



**KIBBLE
EQUIPMENT**

Your Farm. Your Future. Our Focus.

READY TO PLANT GUIDE

Gen4 Monitors
Seedstar 4

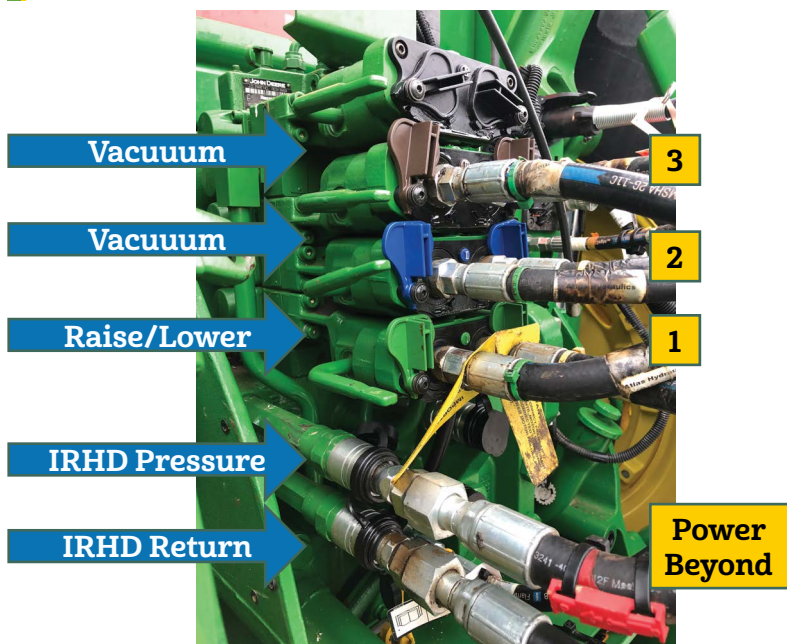


JOHN DEERE

Contents

Hydraulic Hook Up	2
Machine Offsets	3
Connection Offsets	4
Planter Offsets	5
Gen4 Importing Data	6
Gen4 Work Setup	7
Gen4 Machine Profile	9
Gen4 Implement Profile	10
AutoPath Setup	12
Gen4 Work Summary	14
Prescription Setup for Planters	15
Advanced TCM Tutorial	16
Gen4 Section Control	18
Gen4 Map Setup	20
Gen4 Guidance Setup	21
AutoTrac Turn Automation (ATTA)	23
Planter Details	26
Planter Overview	27
Planter – Seed Setup	28
Planter – Rates Setup	29
Seedstar Run Pages	30
Row Cleaners	32
Closing Wheels	33
Curve Compensation	34
Gauge Wheel Down Force	35
Vacuum Automation & Fast Start	36
Height Sensor Cal	37
Speed Source	38
Drive Status	39
CCS Tank Pressure Settings for Common Crops	40

Hydraulic Hook Up



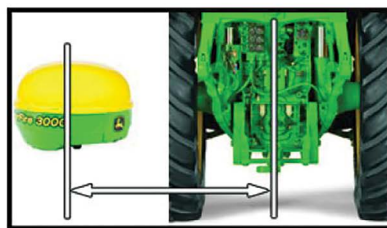
Hydraulic Hook Up

Hose ID	SCV	Pressure	Return	Flow	Detent
Frame/CCS	I	Extend	Retract	10 max	Constant 'C'
Vacuum	II	Retract	Extend	4-7	Constant 'C'
Vacuum	III	Retract	Extend	4-7	Constant 'C'
IRHD Pressure	P	Pressure			
IRHD Return	R		Return		

- Case drain should be connected prior to any other hose
- IRHD can be plumbed to power beyond pressure and return if no SCV available
- Vacuum return hoses must be connected to tractor EXTEND port
- Avoid Pressure spikes by putting SCV's into FLOAT position
- Not pictured: Markers, if equipped use II SCV and move up vacuum hoses

Machine Offsets

- 1) Lateral Offset - Center of GPS Receiver to Center line of Machine



- 2) In line Offset - Center of GPS Receiver to Center of Non-Steering Axle

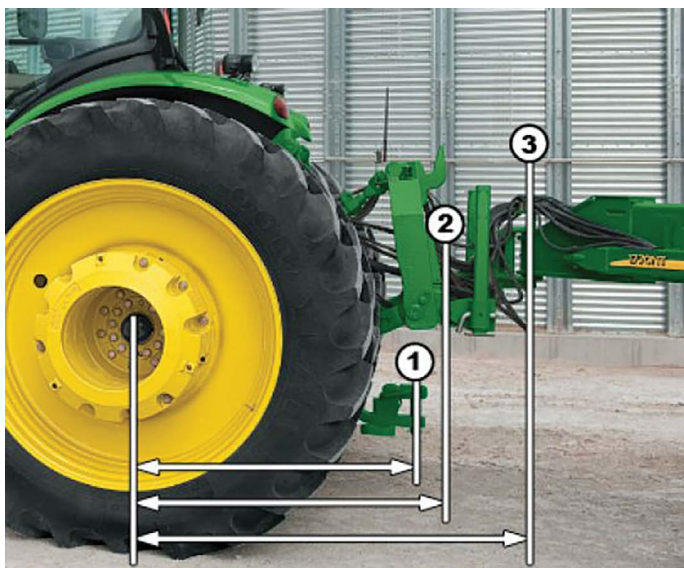


- 3) GPS Height - center of GPS receiver to ground

Connection Offsets

Connection Offset: Center of Non-steering axle to Center line of machine connection point

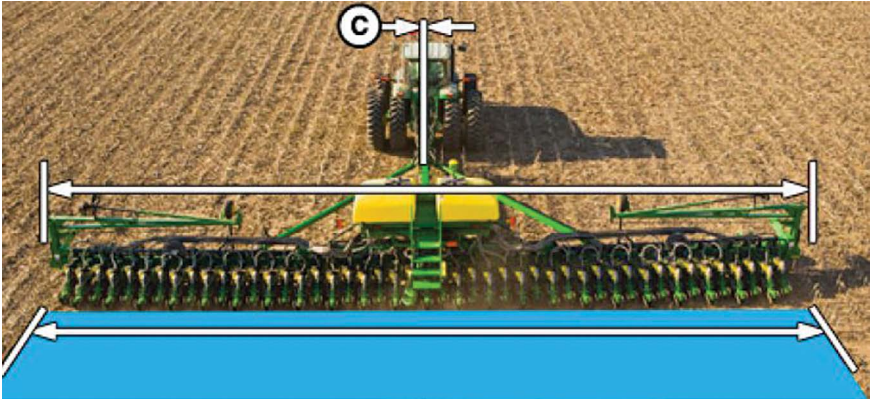
- 1) Rear Pivot Drawbar
- 2) Rear Rigid 3-point
- 3) Rear Pivot 2-point



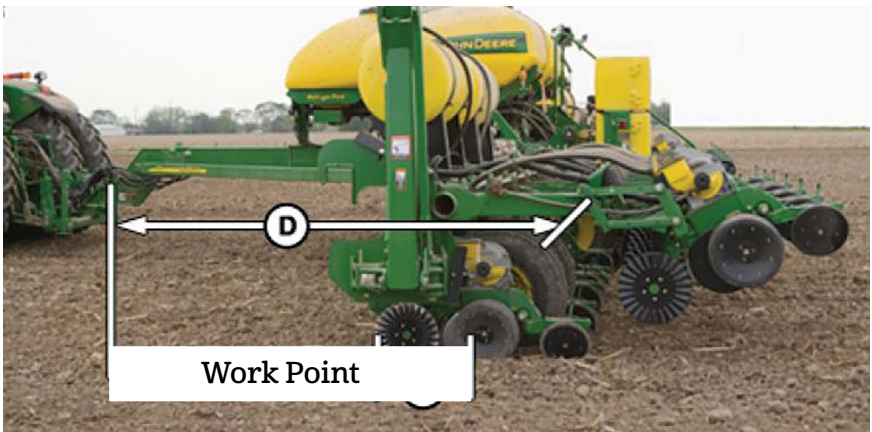
Non steering axle = front on 4 wheel drive

Planter Offsets

- C) Lateral offset from center of machine to center of implement width.



- D) Center of Rotation - Connection Point to center of fixed axles



Work Point - Distance from connection point to location where seed is dropped

Gen4 Importing Data

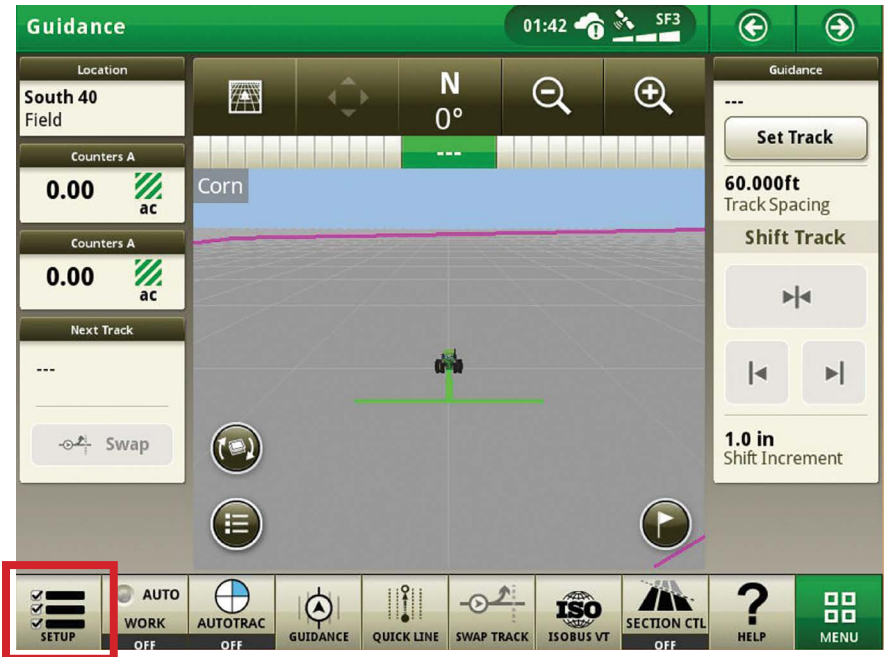
Data Import using a USB Drive

Insert USB with setup data. Import screen will appear. Select the Next button. Choose setup files and Accept to import.



When files are sent wirelessly from MyJD. Choose Import from Recieved Files.




1. Select the Setup button.







Gen4 Work Setup


2. Select the Location button and select your Client, Farm, and Field. Press View All to see entire list.

Work Setup ⓘ ⓘ

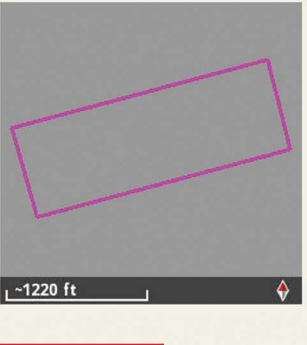
Location	Work Summary
 South 40 Deere Simulator	Type: Planting / Seeding
Equipment	Crop: <input type="text" value="Corn"/>
 Tractor(2)	Variety: <input type="text" value="---"/>
 Planter	Target Rate/Rx: <input type="text" value="Controller Rate"/>




 **Settings Manage**

 **Work List**  **New Work** 

Multiple Boundaries Detected ⓘ 

Select a Detected Location

	South 40 Client: Deere Farm: Simulator
	North 40 Client: Deere Farm: Simulator

 **View All**  **Cancel** 

Gen4 Work Setup, continued

3. Select the Equipment button and select your Machine and Implement.

Work Setup ⓘ ⓘ

Location	Work Summary
South 40 Deere Simulator	Type: Planting / Seeding
Equipment	Crop: <input type="text" value="Corn"/>
Tractor(2)	Variety: <input type="text" value="---"/>
Planter	Target Rate/Rx: <input type="text" value="Controller Rate"/>
Settings Manager	

Work List New Work OK

Equipment ⓘ ⓘ

Tractor(2)

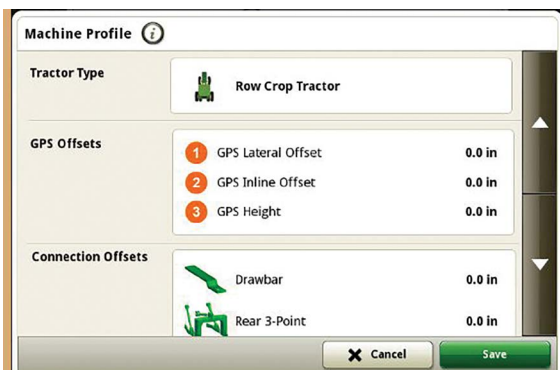
Planter

Add Operation

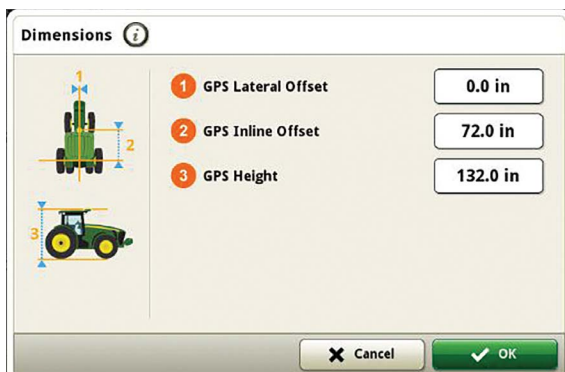
4. Select Tractor and enter offsets. Next select Planter and insert offsets.

Gen4 Machine Profile

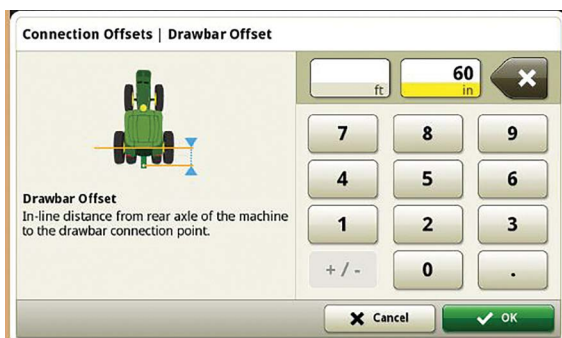
- Under Machine Profile select GPS offsets.



- Enter receiver measurements.



- Select Connection Offset to enter measurement from axle to connection point.



Gen4 Implement Profile

8. Open Implement Profile. Choose correct Connection Type.



The screenshot shows the 'Implement Profile' dialog box. At the top, there is a title bar with an information icon and a close button. Below the title bar, there is a profile icon and a text field for 'Profile Name' containing 'Planter 1'. Underneath, the following details are listed: 'Type: Planter', 'Model: 0', 'Serial Number: 1A01775XX', and 'Modified: ---'. The 'Connection Type' section has two options: 'Rear 3-Point' (selected) and 'Pivot Offset' (with a value of 9.0 in). At the bottom, there are 'Cancel' and 'Save' buttons.

Implement Profile ⓘ

Profile Name
Planter 1

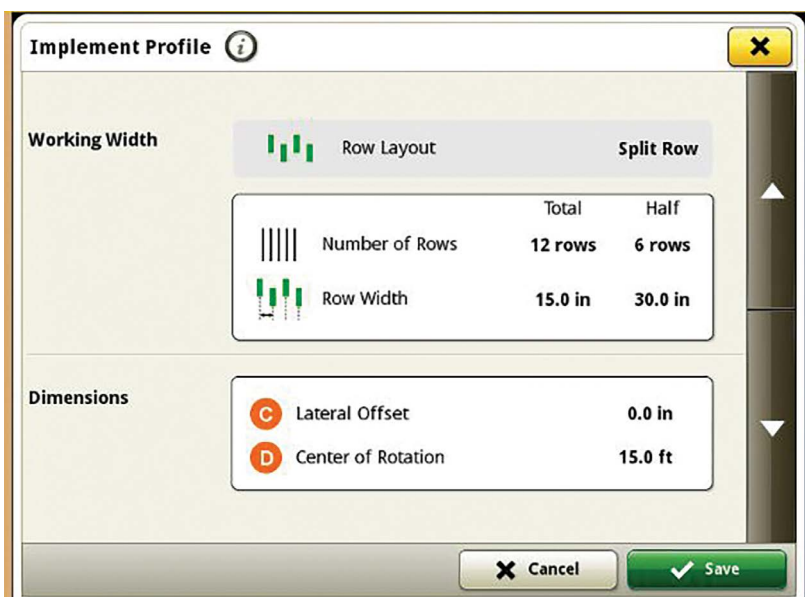
Type: Planter
Model: 0
Serial Number: 1A01775XX
Modified: ---

Connection Type

- Rear 3-Point
- Pivot Offset 9.0 in

✕ Cancel Save

9. Verify Planter Working Width and Dimensions.



The screenshot shows the 'Implement Profile' dialog box with the 'Working Width' and 'Dimensions' sections expanded. The 'Working Width' section has two tabs: 'Row Layout' (selected) and 'Split Row'. Under 'Row Layout', there is a table with columns 'Total' and 'Half'. The 'Number of Rows' row shows '12 rows' and '6 rows'. The 'Row Width' row shows '15.0 in' and '30.0 in'. The 'Dimensions' section has two rows: 'Lateral Offset' (0.0 in) and 'Center of Rotation' (15.0 ft). At the bottom, there are 'Cancel' and 'Save' buttons.

Implement Profile ⓘ

Working Width

Row Layout Split Row

	Total	Half
Number of Rows	12 rows	6 rows
Row Width	15.0 in	30.0 in

Dimensions

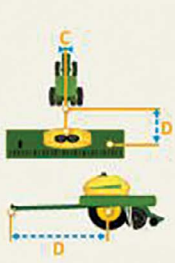
- Lateral Offset 0.0 in
- Center of Rotation 15.0 ft

✕ Cancel Save

Gen4 Implement Profile, continued

10. Enter Lateral Offset and Center of Rotation.

Dimensions



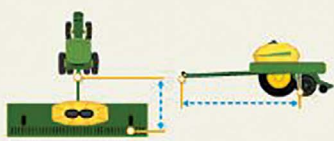
C Lateral Offset

D Center of Rotation

Center of Rotation is measured from connection point to center of frame wheels.

11. Measure and enter Work Point (Seed Tubes) value.
After entering all the info, click Save before returning to the Work Setup page.

Work Point



Work Point
Distance from the Connection Point to the location where seed is dropped.

7	8	9
4	5	6
1	2	3
+ / -	0	.

AutoPath Setup

If using Autopath you will need to set up the implement receiver and turn on Autopath recording status under work setup.

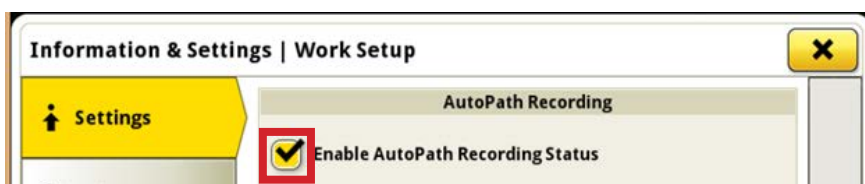
Select Setup icon in the lower left corner.



Then select Advanced Settings at the top of the Work Setup Page.

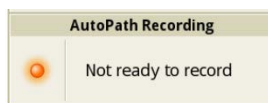


Select Enable Autopath Recording Status



AutoPath Recording status will now be on Work Setup Page. It will say “Not ready to record” until the:

- Implement receiver is powered on and receiving signal
- Row section information is defined
- Implement receiver profile is setup with all the proper measurements
- SF3 or higher correction on the tractor



AutoPath Setup, continued

Equipment



Tractor



Planter 1

Go to Equipment → Planter and go to the bottom of the profile to add an implement receiver and measurements.

Implement Receiver



GPS Receiver

12346



GPS Lateral Offset

0.0 in



GPS Inline Offset

14.5 ft

Once you have verified all measurements and implement profile, the recording status will say “Ready to record”. The display will record your AutoPath lines for later use when the implement is lowered into the ground and is painting a coverage map.

AutoPath Recording | Status



Status



Ready to record

Prerequisites



Implement Receiver must be set up in profile



Row/Section information must be defined



Implement Receiver must be present



Implement Receiver accuracy must be SF3 or higher



Verify Implement Receiver Fore/Aft and Height



Note: Contact your local John Deere dealer with any additional questions about AutoPath

Gen4 Work Summary

12. Select the your Crop Type, Variety, and Target Rate. If using a prescription select RX instead of controller rate and import the RX.

Select OK to save.

Work Setup ⓘ ⓘ

Location	Work Summary
South 40 Deere Simulator	Type: Planting / Seeding
Equipment	Crop: Corn
Tractor(2)	Variety: TEST
Planter 1	Target Rate/Rx: Controller Rate

Settings Manager

Work List + New Work ✓ OK

Target Rate/Rx ⓘ

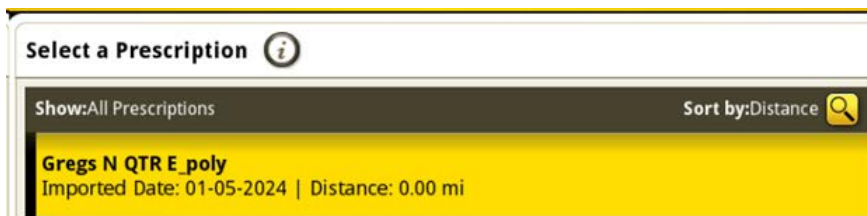
Controller Rate ↻ Set

Rx

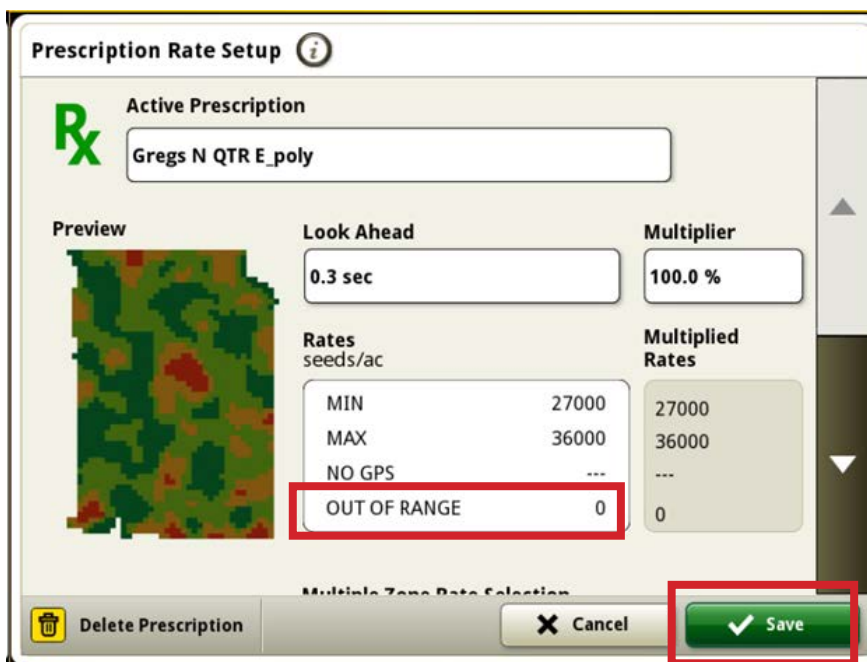
✓ OK

Prescription Setup for Planters

Find the name of your Prescription (Rx) and select OK.



Review the Rx rate range and map preview. Be sure to set up an Out Of Range rate. Select Save when done.

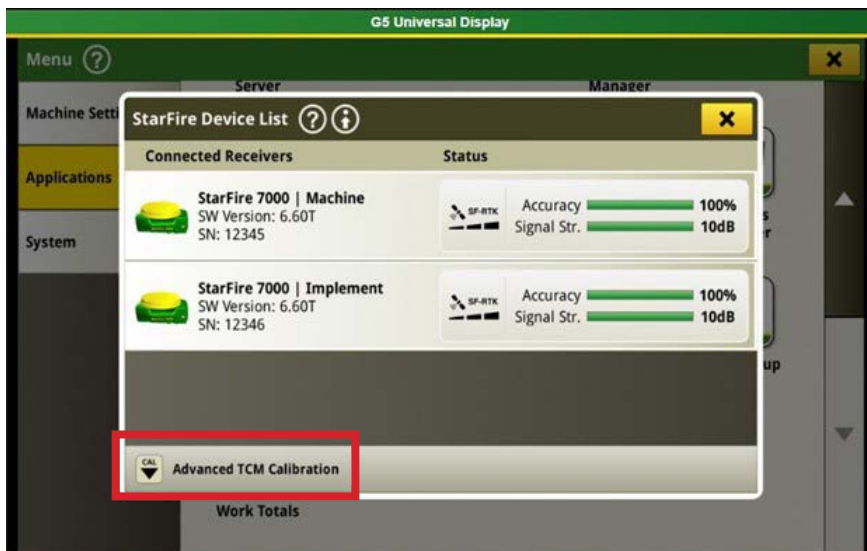


Advanced TCM Tutorial

Go to: Menu → Applications → Starfire



Select Advanced TCM Calibration



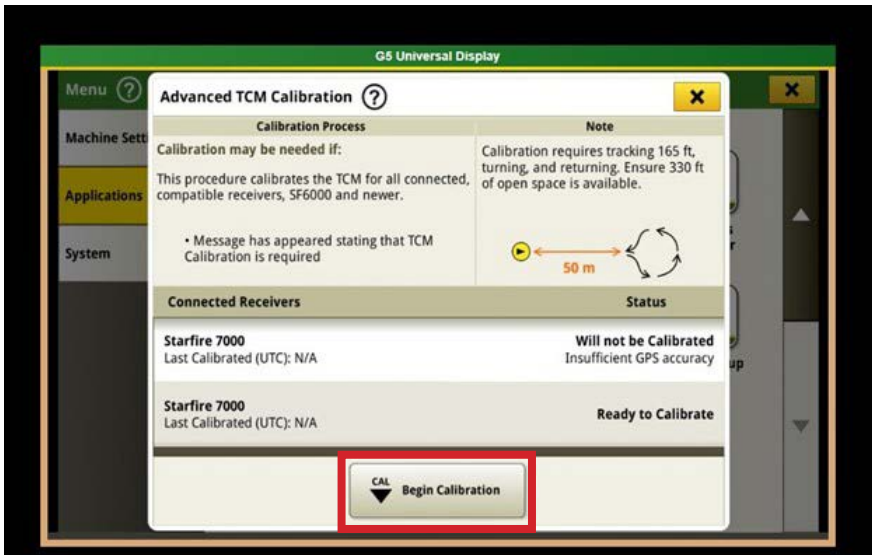
Advanced TCM Tutorial, continued

You can then review process: It will require 330 feet open space and driving down and back on AB line.

Select Begin Calibration and follow the on screen instructions.

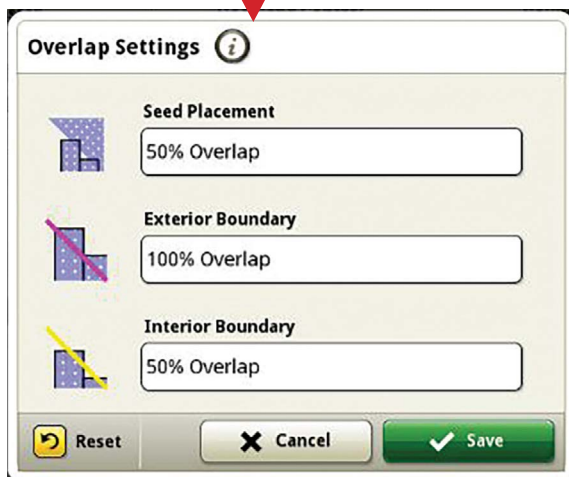
If multiple receivers are online they will calibrate at same time.

Save when Calibration is Complete.



Gen4 Section Control

Select Menu → Applications → Section Control. Turn Master On. Select Boundaries if using.



Select Overlap Settings to edit values to the desired percent overlap and Save.

Gen4 Section Control, continued

Use Performance Tuning while planting to fine tune section control skips/overlaps by measuring distance and noting speed.

Section Control Performance Tuning

Measure the observed skip or overlap distance and enter the values.

Settings will be used to correct unexpected skip or overlap when entering or exiting planted area.

Entering Planted Area

Symptom	Distance	Speed
<input checked="" type="radio"/> Skip	<input type="text" value="... ft"/>	<input type="text" value="... mi/h"/>
<input type="radio"/> Overlap		

Exiting Planted Area

Symptom	Distance	Speed
<input checked="" type="radio"/> Skip	<input type="text" value="... ft"/>	<input type="text" value="... mi/h"/>
<input type="radio"/> Overlap		

Go to Menu → Applications → Layout Manager to create a section control master switch on the Shortcut Bar. Also recommend adding the Seedstar App for quick access to all planter functions.

Edit Shortcut Bar

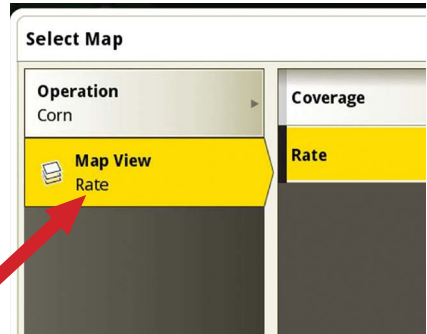
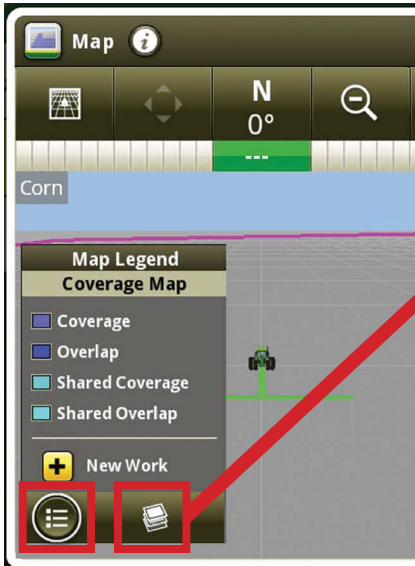
Name: 

SETUP WORK ON AUTOTRAC ON SECTION CTL ON GUIDANCE SWAP TRACK ISOBUS VT SEEDSTAR SHARING MENU

Add a shortcut  Press & Slide Shortcut to Move to an open area

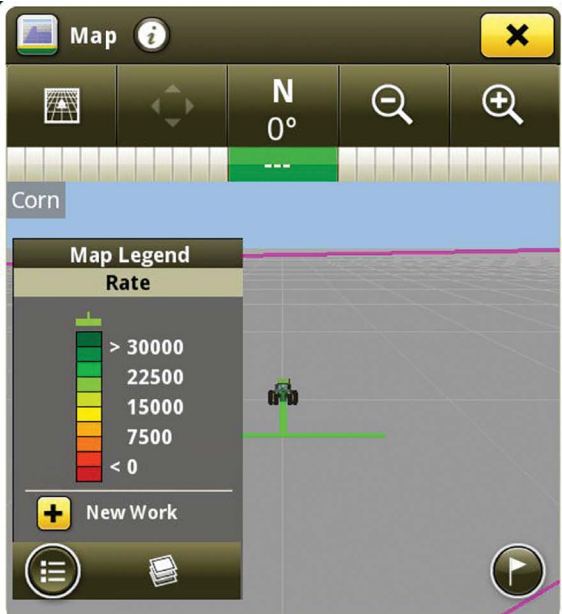
Gen4 Map Setup

If you'd like to view a rate map instead of a coverage map click Menu then Applications, Next, select Mapping and choose the Map Legend icon then select the Map View icon.



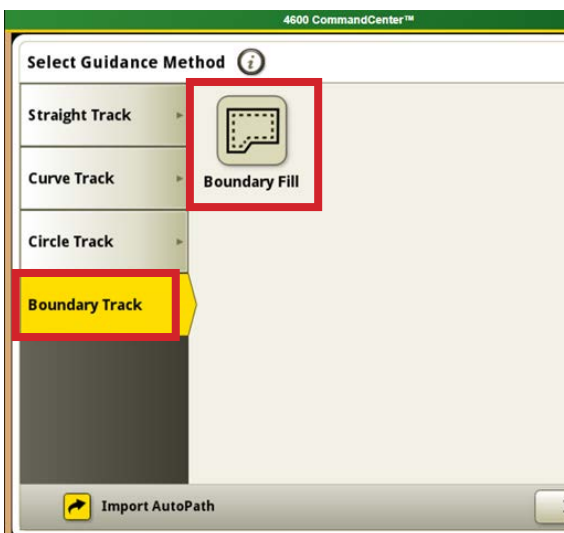
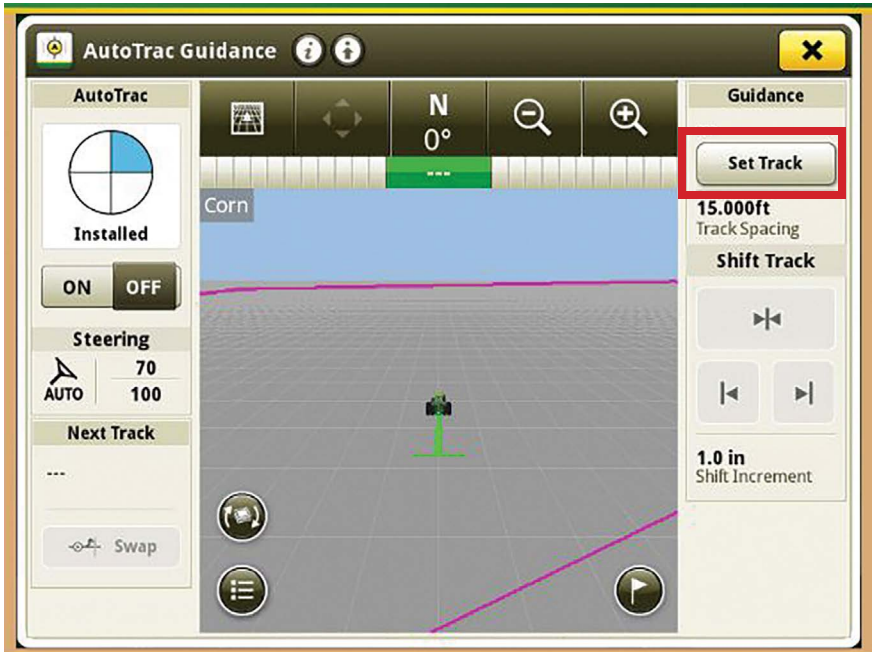
Select Rate and OK to save settings.

To edit the Map Legend click on the colored Legend and enter desired "Greater Than" and "Less Than" values. Click OK to save.



Gen4 Guidance Setup

Select the Guidance shortcut key on the shortcut bar. Click Set Track and choose AB line from the guidance track list or select New track. Next choose type of track and creation method.

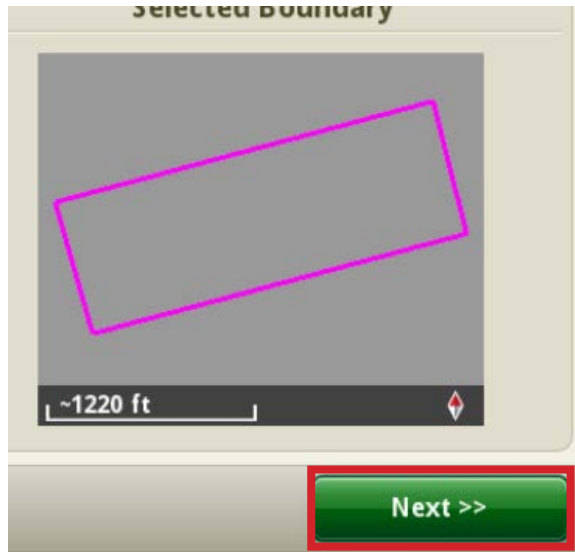


Boundary Track/
Boundary Fill
option will use the
field boundary to
create a single AB
line all the way
around the field that
is matched to the
size of implement
setup.

Gen4 Guidance Setup, continued

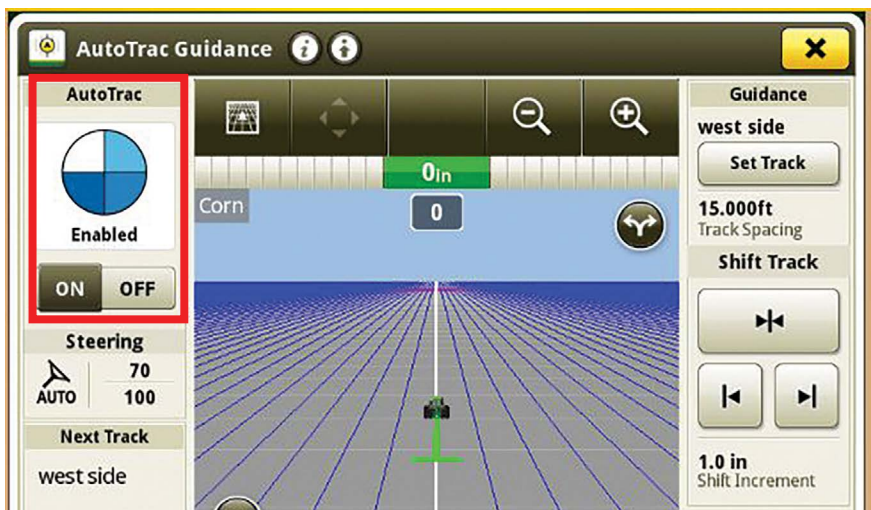
Then click on Next and verify the boundary preview is correct.

Click Save to select.



Turn On Autotrak and hit Resume button.

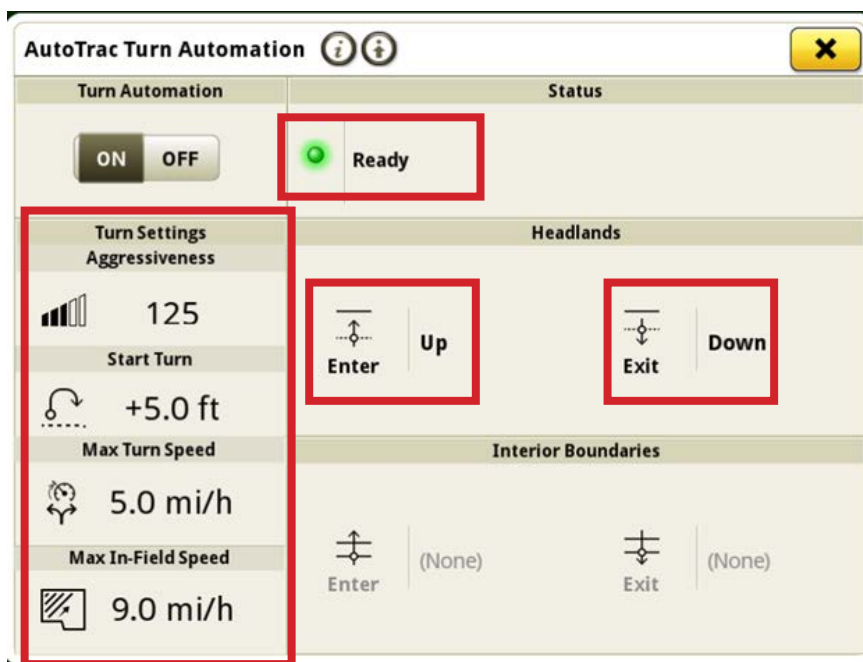
Once in field you can choose Record Fill to record a straight AB line while tracking on the Boundary Track that will be same heading/coordinates as the Boundary Line.



AutoTrac Turn Automation (ATTA)

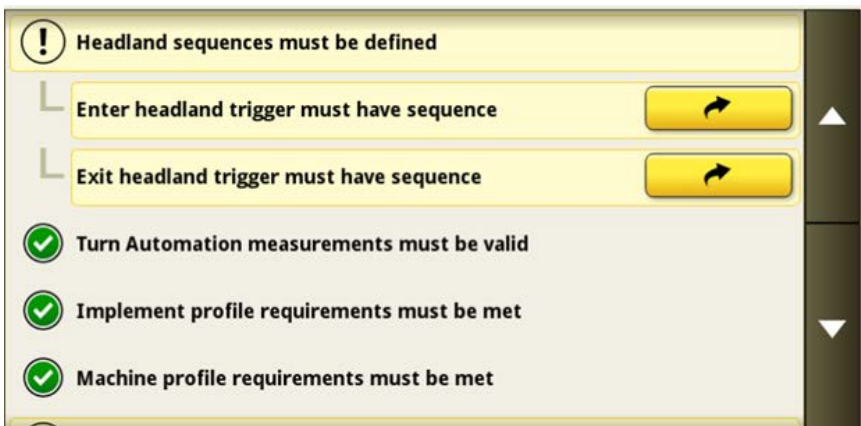
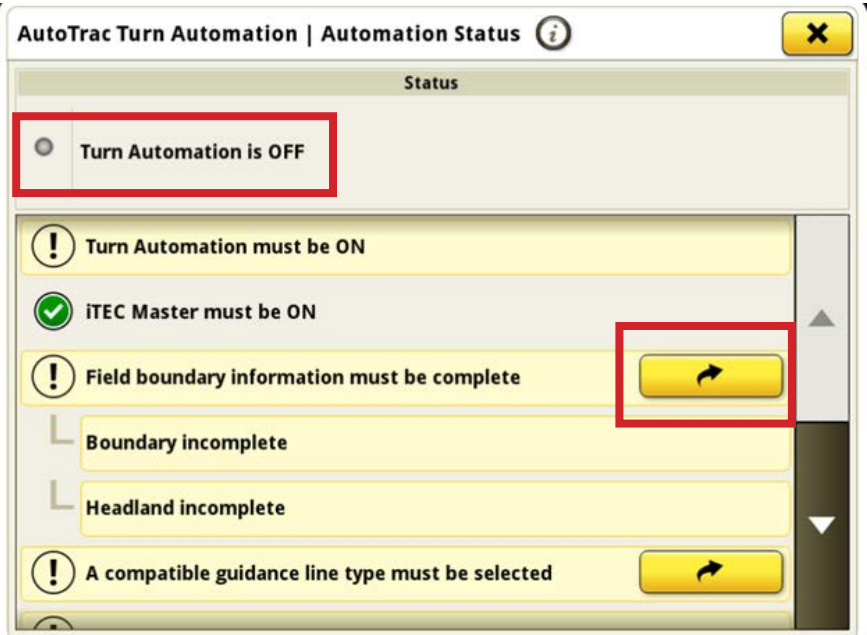
Requirements for Turn Automation:

- Field with boundary – select under work setup
- Headland offsets complete – setup under fields and boundaries
- AB line selected
- Enter / Exit Headland Sequences Defined
- Machine and Implement Measurements complete – under work setup
- Tractor must have Speed Automation active
- Start with default turn aggressiveness
- Identify a distance for start turn
- Set up Max Turn Speed and Return to Field Speed



ATTA, continued

Select Status to work through the checklist of all requirements by selecting shortcut arrow.



ATTA, continued

AutoTrac Turn Automation | Automation Status ⓘ

Status

Ready
Waiting for AutoTrac Resume

- ✔ Turn Automation must be ON
- ✔ iTEC Master must be ON
- ✔ Field boundary information must be complete
- ✔ A compatible guidance line type must be selected
- ✔ Headland sequences must be defined
- ✔ Turn Automation measurements must be valid

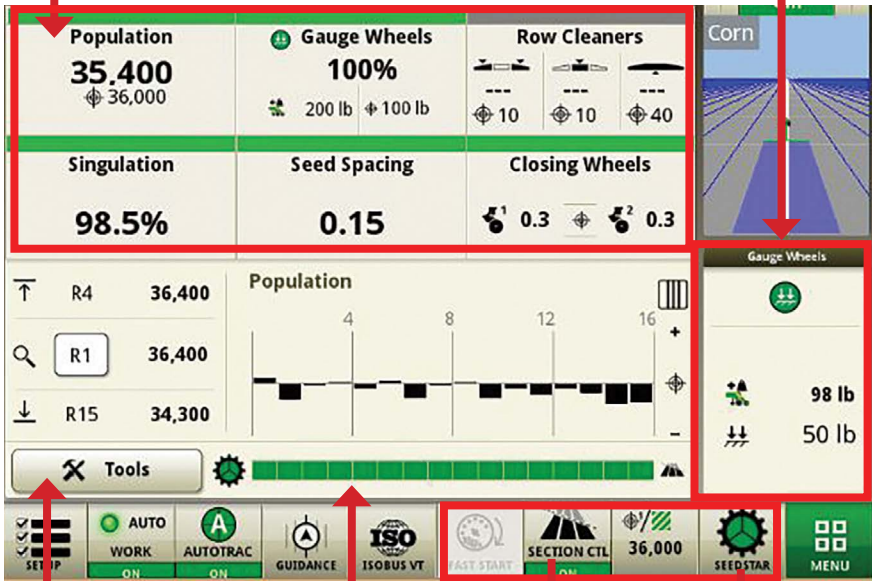
- ✔ Implement profile requirements must be met
- ✔ Machine profile requirements must be met
- ✔ Machine speed automation must be ready

Planter Details

Actual Rate/
Target Rate

Downforce
Controls

SS4 Run Pages - Select for more details



Planter & Seed setup
/ Frame Control &
Diagnostics/
Fast Start

Row Command
Sections

Shortcut Bar
Customize in
Layout Manager

Planter at a Glance

Black bars indicate row is planting normally.

Orange bars indicate row is planting above or below alarm setpoints.

Red bars indicate row is not planting.



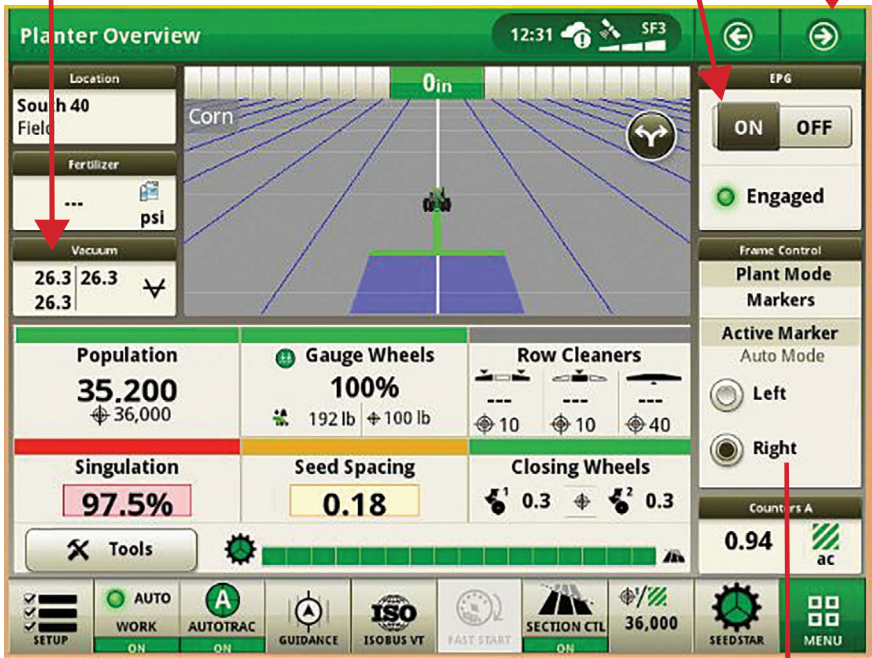
Rotate Meter/ Brush

Planter Overview

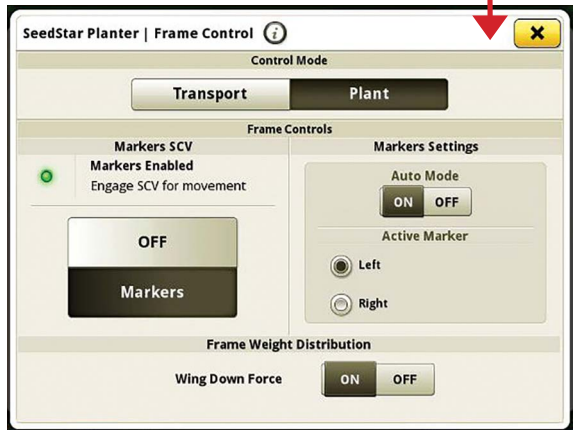
Use arrows to scroll to default pages: Planter Overview, Planter Details & Planter Summary

Vacuum Level Icon

EPG On/Off (PTO Engaged)



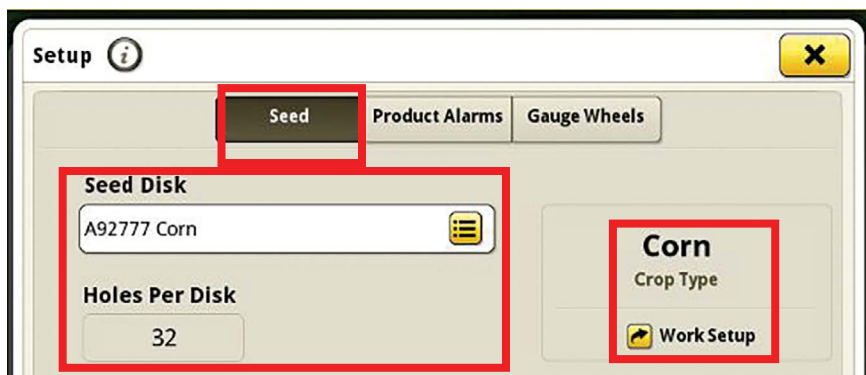
Press Frame Control to select transport or plant mode, enable markers, and frame weight distribution.



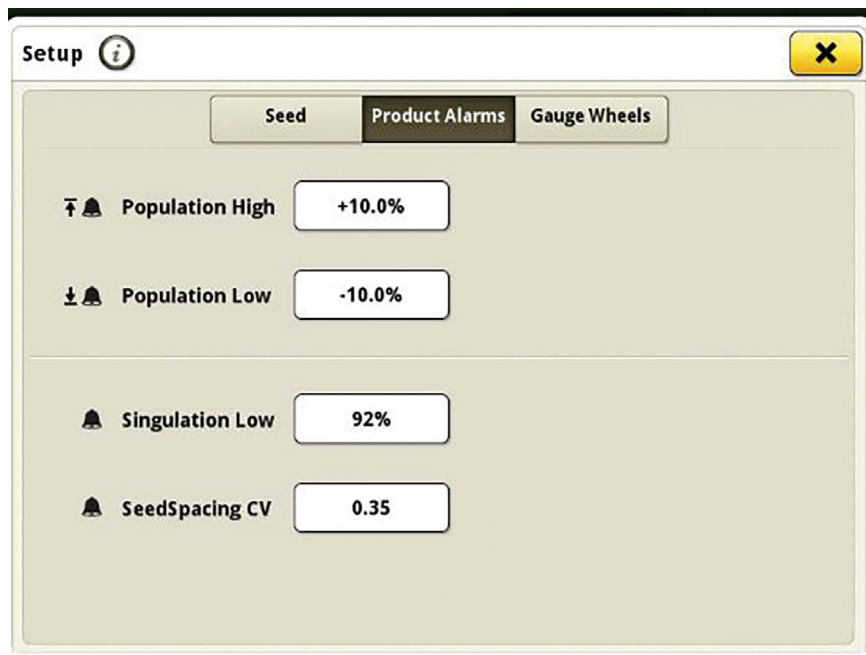
Planter – Seed Setup

Seed Setup

Select Planter Tools → Seed tab. Confirm crop and choose correct Seed Disk. EE Meter = 32 Holes per disk (corn) (beans 64); 5E Pro-max 40 = 40 holes per disk

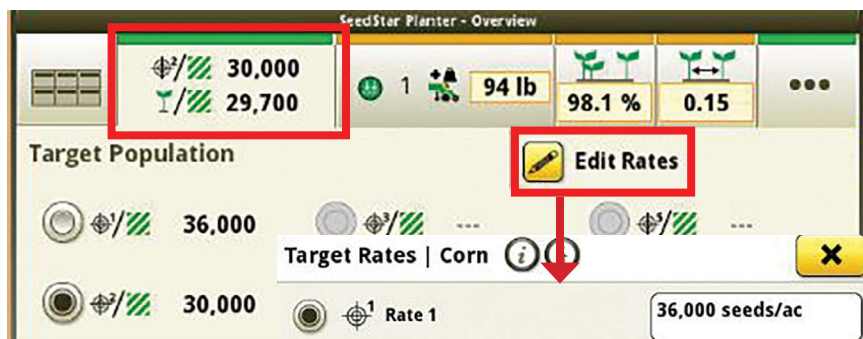


Under Product Alarms and Gauge Wheels customize high and low alarm limits.

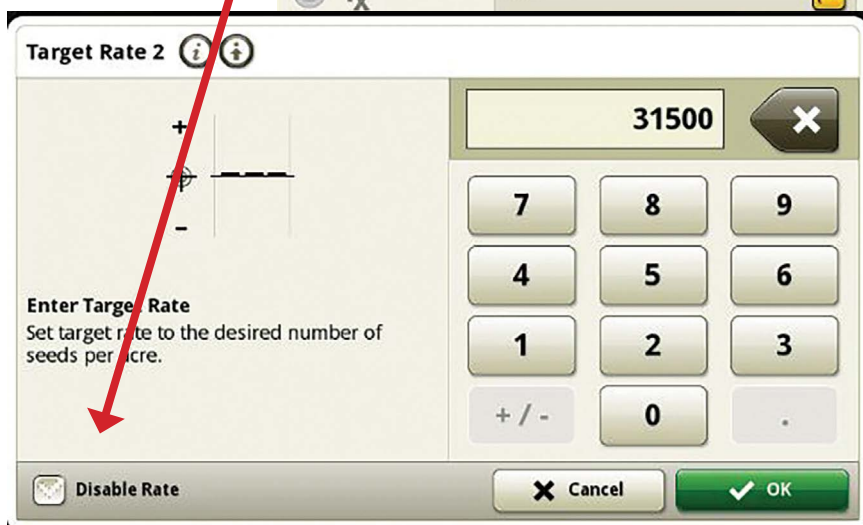


Planter – Rates Setup

From the Planter Details page select the Population Tile to choose target population. Select Edit Rates to enter rates. Uncheck Disable Rate to enable rate.



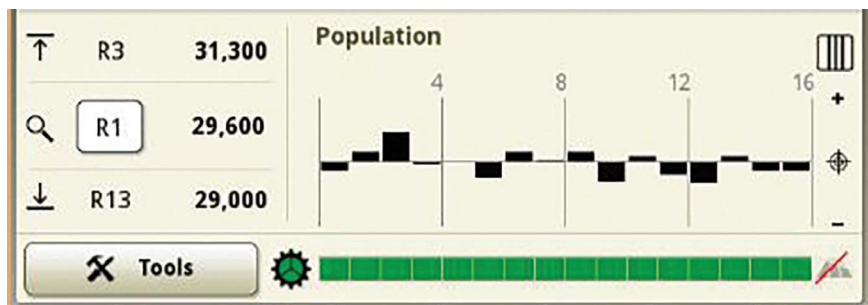
Enter desired rates. Turn on Rate 6 if utilizing prescription. Uncheck Disable Rate to include in list.



Seedstar Run Pages

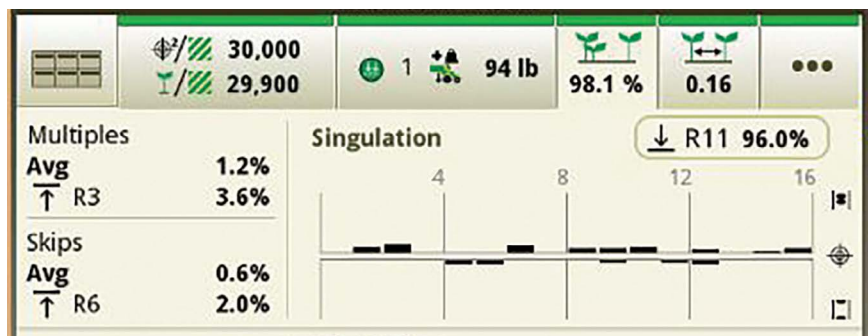
Seed Population

Shows the planter average (actual) and the current target (the average target with advanced populations). The bar graph shows the actual population per row and is selectable for expanded detail. Also displays min and max rows.



Seed Singulation

Shows the average seed singulation for all rows. The percentage of multiples are displayed across the top of the graph and the percentage of skips are displayed across the bottom. Averages and min/max are displayed to the left.



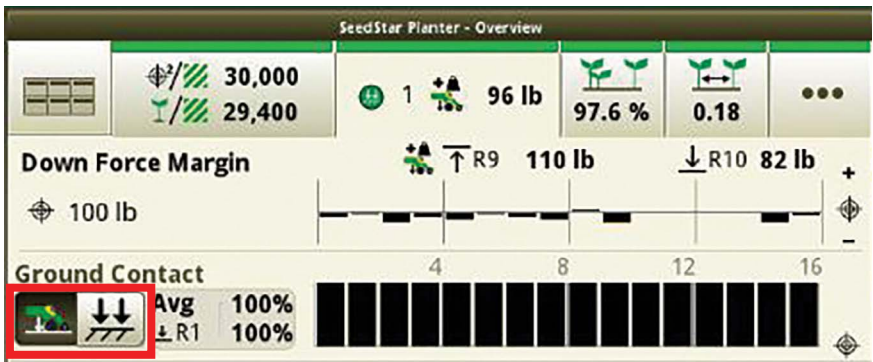
Seedstar Run Pages, continued

Gauge Wheels

The readings are only available from rows with downforce sensors.

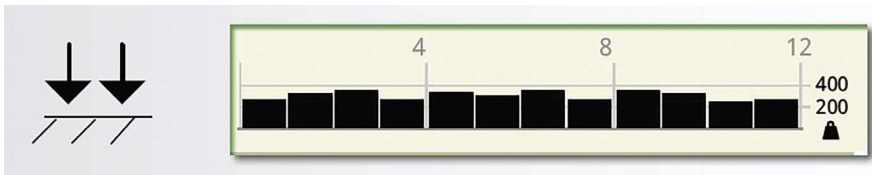
Downforce Margin:

The downforce margin is shown in the upper bar chart. The target margin is displayed as well as the two rows with the highest and lowest reading.



Ground Contact:

The bars show the percent of good ground contact. The percentage is also shown for the overall average and the row with the lowest value. Press button to toggle to applied downforce.



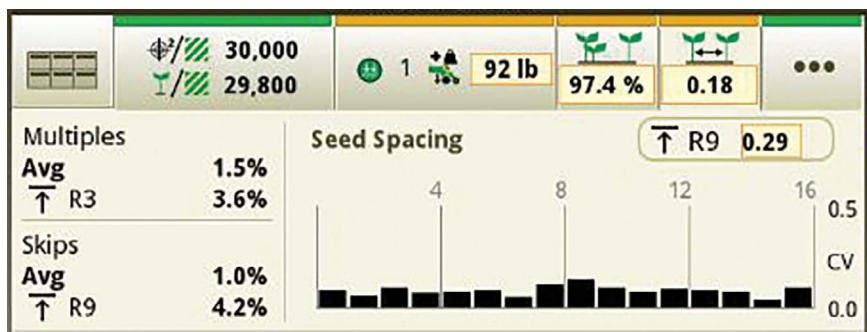
Applied Downforce:

The bars show the applied downforce for each row unit that has a downforce sensor. The average force is shown next to the toggle button.

Row Cleaners

Seed Spacing Coefficient of Variation (CV):

To open a bar graph that shows the consistency of seed spacing, select the tile or tab. Spacing is less consistent as the bar height increases. The degree of consistent spacing is displayed as the coefficient of variation (CV).



Row Cleaners:

The tile shows the target and current down pressure for row cleaners. Select tile to adjust row cleaners. Select from a preset or customize pressures by choosing wing, center, or up pressure.

Use toggle buttons to raise or lower.

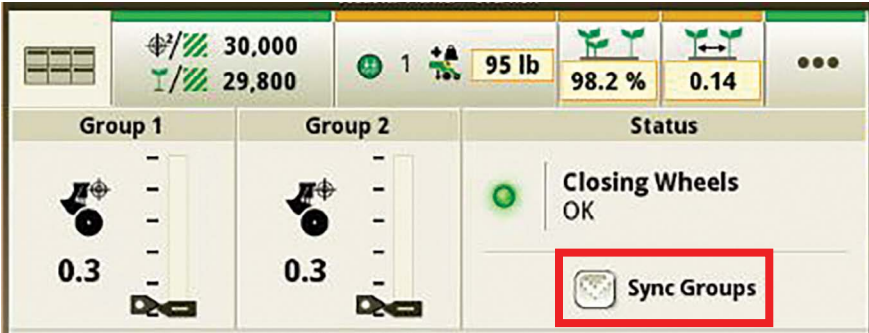


- 1) **Light** - For light residue such as bean stubble
- 2) **Medium** - For medium residue such as corn stalks
- 3) **Heavy** - For heavy residue such as no till conditions

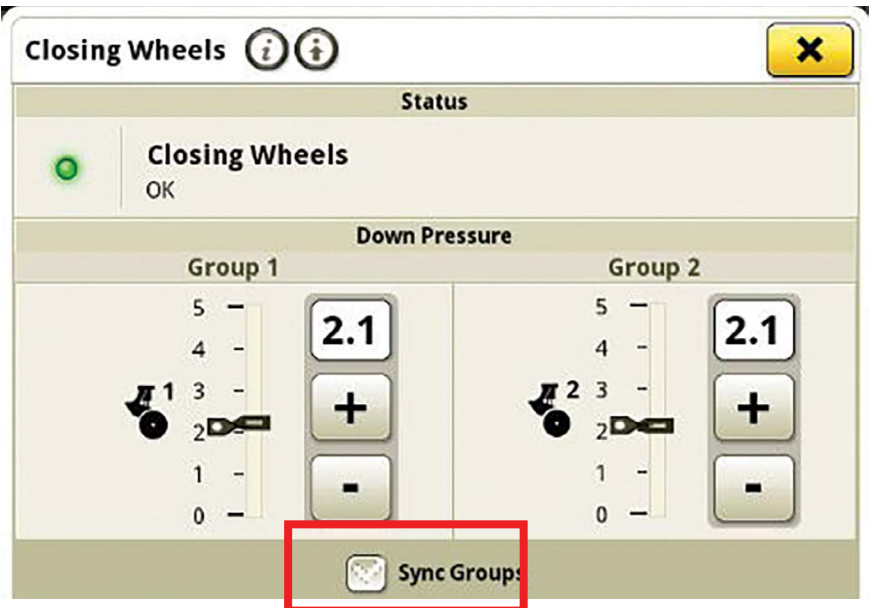
Closing Wheels

Pneumatic Closing Wheels:

The tile shows the current setting. The setting numbers represent the four positions of mechanical closing wheels and add a fifth position. The fifth position provides 75 lb more down pressure than mechanical closing wheels produce.



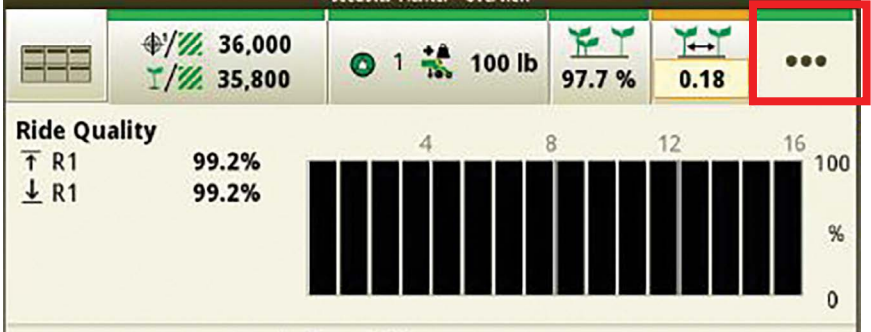
The closing wheel groups can be adjusted separately or synchronized. The groups are factory plumbed (typically separated for the wings and main frame).



Curve Compensation

Ride Quality

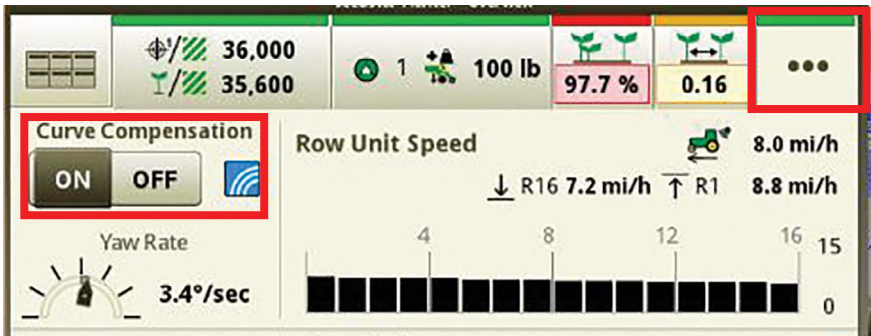
Ride quality can affect seed spacing and depth. Increasing the downforce improves the ride quality, but too much downforce reduces the quality of the seed furrow. Once the downforce is optimized, if the readings remain too low, reduce the ground speed to improve the ride quality.



Curve Compensation

The bar graph displays the ground speed for each row unit. The ground speed for the tractor and for the row units with the highest and lowest speed is shown above the graph. The meter motors adjust to the ground speed for an accurate population at every row.

Confirm Curve Comp is On.

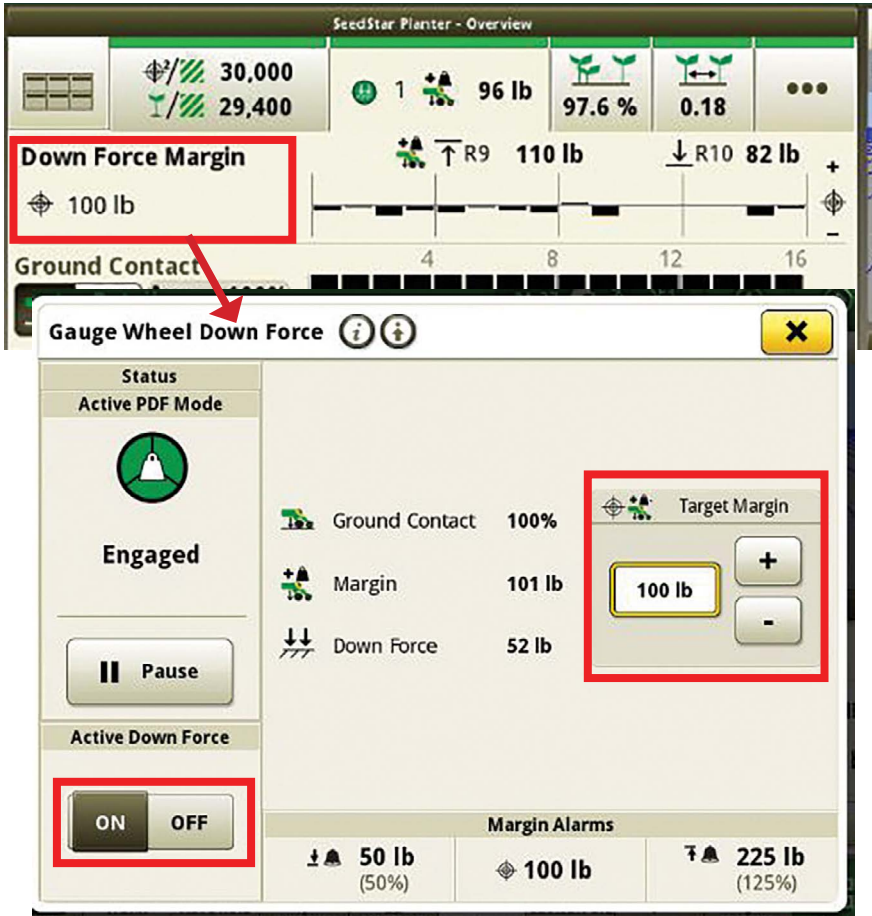


Yaw Rate indicator shows the current degree of turn.

Gauge Wheel Down Force

Active Downforce Automatically makes down force adjustments based on target down force margin and feedback from the gauge wheel sensors.

Center line is Target Margin. Bars above line indicate downforce levels higher than desired. Bars below line indicate levels are low.



Target Margin = Amount of extra downforce applied to row unit. Over and above what is required for the openers to penetrate soil and achieve full planting depth. Default = 75

Vacuum Automation & Fast Start

Select the Vacuum button and click SVC settings in the Automation box. Select automated control for vacuum and frame control. Click Next to complete setup. System will require a restart to save settings.

Step 2: Confirm Tractor SCV Control Mode

SCV 1: Frame Height
SCV 2: Marker/Drawbar
SCV 3: Vacuum 1
SCV 4: Vacuum 2
SCV 5: Vacuum 3

Press Vacuum Button to set target for appropriate seed disk and crop. See chart on page 31 for suggested pressures.



Fast Start:

Select Planter Tools → Fast Start button to engage meter drives for 6 sec. (EPG and Frame height requirements must be met.)



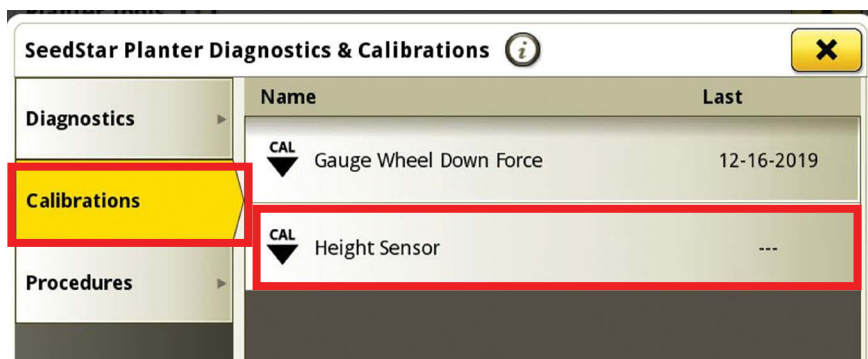
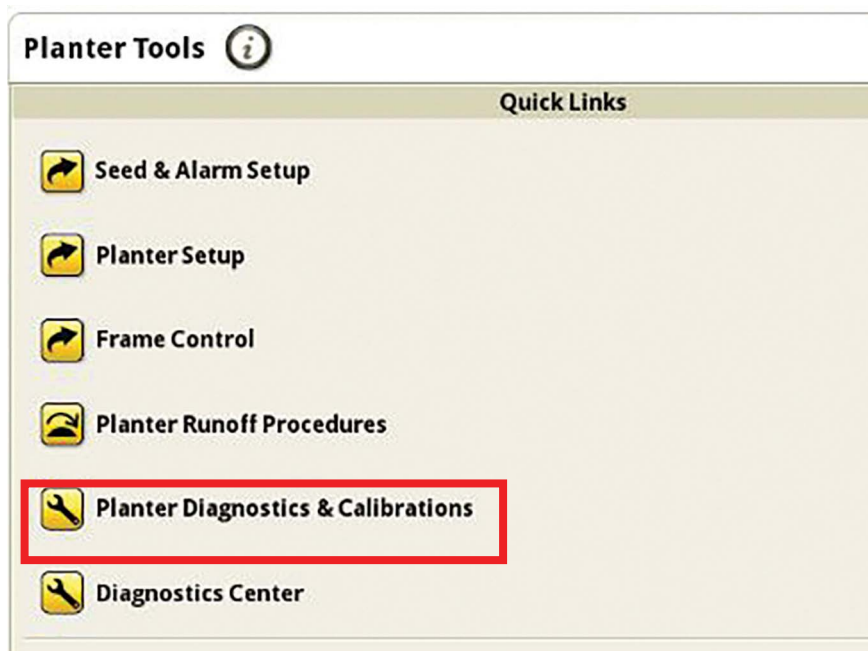
Go to Menu → Machine Settings → Seedstar. Click on Info and Settings icon on top left of screen to access “Auto-Enable Fast Start on Planter Down” and “Override Section Control During Fast Start”.



Height Sensor Cal

To calibrate the height sensor click the Tools button. Next select Planter Diagnostics and Calibrations.

Go to Calibrations and select height sensor.



Follow the on screen prompts to calibrate.

Speed Source

Go to Menu → Machine Settings → Seedstar. Click on Info and Settings icon on top left of screen.

This screenshot shows the 'Settings' menu on the left side of the SeedStar interface. The 'Settings' option is selected and highlighted in yellow. Below it are 'Help' and 'About' options. The main content area on the right is divided into sections: 'Rate Setup', 'Fast Start', and 'Speed'. The 'Speed' section is highlighted with a red border. It contains a table with two columns: 'Mode' and 'Active Source'.

Speed	
Mode	Active Source
Auto:	
Ground Speed	3.0 mi/h

Click on Speed section and confirm that speed is set to Auto and is using either GPS speed or Radar.

This screenshot shows the 'Speed Setting' dialog box. It has a title bar with 'Speed Setting' and an information icon. Below the title bar are four radio button options: 'Auto (Recommended)', 'Ground Speed', 'Wheel Speed', and 'Manual Speed (Fixed)'. The 'Auto (Recommended)' option is selected. To the right of these options is the 'Active Source' section, which shows 'Ground Speed' as the active source. Below this, there is an icon of a tractor with a GPS signal icon and a speedometer showing '0.0 mi/h'.

Speed Setting ⓘ

Active Source

Auto (Recommended)

Ground Speed

Wheel Speed

Manual Speed (Fixed)

--- mi/h

Ground Speed

GPS

0.0 mi/h

Drive Status

Setting Up Shortcuts

Go to Menu → Applications → Layout Manager → Shortcut Bars → Default Shortcut Bar. Remove unnecessary shortcuts and add planter shortcuts. Click Save.



Drive Status

Select the status to view the requirements needed for engagement.



Error detected. Messages appear



The electric power generation is OFF.



The electric power generation is ON.



The ground speed requirement is met.



The planter is lowered.



All sections are commanded off, but all the drive requirements are met and ready.

Vac Pressure	Corn	Soybean
EE Meter Bowl	16 - 23	8 - 26
5E Promax 40	11 - 18	8

CCS Tank Pressure Settings for Common Crops

PRODUCT	DB44 24R22		
	Pressure (Inches H2O)	Small Seed Nozzle Inserts	Small Seed Discharge Elbows
Soybeans	12	No	No
Small Corn (Over 2000 seeds/lb)	10	No	No
Medium Corn (2000 to 1200 seed/lb)	12	No	No
Large Corn (Less than 1200 seeds/lb)	14	No	No
Cotton	10	No	No
Sorghum	8	Yes	Yes
Sunflowers	6	NO	No

PRODUCT	1725CCS, 1775NT 12R30, 16R30, Deere/Orthman 12R		
	Pressure (Inches H2O)	Small Seed Nozzle Inserts	Small Seed Discharge Elbows
Soybeans	12	No	No
Small Corn (Over 2000 seeds/lb)	10	No	No
Medium Corn (2000 to 1200 seed/lb)	12	No	No
Large Corn (Less than 1200 seeds/lb)	14	No	No
Cotton	10	No	No
Sorghum	8	Yes	Yes
Sunflowers	6	No	No
Small Popcorn > 4500 seeds/lb	10	Yes	Optional
Large Popcorn < 4500 seeds/lb	10	No	No
Sweet Corn	10	No	No

Note: Set the tank pressure according to machine and crop when hoppers are full and machine is not moving.

DB60 24R30, 36R20, 47R15, DB66 36R22			DB80 32R30, 48R20, 48R20, 36R30		
Pres- sure (Inches H2O)	Small Seed Nozzle Inserts	Small Seed Discharge Elbows	Pres- sure (Inches H2O)	Small Seed Nozzle Inserts	Small Seed Discharge Elbows
14	No	No	16	No	No
12	No	No	14	No	No
14	No	No	16	No	No
16	No	No	18	No	No
12	Yes	Optional	12	Yes	Optional
10	Yes	Yes	10	Yes	Yes
6	No	No	8	No	No

1775NT 24R30, Deere/Orthman 16R, 18R, and 24R30			1795 and Deere/Orthman 24R20, 24R22		
Pres- sure (Inches H2O)	Small Seed Nozzle Inserts	Small Seed Discharge Elbows	Pres- sure (Inches H2O)	Small Seed Nozzle Inserts	Small Seed Discharge Elbows
14	No	No	12	No	No
12	No	No	10	No	No
14	No	No	12	No	No
16	No	No	14	No	No
12	Yes	Optional	10	No	No
10	Yes	Yes	8	Yes	Yes
6	No	No	6	No	No
12	Yes	Optional	10	Yes	Optional
12	No	No	10	No	No
12	No	No	10	No	No

Need Assistance? Contact us!

Belle Plaine, MN	952-873-2224
Bird Island, MN	320-365-3445
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Hollandale, MN	507-889-4221
Huron, SD	605-352-8519
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