



**KIBBLE  
EQUIPMENT**

Your Farm. Your Future. Our Focus.

# READY TO SPRAY GUIDE

Gen4 Monitors  
4640 Display



**JOHN DEERE**



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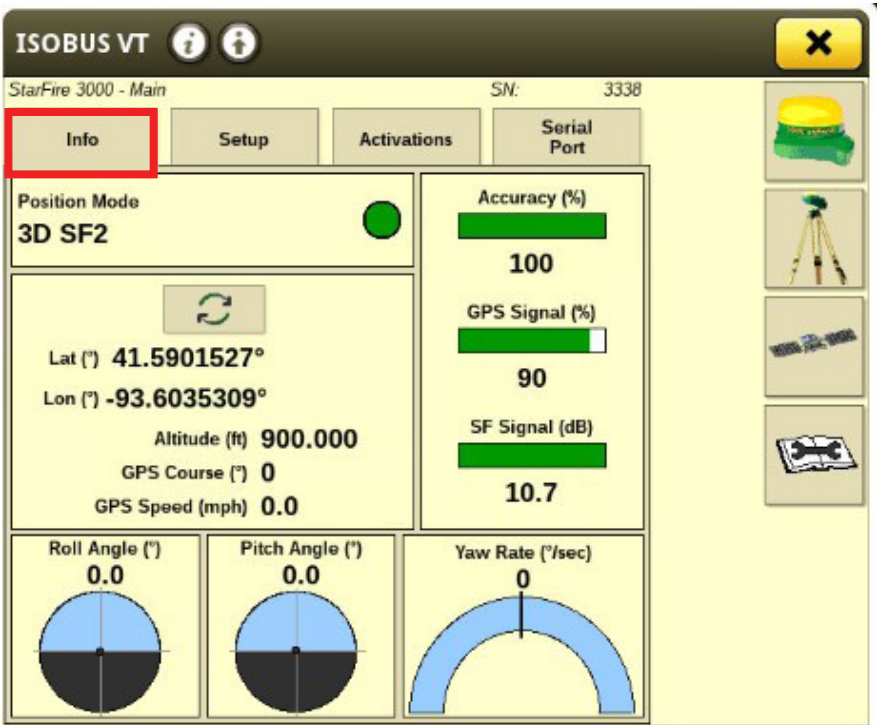
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# GPS Receiver Setup

**Gen4:** Select ISOBUS VT from shortcut bar. Choose Menu button in right hand corner then choose Starfire Receiver.

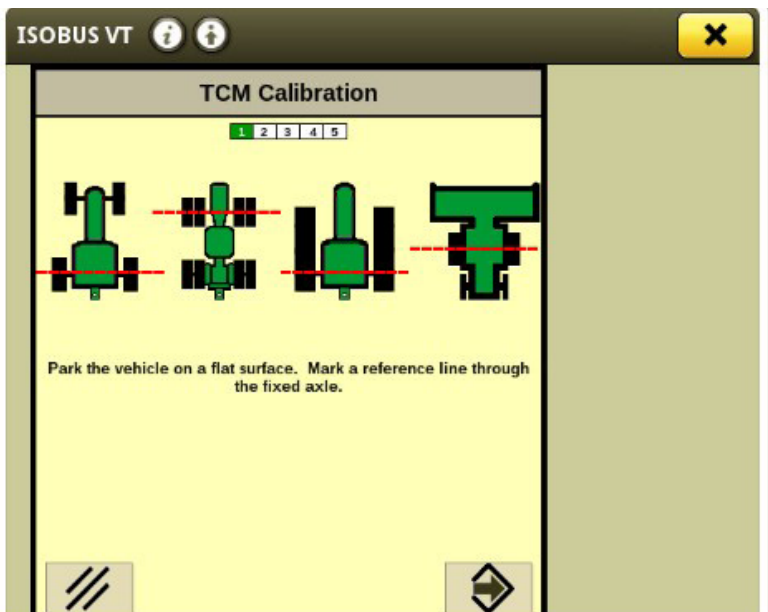
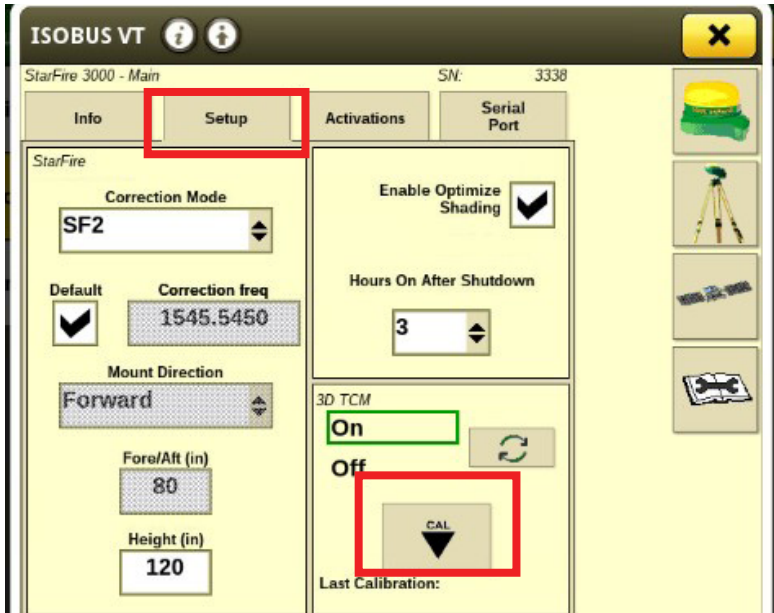


Verify signal is 90% or greater under info tab before starting any fieldwork.



Then navigate to setup tab to calibrate TCM. Follow on screen instructions.

# GPS Receiver Setup, continued



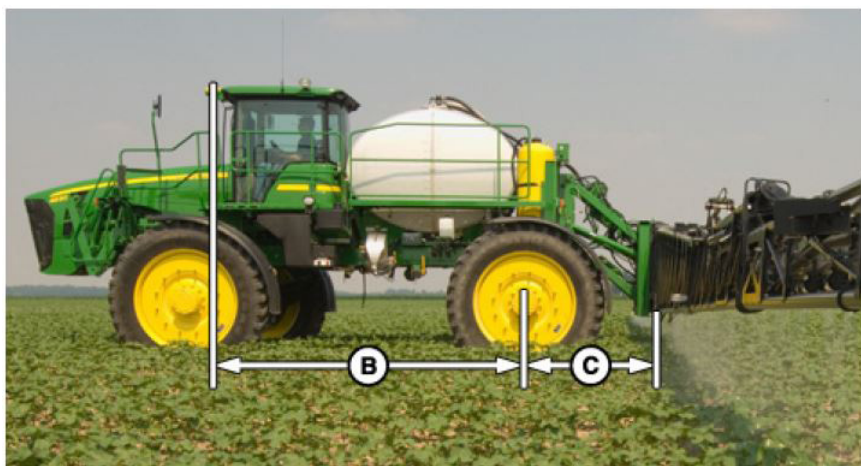
# Machine Offsets

- A) Center of GPS Receiver to Center line of Machine



- B) Center of GPS Receiver to Center of Non-Steering Axle

- C) Center of Non-steering axle to spray nozzles  
(in operating position)

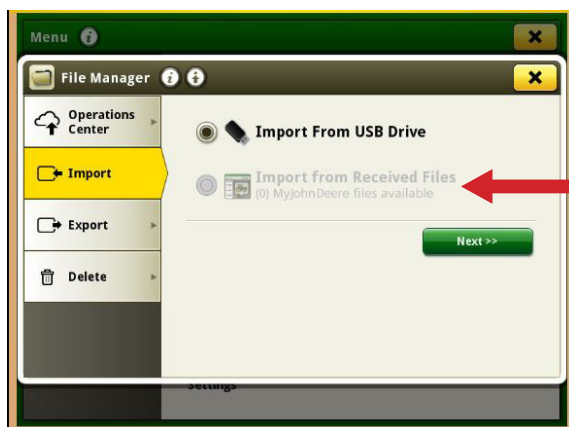


Implement Width: Width of spray area, may extend outside of spray booms.

# Importing Data

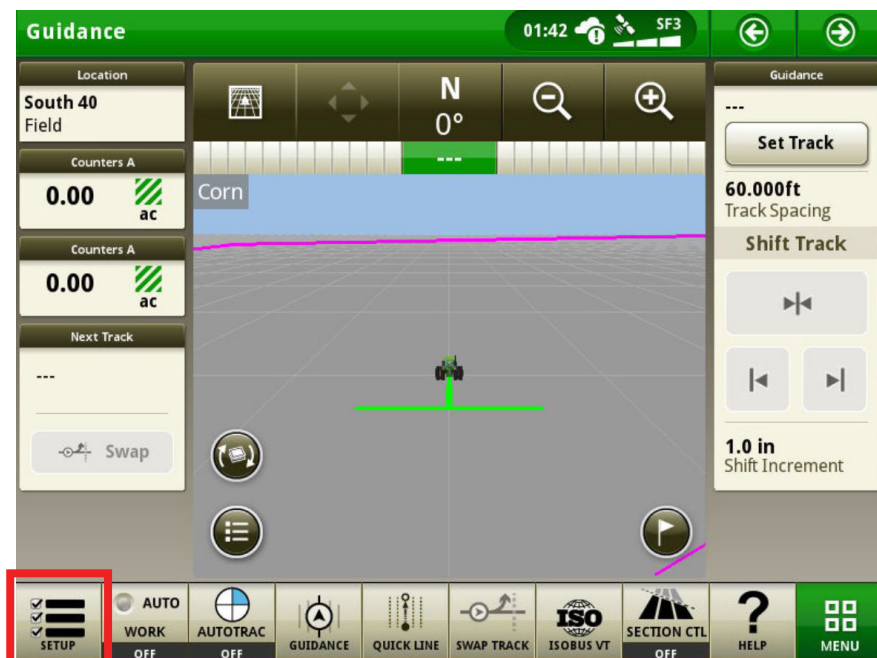
## Data Import using a USB Drive

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.



# 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
<b>South 40</b> Deere   Simulator	Operation: <b>Product Application</b>
<b>Details</b>	<input checked="" type="radio"/> <b>Single Product</b>
... ...	Tank Contents: <input type="radio"/> <b>Tank Mix</b>
Conditions	Product Name: <input type="text" value="..."/>
<b>Equipment</b>	Target Rate/Rx: <input type="text" value="Controller Rate"/>
<b>Sprayer</b>	
<b>Settings Manager</b>	

Work List New Work

**Multiple Boundaries Detected** ⓘ

Select a Detected Location

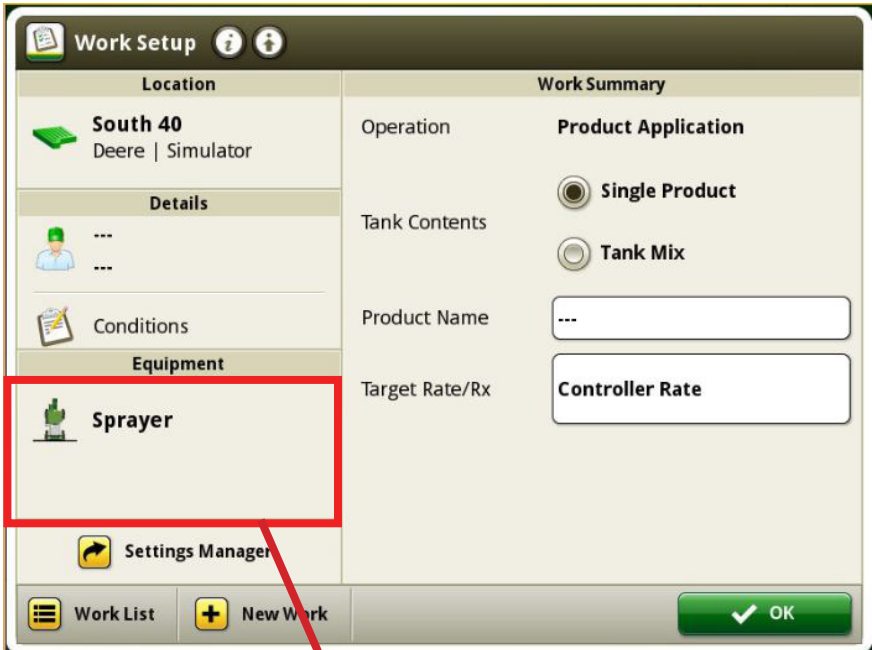
	<b>South 40</b> Client: Deere   Farm: Simulator
	<b>North 40</b> Client: Deere   Farm: Simulator

View All Cancel

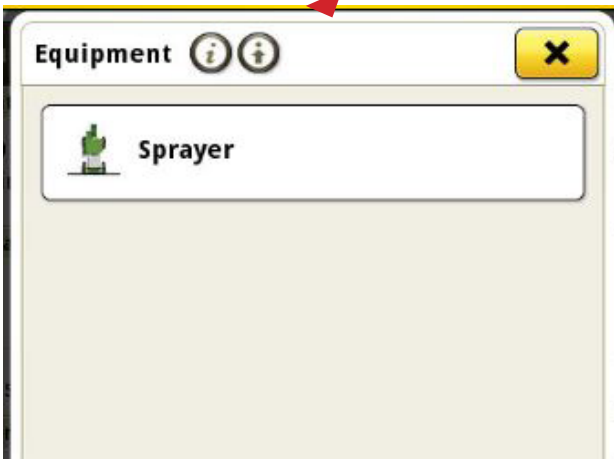


## Work Setup, continued

3. Select the Equipment button and select your Machine.



The screenshot shows the 'Work Setup' interface. The 'Location' section is set to 'South 40 Deere | Simulator'. The 'Equipment' section is highlighted with a red box, and a red arrow points from it to the 'Equipment' selection dialog shown below. The 'Work Summary' section includes 'Operation', 'Tank Contents', 'Product Name', and 'Target Rate/Rx'. The 'Product Application' section has radio buttons for 'Single Product' (selected) and 'Tank Mix'. There are input fields for 'Product Name' and 'Controller Rate'. At the bottom, there are buttons for 'Settings Manager', 'Work List', 'New Work', and 'OK'.



The screenshot shows the 'Equipment' selection dialog. It has a title bar with 'Equipment', an information icon, a help icon, and a close button. The main area contains a single option: 'Sprayer' with a green sprayer icon to its left.

4. Select Sprayer and enter offsets.

# Machine Profile

- Under Machine Profile select GPS offsets.

**Machine Profile** ⓘ

**Profile Name**  
Sprayer

Type: Sprayer  
Serial Number: 1N04038RAD0000313  
Modified: 03/04/2020

**GPS Offsets**

1	GPS Lateral Offset	0.0 in
2	GPS Inline Offset	176.0 in

**Boom & Nozzles Settings** ↻

**Working Width**  
133.8 ft  
107 sections

- Enter receiver measurements.

**GPS Offsets** ⓘ

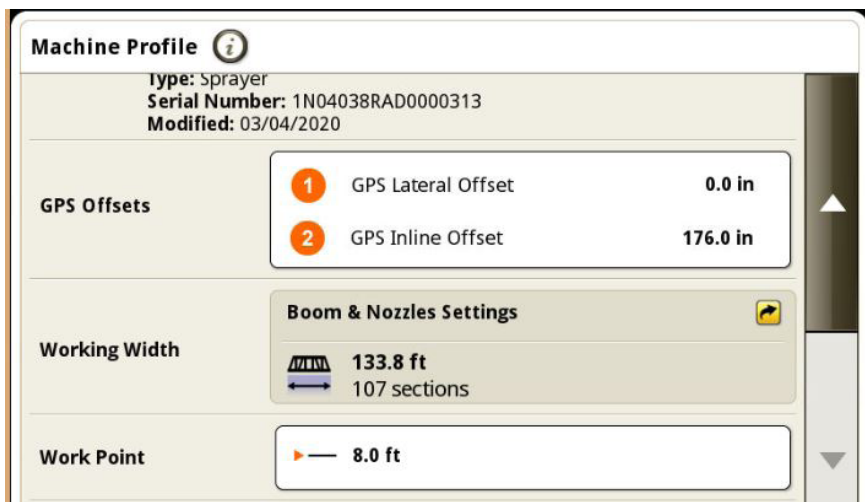
1 GPS Lateral Offset 0.0 in

2 GPS Inline Offset 176.0 in

✕ Cancel

## Machine Profile, continued

7. Scroll down to work point. Select to edit.



**Machine Profile** ⓘ



Type: Sprayer  
Serial Number: 1N04038RAD0000313  
Modified: 03/04/2020

**GPS Offsets**


1	GPS Lateral Offset	0.0 in
2	GPS Inline Offset	176.0 in

**Working Width**

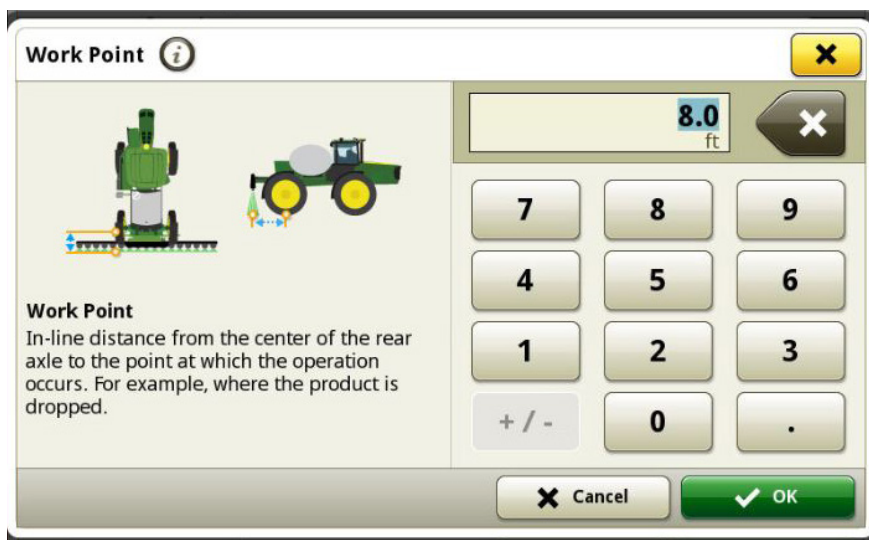
**Boom & Nozzles Settings** ⓘ

	133.8 ft
	107 sections

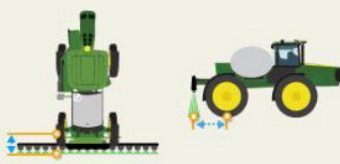
**Work Point**

 8.0 ft

8. Open the Work Point. Enter measurement from center of rear axle to spray nozzles.



**Work Point** ⓘ



**Work Point**  
In-line distance from the center of the rear axle to the point at which the operation occurs. For example, where the product is dropped.

8.0 ft

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

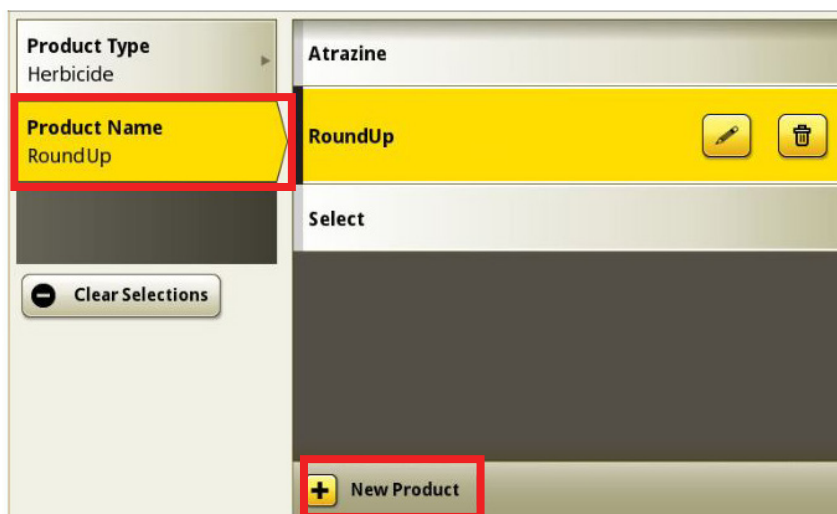
Cancel OK

# Work Summary

10. Select Single Product then choose Product Type.

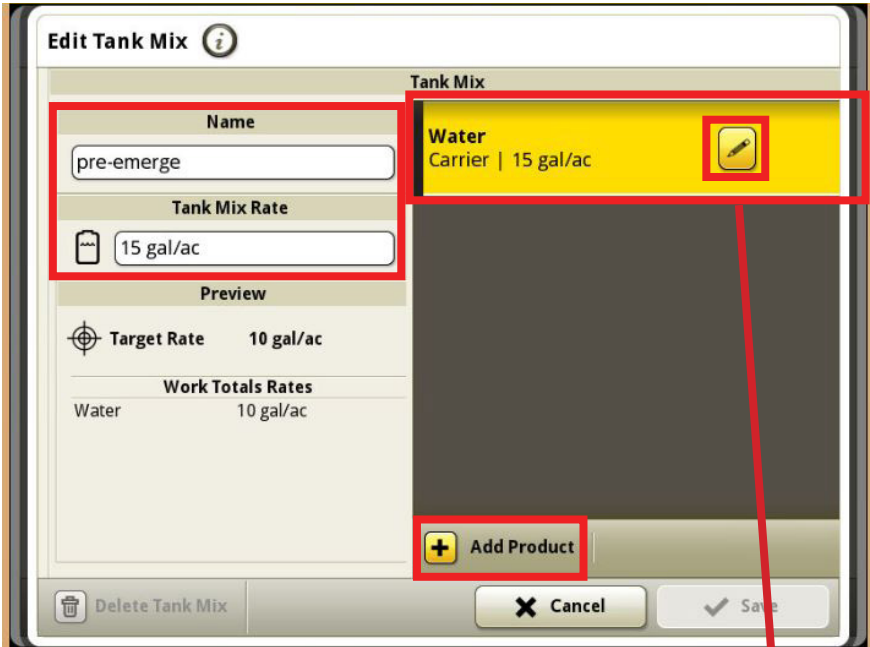


11. Next select Product Name and select the name of the product or enter a new name by clicking New Product at the bottom of the page.

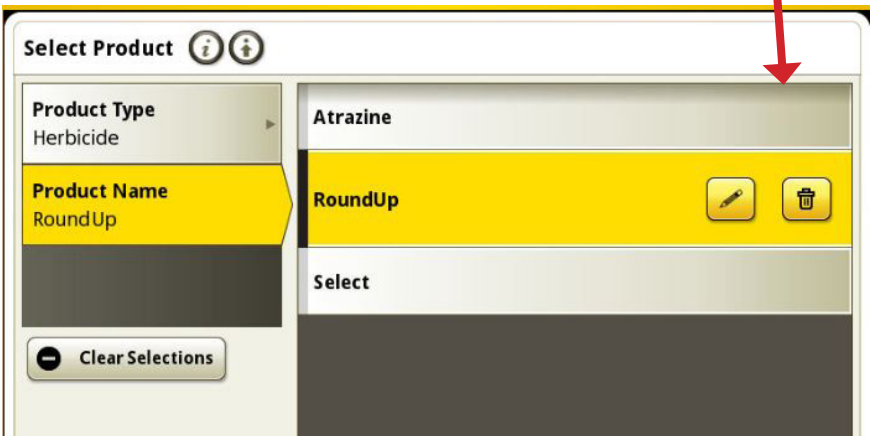


# Tank Mix

12. Select Tank Mix option. Press New Tank Mix and enter name, rate, and add product. Water will be the default carrier but it can be changed by selecting the edit button.

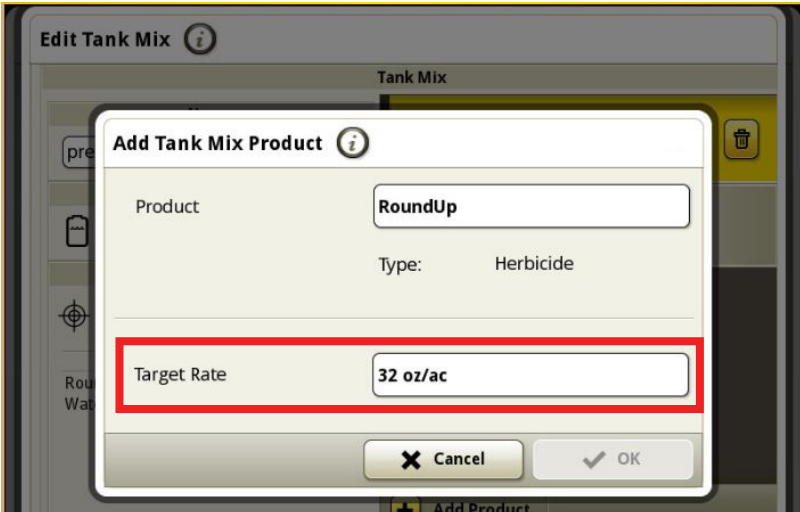


13. Select Add Product to select product type and name.

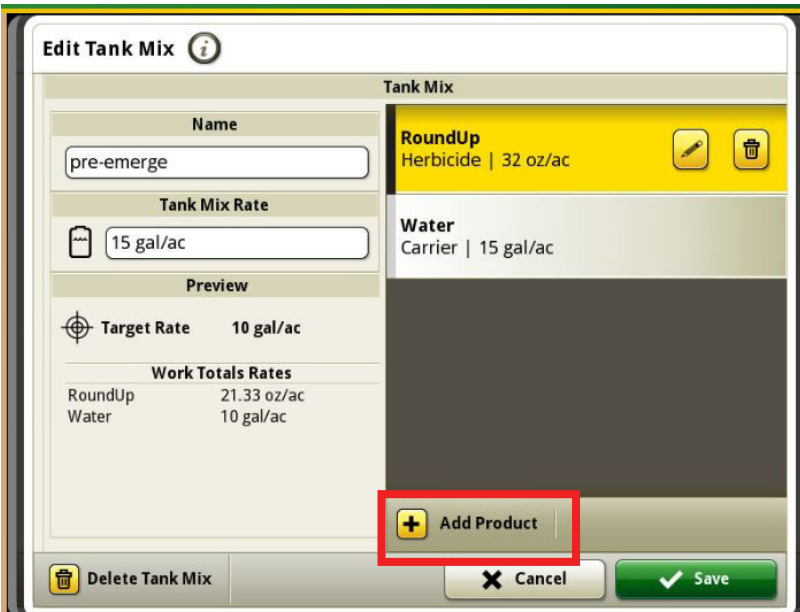


# Tank Mix, continued

14. Assign a rate for each product in the tank mix.

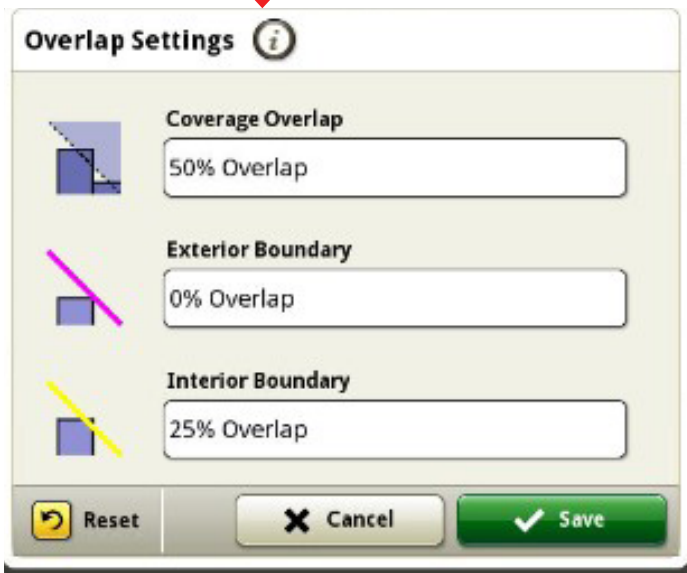
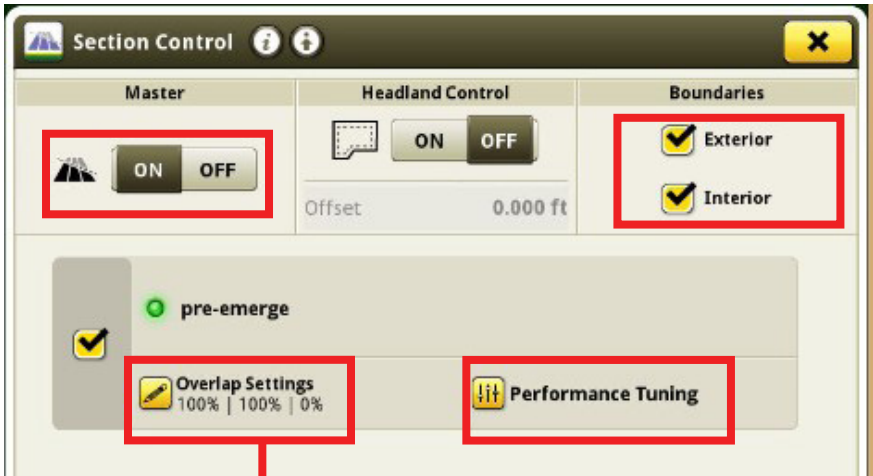


15. Select Add Product to add additional products to complete tank mix.



# Section Control

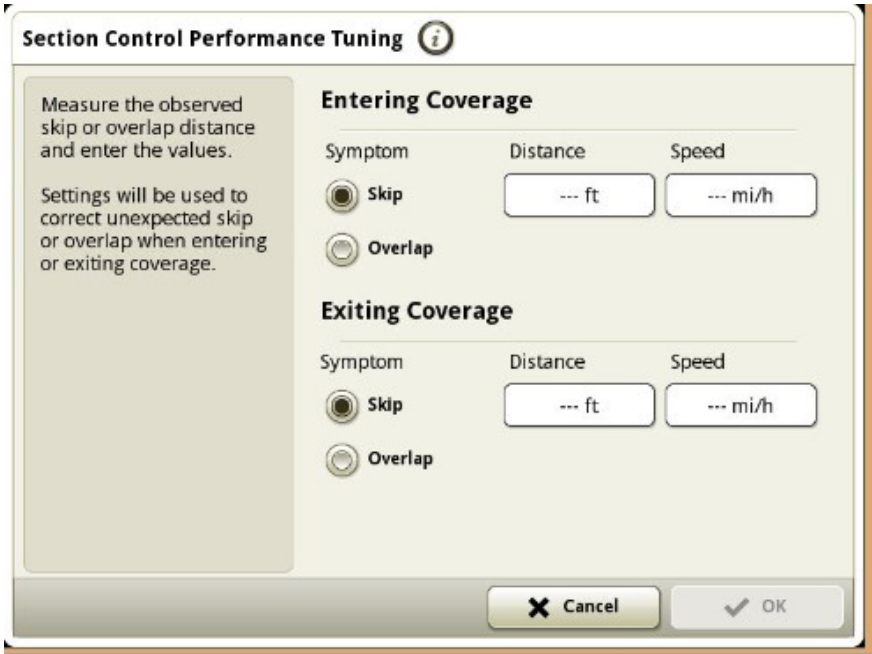
Select Menu → Applications → Section Control. Turn Master On. Select Boundaries if using.



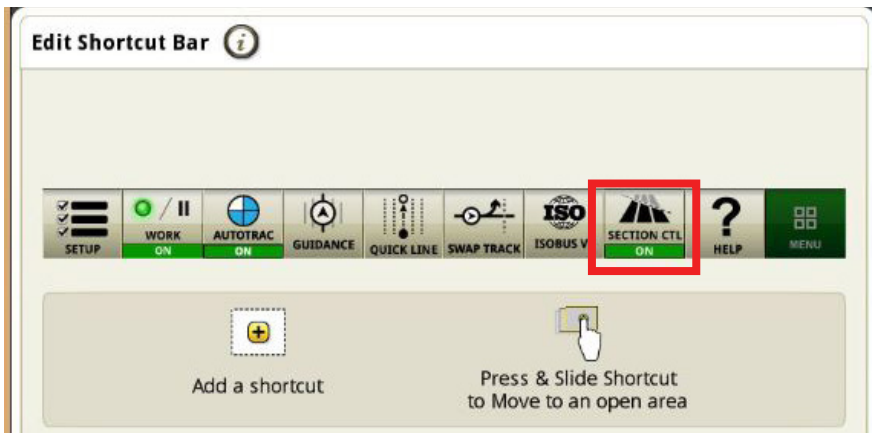
Select Overlap Settings to edit values to the desired percent overlap.

# Section Control, continued

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



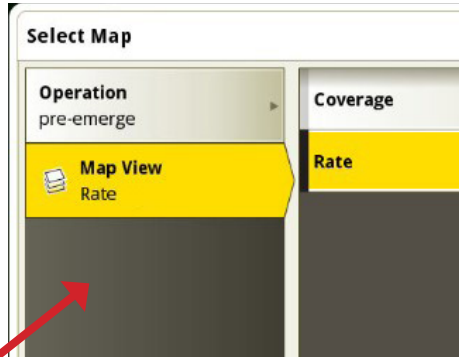
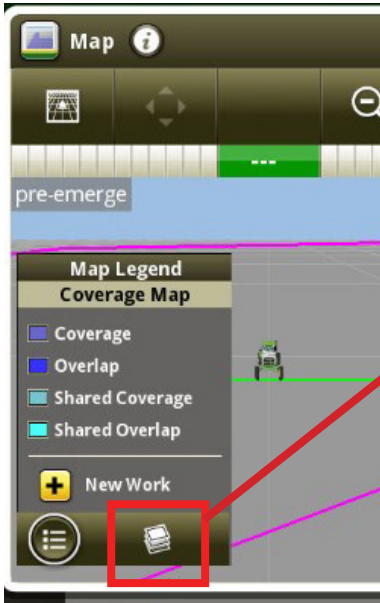
Go to Applications → Layout Manager → Shortcut Bars → Default Shortcut Bar to add section control master switch.





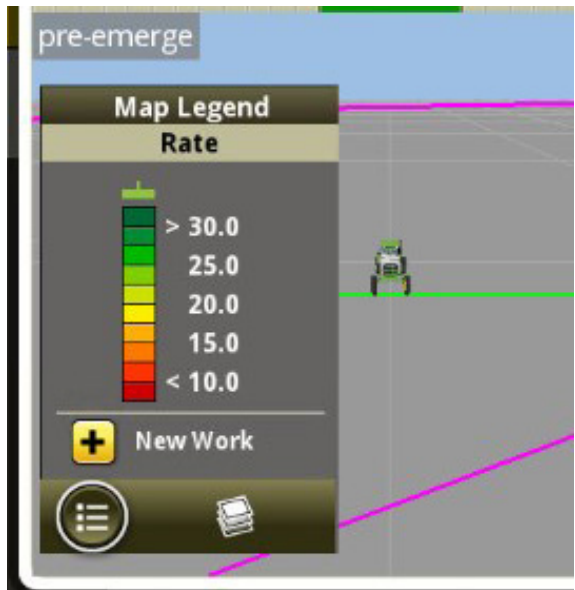
# Map Setup

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 View icon.



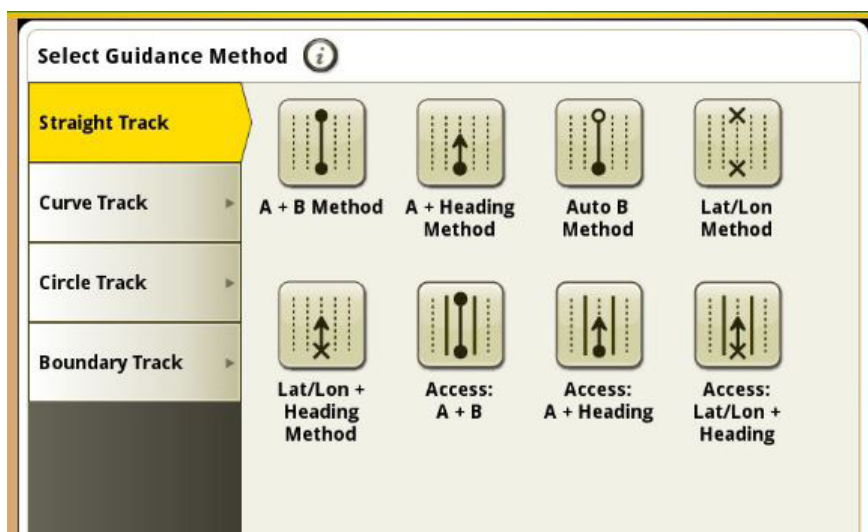
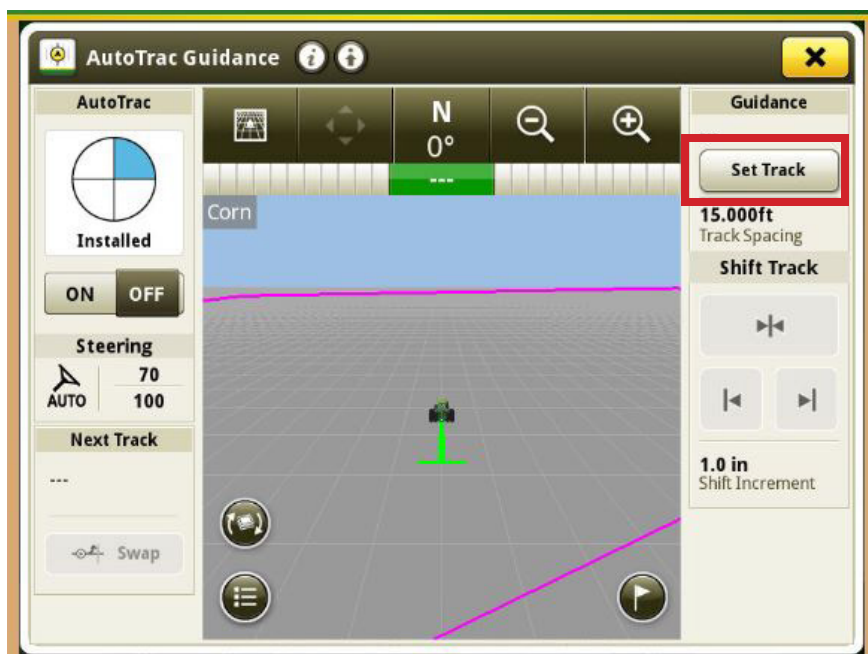
Select Rate and OK to save settings.

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



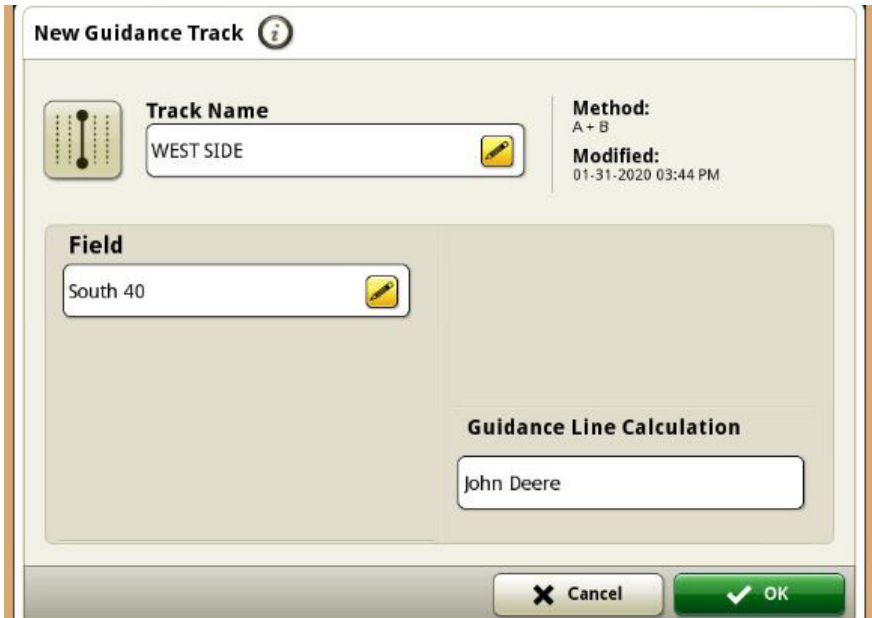
# Gen4 Guidance Setup

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.

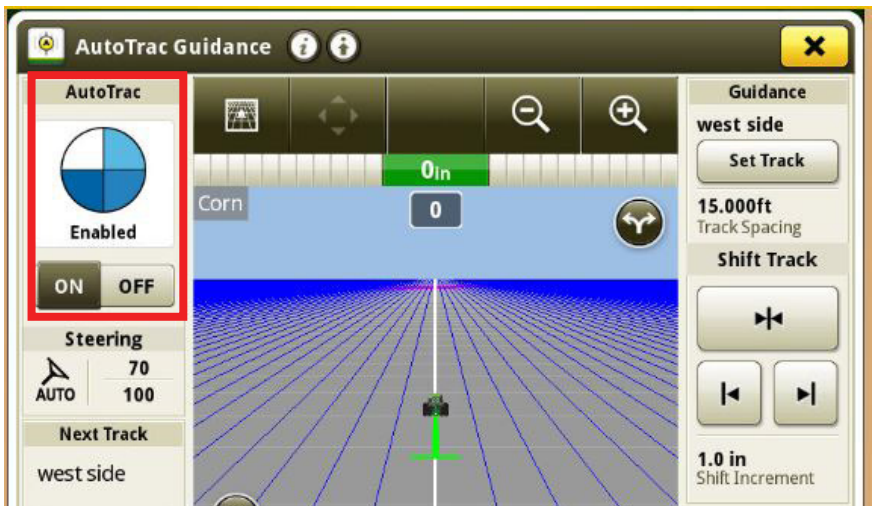


## Gen4 Guidance Setup, continued

Give track a unique name and confirm it is in the correct field. Click OK to continue setup. Set A and drive line. Set B.



Turn On Autotrak and hit Resume button.



# Hydro Handle

Boom Index Reset - enable all

Boom Index L & R

Headland Management System



Master On/Off

Boomtrac Resume

Autotrac Resume

Left/Right Foamer

Raise/Lower Center Boom

Boom tilt Left/Right

Programmable Buttons

# Armrest Controls

Pump On/Off



Agitation On/Off

Target Rate Selection

Fence Row Nozzles On/Off

Spray Mode Selection

Video Input

Programmable Buttons

# Armrest Controls, continued



Throttle

Road Transport Lock

Tread Adjust

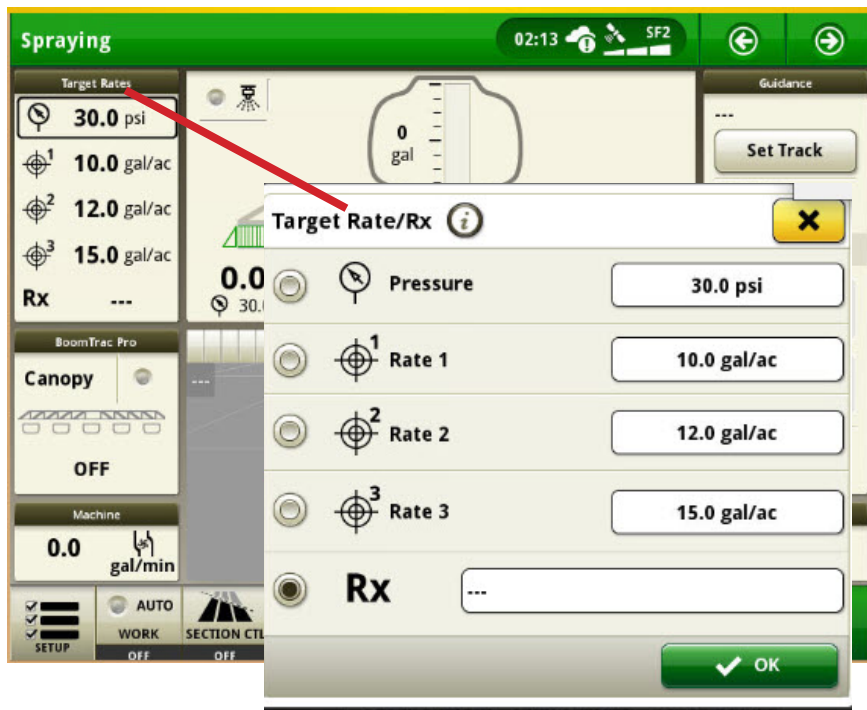
Ladder

Diff Lock

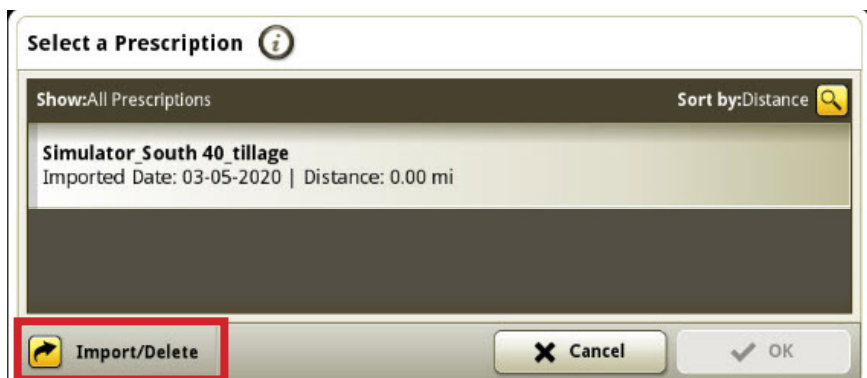
Park Brake

# Rate Setup

From the “Spraying” page select “Target Rate”. Enter desired manual pressure, rates, or prescription.



If using RX choose from list. To upload a new RX select “Import/Delete” to go to file manager.



# Spray System Setup



Spray System

Menu → Machine Settings → Spray System to set system pressures and flow rate mode.

**Spray System** [Info] [Help] [Close]

Target Presets	Pressure	Flow Rate Mode
<input type="radio"/> 30.0 psi	<b>Minimum Pressure</b> 15.0 psi	<b>Standard Flow</b>
<input type="radio"/> 10.0 gal/ac	Spray Off Pressure 40.0 psi	Note: Match Flow Rate Mode to physical valve positions
<input type="radio"/> 12.0 gal/ac	<b>Pressure Relief</b>	<b>Status</b>
<input type="radio"/> 15.0 gal/ac	ON OFF	OK

Rx ---

**Flow Rate Mode** [Info]

Mode	Valve Configuration		Flow Rate
	Flowmeter	Orifice	
<input type="radio"/> High Flow			> 120 gal/min
<input checked="" type="radio"/> Standard Flow			26 - 120 gal/min
<input type="radio"/> Low Flow			< 26 gal/min

Note: Match Flow Rate Mode to physical valve configuration

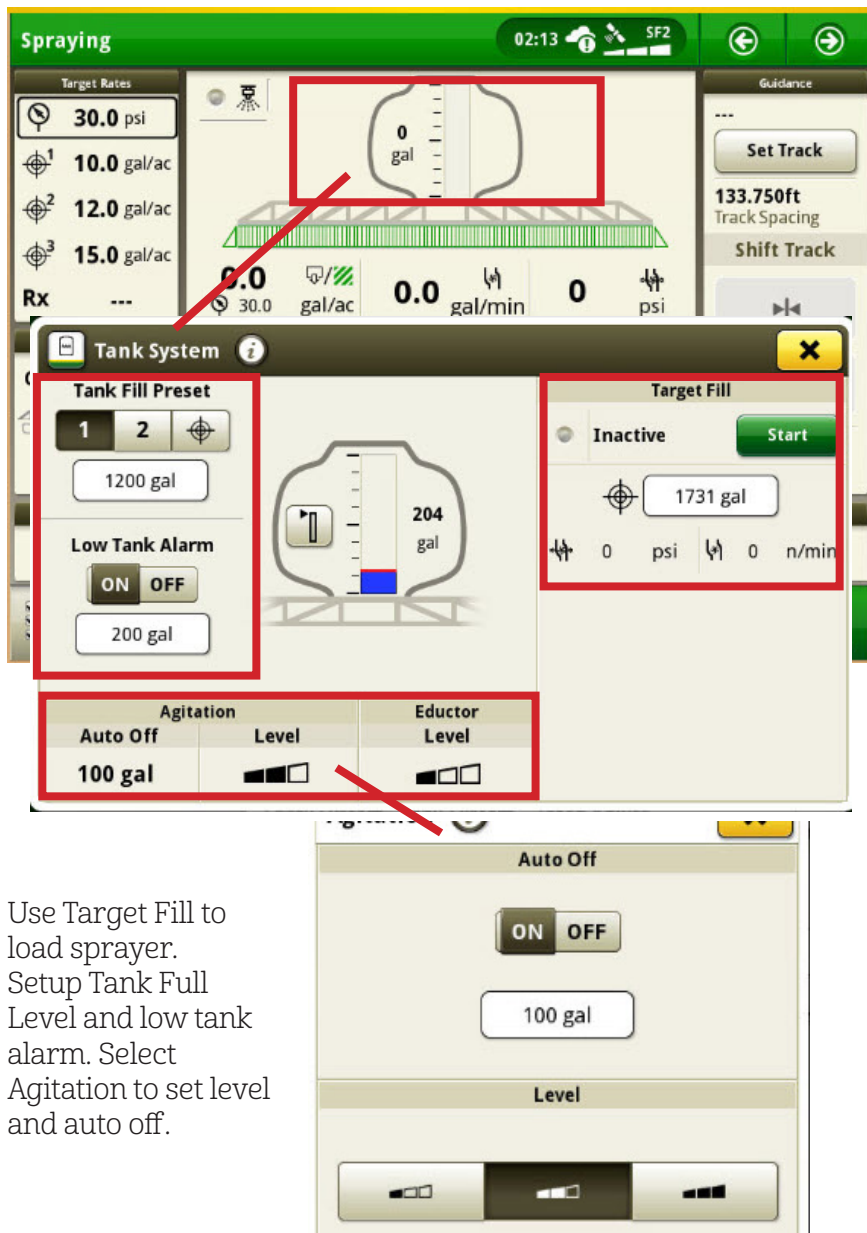
**Recommendations** [Cancel] [OK]

Enter working speed and target rate to view recommendations



# Tank System

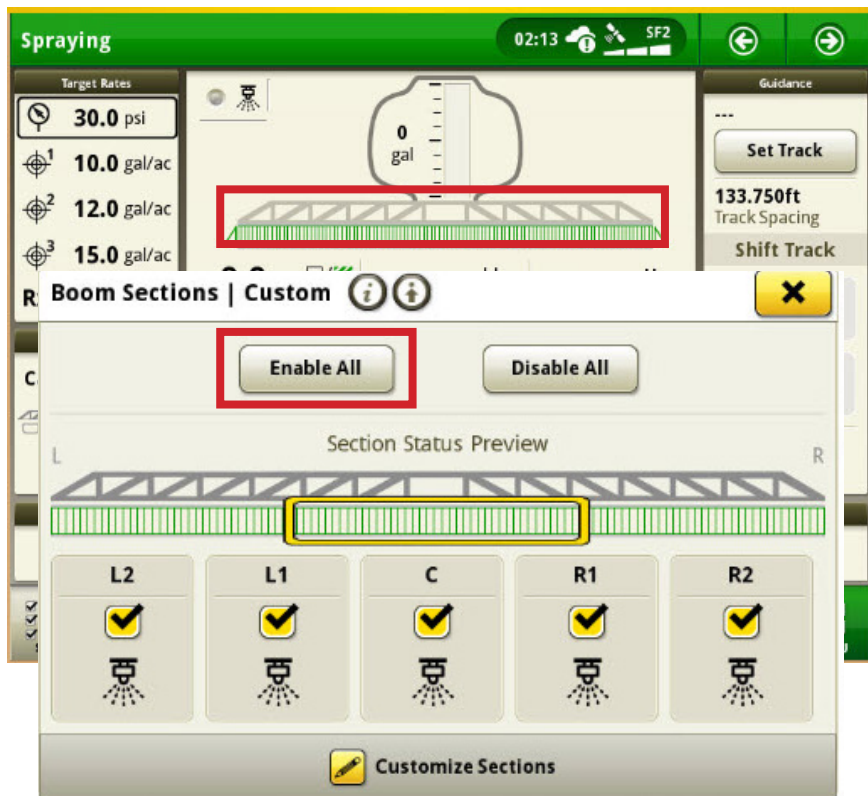
From the “Spraying” page select the Tank to view “Tank System” settings.



Use Target Fill to load sprayer. Setup Tank Full Level and low tank alarm. Select Agitation to set level and auto off.

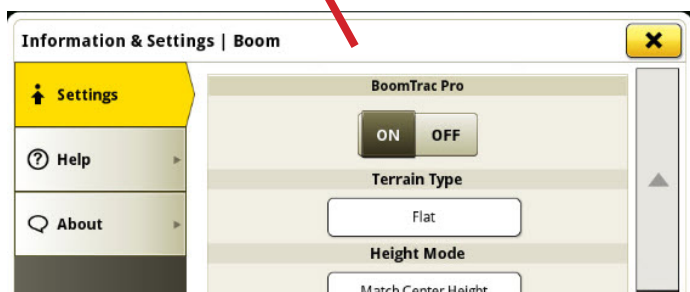
# Boom Settings

From the “Spraying” page select the Boom to view “Boom Sections” and manually turn on/off sections or Enable All.



Boom Sections | Custom

Press Advanced Settings button to enable BoomTrac Pro.



# BoomTrac Pro

From the “Spraying” page select BoomTrac Pro to setup and troubleshoot.

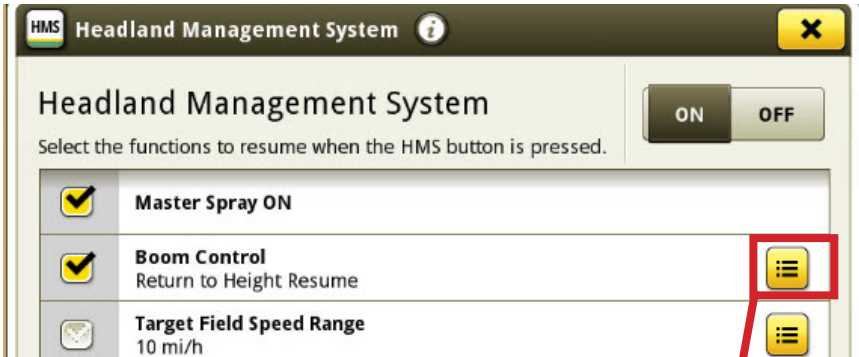
The screenshot displays the 'Spraying' control interface. At the top, a green header shows 'Spraying', the time '02:13', and signal strength 'SF2'. Below the header, the 'Target Rates' section lists three spray rates: 30.0 psi, 10.0 gal/ac, and 12.0 gal/ac. The 'Guidance' section on the right shows '133.750ft Track Spacing' and '1.0 in Shift Increment'. A central display shows a 3D view of the boom with a '0 gal' sensor reading. A 'BoomTrac Pro' panel at the bottom left is highlighted with a red box, showing 'Canopy' mode and 'OFF' status. An overlay window titled 'BoomTrac Pro' is open, showing 'Settings' for 'Canopy' mode, 'Center Frame Control' (ON/OFF), 'Target Heights' (40 in), 'Raise Response' (3), and 'Lower Response' (3). The 'Status' section indicates 'Not Ready' due to an unavailable sensor, and the 'Diagnostics' section lists several active checks: 'Operator in seat', 'Transmission in field range', 'Boom unfolded', and 'BoomTrac Pro enabled'.

Select Ground or Canopy mode. Setup Center Frame Control, Heights and Raise and Lower Sensitivity settings.

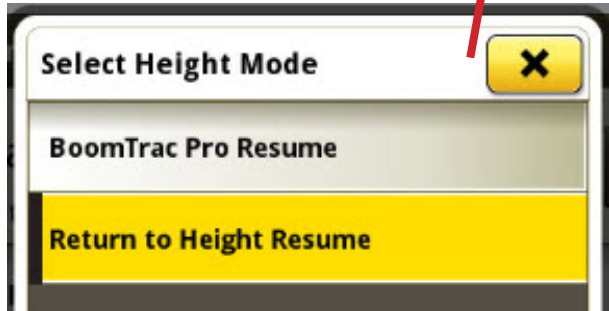
# HMS



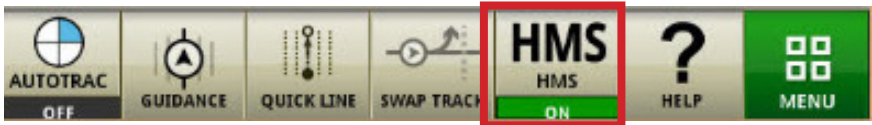
Menu → Machine Settings → Headland Management System to configure HMS button functions on the hydro handle.



Choose Master Spray On, Autotrac Resume, and set Boom control and speed ranges if desired.

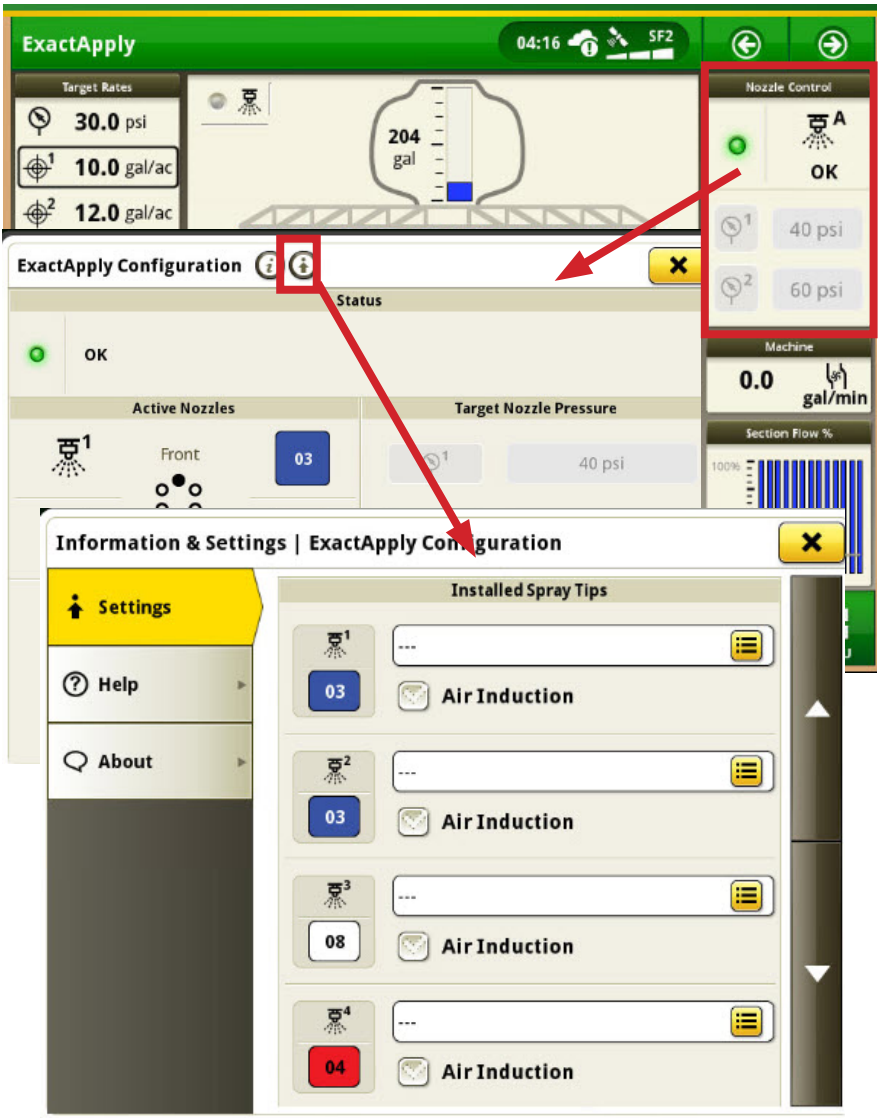


Enable HSM with button on shortcut bar.



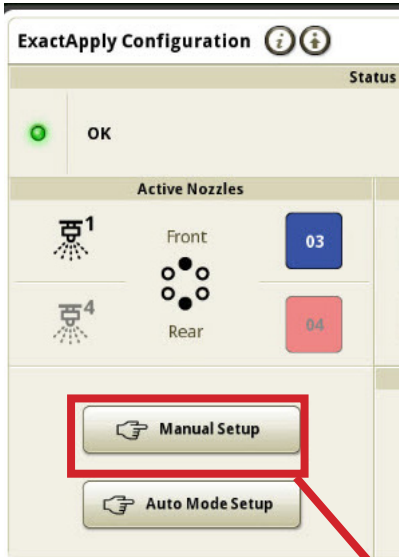
# ExactApply

From ExactApply Page select Nozzle Control in righthand corner. Select Advanced Settings to tell system which spray tips are installed in positions 1 through 6.



# Pulsing Mode

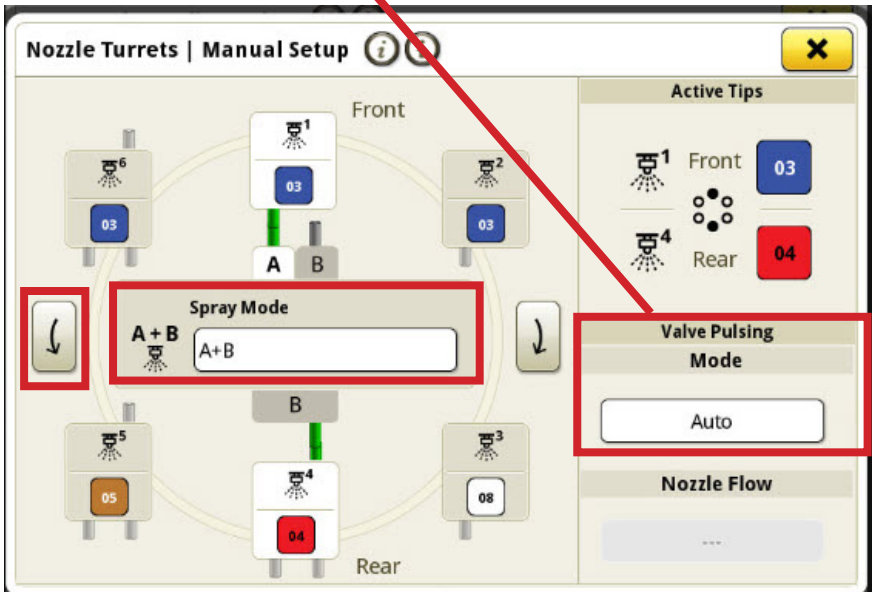
From ExactApply Configuration page choose manual setup to turn on pulsing mode - off/fixed/auto.



Change your active tips by using the arrow button to rotate your nozzle turrets.

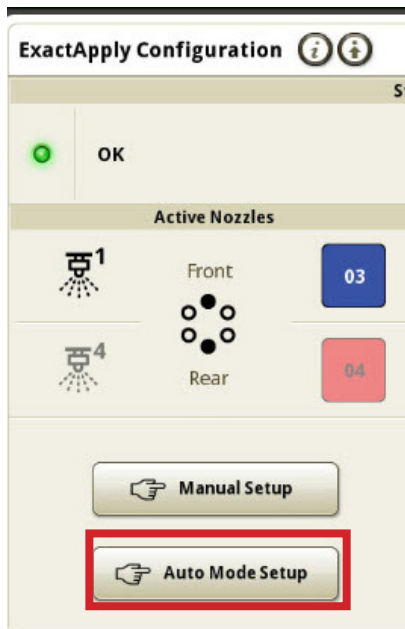
Select Spray Mode: A only, B only, A+B

Note: Automatic nozzle switching is not available while pulsing is on.



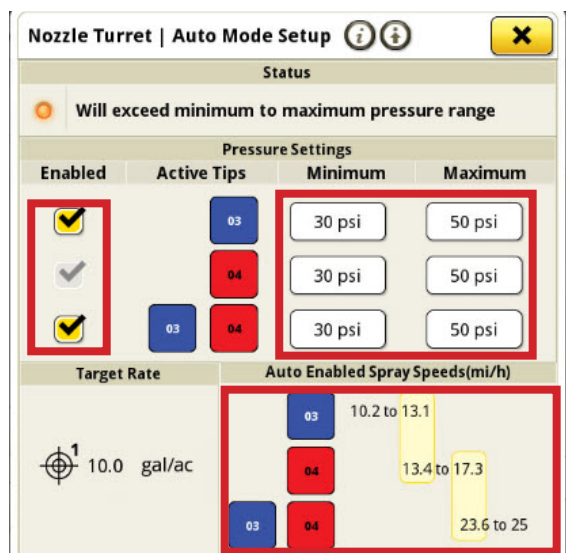
# A + B Switching

**Automatic Nozzle Switching Mode Setup** - the following conditions must be met before Auto Mode is available:



1. Valve pulsing set to OFF.
2. Nozzle body turret set with 1,2, or 3 in the front position.
3. Spray tips setup in both front and rear turret positions.
4. Rate based application selected.

Enable your tip and adjust min and max pressures.  
(bottom box shows tip used at different speeds)



# ExactApply

	Nozzles 4, 5, 6 in the Front Position	
	Combined A + B Pulsing OFF	Combined A + B Automatic Pulsing
Speed Range	Base	Better
Turn Compensation	<i>Not Applicable</i>	Good
Boost	<i>Not Applicable</i>	Good
Pressure Selection	<i>Not Applicable</i>	Target
Coverage	Best	Best
High Application Rates	Best	Better
Manual Nozzle Selection using the Display or CommandArm	No	No
Notes		a

## Notes:


- a. One nozzle supplied by two solenoids with alternating pulses
- b. One nozzle supplied by one solenoid
- c. Supplies two nozzles with one solenoid each with alternating pulses
- d. Different spray tip sizes can be used on both turret positions. Spray tips must be 02 or larger

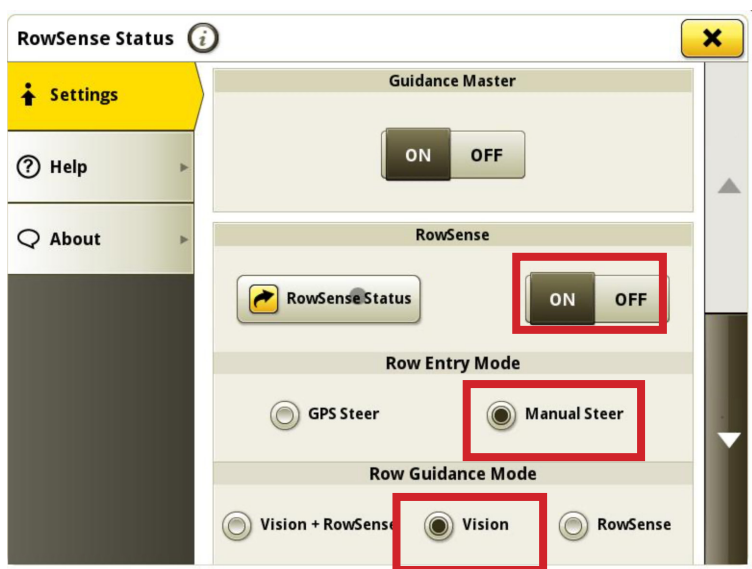


Nozzles 1, 2, or 3 in the Front Position		
A Only or B Only - Automatic Pulsing	A + B Automatic Pulsing	Automatic Pulsing OFF
Best	Best	Good
Best	Best	<i>Not Applicable</i>
Best	Best	<i>Not Applicable</i>
Target	Target	Target Range
Good	Best	Best
Good	Best	Best
Yes	Yes	Yes
b	c, d, e	f, g

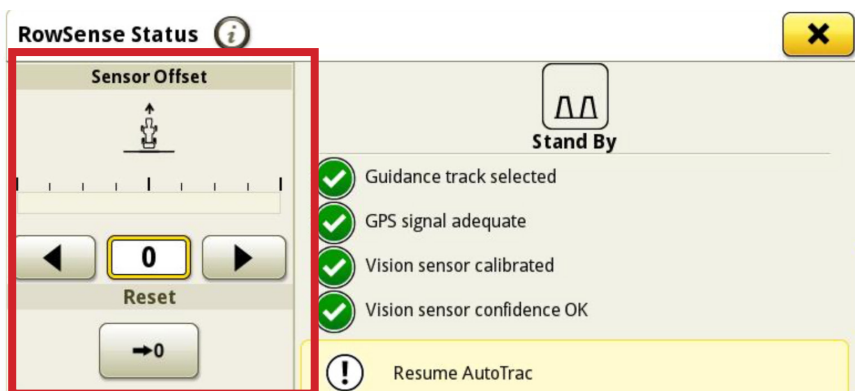
- e. Dual fan pattern possible
- f. Uses a small and a large spray tip. The large spray tip cannot be more than double the size of the small spray tip
- g. Sprays without pulsing, automatically switching between the front, rear, or both nozzles within an operator set pressure range

# Autotrac Vision

From Autotrac guidance page choose the advanced settings  Enable RowSense, choose row entry mode, and select sensors. . Manual steer mode is recommended if not using AB from planter.



Press Status button to go to RowSense status. Enter sensor offsets if needed and calibrate camera. For best results, complete accurate TCM calibration for receiver. Vision camera may require multiple calibrations due to changing conditions.



# Autotrac Vision, continued



Press the Calibration button from the Rowsense Status page. Follow on screen prompts be sure to have accurate row spacing.

## RowSense Vision Sensor Calibration

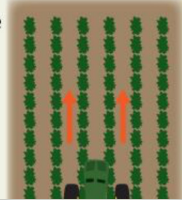
**CAL**



### Step 1: Meet the Calibration Prerequisites

In order to perform a successful calibration, please ensure the following prerequisites have been met:

- RowSense Vision camera installed and available
- Machine positioned in standing crop
- Machine aligned parallel to row crop
- Wheels centered in middle of row



## RowSense Vision Sensor Calibration

**CAL**



### Step 2: Provide Crop Details

Provide crop details to improve sensor accuracy.

Camera Height

83.0 in



Row Spacing

20.0 in



**X** Cancel

Step 2 of 7

Next >>



System Active operating with both RowSensor and GPS.



No GPS signal. Operating with RowSensor data only.



No RowSensor signal. Operating with GPS only.

# Need Assistance? Contact us!

Belle Plaine, MN	952-873-2224
Bird Island, MN	320-365-3445
Blue Earth, MN	507-526-2714
Brookings, SD	605-693-3514
Garretson, SD	605-594-3476
Hollandale, MN	507-889-4221
Huron, SD	605-352-8519
Madison, SD	605-256-4575
Mankato, MN	507-387-8201
Marshall, MN	507-537-1523
Milbank, SD	605-432-5523
Minnesota Lake, MN	507-462-3828
Montevideo, MN	320-269-6466
Northwood, IA	641-324-1154
Osage, IA	641-732-3719
Owatonna, MN	507-451-4054
Redwood Falls, MN	507-644-3571
Sleepy Eye, MN	507-794-5381
Tyler, MN	507-247-5572
Wabasso, MN	507-342-5171
Watertown, SD	605-886-3545
Wheaton, MN	320-563-8112

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[www.KibbleEq.com](http://www.KibbleEq.com)

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