

ENGAGE[®]

ZONE CONTROL

OPERATOR'S GUIDE

Document revision: 1.3
Last revised: July 27, 2020



Engage Zone Control Operator's Guide

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Record of Revision			
Revision Number	Change Description	Revision Date	Inserted By
0.1	Prototype release	9/01/17	AAL
1.0	Initial release	1/29/18	AAL
1.1	Updated to include new configuration best practices, readability improvements.	2/18/19	AAL
1.2	Added sections on configuring gateway firmware, documentation settings, and home page settings. Re-organized to reflect new configuration best practices.	8/20/19	AAL
1.3	Added cleaning and maintenance warning	7/27/20	AAL

Related Documentation	
Document Number	Document Title
600840-000043	Engage Zone Control Installation Guide
600840-000047	Engage Zone Control Maintenance Manual

1. About Engage Zone Control

Engage Zone Control is a retrofit section control system for John Deere 1910 air carts using John Deere 2630 displays. The system communicates with an air seeder's existing GPS mapping system and prevents overlap by opening and closing up to eight sections per toolbar.

Before proceeding, you must have the latest software installed on your 2630, 1910 air cart, and any blockage detection systems. You must also have Section Control activated and enabled on the 2630 in order to properly operate Engage Zone Control. If you don't have section control activated on your 2630, contact your dealer.

For videos on the configuration procedures below, visit www.intelligentag.com/support.

2. Connecting the System to the 2630

IMPORTANT: If power is disconnected from the 2630, disconnect and reconnect power to the gateway.

Engage Zone Control must be activated and enabled in the IAS VT application in order to enable zone control.

To enable Engage Zone Control, complete the steps below.


1. Tap  in the lower right corner of the 2630 screen.
2. Tap **Intelligent Ag**.
3. Tap **Configure**.
4. Tap **Settings**.
5. Scroll to the bottom of the screen. Make sure that the **Enabled** box next to **Engage Zone Control** is checked.




Figure 1: Intelligent Ag settings screen

3. Configuring Engage Zone Control Application

Configure the Engage Zone Control application settings so that the gate status and mapping display correctly.

3.1. Navigating to Intelligent Ag Section Settings

1. Tap  in the lower right corner.
2. Tap **Intelligent Ag**.
3. Tap **Config**. You may get a series of messages or errors. These are normal and can be dismissed.

*Only the **Gates** and **Config** buttons are used with the Engage Zone Control application. The other buttons will not change zone control settings.*

4. Tap **Section Control Configure**.

*Only the **Section Control Configure** and **Diagnostics** buttons are used with the Engage Zone Control application. The other buttons will not change zone control settings.*

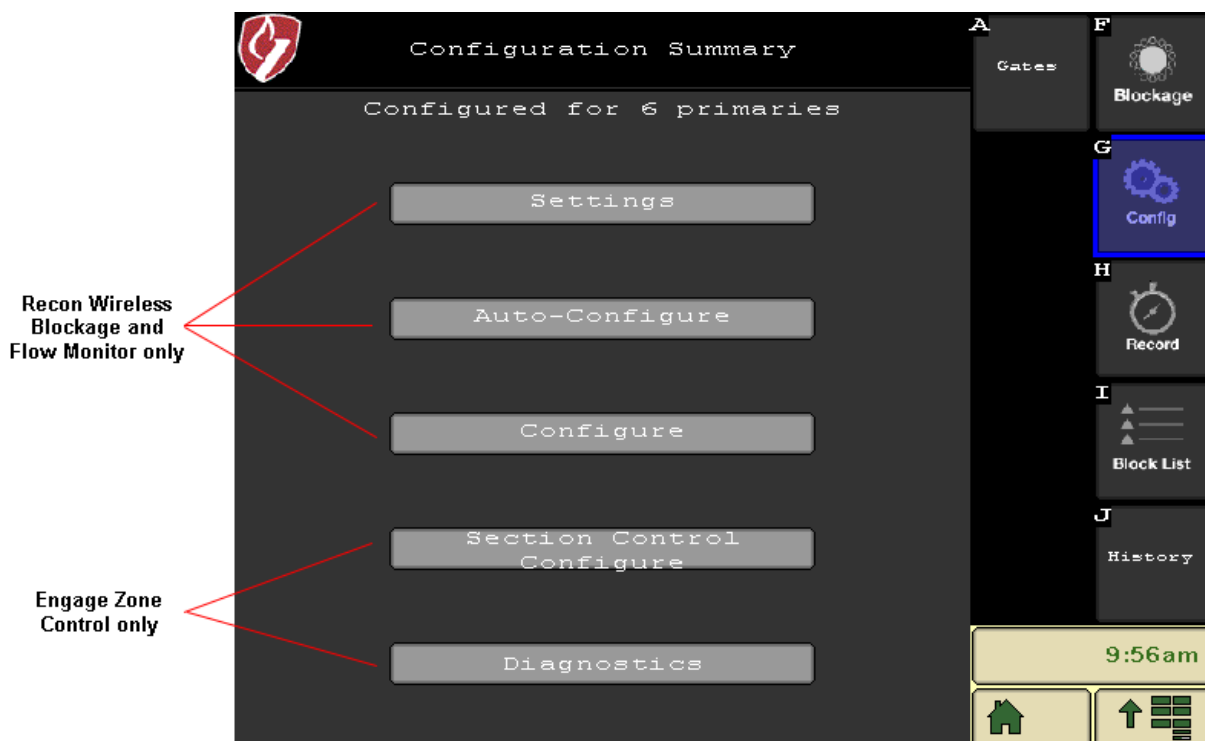


Figure 2: Intelligent Ag Configuration Summary screen

3.2. Modifying Intelligent Ag Section Settings

On the Intelligent Ag Section Control Configuration page, enter the information below according to your air cart setup.

1. **Number of Bins:** Input the number of bins on your air cart.
2. **Section Ordering:** Configure section ordering in the application based on the section ordering on your toolbar. Numbers 1-8 in the application corresponds with a gate on the Engage Zone Control unit, as shown in Figure 3.

IMPORTANT: Not all primary lines are connected to the manifold in sequential order. Make sure that your primary lines correspond with these gate assignments. If they don't, re-order the primaries to match these gate assignments.



Figure 3: Engage Zone Control unit gate numbering

EXAMPLE 1: If your air seeder has 8 sections, configure your section ordering like the image below.



Figure 4: Standard section ordering

EXAMPLE 2: If your air seeder has 6 sections, select **Off** for the two gate positions you are not using. A 6-section air seeder doesn't use sections 7 and 8.

In the example below, gates 4 and 5 are off.



Figure 5: Section ordering with sections off

EXAMPLE 3: If your air seeder has two rows of four manifolds (two gates mapped to one section), manifolds 1-4 in the front correspond with gates 1-4 of the unit. Manifolds 1-4 in the back correspond with gates 5-8 of the unit. Configure your section ordering like the image below.



Figure 6: Section ordering with two gates mapped to one section

3. **Section Width:** Input the width of each toolbar section. Calculate each section width by multiplying the runs per section by the row spacing. Round these numbers to the nearest tenth of an inch.
4. **Time of Flight Compensation:** Sections on the outside of your implement boom require more time to deposit product than the innermost sections. If not adjusted, this will result in a chevron shape instead of a straight line. Time of flight compensation supplements the JD turn on/turn off times by accounting for the time it takes product to travel to each individual section. Measure this by following the procedure below.
 - a. For each section of each bin with fan running at operating speed, manually actuate your meter and use a stopwatch to time how many seconds it takes the seed to get to the ground.
 - b. Input these times into the Time of Flight Compensation section of the Intelligent Ag Section Settings screen.

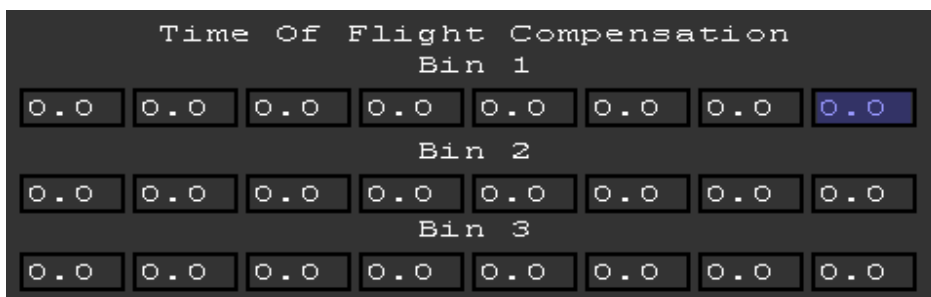


Figure 7: Intelligent Ag time of flight compensation

IMPORTANT: Re-measure these times if you make any large changes in product rate, fan speed, or product type.

5. **Implement Type:** Implement is type 1.
6. Tap **Save**.

3.3. Configuring Serial Numbers

On the Intelligent Ag ECU Configuration page, enter the serial numbers for each set of gates.

The screenshot shows a configuration screen with the following structure:

- ECU to Section Configuration** (Title)
- Serial Number** (Section Header)
- Bin 1**
 - Gates 1-4:
 - Gates 5-8:
- Bin 2**
 - Gates 1-4:
 - Gates 5-8:
- Bin 3**
 - Gates 1-4:
 - Gates 5-8:
- Buttons:** Save, Cancel

Figure 8: Intelligent Ag Serial Number Configuration settings screen

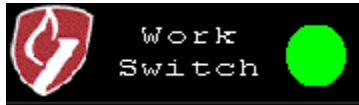
1. Navigate to the Intelligent Ag section control settings screen, if you are not already there.
2. Input the serial number for gates 1-4 and 5-8.
 - a. Remove the cover from the Engage Zone Control unit and find the serial numbers on the two motor controllers.

Gates 1-4 correspond with the serial number on the leftmost motor controller, and gates 5-8 correspond with the rightmost motor controller.
 - b. Input the serial number for gates 1-4 and 5-8 of each bin.

Bin 1 is the bin closest to the tractor. Bins 2 and 3 (if applicable) are further away from the tractor.
3. Tap **Save**.
4. Reposition all gates
 - a. Tap **Diagnostics**.
 - b. Tap **Reposition All Gates**.

3.4. Viewing work switch status

The work switch status is shown in the top left corner of the Intelligent Ag Gates screen.



- When the implement is **raised**, the work switch icon should appear **gray**.
- When the implement is **lowered**, the work switch icon should appear **green**.

If the opposite colors appear, refer to the instructions below to reverse the work switch.



1. Disable Engage Zone Control.
 - a. From the Intelligent Ag Configuration page, tap **Config** on the right navigation.
 - b. Tap **Settings**.
 - c. Uncheck the Engage Zone Control **Enabled** box at the bottom of the page.
 - d. Tap **Config** on the right navigation. The gateway will reboot.
2. Change the status of the work switch.
 - a. Tap **Config** on the right navigation.
 - b. Tap **Configure**, then tap **Next**.
 - c. Change the status of the box below **Is the work switch reversed?**.
 - If the box is checked, uncheck it.
 - If the box is unchecked, check it.
 - d. Tap **Next**, then tap **Save**.
3. Re-enable Engage Zone Control.
 - a. Tap **Config** on the right navigation.
 - b. Tap **Settings**.
 - c. Re-check the Engage Zone Control **Enabled** box at the bottom of the page.
 - d. Tap **Config** on the right navigation. The gateway will reboot.
4. Navigate back to the Intelligent Ag Gates screen and verify that the work switch status is correct.

For more information about using the Intelligent Ag Gates screen to manually control gates or view covered/saved area, refer to Section 5: Using the System.

4. Configuring John Deere Settings

4.1. Configuring Main John Deere Settings

After configuring Zone Control settings, make sure that the John Deere settings listed below are correctly configured.

1. Navigate to the Setup screen:
 - a. Tap  in the lower right corner.
 - b. Tap **GS3 (GreenStar)**.
 - c. Tap  in the upper right corner.
 - d. Add a check mark to the **Documentation** and **Section Control** boxes. It is okay if other boxes are automatically checked by default.
 - e. Tap **Accept**.

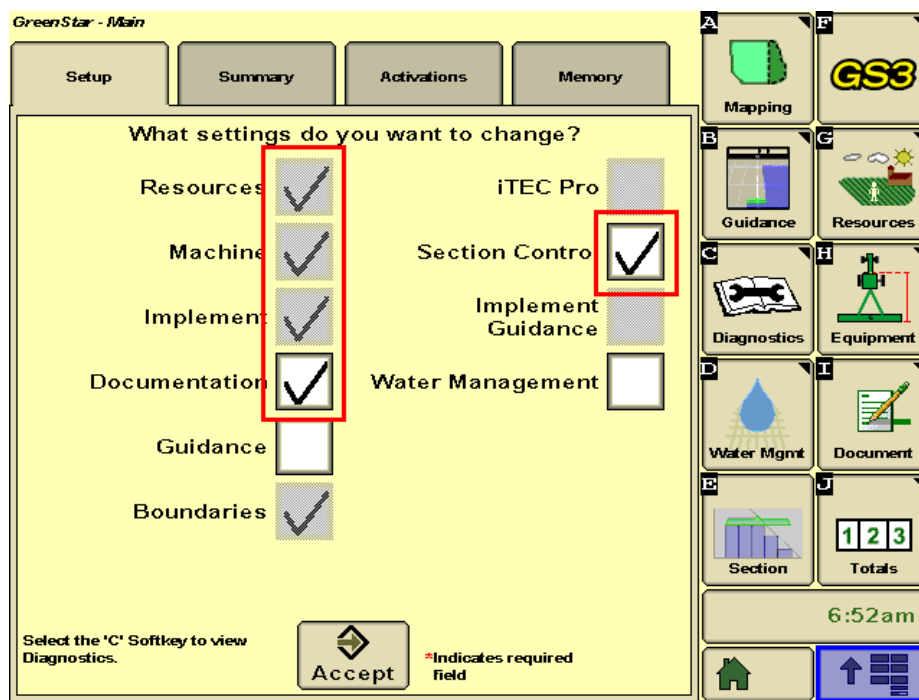



Figure 9: JD Main settings screen

2. Modify **Resources** settings.
 - a. Ensure that a value is selected for all items with a red asterisk.

If the boxes are grayed out and uneditable, navigate to the Gates screen in the Intelligent Ag app and uncheck the **Zone Control Enabled** box. This will disable the Zone Control system and allow you to edit fields during VT setup. Navigate back to the GS3 screen.

IMPORTANT: Remember to re-enable this when your VT set up is complete. If you do not have this enabled, Engage Zone Control will not respond to gate commands.

- b. Tap  to continue.

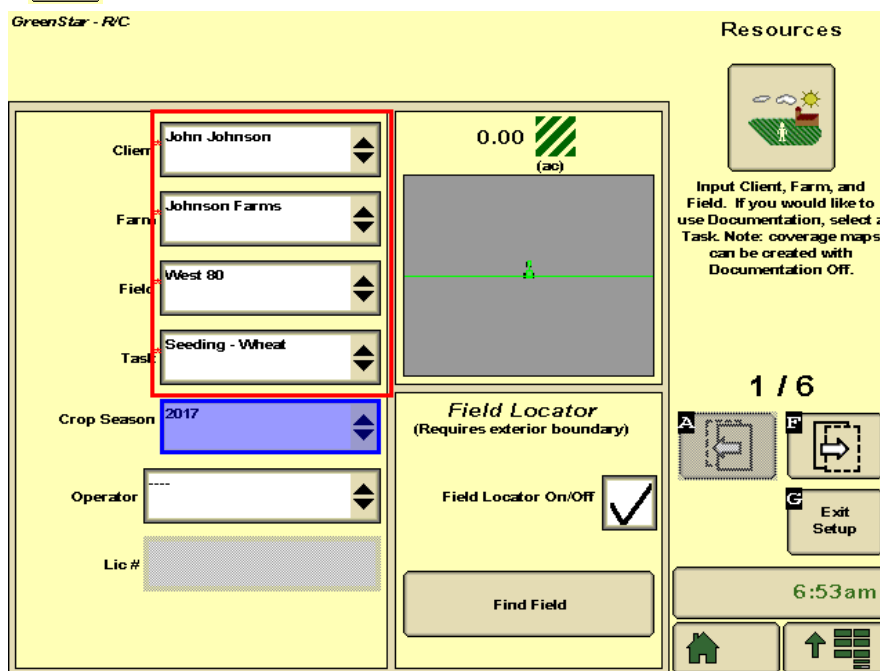



Figure 10: JD Resources settings

- 3. Modify **Equipment - Machine** settings.

- a. Ensure that a value is selected for all items with a red asterisk.

- b. Tap  to continue.

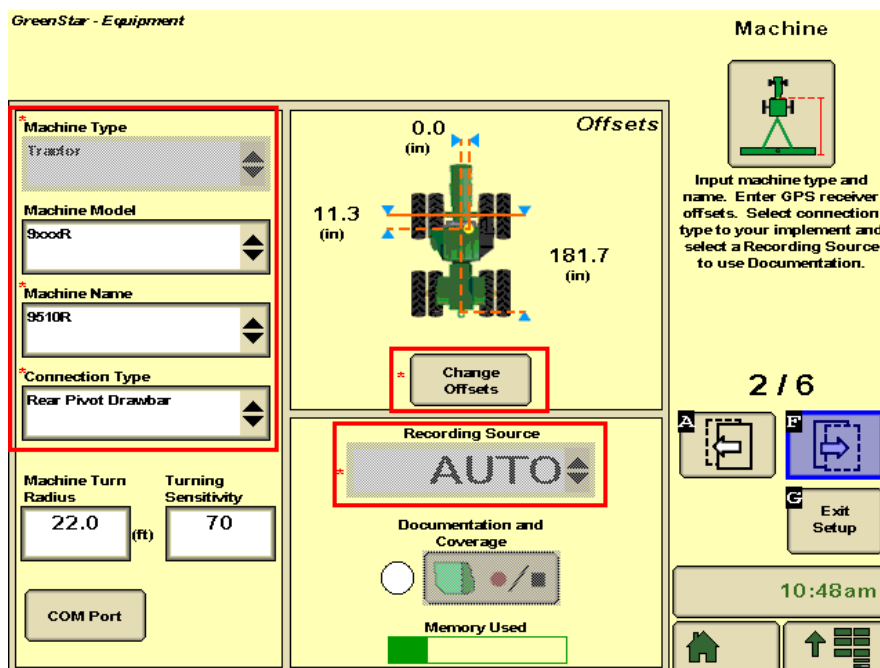



Figure 11: JD Equipment - Machine settings

4. Modify **Equipment - Implement** settings.
 - a. Ensure that a value is selected for all items with a red asterisk.
 - b. Tap  to continue.

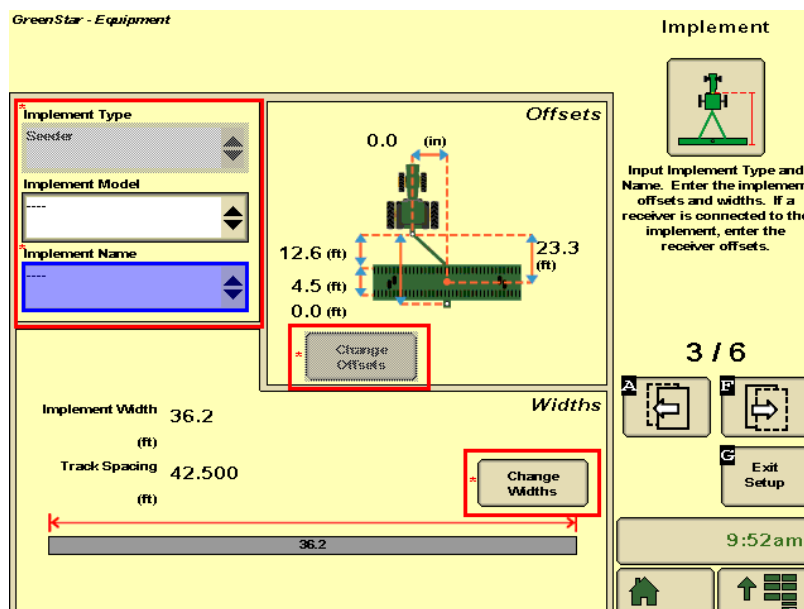



Figure 12: Equipment - Implement settings

5. Modify **Section Control** settings.
 - a. Ensure that **Section Control Master** and any boxes below it have checkmarks.
 - b. Modify overlap settings
 - i. Tap **Overlap Settings**.
 - ii. Select **% Overlap** for the Exterior Boundaries, Interior Boundaries, and Coverage.
 - iii. Type **102** for each percentage.
 - iv. Tap **Accept**.
 - c. Tap  to continue.

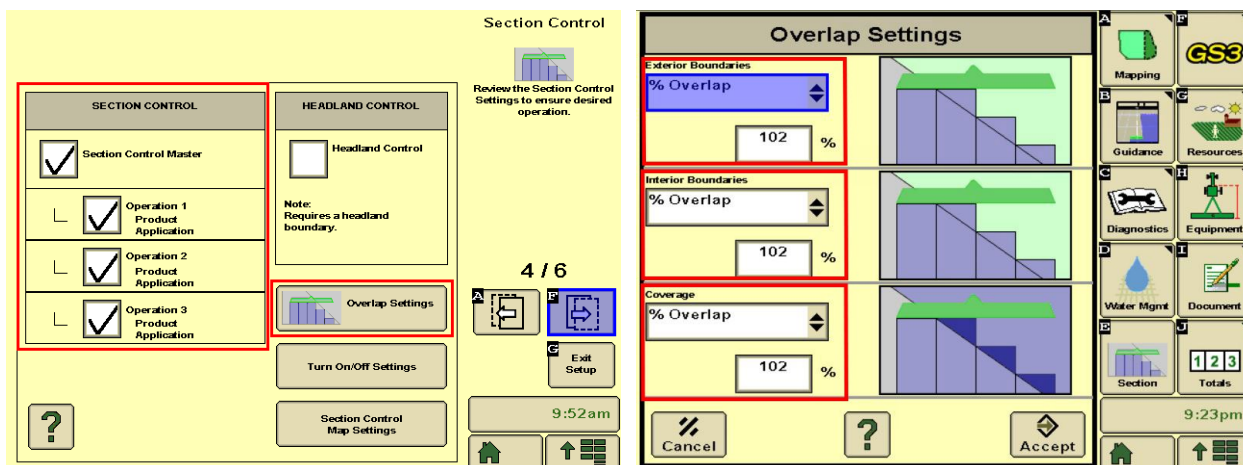



Figure 13: JD Section Control settings

6. Modify **Documentation** settings.
 - a. Ensure that a value is selected for items with a red asterisk.
 - b. Tap  to save the settings.

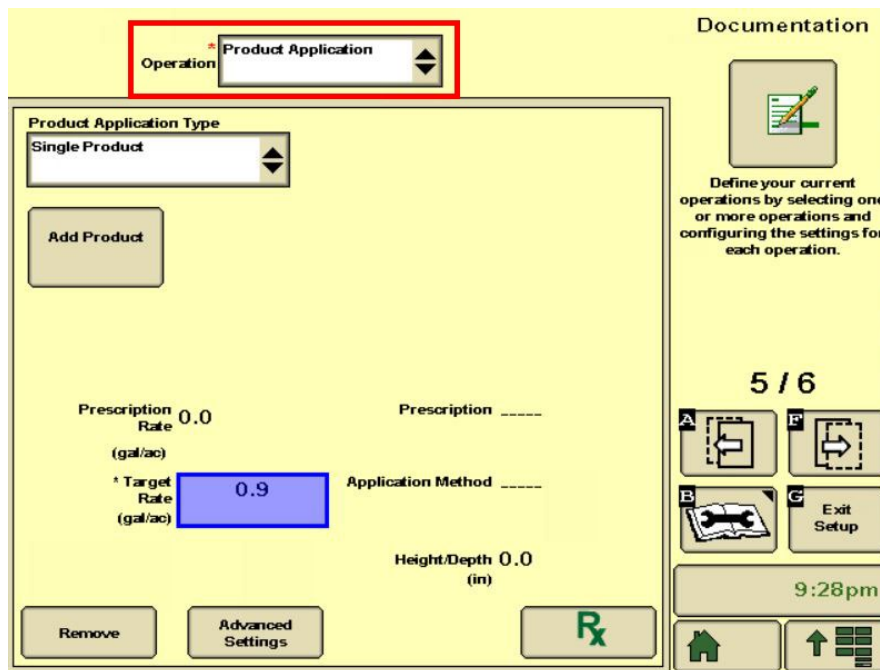



Figure 14: JD documentation settings

IMPORTANT: To modify Documentation settings after initial configuration, you must disable Zone Control in the Gates page by unchecking **Zone Control Enabled**. Refer to Section 5.3 for instructions to navigate to the Gates page.

Unchecking this disables the control and mapping of the system. Only uncheck this if you want to change documentation settings in the 2630. Re-check it if you want to use mapping and section control again.

7. Modify **Boundaries** settings.
 - a. Ensure that a value is selected for items with a red asterisk. If you're using headland control, select a boundary or create one using the record button.
 - b. Tap  to save the settings.

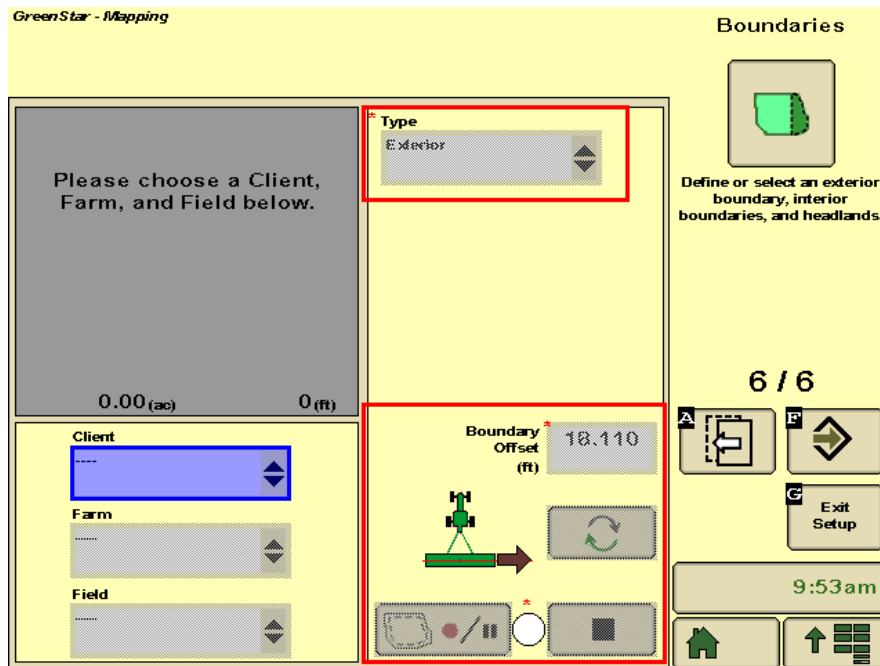


Figure 15: JD Boundaries settings

Initial configuration of the main John Deere settings is now complete. To edit an individual setting, tap the corresponding setting on the right side of the JD Main screen.

4.2. Configuring Documentation Settings

In order for the 2630 to control the sections, it is critical that the gateway has a JD documentation operation set up.

Verify that the gateway has an operation set up on the 2630 by tapping **Document** on the GreenStar – Main page.

At the top of the screen, you should have a tab for each of the tanks on your air cart, plus a tab for the Engage Zone Control system. The tab for the Engage Zone Control system shows a target rate of **0.9 lbs./acre** in the bottom left of the page. This rate should be grayed out and uneditable.



If you do not have the correct amount of tabs at the top of the screen, or it does not show a target rate of 0.9 lbs./acre, create a new documentation operation.

1. Tap the **New** tab at the top of the screen.
2. Select **Product Application**.
If a product with 0.9 lbs./acre target rate still does not show up, do a key cycle for the Document tab to pull in the Engage Zone Control system.
3. Once you have a tab with a target rate of 0.9 lbs./acre, tap **Add Product**.
4. From the **Product Type** dropdown box, select any type. We recommend selecting **Manure** because you will most likely never put down manure with an air drill.
5. From the **Product Name** dropdown box, select **<New>**.
6. Using the on screen keyboard, type **Section Control**. Then, select **Accept** in the lower right of the screen.
7. Tap **Accept**.

4.3. Configuring JD Section Control Settings

4.3.1. Setting Section Control Times

Use Time of Flight Compensation measurements to set turn on and turn off times. This is sometimes referred to as “look ahead times”. Look-ahead times affect the amount of overlap by adjusting the on/off times of your Engage Zone Control system when entering areas of the field previously covered.

1. Navigate to the JD Section Control Settings screen.
 - a. Tap  in the lower right corner.
 - b. Tap **GS3 (GreenStar)**.
 - c. Tap  in the upper right corner.
 - d. Tap **Section**.
2. Tap **Turn On/Off Settings** and input the following time of flight compensation times from Section 3.2:
 - **Turn on time:** the longest Time of Flight Compensation time.
 - **Turn off time:** the shortest Time of Flight Compensation time.

IMPORTANT: The turn on times for each operation should all be the same number, and the turn off times for each operation should all be the same number.




Section Control On/Off Settings		
	Turn on (sec):	Turn off (sec):
Operation 1 Planting / Seeding #1	1.0	0.6
Operation 2 Planting / Seeding #2	1.0	0.6
Operation 3 Planting / Seeding #3	1.0	0.6
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid gray; padding: 5px; text-align: center;">  Cancel </div> <div style="border: 1px solid gray; padding: 5px; text-align: center;">  </div> <div style="border: 1px solid gray; padding: 5px; text-align: center;">  Accept </div> </div>		

Figure 16: JD Section Control On/Off settings screen

3. Tap **Accept**.

4.3.2. Refining Times

If needed, refine your times by adjusting the turn on and turn off times.

1. Seed 2 passes with enough room on either side to easily turn around on both sides. These passes should be long enough to make several passes through them during the test.

EXAMPLE: If your drill is 60 ft. wide, allowing for 240 ft would give you 4 chances to test and dial in your look ahead times.

2. Trip the work switch for the Intelligent Ag app. This will make the work switch indicator in the top left of the Gates screen show green when the drill is raised.
3. Set your ground speed and fan speed for the product you are applying.
4. With the implement raised out of the ground, approach the first 2 passes at a 90 degree angle. About 50 ft. before reaching the covered area, tap the master clutch icon on your 1910 cart screen.
5. Drive completely through the initial two passes. This will give the system the ability to complete one turn off and one turn on cycle.
6. Get out and look for your product on top of the soil. Measure your overlap and adjust your on/off times in the John Deere Section Settings screen to achieve your desired overlap.
7. Use the chart below to calculate how many seconds to adjust your timing to reduce the error.

MPH	Ft/sec
3	4.40
3.25	4.77
3.5	5.13
3.75	5.50
4	5.87

MPH	Ft/sec
4.25	6.23
4.5	6.60
4.75	6.97
5	7.33
5.25	7.70

MPH	Ft/sec
5.5	8.07
5.75	8.43
6	8.80
6.25	9.17
6.5	9.53
6.75	9.90

8. Navigate to the JD Section Control Settings screen and adjust your turn on and turn off times based on the number above. Tap **Accept**.
9. If you are still overseeding or skipping, use the information below to adjust your times.
 - Entering the headland (off times):
 - **To increase overlap:** decrease the turn off time.
 - **To decrease overlap:** increase the turn off time.
 - Exiting the headland (on times):
 - **To increase overlap:** increase the turn on time.
 - **To decrease overlap:** decrease the turn on time.

IMPORTANT: Product type, rates, fan speed, and travel speed in and out of headlands can affect timings. Periodically check coverage in the ground to make sure that your timings are correct.

Intelligent Ag does not assume any responsibility for improper calibration of timings, gate positioning or configuration. Intelligent Ag recommends that you use a blockage and flow monitoring system with this system.

5. Using the System

5.1. Monitoring Mapping

Navigate to the JD **Section Control** screen, then tap the **View By Operation** tab. Tap **Section Control** to see coverage mapping.

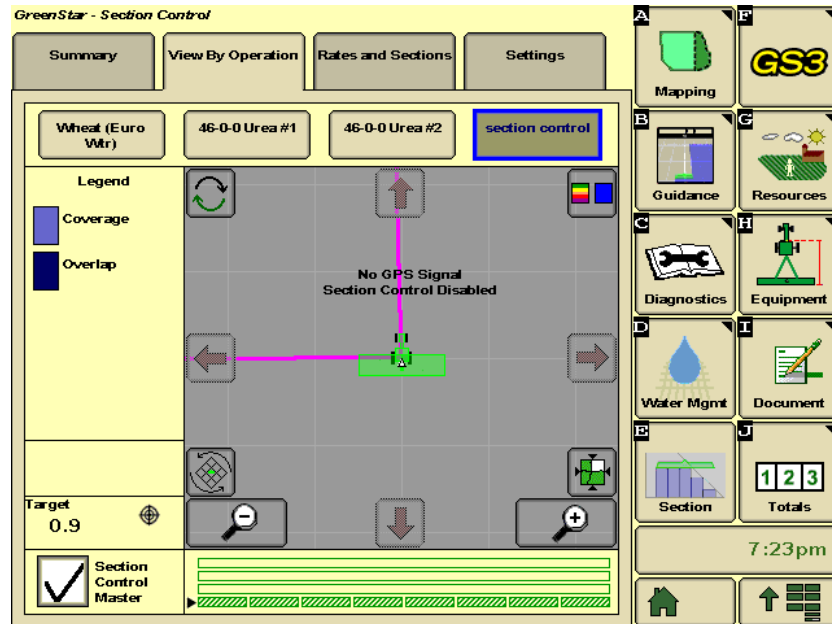


Figure 17: JD Section Control screen

NOTE: When the implement is raised, the gates won't move and won't map coverage. If coverage isn't immediately mapping upon exiting headland or previous coverage, either lower the implement sooner or adjust the work switch triggering point.

5.2. Intentionally Overseeding

Uncheck the **Section Control Master** box on the John Deere Section Control screen if you want to intentionally overseed (such as when seeding into the headland or near field boundaries).

IMPORTANT: Make sure that all gates are open before unchecking the box.

5.3. Manually Closing or Opening a Section


1. Tap  in the lower right corner.
2. Tap **Intelligent Ag.**
3. Tap **Gates.**
4. Tap the number of the section that you want to open or close.



Figure 18: Manually closing or opening a section


The color of the section shows its state.

Color	Meaning
Green	Section is open.
White	Section is closed or not seeding.
Red	There is an error.

NOTE: Manual changes only stay in effect until the JD task controller issues another command. To continue to manually control the system, uncheck **Section Control Master** box on the JD Section Control screen.

5.4. Viewing Covered and Saved Area

View the covered and saved area counters to see the total area seeded and the area saved by using Engage Zone Control.

1. Tap  in the lower right corner.
2. Tap **Intelligent Ag.**
3. Tap **Gates.**
4. View your counters.
 - **Covered area:** Total area that you've gone over with the whole tool.
 - **Saved area:** The amount of acres you would have over seeded without Zone Control. This is calculated using tractor speed, work switch state, and section state (open or closed).

You can calculate your savings by taking the saved area number and multiplying it by your input costs.

5.5. Updating Motor Controllers

The Updating Motor Controllers screen appears when the motor controllers are updating. You don't need to do anything during this process.

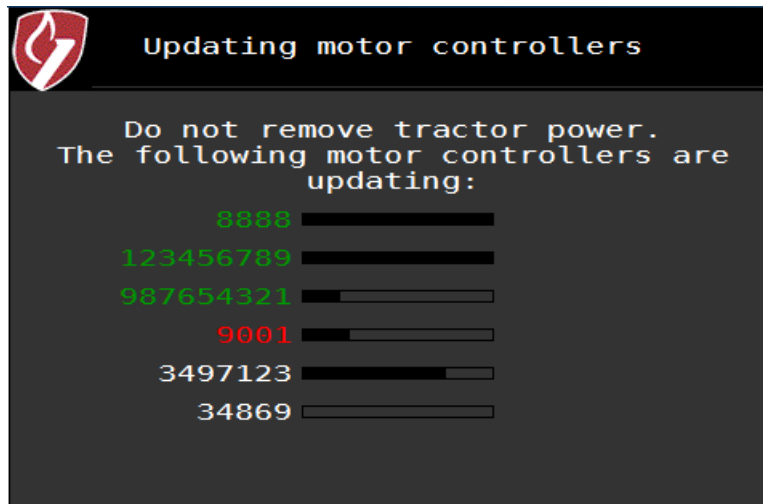



Figure 19: Motor controller update screen

The motor controller LEDs will flash during the update, which may take up to 10 minutes. The update status is indicated by the colors below:

Serial number text color	Status
Green	Update complete
White	Update in progress
Red	Update failed. Restart the system (turn off and turn on the tractor). If it fails again, contact your dealer.

5.6. Configuring Home Page

To set up an all-inclusive homepage where you can view autosteer, coverage mapping with section control, and the air cart, follow the instructions below.

1. Tap  in the lower right corner.
2. Tap **Layout Manager** on the right of the screen. From the dropdown box in the upper left corner, select a homepage that has not been set up or one that you will not be using.
3. Tap the option on the right labeled **G**.
4. Tap the red portion of the layout selector. Then, tap **GS3 (GreenStar)**.
5. Tap the right arrow until you see the page titled **Section Control and Map**. Tap the image of the map to accept it.
6. Tap the green portion of the layout selector. Then, tap **Air Cart**.
7. Tap the image of the air cart screen to select it.
8. Tap the blue portion of the layout selector. Then, tap **GS3**.
9. Tap the right arrow until you see the page titled **Guidance and Map**. Tap the image to accept it.
10. At the top of the screen, make sure the **Include In Homepage Collection** box is checked.
11. Tap **Accept** at the bottom of the page.

Your new homepage is configured. Tap the **Home** button to cycle through the homepage collection.

6. Cleaning and Storage

At the end of the season, refer to the Engage Zone Control Maintenance Manual (600840-000047) for storage and cleaning best practices.

Failure to follow proper cleaning and maintenance protocols may reduce product performance and may void warranty on motor and other internal components.

7. Troubleshooting

7.1. Viewing Diagnostics

Viewing diagnostics is typically only used for troubleshooting and maintenance. Use the main Engage Zone Control screen to manually control a section.

1. Tap **Config** on the right Intelligent Ag navigation.
2. Tap **Diagnostics**.

IMPORTANT: Only navigate to this screen when the toolbar is raised so that section control commands are not received during gate positioning.

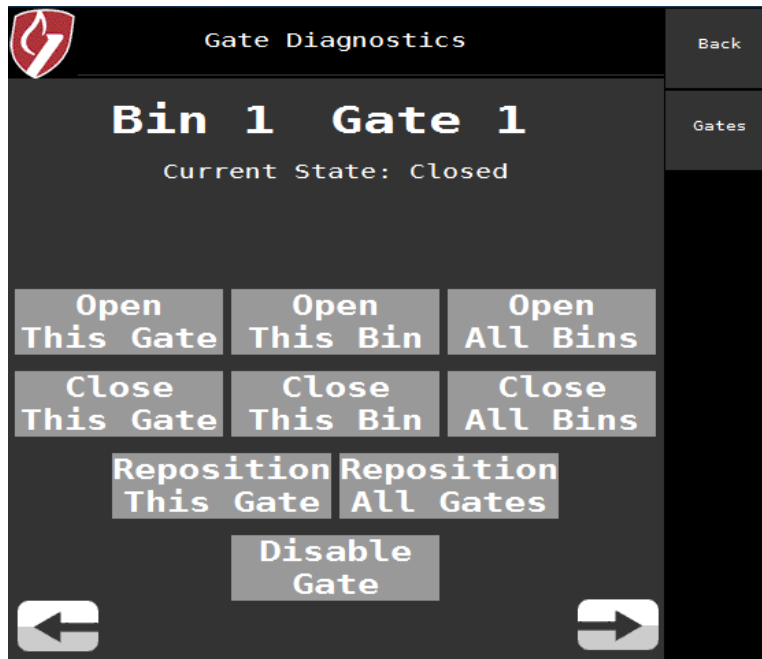




Figure 20: Intelligent Ag Gate Diagnostics screen

Button	Function	Figure 20 Example
Open This Gate	Opens a gate.	Opens Gate 1 on Bin 1.
Close This Gate	Closes a gate.	Closes Gate 1 on Bin 1.
Open This Bin	Opens all gates on a bin.	Opens all gates on Bin 1.

Close This Bin	Closes all gates on a bin.	Closes all gates on Bin 1.
Open All Bins	Opens all gates on all bins.	Opens all gates on all bins.
Close All Bins	Closes all gates on all bins.	Closes all gates on all bins.
Reposition This Gate	Recalibrates a gate (used when troubleshooting an error). IMPORTANT: Start the fan before repositioning a gate to make sure that there isn't debris in the gate area.	Recalibrates Gate 1 on Bin 1.
Reposition All Gates	Recalibrates all gates on all bins (used when troubleshooting an error). IMPORTANT: Start the fan before repositioning gates to make sure that there isn't debris in the gate area.	Recalibrates all gates on all bins.
Disable Gate	Locks a gate and stops it from receiving commands. Once a gate is disabled, the gate will not open or close, even if a command affects all gates. Disable all gates in a bin if you are not using the bin. IMPORTANT: Ensure that the gate is open before disabling the gate.	Locks Gate 1 on Bin 1.
Enable & Reposition	Re-enables a disabled gate.	Re-enables Gate 1 on Bin 1.
	View diagnostics for the next gate.	View diagnostics for Gate 2 on Bin 1.
	View diagnostics for the previous gate.	View diagnostics for Gate 8 on Bin 3.

7.2. Common Issues

Problem	Troubleshooting steps
The Intelligent Ag application does not appear on the John Deere main menu.	<ol style="list-style-type: none"> 1. Verify that the Gateway 300 has power (green LED). 2. Verify that the Gateway 300 is wired according to Section 3 of the Engage Zone Control Installation Instructions (600840-000043).
I can't edit Section Control settings during JD auto-configure.	<p>Make sure that you have section control enabled.</p> <ol style="list-style-type: none"> 1. Tap GreenStar on the John Deere main page. 2. Tap GS3. 3. Tap Activations. 4. Press the down arrow. 5. Ensure that Section Control has a checkmark.
Coverage is mapping on the 2630 but section control isn't operating.	<ol style="list-style-type: none"> 1. Make sure that Zone Control Enabled is checked in the Engage Zone Control screen. 2. Make sure that Section Control Master is checked on the JD Section Control settings screen. 3. Verify that the work switch is active in the top left corner of the Intelligent Ag Gates screen.
I can't edit JD Documentation settings when Zone Control is running.	<p>Uncheck Zone Control Enabled on the Engage Zone Control screen.</p>
Gates won't reposition.	<ol style="list-style-type: none"> 1. Run the fan to blow out any product that could be blocking gate movement. 2. Check for product buildup. <ol style="list-style-type: none"> a. Unplug the Engage Zone Control unit bin harness. b. Remove the bottom meter cover and top lid and clean product buildup that is impeding gate movement. Refer to the Engage Zone Control Maintenance Manual (600840-000047) for cleaning procedures. c. Re-connect the bin harness.

<p>The work switch status is reversed (<i>green when the implement is raised, and grey when the implement is lowered</i>)</p>	<ol style="list-style-type: none"> 1. Disable Engage Zone Control. <ol style="list-style-type: none"> a. Tap Config on the Intelligent Ag right navigation. b. Tap Settings. c. Uncheck the Engage Zone Control Enabled box at the bottom of the page. d. Tap Config on the right navigation. The gateway will reboot. 2. Change the status of the work switch. <ol style="list-style-type: none"> a. Tap Config on the Intelligent Ag right navigation. b. Tap Configure, then tap Next. c. Change the status of the box below Is the work switch reversed?. <ul style="list-style-type: none"> • If the box is checked, uncheck it. • If the box is unchecked, check it. d. Tap Next, then tap Save. 3. Re-enable Engage Zone Control. <ol style="list-style-type: none"> a. Tap Config on the Intelligent Ag right navigation. b. Tap Settings. c. Re-check the Engage Zone Control Enabled box at the bottom of the page. d. Tap Config on the right navigation. The gateway will reboot. 4. Navigate back to the Intelligent Ag Gates screen and verify that the work switch status is correct.
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7.3. Error Messages

Error message	Troubleshooting steps
<p>Gate state says <i>ERROR</i></p>	<ol style="list-style-type: none"> 1. Reposition the gate that has an error. See Section 7.1 for more information on repositioning. 2. Check for product buildup. <ol style="list-style-type: none"> a. Unplug the Engage Zone Control unit bin harness. b. Remove the bottom meter cover and top lid and clean product buildup that is impeding gate movement. Refer to the Engage Zone Control Maintenance Manual (600840-000047) for cleaning procedures. c. Re-connect the bin harness.
<p><i>On/off settings are linked to the implement. Please select an implement name before modifying Section Control On/Off Settings.</i></p>	<p>Make sure that you've selected an implement type and name in the JD Equipment settings.</p>
<p><i>The following gates are in need of repositioning.</i></p>	<ol style="list-style-type: none"> 1. Reposition the gate that appears red on the screen. 2. Check for product buildup. <ol style="list-style-type: none"> a. Unplug the Engage Zone Control unit bin harness. b. Remove the bottom meter cover and top lid and clean product buildup that is impeding gate movement. Refer to the Engage Zone Control Maintenance Manual (600840-000047) for cleaning procedures. c. Re-connect the bin harness. <p>Contact your Intelligent Ag dealer if you repeatedly get the same error on a gate.</p>
<p><i>This feature is currently disabled.</i></p>	<p>Make sure that Engage Zone Control is enabled on the Intelligent Ag Settings screen (see Section 2).</p>
<p><i>There are disabled gates in the system. You may re-enable them in the diagnostics menu.</i></p>	<ol style="list-style-type: none"> 1. Tap Config on the right Intelligent Ag navigation. 2. Tap Diagnostics. 3. Tap the arrow buttons until you see the disabled gate. 4. Tap Enable & Reposition.
<p><i>There are X motor controllers that haven't been mapped to a location.</i></p>	<p>Navigate to the Intelligent Ag Serial Number Configuration settings screen and ensure that all motor controllers have been configured.</p>

<p><i>An unmapped motor controller with serial number XX has disconnected from the control unit.</i></p>	<p>Ensure that the motor controller with that serial number is powered on and communicating. Refer to the LED codes below:</p> <ul style="list-style-type: none"> • Solid red: Powered on and communicating. • Flashing red: Powered on but not communicating. • Fast flashing red: Firmware update in progress.
<p><i>Motor controller with serial number XX on bin X on the left side has disconnected from the control unit.</i></p>	<p>Ensure that the motor controller with that serial number is powered on and communicating. Refer to the LED codes below:</p> <ul style="list-style-type: none"> • Solid red: Powered on and communicating. • Flashing red: Powered on but not communicating. • Fast flashing red: Firmware update in progress.
<p><i>Haven't found the tractor speed; the covered area statistics may be inaccurate.</i></p>	<p>GPS data isn't available to the Gateway with current GPS setup. The acre counter won't work.</p>
<p><i>Bin X gate X has encountered an obstruction.</i></p>	<ol style="list-style-type: none"> 1. Close and open the gate with the obstruction. <ol style="list-style-type: none"> a. Tap Config on the right Intelligent Ag navigation. b. Tap Diagnostics. c. Tap Open this gate. d. Tap Close this gate. 2. Visually inspect the unit for obstructions. <ol style="list-style-type: none"> a. Unplug the Engage Zone Control unit bin harness. b. Remove the bottom meter cover and top lid and clean product buildup that is impeding gate movement. Refer to the Engage Zone Control Maintenance Manual (600840-000047) for cleaning procedures. c. Re-connect the bin harness.
<p><i>Bin X gate X is not moving.</i> ACTION REQUIRED!</p>	<p>Visually inspect the unit for obstructions.</p> <ol style="list-style-type: none"> 1. Unplug the Engage Zone Control unit bin harness. 2. Remove the bottom meter cover and top lid and clean product buildup that is impeding gate movement. Refer to the Engage Zone Control Maintenance Manual (600840-000047) for cleaning procedures. 3. Re-connect the bin harness. <p>Contact your Intelligent Ag dealer if there are no obstructions.</p>