# MORRIS TOPCOR



#### X30 MONITOR TRAINING ICT Module 1 : Aircart Setup



- Turn the monitor ON by pressing and holding the Green Button on the Back left side of the monitor for 5 seconds.
- The guidance LEDS will flash and the loading screen will be displayed.







# • Press **YES** after completely reading and understanding the warning.

#### Controller Controller WARNING This Topcon Precision Agriculture console and software (System) controls guidance. The System may be used to assist with (a) steering (Steering Control), and/or (b) planting, spraying, spreading and fertilizing (Applications) (together or alone). IMPORTANT: You must read and follow the appropriate System manuals and have appropriate training before use. If you do not operate the System properly it will not correctly assist with guidance/steering control or apply the Applications to your requirements. This can result in damage to property and equipment, serious injury to persons, poor yields and/or crop damage or failure. STEERING CONTROL: If you are using a Steering Control System (including ACU-1): - you acknowledge it will assist in steering the vehicle to a pre-determined line, however you must be alert and manually take control from time to time. - you agree that it is not to be used on public or private roads. While the vehicle is on a road Steering Control MUST be disabled. you must NEVER leave the vehicle steering station while the Steering Control is activated. when Steering Control is activated, you MUST manually turn the vehicle at the end of rows. when in Identical Curves or Adaptive Curves modes, you MUST manually turn the vehicle on sharp corners. We do not guarantee the accuracy or service of the GPS units in the Steering Control System. However, we have made reasonable efforts to ensure reputable signal transmitting and receiving devices are used in the Steering Control System. APPLICATIONS: You are responsible for accurately entering the information required for the System to apply the Applications to your requirements (including measurement units (e.g. metric or imperial), vehicle dimensions, rate of application and vehicle speed). You are responsible for the calibration of the System and ensuring Applications are applied in accordance with their specifications (including wind, temperature and moisture conditions, dilution and withholding periods). Failure by you to comply with the above may result in incorrect operation of the System. You should monitor at all times that the System is performing as required. By selecting the YES button you agree that you: have read the above, have appropriate training and have read the System manual; and assume control and responsibility for the use of the System. 罴 YES





 Press the Wrench on the Bottom Left Corner to enter the Set up Menu







 Navigate to Vehicle-New. Create a new vehicle based on the manufacture of tractor you are using. Example : John Deere

	^	
ゴ John Deere		
🗑 Krone		
🕤 Laverda		
🛒 Massey Fe	rguson	
🗑 New Holla	(d	l. Π
🗑 Rogator		
🗑 Santal		1
🗑 Steiger		
🛒 TerraGato		
	✓	
	Select New Geometry Anter	na J
		CONTRACTOR OF THE OWNER





- Select the profile that best matches your tractor.
  - Example: 9xxxR

		^			
9020T					
9030 Artic	lated				
9030T					
9050					
9060					
9070					
9080					h
9xxxR					
		~			
	<b>A</b> .	1	<b>≥</b> ≘		
	Select		Geometry	Antenna	
	L	<u> </u>			





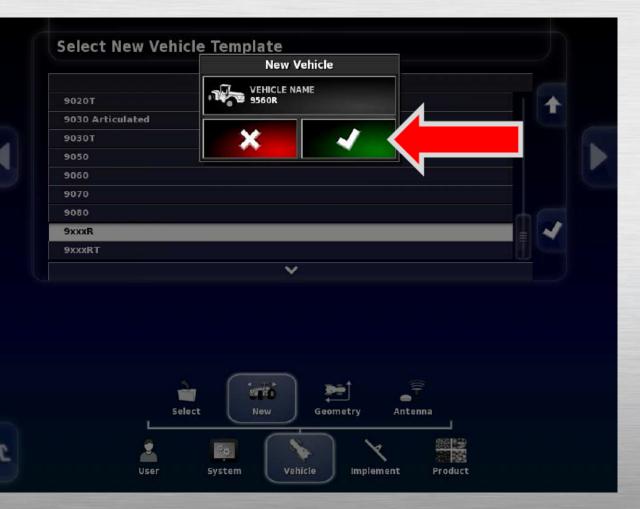
# • STOP! Press within the Vehicle Name Tab.







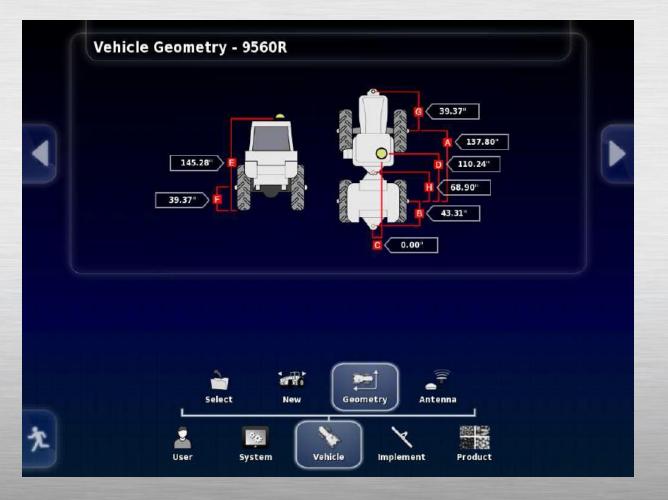
 Create a new Vehicle Name by entering your specific tractor model number. Apply with the Green Check mark.







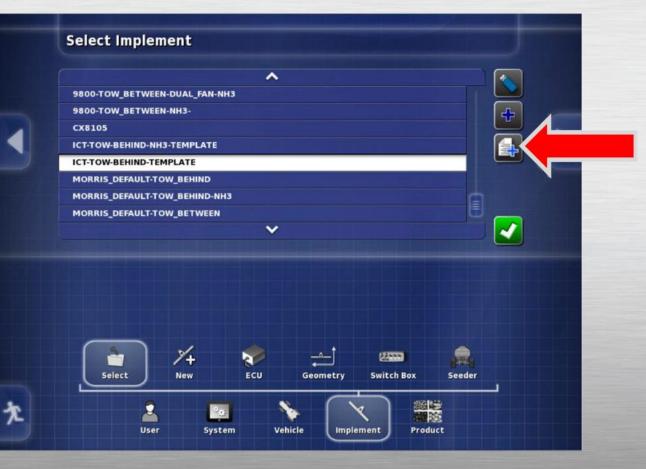
- Have a helper hold the tape measure. Check and enter the correct Vehicle Geometry dimensions.
- NOTE: Please be accurate as possible; The ICT Section timing is partially driven off of these dimensions. Incorrect dimensions will result in incorrect On/Off timing.





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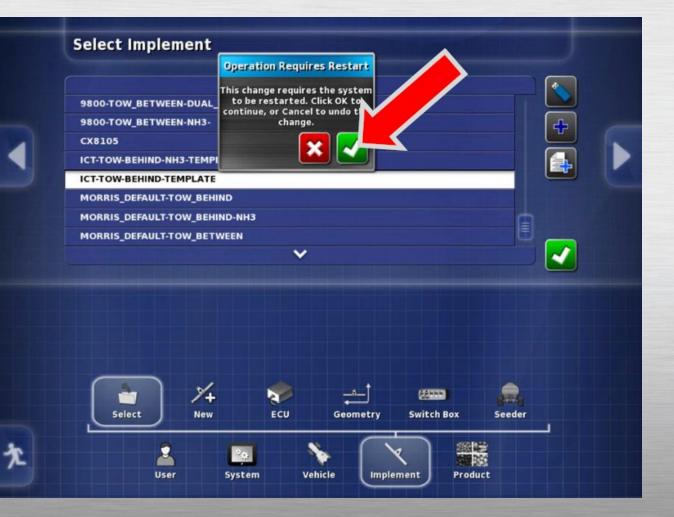
- Navigate from the bottom of the "Tree" Press: Implement-Select.
- Choose from any of the ICT Profiles; Press the Create New Implement as Copy.

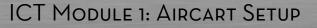






 The system will give a notification that it will need to restart after the operation.
Press the Green Check mark to Proceed.









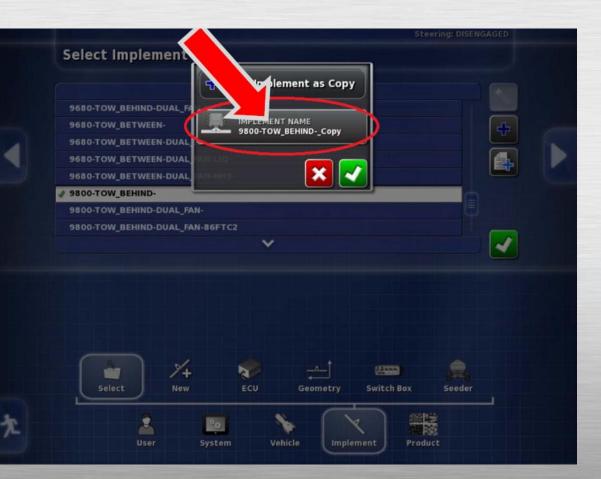
#### • STOP! YOU MUST RENAME THE PROFILE BEFORE CONTINUING!







• Tap in the **Implement Name** window to rename the profile.







• Remove the **ICT-TEMPLATE** name by pressing the backspace key.







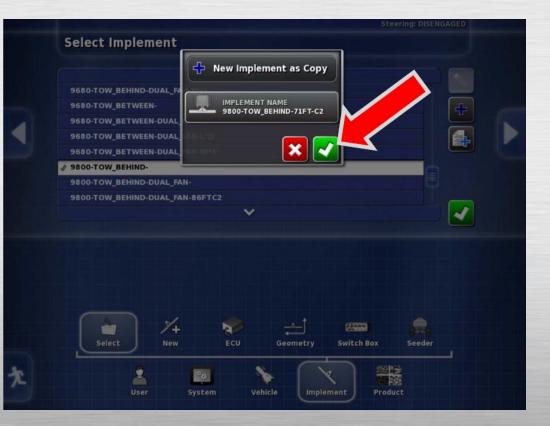
- Rename the profile by adding your Aircart and Drill Information.
- Example: 9800-TOW-BEHINDICT-71ft-C2
- Note: Always uses instead of the space bar. Never use /., \*& or any other type of special characters at any time in the X30.





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• Note: how the profile name now includes the drill width. Apply the Changes with the **Green Check** mark. The system will now restart.







 The system is now restarting. The reason for copying the profile is so that the user will always have a backup of the original profile to fall back on. This is useful in case he encounters an error.







#### • Press the Section Control icon.

#### ECU Setup (IB-1) - 9800-TOW-BEHIND-ICT-71FT-C2 (Seeder)

#### REFRESH ECU SETTINGS Click to retrieve current settings from ECU

EDIT IMPLEMENT SETUP Click to edit the active implement

Tank	Name	Туре	ECU Name	Firmware Version
1	Tank 1	Granular	MDECU - Drive 1	N/A
2	Tank 2	Granular	MDECU - Drive 2	N/A
3	Tank 3	Granular	MDECU - Drive 3	N/A
4	Tank 4	Granular	MDECU - Drive 4	N/A







#### • Now press on the Sections icon.







## • Adjust the number of **Granular** sections to suit your Aircart.





 Press the + or – to increase or decrease the number of sections.
Apply with the Green check mark.



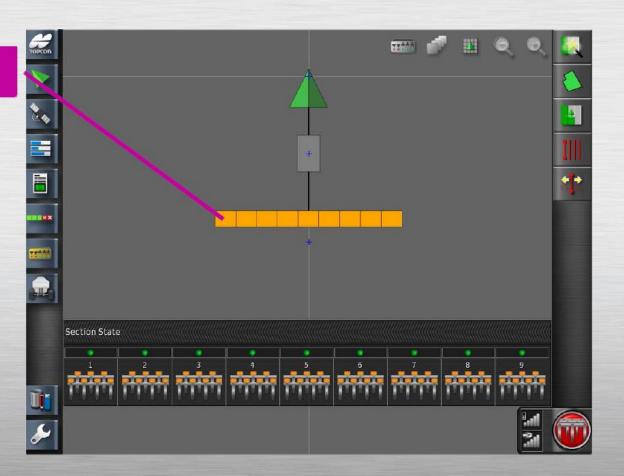






#### SECTION 1 (LEFT)

- Enter the correct width for each section. Depending on your drill the Sections will be either:
  - (#7)-84"
  - (#8)-96"
  - (#9)-108"
  - (#10)-120"







#### METER BODY LOOKING FROM THE REAR OF CART

12″	SEC 1	SEC 2	SEC 3	SEC 4	SEC 5	SEC 6	SEC 7	SEC 8	SEC 9
	LEFT				MID				RIGHT
	-						-		
61'	8	8	7	7	BLANK	7	8	8	8
732″	96"	96"	84"	84"	0"	84"	96"	96"	96"
18.5928	2.4384	2.4384	2.1336	2.1336	0.0000	2.1336	2.4384	2.4384	2.4384
71'	8	8	8	8	7	8	8	8	8
852″	96"	96"	96"	96"	84"	96"	96"	96"	96″
21.6408	2.4384	2.4384	2.4384	2.4384	2.1336	2.4384	2.4384	2.4384	2.4384
86'	10	10	9	9	9	9	10	10	10
1032"	120"	120"	108"	108"	108"	108"	120"	120"	120"
26.2128	3.048	3.048	2.7432	2.7432	2.7432	2.7432	3.048	3.048	3.048
90'	10	10	10	10	10	10	10	10	10
1080"	120"	120"	120"	120"	120"	120"	120"	120"	120"
27.4320	3.048	3.048	3.048	3.048	3.048	3.048	3.048	3.048	3.048





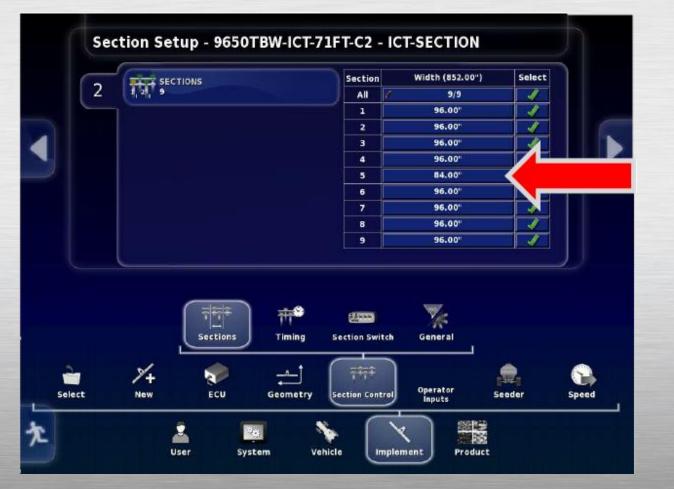
#### STEP 22 CONT

10"	SEC 1	SEC 2	SEC 3	SEC 4	SEC 5	SEC 6	SEC 7	SEC 8	SEC 9
	LEFT				MID				RIGHT
61'	8	8	8	8	8	8	8	8	8
	80″	80″	80″	80″	80″	80″	80″	80″	80″
71′	10	9	9	9	9	9	9	10	10
	100″	90"	90"	90″	90″	90″	90"	100″	100"





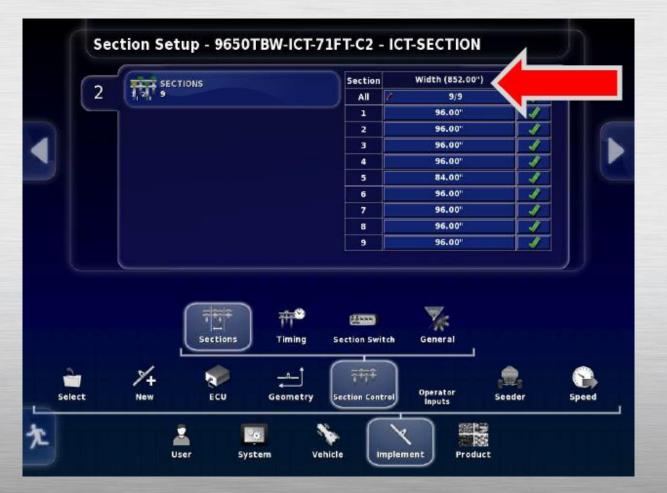
- Using the provided chart enter in the correct section width.
- NOTE: HOW THE CENTER SECTION 5 USES A #7 METERING WHEEL, THE WIDTH IS SET AT 84".







- Verify and ensure your Width matches your drill.
- Notice how the total width is equal to 852"





#### • Press the **Timing** icon.









#### • Adjust the **On Time** and **Off Time**.

2   All   9/9   9/9   1     1   6.0 s   4.0 s   1     2   6.0 s   4.0 s   1     3   6.0 s   4.0 s   1     4   6.0 s   4.0 s   1     5   6.0 s   4.0 s   1     6   6.0 s   4.0 s   1     7   6.0 s   4.0 s   1     9   6.0 s   5   5     9   6.0 s   5   5     9   6.0 s   5   6     9	G	Section	On Time	Off Time	Select	
2   6.0 s   4.0 s   1     3   6.0 s   4.0 s   1     4   6.0 s   4.0 s   1     5   6.0 s   4.0 s   1     6   6.0 s   4.0 s   1     7   6.0 s   4.0 s   1     8   6.0 s   4.0 s   1     9   6.0 s   4.0 s   1	[ 2	All	9/9	9/9		
3   6.0 s   4.0 s   1     4   6.0 s   4.0 s   1     5   6.0 s   4.0 s   1     6   6.0 s   4.0 s   1     7   6.0 s   4.0 s   1     8   6.0 s   4.0 s   1     9   6.0 s   4.0 s   1     9   6.0 s   4.0 s   1		1	6.0 s	4.0 s		
4   6.0 s   4.0 s   1     5   6.0 s   4.0 s   1     6   6.0 s   4.0 s   1     7   6.0 s   4.0 s   1     8   6.0 s   4.0 s   1     9   6.0 s   4.0 s   1     9   6.0 s   4.0 s   1     9   6.0 s   4.0 s   1		2	6.0 s	4.0 s		
5   6.0 s   4.0 s   1     6   6.0 s   4.0 s   1     7   6.0 s   4.0 s   1     8   6.0 s   4.0 s   1     9   6.0 s   4.0 s   1     9   6.0 s   4.0 s   1		3	6.0 s	4.0 s		
6 6.0 s 4.0 s   7 6.0 s 4.0 s   8 6.0 s 4.0 s   9 6.0 s 4.0 s		4	6.0 s	4.0 s		
7 6.0 s 4.0 s   8 6.0 s 4.0 s   9 6.0 s 4.0 s		5	6.0 s	4.0 s		
8 6.0 s 4.0 s 9 6.0 s 4.0 s 10 10 10 10 10 10 10 10 10 10 10 10 10 1		6	6.0 s	4.0 s		
9 6.0 s 4.0 s		7	6.0 s	4.0 5		
		8	6.0 s	4.0 s	1	
		9	6.0 s	4.0 s		
			す ま sections て iming	1		





#### **STEP 26 CONT**

- These values dictate when the monitor will turn the metering system On and Off. An adjustment to compensate for the lag time for the seed /product to leave the metering wheel and travel through the airstream and arrive at the openers.
- Each wing section time can be adjusted indenpendently to apply product evenly. This is very useful feature on the larger size drills.
- NOTE: THE TIME VALUES ADJUST ALL OF TANKS SIMULTANEOUSLY INDIVIDUAL TANK TIMING IS NOT OPTION, THEREFORE THE TANK WHICH IS THE FURTHEST AWAY FROM THE DRILL IS USED DURING THE TIMING SETUP EXERCISE.



MODULE 4: CALIBRATION



#### **STEP 26 CONT**

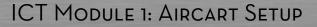
 Adjust these values to "dial in" the optimal balance between On and OFF times. The numbers should be adjusted for different size drills, your seeding ground speed and product type are all also a contributing factor. See testing section for further information.



MODULE 4: CALIBRATION

#### Virtual Section Switchbox – Enabled





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 Match the number of Virtual Sections Switches to the number of ICT sections.







#### **STEP 28 CONT**

- The virtual section switchbox control is very useful for testing purposes. Prior to seeding it is recommended to preform a daily systems check to verify that each section is functioning correctly.
- Each section can be toggled **On** and **Off** independently by pressing the onscreen switches.







- General Section Control Setup use the following settings:
- GRANULAR SECTION CONTROL LOCATION
  - METERING ROLLER ( WARNING ENSURE METERING ROLLER IS SELECTED!!! THIS IS VERY IMPORTANT!)
- GRANULAR SECTION MONITORING
  - ENABLED / DISABLED
- GRANULAR SECTION MONITORING STYLE
  - PULSED
- SECTION SHAFT PULSES/REVOLUTION
  - 21







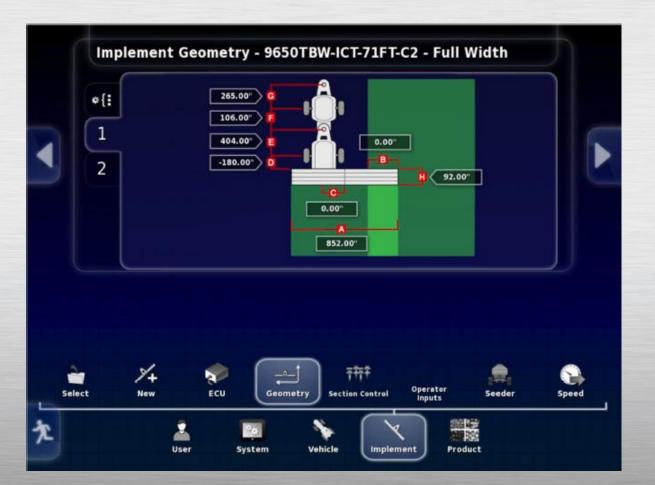
#### • Move onto the **Geometry Icon**.







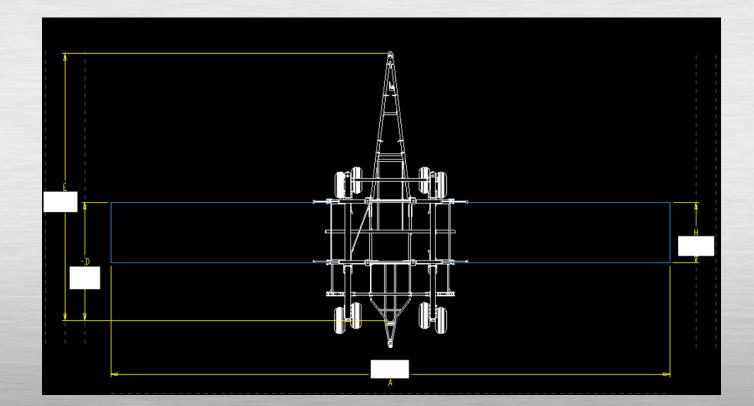
- Implement Geometry. Adjust the Full Width Geometry to match your drill.
- Our example is a **71ft C2**.







 Adjust the *Geometry* to match your drill. Note: The implement on the monitor is a tow behind drill. However the diagram does not accurately represent our drill. Measure and fill in the dimension using the above template.

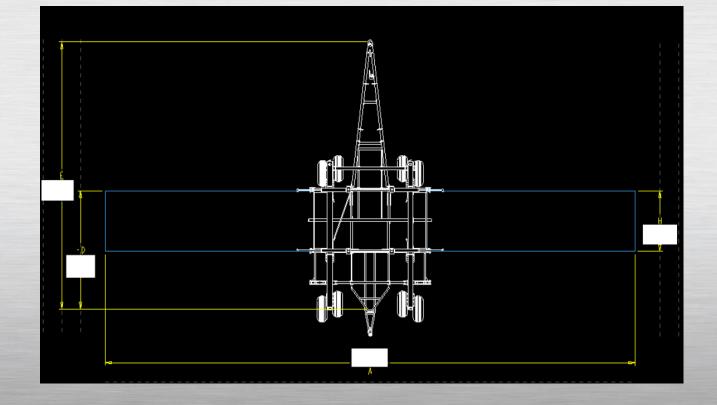




# Step 32



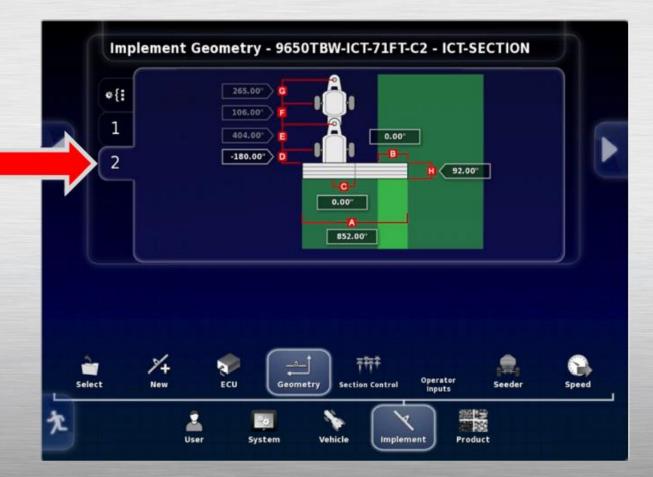
- A = Implement Working Width (VALUE IS AUTOMATICALLY ENTERED FROM SECTION SETUP)
- B = 0.00
- C = 0.00
- D = (NEGATIVE VALUE) REAR AXLE TO FRONT OPENER
- E = FRONT HITCH TO REAR AXLE
- H = FRONT OPENER TO REAR OPENER.







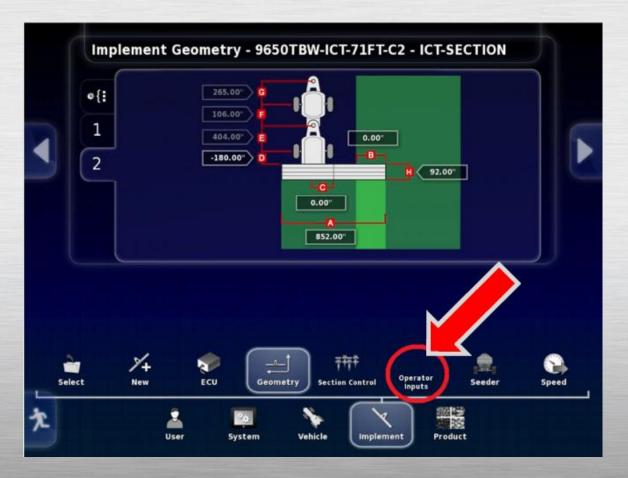
 Press on the #2 Tab; enter the same values into the available areas in the *ICT-SECTION Geometry* diagram.







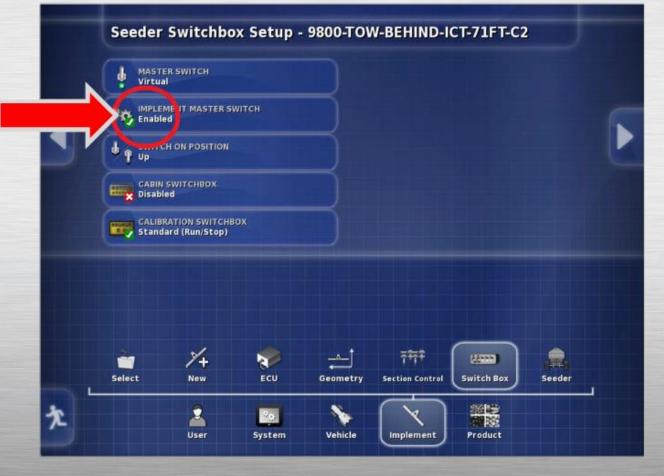
### • Press the **OPERATOR INPUTS** Icon.



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## Step 35



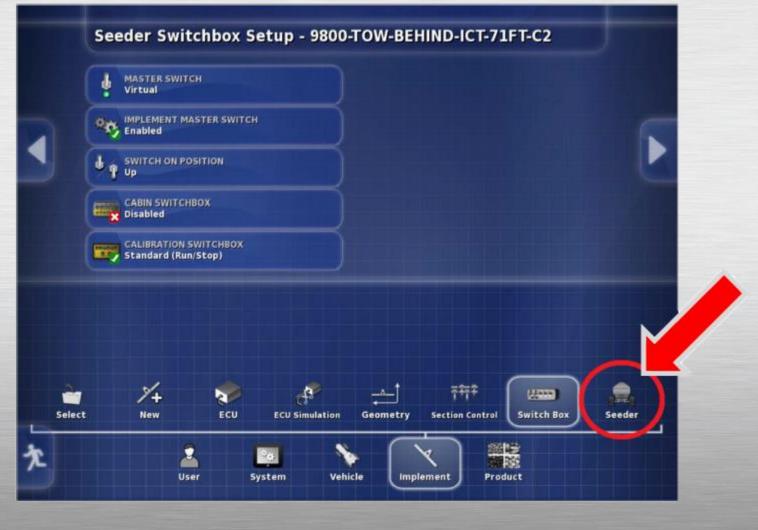


• Enable the Implement Master Switch.





#### • Select the Seeder icon.

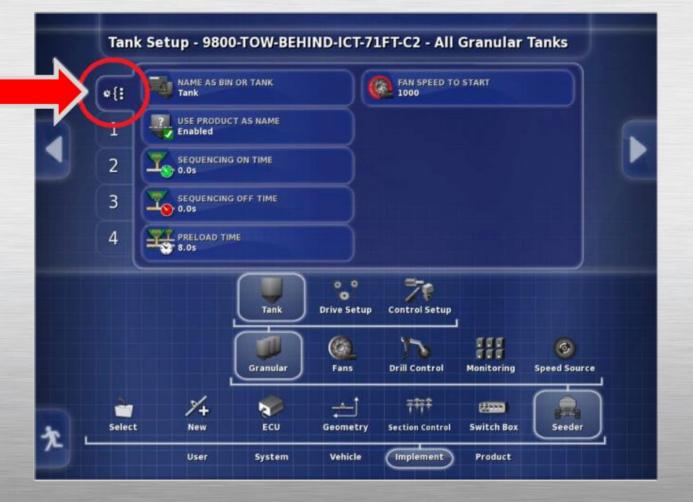




# Step 37



 Move up the tree and Select Granular -Tank - All Granular tanks





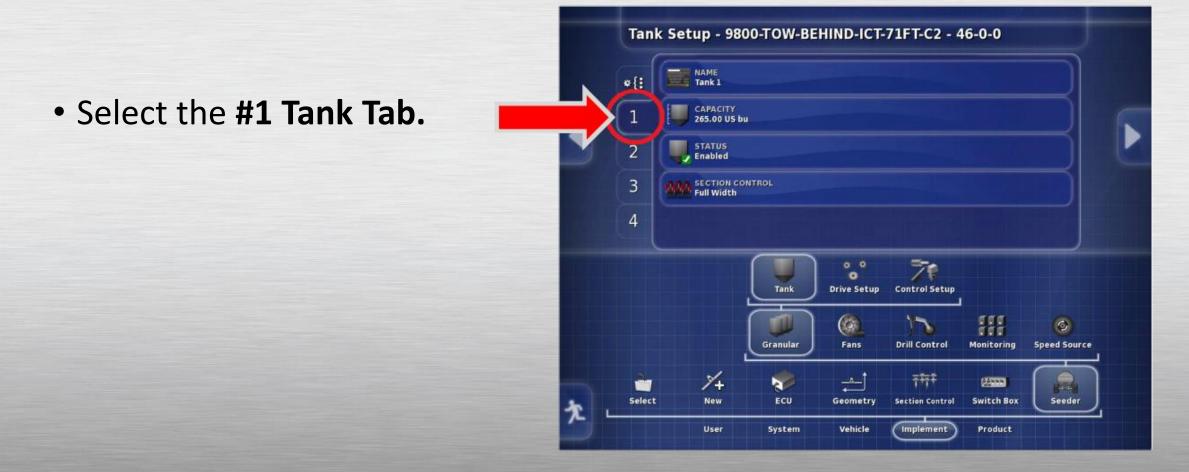


- Adjust the **Preload time to 8.0s.**
- \*Sequencing On and Off time are not used on this page (ICT equipped carts).









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 Change Full Width to ICT-SECTION; apply with the Green Check mark.







 Repeat the above procedure and change Full Width to ICT-SECTION on Tabs # 2, 3 and 4.

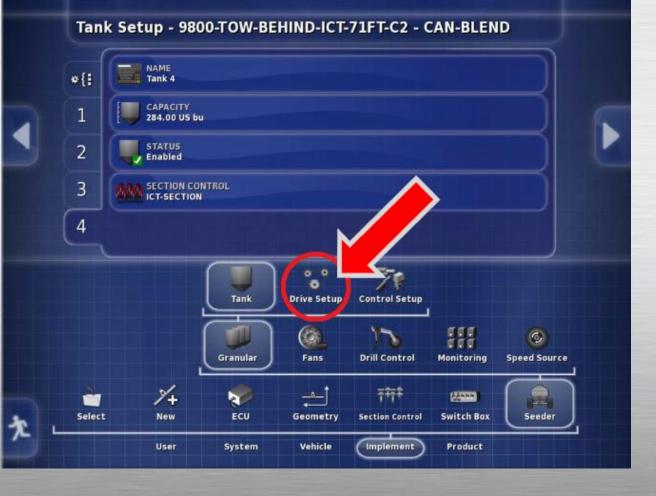
*{:	Tank 1					
1	CAPACITY 265.00 US bu					
2	Enabled					
3 🔥	SECTION CONTROL					
4						
			٥٥	70		
		Tank	Orive Setup	Control Setup		
			0	5		0
		Granular	Fans	Drill Control	Monitoring	Speed Source
Select	1/+		÷	ŦŦŦ	Switch Box	

Tank Setup - 9800-TOW-BEHIND-ICT-71FT-C2 - 46-0-0





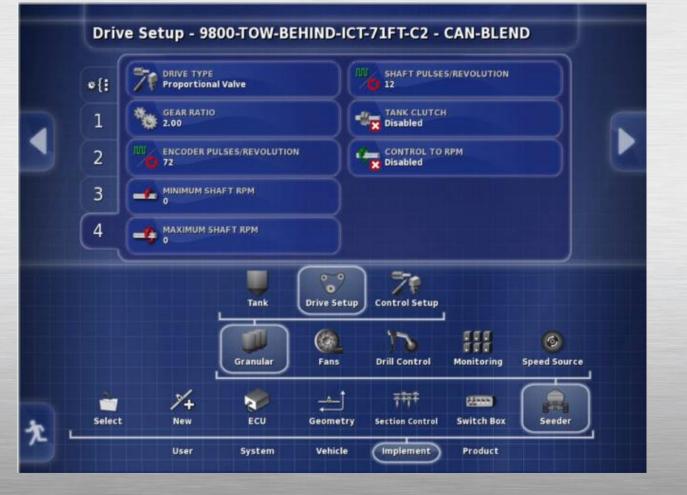
#### • Press the Drive Setup icon.







- Verify the following settings are in place. On Tabs 1-4
- NOTE: ICT AIRCARTS USE 12 Pulses /Revolution







• Press the **Running man** icon to **Exit** back to the home screen.





