	28	**165 092**	11.0	13
17	25	**165 440**	11.0	11
19	27	**171 207**	10.6	11
17	24	**172 333**	10.6	11
19	26	**177 791**	10.2	11
17	23	**179 826**	10.1	11
19	25	**184 903**	9.8	11
19	24	**192 607**	9.4	10
23	28	**199 848**	9.1	10
19	23	**200 982**	9.0	10
23	27	**207 250**	8.8	10
24	28	**208 537**	8.7	10
23	26	**215 221**	8.4	10
24	27	**216 261**	8.4	10
25	28	**217 226**	8.4	10
17	19	**217 684**	8.4	10
23	25	**223 830**	8.1	8
24	26	**224 579**	8.1	8
25	27	**225 272**	8.1	8
26	28	**225 915**	8.0	8
23	24	**233 156**	7.8	8
24	25	**233 562**	7.8	8
25	26	**233 936**	7.8	8
26	27	**234 283**	7.8	8
27	28	**234 605**	7.7	8
23	23	**243 294**	7.5	8
28	27	**252 304**	7.2	8
27	26	**252 651**	7.2	8
26	25	**253 025**	7.2	8
25	24	**253 431**	7.2	8
24	23	**253 872**	7.2	8
28	26	**262 009**	6.9	8
27	25	**262 757**	6.9	8
26	24	**263 568**	6.9	8
25	23	**264 450**	6.9	6
19	17	**271 916**	6.7	6
28	25	**272 489**	6.7	6
27	24	**273 705**	6.6	6
26	23	**275 028**	6.6	6
28	24	**283 843**	6.4	6
27	23	**285 606**	6.4	6
23	19	**294 513**	6.2	6
28	23	**296 184**	6.1	6
24	19	**307 318**	5.9	6
25	19	**320 123**	5.7	6
23	17	**329 162**	5.5	6
26	19	**332 928**	5.5	5
24	17	**343 473**	5.3	5
27	19	**345 733**	5.3	5
25	17	**357 785**	5.1	5
28	19	**358 538**	5.1	5
26	17	**372 096**	4.9	5
27	17	**386 408**	4.7	5
28	17	**400 719**	4.5	5

31799E

YP925TD0965
168 Cell Disk
403-551D SOYBEAN

SOYBEAN
Air-Pro® Meter
Ezee Glide Plus Required

Seed Inlet Shutter Setting: **2**

Transmission Combinations		Seed Population	65cm Rows Range Sprockets: Driving = **25** Driven = **25**	
Driving	Driven	(seeds/ha)	Seed Spacing (cm)	Maximum Planting Speed (kph)
17	28	**215 365**	7.1	13
17	27	**223 342**	6.9	13
17	26	**231 932**	6.6	13
19	28	**240 702**	6.4	13
17	25	**241 209**	6.4	13
19	27	**249 617**	6.2	13
17	24	**251 259**	6.1	13
19	26	**259 218**	5.9	13
17	23	**262 184**	5.9	13
19	25	**269 587**	5.7	13
19	24	**280 819**	5.5	13
23	28	**291 376**	5.3	13
19	23	**293 029**	5.3	13
23	27	**302 168**	5.1	13
24	28	**304 045**	5.1	13
23	26	**313 790**	4.9	13
24	27	**315 306**	4.9	13
25	28	**316 714**	4.9	13
17	19	**317 380**	4.8	13
23	25	**326 342**	4.7	13
24	26	**327 433**	4.7	13
25	27	**328 444**	4.7	13
26	28	**329 382**	4.7	13
23	24	**339 939**	4.5	13
24	25	**340 530**	4.5	13
25	26	**341 076**	4.5	13
26	27	**341 581**	4.5	13
27	28	**342 051**	4.5	13
23	23	**354 719**	4.3	13
28	27	**367 857**	4.2	13
27	26	**368 362**	4.2	13
26	25	**368 908**	4.2	13
25	24	**369 499**	4.2	13
24	23	**370 142**	4.2	13
28	26	**382 005**	4.0	13
27	25	**383 097**	4.0	13
26	24	**384 279**	4.0	13
25	23	**385 564**	4.0	13
19	17	**396 451**	3.9	13
28	25	**397 286**	3.9	13
27	24	**399 059**	3.9	13
26	23	**400 987**	3.8	13
28	24	**413 839**	3.7	13
27	23	**416 410**	3.7	13
23	19	**429 397**	3.6	13
28	23	**431 832**	3.6	13
24	19	**448 066**	3.4	11
25	19	**466 736**	3.3	11
23	17	**479 914**	3.2	11
26	19	**485 405**	3.2	11
24	17	**500 780**	3.1	11
27	19	**504 075**	3.1	11
25	17	**521 646**	2.9	10
28	19	**522 744**	2.9	10
26	17	**542 512**	2.8	10
27	17	**563 378**	2.7	10
28	17	**584 243**	2.6	10

31799K

YP625TD12TR110
84 Cell Disk
817-798C SOYBEAN

SOYBEAN
Air-Pro® Meter
Ezee Glide Plus Required

Seed Inlet Shutter Setting: 2

Transmission Combinations		Seed Population	Twin Row 110cm Range Sprockets: Driving = **30** Driven = **20**	
Driving	Driven	(seeds/ha)	Seed Spacing (cm)	Maximum Planting Speed (kph)
17	28	**190 892**	9.5	13
17	27	**197 962**	9.2	13
17	26	**205 576**	8.8	13
19	28	**213 350**	8.5	13
17	25	**213 799**	8.5	13
19	27	**221 252**	8.2	13
17	24	**222 707**	8.2	13
19	26	**229 761**	7.9	13
17	23	**232 390**	7.8	13
19	25	**238 952**	7.6	13
19	24	**248 908**	7.3	13
23	28	**258 266**	7.0	13
19	23	**259 730**	7.0	13
23	27	**267 831**	6.8	11
24	28	**269 494**	6.7	11
23	26	**278 132**	6.5	11
24	27	**279 476**	6.5	11
25	28	**280 723**	6.5	11
17	19	**281 314**	6.5	11
23	25	**289 257**	6.3	11
24	26	**290 225**	6.3	11
25	27	**291 121**	6.2	11
26	28	**291 952**	6.2	11
23	24	**301 310**	6.0	10
24	25	**301 834**	6.0	10
25	26	**302 318**	6.0	10
26	27	**302 765**	6.0	10
27	28	**303 181**	6.0	10
23	23	**314 410**	5.8	10
28	27	**326 055**	5.6	10
27	26	**326 503**	5.6	10
26	25	**326 987**	5.6	10
25	24	**327 511**	5.6	10
24	23	**328 080**	5.5	10
28	26	**338 596**	5.4	10
27	25	**339 563**	5.4	10
26	24	**340 611**	5.3	10
25	23	**341 750**	5.3	10
19	17	**351 400**	5.2	8
28	25	**352 139**	5.2	8
27	24	**353 711**	5.1	8
26	23	**355 420**	5.1	8
28	24	**366 812**	5.0	8
27	23	**369 090**	4.9	8
23	19	**380 602**	4.8	8
28	23	**382 760**	4.8	8
24	19	**397 150**	4.6	8
25	19	**413 698**	4.4	8
23	17	**425 379**	4.3	6
26	19	**430 246**	4.2	6
24	17	**443 873**	4.1	6
27	19	**446 793**	4.1	6
25	17	**462 368**	3.9	6
28	19	**463 341**	3.9	6
26	17	**480 863**	3.8	6
27	17	**499 357**	3.6	6
28	17	**517 852**	3.5	6

31799F

YP625TD18TP110
YP625PD18TP110
84 Cell Disk
817-798C SOYBEAN

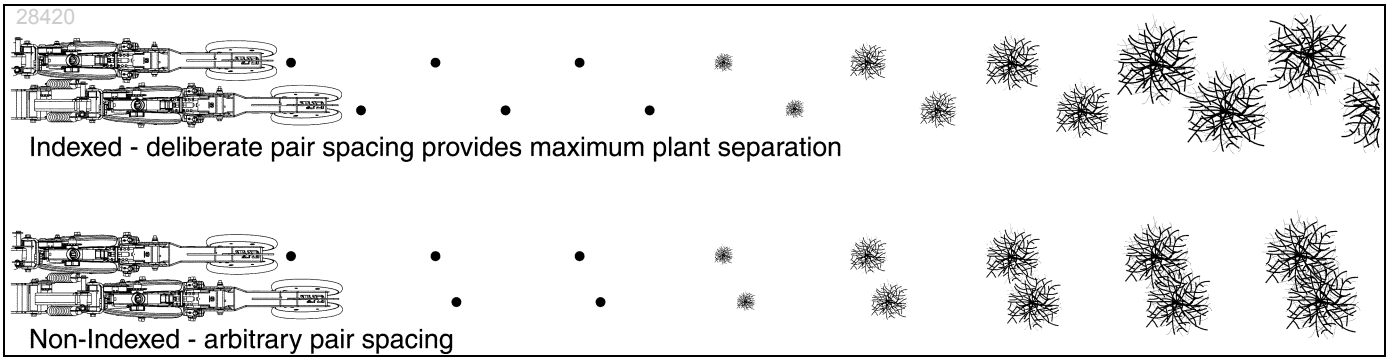
SOYBEAN
Air-Pro® Meter
Ezee Glide Plus Required

Seed Inlet Shutter Setting: 2

Transmission Combinations		Seed Population	Tri Row 110cm Range Sprockets: Driving = **30** Driven = **25**	
Driving	Driven	(seeds/ha)	Seed Spacing (cm)	Maximum Planting Speed (kph)
17	28	**229 070**	11.9	13
17	27	**237 554**	11.5	13
17	26	**246 691**	11.1	13
19	28	**256 019**	10.7	13
17	25	**256 558**	10.6	13
19	27	**265 501**	10.3	13
17	24	**267 248**	10.2	13
19	26	**275 713**	9.9	13
17	23	**278 868**	9.8	13
19	25	**286 741**	9.5	13
19	24	**298 689**	9.1	13
23	28	**309 918**	8.8	13
19	23	**311 675**	8.8	13
23	27	**321 396**	8.5	13
24	28	**323 393**	8.4	13
23	26	**333 758**	8.2	13
24	27	**335 370**	8.1	13
25	28	**336 867**	8.1	13
17	19	**337 576**	8.1	13
23	25	**347 108**	7.9	13
24	26	**348 269**	7.8	13
25	27	**349 344**	7.8	13
26	28	**350 342**	7.8	13
23	24	**361 571**	7.5	13
24	25	**362 200**	7.5	13
25	26	**362 780**	7.5	13
26	27	**363 318**	7.5	13
27	28	**363 817**	7.5	13
23	23	**377 291**	7.2	13
28	27	**391 265**	7.0	13
27	26	**391 803**	7.0	13
26	25	**392 383**	7.0	13
25	24	**393 012**	6.9	13
24	23	**393 695**	6.9	13
28	26	**406 314**	6.7	11
27	25	**407 475**	6.7	11
26	24	**408 732**	6.7	11
25	23	**410 099**	6.7	11
19	17	**421 679**	6.5	11
28	25	**422 566**	6.5	11
27	24	**424 453**	6.4	11
26	23	**426 503**	6.4	11
28	24	**440 173**	6.2	11
27	23	**442 907**	6.2	11
23	19	**456 721**	6.0	10
28	23	**459 311**	5.9	10
24	19	**476 579**	5.7	10
25	19	**496 436**	5.5	10
23	17	**510 453**	5.3	10
26	19	**516 293**	5.3	10
24	17	**532 647**	5.1	8
27	19	**536 151**	5.1	8
25	17	**554 840**	4.9	8
28	19	**556 008**	4.9	8
26	17	**577 034**	4.7	8
27	17	**599 227**	4.6	8
28	17	**621 421**	4.4	8

31799A

Sprocket Indexing (Stagger)



If you are planting:
- with a seed disc having 24 cells or less,
- twin- or tri-row crops,
- at seed populations below:
  77 000 seeds/ha (Twin Row), or
  116 000 seeds/ha (Triple Row)

you can synchronize the front and rear meters in a twin- or tri-row so that you achieve the maximum seed-to-seed spacing between the units of the set.

If the initial indexing does not provide equal spacing, See "**Indexing Fine Adjustment**" on page 28.

If you are planting:
- single-row,
- or with seed discs or 25 cells or more,
- or twin/tri-row with seed spacings below 23.5cm,

this section of the manual, and the sprocket indexing charts, do *not* apply to your operations.

Due to limitations on the number of sprocket teeth and wheel cell count, it may not be possible to obtain perfect stagger. Charts and fine adjustment provide the optimal available stagger.

Air-Pro® Meter Stagger Timing Chart **110cm Twin Row**

Set front meter to tooth "1". Page 1 of 2

Set rear meter to indicated initial tooth number.

Advance or Retard to adjust - see instructions in Seed Rate Manual.

		These Columns are for Fine Adjustment Only			
Population	Initial Rear	20% Rear Seed Drop Adjust		40% Rear Seed Drop Adjust	
Seeds/ha	Tooth Number	Retard	Advance	Retard	Advance
29100	7	3	4	6	16
29960	19	10	16	13	16
30810	19	10	16	13	16
31670	3	7	19	10	16
32520	4	6	19	9	12
33380	4	1	15	17	12
34240	18	11	15	14	12
35090	8	2	15	5	8
35950	8	5	11	5	8
36800	14	15	11	18	8
37660	14	15	11	18	4
38510	12	9	7	1	4
39370	10	19	7	3	4
40230	10	19	7	3	4
41080	16	13	3	10	19
41940	6	13	3	10	19
42790	6	4	3	7	19
43650	1	17	18	14	15
44510	2	17	18	14	15
45360	2	8	18	11	15
46220	5	5	18	18	11
47070	5	2	14	18	11
47930	17	12	14	15	11
48790	9	1	14	3	7
49640	9	6	10	3	7
50500	13	16	10	19	7
51350	13	16	10	19	3
52210	13	10	6	7	3
53060	9	10	6	4	3

31823A

Thumbnail view. Actual charts begin on page 29.

Indexing Preparation

Tools required:

- 23mm ($^{7}/_{8}$in) open end wrench
- 10mm ($^{3}/_{8}$in) socket wrench, or any socket wrench with 9.5mm square drive
- 812-391C timing tool (located on a hopper mount)

1. Find (in page 29-30) the sprocket indexing chart for your row spacing, cell count and desired seed population. Note the "**Initial Rear Tooth Number**" value in the second column.
2. Raise the planter.
   Chain geometry changes slightly when lowered. The indexing charts account for this change, and assume the planter is raised. Also, raising the planter frees the ground drive wheel, allowing you to turn the wheel, or turn the drive shaft with a hand tool.

⚠ CAUTION

Crushing Hazard:
Install transport locks. Do not rely on hydraulics to hold the planter at raised. This adjustment takes some time.

3. Clean out meters. Leave seed discs out.
   See Operator Manual for procedure.

Refer to Figure 11 (which depicts tooth 1 slightly ahead of the index rib at 2:00)

4. Use drive shaft or ground drive wheel to set front row unit to index 1.

   Observe the meter drive sprocket at a front (short mount) row unit on each wing. Use the ground drive wheel, or a wrench (from the rear of the shaft, to rotate the shaft forward - wrench up and forward).

   Stop rotation when the tip of the tooth stamped "1" ① is aligned with a rib ② cast into the meter housing. In general, the rib at the 2:00 position is the easiest to use, as it is visible from the side and from behind the meter.

5. Check front sprocket synchronization.

   Inspect all meter drive sprockets on front row units. Check that all springs are taut, and no chains have slack. All sprockets should be at "1". If not, use step 6 through step 10 to set them to 1.

NOTICE

Equipment Damage Risk:
Do not apply significant force to meter disk, or drive hub may be damaged.

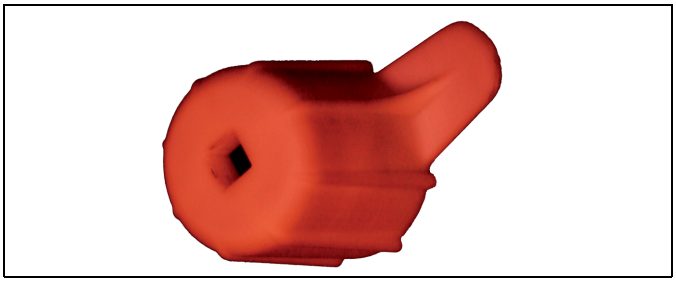


Figure 10 31445
812-391C Timing Tool

Note: Sprocket indexing may be performed with seed present and discs installed, but if so, you must perform step 9 (chain taut check) by rotating the drive shaft forward to remove slack. Reverse meter rotation, with seed present, is not recommended.

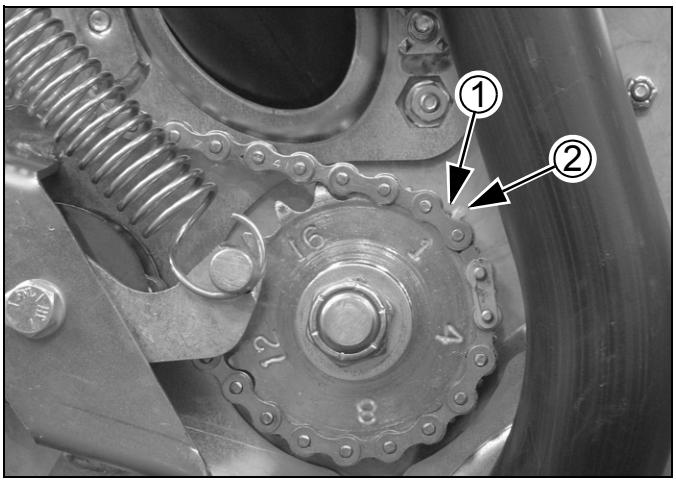


Figure 11 29630
Sprocket Indexing Reference

Note: In the future, finding front sprockets out of sync suggests idler/spring problems, and/or worn chain. Row drive systems must be in reliable working order for effective sprocket indexing.

Refer to Figure 12

6. At the rear (long mount) row unit of each pair, note which sprocket tooth is at the index mark ②. If the sprocket is already at the chart value, skip to step 12. Otherwise, complete step 7 through step 10 for that row.

Refer to Figure 13

7. Place the timing tool ③ over the meter shaft. Attach a 10mm ($^{3}/_{8}$in) socket wrench to aid in rotation.

   Sweep the tool[b] tooth under the chain, rotating in the direction opposite of that desired for sprocket adjustment.

   Each clockwise rotation of the timing tool advances the sprocket by one tooth.

   Each counter-clockwise rotation of the timing tool retards the sprocket by one tooth.

8. Advance or retard the sprocket until the desired tooth number is at the index mark. Hold the sprocket stationary, and re-mount the chain, making sure the chain is taut in the top loop.
9. Rotate meter shaft backward, or rotate wing drive shaft forward to tension chain. Re-check that front row sprocket is still at “1”.
10. Check the position of the rear row sprocket. The tooth tip at, or just ahead of the index mark must be the tooth called for by the chart. If not, release spring and re-mount chain.
11. Repeat step 4 through step 10 for each row pair.
12. Re-install seed discs and meter covers. No particular disc orientation is required during seed disc installation. The disc is symmetrical about all four seat lobes.

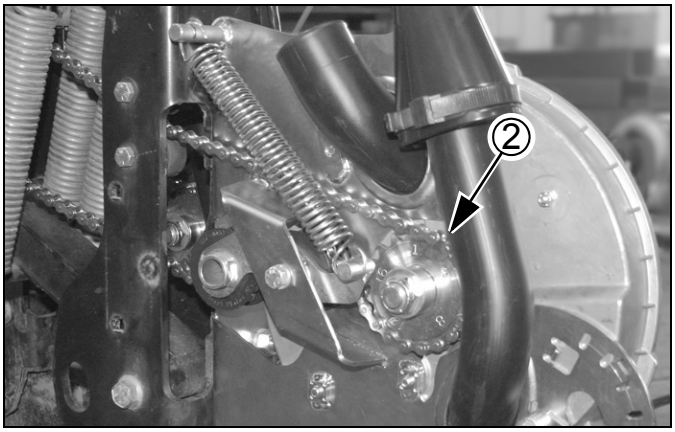


Figure 12 29628
Sprocket Index Check

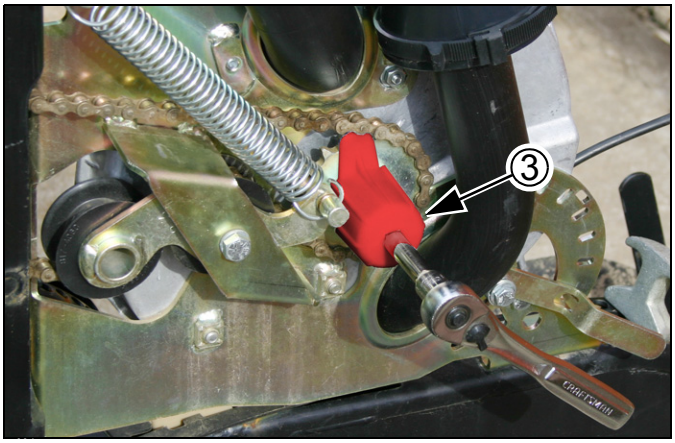


Figure 13 31444
Adjusting Sprocket Index

b. If the timing tool is not available, remove the idler tensioning spring to adjust the sprocket position. Rotate meter shaft backward (if meter empty, otherwise forward one full rotation), and re-check indexing with normal tension on chain.

Indexing Fine Adjustment

If, after indexing, the twin-row side-to-side seed stagger is substantially imbalanced, it is possible to make small adjustments that may correct it. Imbalance can occur over time as row unit chains wear and stretch.

The Indexing charts on page 29 and 30 provide columns for alternate rear row sprocket alignments. These settings move the placement of the rear seed drop. The amount of movement is given as a percentage (±20% or ±40%) of the in-row seed spacing.

Refer to Figure 14

Adjustments are made only to the rear row timing.

- Advancing the timing (dropping the seed sooner, moves the seed position back).
- Retarding the timing moves the seed position forward.

If an adjustment is made, test it on one row pair before adjusting the entire planter.

Indexing Adjustment Steps

1. Make sure the current front sprocket index is 1, and the current rear sprocket index number matches the “Initial” number in the indexing chart for the population being planted.
2. Measure the actual stagger at the rear row seeds.
3. Determine by how many inches (or cm) the rear seed placement needs to move in order to be centered between the front seed placements.
4. Determine the percent of seed spacing, and whether advance or retard, required to adjust the rear seed drop to the desired spot.
5. In the tables (thumbnail view of one shown at right), find the new rear sprocket tooth setting for the percent retard or advance desired.

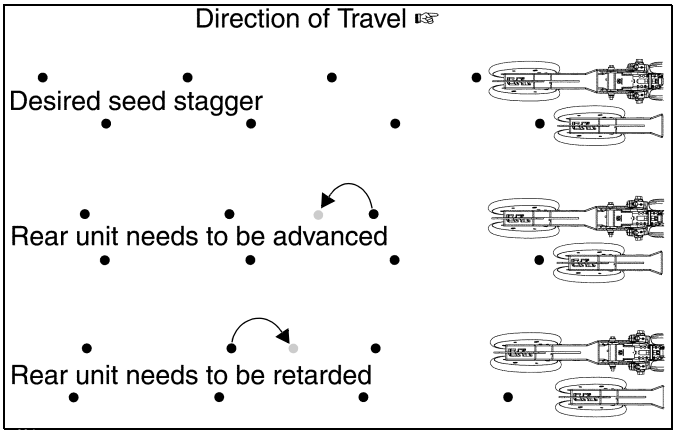


Figure 14 29717
40% Rear Timing Adjustments

Example:

The front sprocket is “1”. At a target population of 31,500 seeds/ac, the rear sprocket is at tooth “17”.

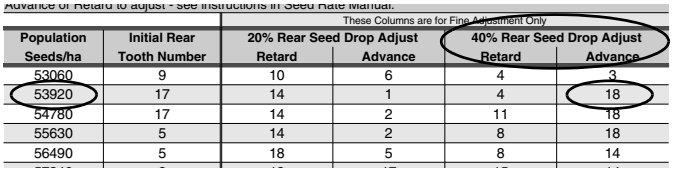
At this population, spacing in a single row is:
13.3in

The rear row seeds would be ideally at:
6.6in
ahead or behind the front row seeds.

We find that the rear seeds are being placed:
1.5in behind the front seeds.

We need to move the rear seeds back another 5.1in.

A 40% advance is 5.3in at this seed spacing.



Advance or Retard to adjust - see instructions in Seed Rate Manual.

		These Columns are for Fine Adjustment Only			
Population Seeds/ha	Initial Rear Tooth Number	20% Rear Seed Drop Adjust Retard	20% Rear Seed Drop Adjust Advance	40% Rear Seed Drop Adjust Retard	40% Rear Seed Drop Adjust Advance
53060	9	10	6	4	3
53920	17	14	1	4	18
54780	17	14	2	11	18
55630	5	14	2	8	18
56490	5	18	5	8	14

Example:

Moving the rear sprocket from tooth 17 to tooth 18 provides a 40% advance.

Sprocket Indexing Charts

110cm Twin Row Sprocket Indexing

Note: This is NOT a seed rate chart.
This is a chart for staggering seed spacing between rows of a twin-row planter.

NOTICE

Verify sprocket tooth position with the top length of chain taut.

Air-Pro® Meter Stagger Timing Chart **110cm Twin Row**

Set front meter to tooth "1". Page 1 of 2

Set rear meter to indicated Initial tooth number.

Advance or Retard to adjust - see instructions in Seed Rate Manual.

		These Columns are for Fine Adjustment Only			
Population	Initial Rear	20% Rear Seed Drop Adjust		40% Rear Seed Drop Adjust	
Seeds/ha	Tooth Number	Retard	Advance	Retard	Advance
29100	7	3	4	6	16
29960	19	10	16	13	16
30810	19	10	16	13	16
31670	3	7	19	10	16
32520	4	6	19	9	12
33380	4	1	15	17	12
34240	18	11	15	14	12
35090	8	2	15	5	8
35950	8	5	11	5	8
36800	14	15	11	18	8
37660	14	15	11	18	4
38510	12	9	7	1	4
39370	10	19	7	3	4
40230	10	19	7	3	4
41080	16	13	3	10	19
41940	6	13	3	10	19
42790	6	4	3	7	19
43650	1	17	18	14	15
44510	2	17	18	14	15
45360	2	8	18	11	15
46220	5	5	18	18	11
47070	5	2	14	18	11
47930	17	12	14	15	11
48790	9	1	14	3	7
49640	9	6	10	3	7
50500	13	16	10	19	7
51350	13	16	10	19	3
52210	13	10	6	7	3
53060	9	10	6	4	3

31823A

110cm Twin Row Sprocket Indexing (cont.)

Note: This is NOT a seed rate chart.
This is a chart for staggering seed spacing between rows of a twin-row planter.

NOTICE

Verify sprocket tooth position with the top length of chain taut.

Air-Pro® Meter Stagger Timing Chart — 110cm Twin Row

Set front meter to tooth "1".
Set rear meter to indicated Initial tooth number.
Advance or Retard to adjust - see instructions in Seed Rate Manual.

		These Columns are for Fine Adjustment Only			
Population	Initial Rear	20% Rear Seed Drop Adjust		40% Rear Seed Drop Adjust	
Seeds/ha	Tooth Number	Retard	Advance	Retard	Advance
53060	9	10	6	4	3
53920	17	14	1	4	18
54780	17	14	2	11	18
55630	5	14	2	8	18
56490	5	18	5	8	14
57340	2	18	17	15	14
58200	1	18	17	12	14
59060	1	3	9	12	14
59910	6	3	9	19	10
60770	6	3	13	19	10
61620	10	7	13	16	10
62480	10	7	13	4	6
63340	10	7	9	4	6
64190	14	11	17	4	1
65050	14	11	17	8	2
65900	14	11	5	8	2
66760	18	11	2	8	5
67610	18	15	2	12	17
68470	18	15	1	12	17
69330	3	15	1	12	9
70180	3	19	6	16	9
71040	3	19	6	16	13
71890	7	19	10	16	13
72750	7	4	10	16	13
73610	7	4	10	16	9
74460	11	4	14	16	17
75320	11	8	14	16	17
76170	11	8	14	16	5
77030	15	8	18	16	2

31823B

110cm Triple Row Sprocket Indexing

Note: This is NOT a seed rate chart.
This is a chart for staggering seed spacing between rows of a twin-row planter.

NOTICE

Verify sprocket tooth position with the top length of chain taut.

Air-Pro® Meter Stagger Timing Chart **110cm Triple Row**

Set front meter to tooth "1".
Set rear meter to indicated Initial tooth number.
Advance or Retard to adjust - see instructions in Seed Rate Manual.

		These Columns are for Fine Adjustment Only			
Population	Initial Rear	20% Rear Seed Drop Adjust		40% Rear Seed Drop Adjust	
Seeds/ha	Tooth Number	Retard	Advance	Retard	Advance
43650	7	3	4	6	16
44930	19	10	16	13	16
46220	19	10	16	13	16
47500	3	7	19	10	16
48790	4	6	19	9	12
50070	4	1	15	17	12
51350	18	11	15	14	12
52640	8	2	15	5	8
53920	8	5	11	5	8
55200	14	15	11	18	8
56490	14	15	11	18	4
57770	12	9	7	1	4
59060	10	19	7	3	4
60340	10	19	7	3	4
61620	16	13	3	10	19
62910	6	13	3	10	19
64190	6	4	3	7	19
65470	1	17	18	14	15
66760	2	17	18	14	15
68040	2	8	18	11	15
69330	5	5	18	18	11
70610	5	2	14	18	11
71890	17	12	14	15	11
73180	9	1	14	3	7
74460	9	6	10	3	7
75750	13	16	10	19	7
77030	13	16	10	19	3
78310	13	10	6	7	3
79600	9	10	6	4	3

31823C

110cm Triple Row Sprocket Indexing (cont.)

Note: This is NOT a seed rate chart.
This is a chart for staggering seed spacing between rows of a twin-row planter.

NOTICE

Verify sprocket tooth position with the top length of chain taut.

Air-Pro® Meter Stagger Timing Chart — 110cm Triple Row

Set front meter to tooth "1".
Set rear meter to indicated Initial tooth number.
Advance or Retard to adjust - see instructions in Seed Rate Manual.

		These Columns are for Fine Adjustment Only			
Population	Initial Rear	20% Rear Seed Drop Adjust		40% Rear Seed Drop Adjust	
Seeds/ha	Tooth Number	Retard	Advance	Retard	Advance
79600	9	10	6	4	3
80880	17	14	1	4	18
82160	17	14	2	11	18
83450	5	14	2	8	18
84730	5	18	5	8	14
86020	2	18	17	15	14
87300	1	18	17	12	14
88580	1	3	9	12	14
89870	6	3	9	19	10
91150	6	3	13	19	10
92440	10	7	13	16	10
93720	10	7	13	4	6
95000	10	7	9	4	6
96290	14	11	17	4	1
97570	14	11	17	8	2
98850	14	11	5	8	2
100140	18	11	2	8	5
101420	18	15	2	12	17
102710	18	15	1	12	17
103990	3	15	1	12	9
105270	3	19	6	16	9
106560	3	19	6	16	13
107840	7	19	10	16	13
109120	7	4	10	16	13
110410	7	4	10	16	9
111690	11	4	14	16	17
112980	11	8	14	16	17
114260	11	8	14	16	5
115540	15	8	18	16	2

31823D

Fertilizer Rate

The YP625PD/TD & YP925TD Planters include a dry fertilizer system.

CAUTION

Possible Agricultural Chemical Hazard:
Wear recommended protective equipment and clothing when handling, measuring, loading, applying, and unloading dry fertilizer. Inhalation of dusts or mists, and direct skin and eye contact with material, dusts or contaminated fluids, can cause irritation, illness or other serious medical problems.

NOTICE

Equipment Damage Risk:
Avoid spills. Confine fertilizer to the hoppers. Load hoppers shortly prior to application. Unload or apply left-over material. Fertilizers are generally caustic, and can be extremely destructive to unpainted metal surfaces (other than stainless steel). Wash off any spilled material after application.

Dry Fertilizer Rate

Refer to Figure 15
Dry fertilizer rate is set by a pair of Transmission sprockets at the left side of the implement.

Note: Dry fertilizer rate is independent of seed rate. Although the dry fertilizer drive relies on the same ground drive and main shaft as the seed metering system, changes in seed rate do not affect those drive components.

NOTICE

Application Rate Risk:
*Make field checks to assure you are applying fertilizer at the desired rate. Fertilizer application rates vary with speed, material density, material granularity and atmospheric conditions. The charts provide only approximate rates for a specific density. See "**Dry Fertilizer Rate Check**" on page 35.*

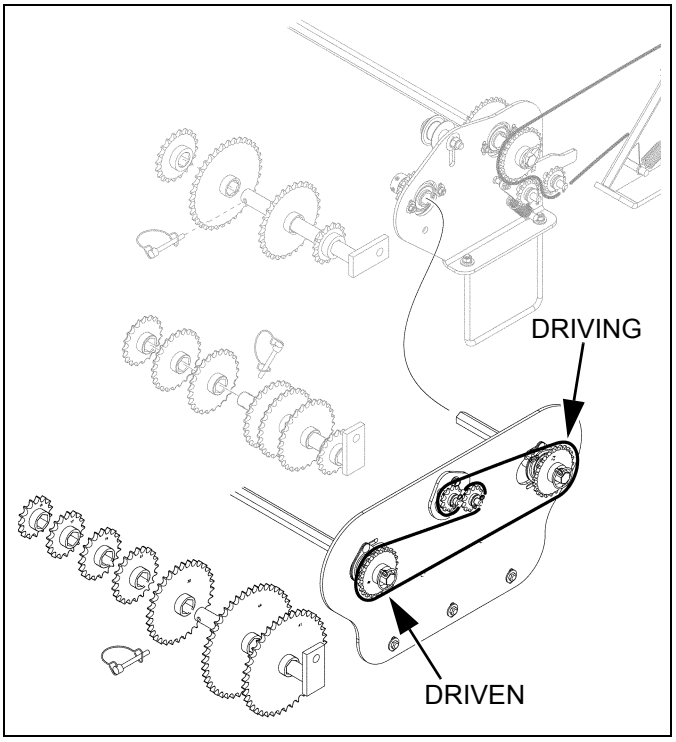


Figure 15 31871
Fertilizer Transmission

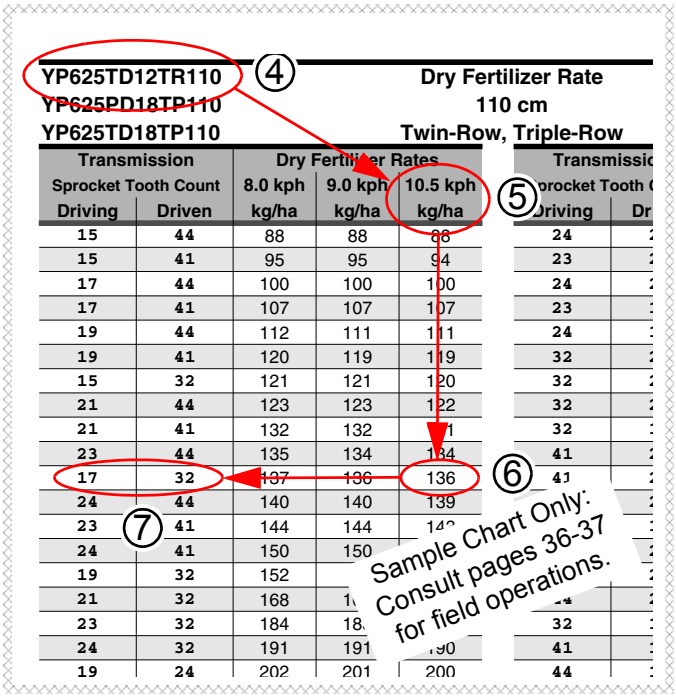
Setting Dry Fertilizer Rate

1. Determine your desired (target) rate in kilograms per hectare.
2. Obtain the density of your material in kilograms per liter (kg/l).
3. If the material density varies more than a few percent from 1.04 kg/l, do not use your target rate when consulting the rate charts. First apply a density correction factor (instructions on page 35).

Note: Great Plains recommends checking with your local Agronomist as soil conditions vary.

Note: If the density is not provided on the material container, weigh an empty liter measuring jug. Fill it with a sample of your material. Weigh again. Subtract the weight of the empty jug. Divide by the container capacity in liters.

4. Find the chart for your implement or row spacing. Charts begin on page 36.
   Example: planter is model YP625TD12TR110
5. Choose the speed (kph) column that is closest to the planned field speed.
   Example: field speed planned is 9.6 kph (use 10.5)
6. Find the fertilizer rate closest to your corrected or target rate.
   Example: density corrected rate is 137.5 kg/ha (use 136)
7. In the Transmission columns to the left, find the DRIVING and DRIVEN sprocket tooth counts required for the chosen chart rate.



YP625TD12TR110
YP625PD18TP110
YP625TD18TP110

Dry Fertilizer Rate
110 cm
Twin-Row, Triple-Row

Transmission Sprocket Tooth Count		Dry Fertilizer Rates			Transmission Sprocket Tooth Count	
Driving	Driven	8.0 kph kg/ha	9.0 kph kg/ha	10.5 kph kg/ha	Driving	Dr
15	44	88	88	88	24	
15	41	95	95	94	23	
17	44	100	100	100	24	
17	41	107	107	107	23	
19	44	112	111	111	24	
19	41	120	119	119	32	
15	32	121	121	120	32	
21	44	123	123	122	32	
21	41	132	132	131	32	
23	44	135	134	134	41	
17	32	137	136	136	41	
24	44	140	140	139		
23	41	144	144	143		
24	41	150	150			
19	32	152				
21	32	168	1			
23	32	184	18		32	
24	32	191	191	190	41	
19	24	202	201	200	44	

Refer to Figure 15

8. Inspect the current DRIVING ⓐ and DRIVEN ⓑ transmission sprockets. It is likely that one or both need to be changed. If no sprockets need to be changed, continue at "**Dry Fertilizer Rate Check**" on page 35.
9. Loosen the bolt at the idler plate ⓒ. Rotate the idler plate to relax chain tension. Lift the chain of the DRIVING and/or DRIVEN sprockets that need to be exchanged.
10. Remove the pins from any sprocket that needs to be changed, and from the storage tree ⓓ.
11. Exchange sprockets between shafts and tree as needed to match the chart values.
12. Re-engage the idler plate for 1.8 mm chain slack (see Operator manual for information on chain slack and chain orientation). Tighten the bolt of the idler plate.

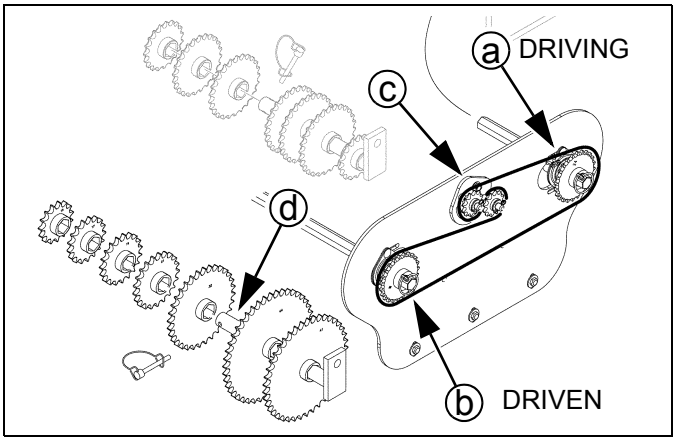


Figure 16
Fertilizer Transmission
31871

Fertilizer Density Adjustment

The fertilizer meter rate charts are based on fertilizer with a density of 1.04 kilograms per liter.

If you are applying fertilizer of a different density, use the following table to convert application rate.

Density kg/l	0.72	0.80	0.88	0.96	1.04	1.12	0.87	0.81
Correction Factor	1.45	1.30	1.20	1.10	1.00	0.93	0.87	0.81

Multiply the desired application rate by the conversion factor.

$$ChartRate = FieldRate \times CorrectionFactor$$

Use the “Chart Rate” to determine the initial sprocket settings.

If the rate measured in calibration varies from the desired field rate by more than a few percent, apply the error percentage to the Chart Rate, and pick a new sprocket pairing based on that.

You want to apply at: 125 kg/ha.
The fertilizer density is: 0.96 kg/l
This is a correction factor of: 1.10
125 x 1.10 = 137.5
Use chart rate closest to 137.5 kilograms per hectare.

Dry Fertilizer Rate Check

Use the following instructions to check the exact number of kilograms your fertilizer attachment delivers.

1. Adjust for your fertilizer density (above).
2. Consult the Fertilizer Rate charts (pages 36-37).
3. Install the Driving and Driven sprockets called out in the chart (page 33).
4. Remove a hose from one of the fertilizer hoppers and attach a container under the opening.
5. Engage the fertilizer attachment and drive forward for the “Distance for 1/100th ha”.
6. Weigh the amount of fertilizer caught in the container and multiply that amount by 100. The result is the kilograms of fertilizer delivered per hectare.

Single Drop Rate Check

Model	YP925	YP625	
Row Spacing	65 cm	110 cm	110 cm
Seed Rows	Single	Twin	Triple
Fertilizer Rows	9	12	12
Distance for 1/100th ha	153.8 m	181.8 m	181.8 m
Multiplier	100.0	100.0	100.0

31824C

Dry Fertilizer Rate Charts

YP925TD0965 **Dry Fertilizer Rate** **Density**

65 cm

Single Row

1.04 kg/liter*

Transmission		Dry Fertilizer Rates		
Sprocket Tooth Count		8.0 kph	9.0 kph	10.5 kph
Driving	Driven	kg/ha	kg/ha	kg/ha
15	44	75	75	75
15	41	80	80	80
17	44	85	85	84
17	41	91	91	90
19	44	94	94	94
19	41	101	101	101
15	32	102	102	102
21	44	104	104	104
21	41	112	111	111
23	44	114	114	113
17	32	116	115	115
24	44	119	118	118
23	41	122	122	121
24	41	127	127	126
19	32	129	129	128
21	32	142	142	141
23	32	155	155	154
24	32	162	161	160
19	24	171	170	169
19	23	178	177	176
21	24	188	187	186
21	23	196	195	194
23	24	205	204	203

Transmission		Dry Fertilizer Rates		
Sprocket Tooth Count		8.0 kph	9.0 kph	10.5 kph
Driving	Driven	kg/ha	kg/ha	kg/ha
24	23	223	221	220
23	21	233	232	230
24	21	243	241	239
23	19	256	255	253
24	19	267	265	263
32	24	281	279	276
32	23	293	291	287
32	21	319	316	313
32	19	350	347	342
41	24	354	351	347
41	23	369	365	360
44	24	378	375	370
32	17	388	384	378
44	23	394	390	384
41	21	401	397	391
44	21	428	423	416
32	15	435	430	423
41	19	439	434	427
44	19	468	462	454
41	17	486	479	470
44	17	517	510	499
41	15	543	535	523
44	15	577	568	554

* Chart based on a fertilizer density stated. Adjust rate for other densities.

31824A

YP625TD12TR110
YP625PD18TP110
YP625TD18TP110

Dry Fertilizer Rate
110 cm
Twin-Row, Triple-Row

Density
1.04 kg/liter*

Transmission Sprocket Tooth Count		Dry Fertilizer Rates		
Driving	Driven	8.0 kph kg/ha	9.0 kph kg/ha	10.5 kph kg/ha
15	44	88	88	88
15	41	95	95	94
17	44	100	100	100
17	41	107	107	107
19	44	112	111	111
19	41	120	119	119
15	32	121	121	120
21	44	123	123	122
21	41	132	132	131
23	44	135	134	134
17	32	137	136	136
24	44	140	140	139
23	41	144	144	143
24	41	150	150	149
19	32	152	152	151
21	32	168	168	167
23	32	184	183	182
24	32	191	191	190
19	24	202	201	200
19	23	210	209	208
21	24	222	221	220
21	23	231	230	229
23	24	242	241	240

Transmission Sprocket Tooth Count		Dry Fertilizer Rates		
Driving	Driven	8.0 kph kg/ha	9.0 kph kg/ha	10.5 kph kg/ha
24	23	263	262	260
23	21	276	274	272
24	21	287	285	283
23	19	303	301	299
24	19	316	314	311
32	24	332	330	327
32	23	346	343	340
32	21	377	374	369
32	19	413	410	405
41	24	419	415	410
41	23	436	432	426
44	24	447	443	437
32	17	458	454	447
44	23	465	460	454
41	21	474	469	462
44	21	505	500	492
32	15	514	508	500
41	19	519	513	505
44	19	553	547	537
41	17	574	567	556
44	17	611	603	590
41	15	641	632	618
44	15	682	671	655

* Chart based on a fertilizer density stated. Adjust rate for other densities.

31824B

Appendix - Seed Lubricants

Air-Pro® Meters (all seeds)

Ezee Glide Plus Talc+Graphite Mix

821-069C bucket, 19 liter

Ezee Glide Plus Lubricant
To maximize performance of Great Plains metering systems, it is imperative to use only “Ezee Glide Plus” lubricant. “Ezee Glide Plus” Talc-Graphite lubricant is mandatory for all seeds, especially treated or inoculated seed. *Thorough mixing of seed and added lubricant is required.*

Recommended usage:

For clean seeds other than milo, cotton, and sunflowers sprinkle 170 ml of Ezee Glide Plus Talc per 100 liters of seed.

For milo, cotton, and sunflowers double the application to 335 ml (or more) per 100 liters of seed.

Adjust this rate as necessary so all seeds become coated while avoiding an accumulation of lubricant in the bottom of the hopper.

For seed with excessive treatment, or for humid planting environments, increase the rate as needed for smooth meter operation.

⚠ CAUTION

Irritation and Chronic Exposure Hazard:
Wear gloves. DO NOT use hands or any part of your body to mix seed lubricant. Wear a respirator when transferring and mixing. Avoid breathing lubricant dust. Not an acute hazard. May cause mechanical eye or skin irritation in high concentrations. As with all mineral spills, minimize dusting during clean-up. Prolonged inhalation may cause lung injury. Product can become slippery when wet.

Table of Contents

Table of Contents

Great Plains Manufacturing, Inc.
Corporate Office: P.O. Box 5060
Salina, Kansas 67402-5060 USA