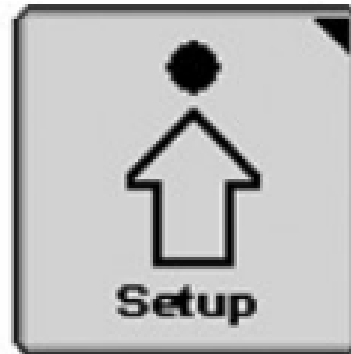# *Dual Product Setup*
John Deere
Rate Controller 2000
Lynx Q2 Dry Box

- *Open the Rate Controller 2000 Main page by selecting the Rate Controller 2000 Icon*

- *To begin setup select the Setup Softkey*

- *Under the Implement Tab (A), select Change/New (B)*
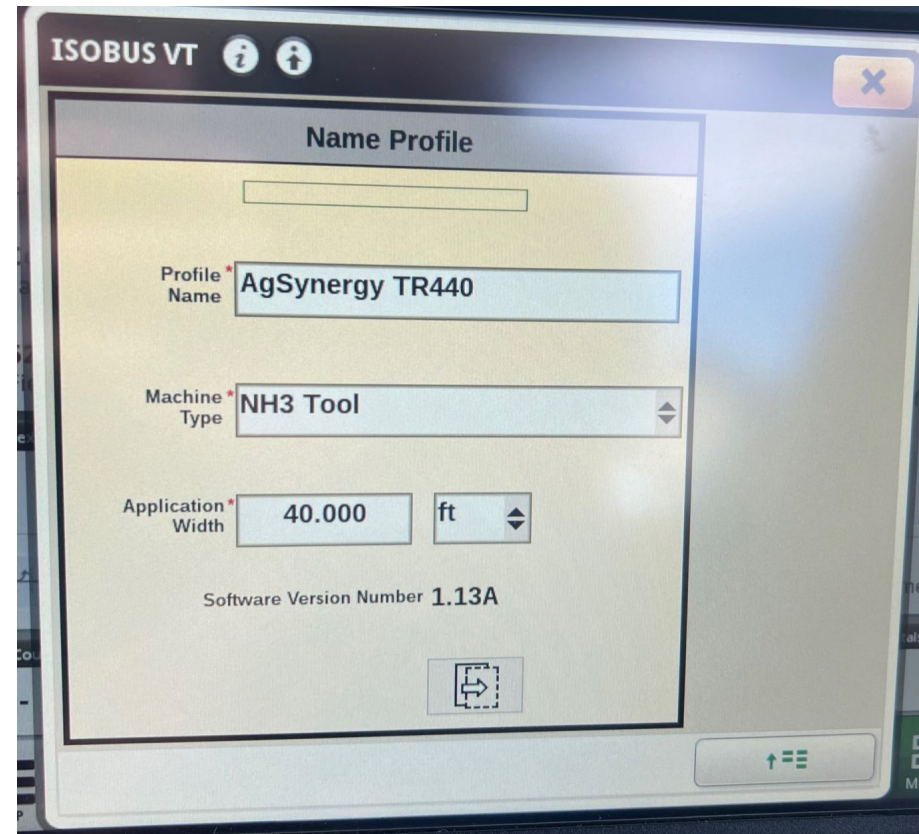
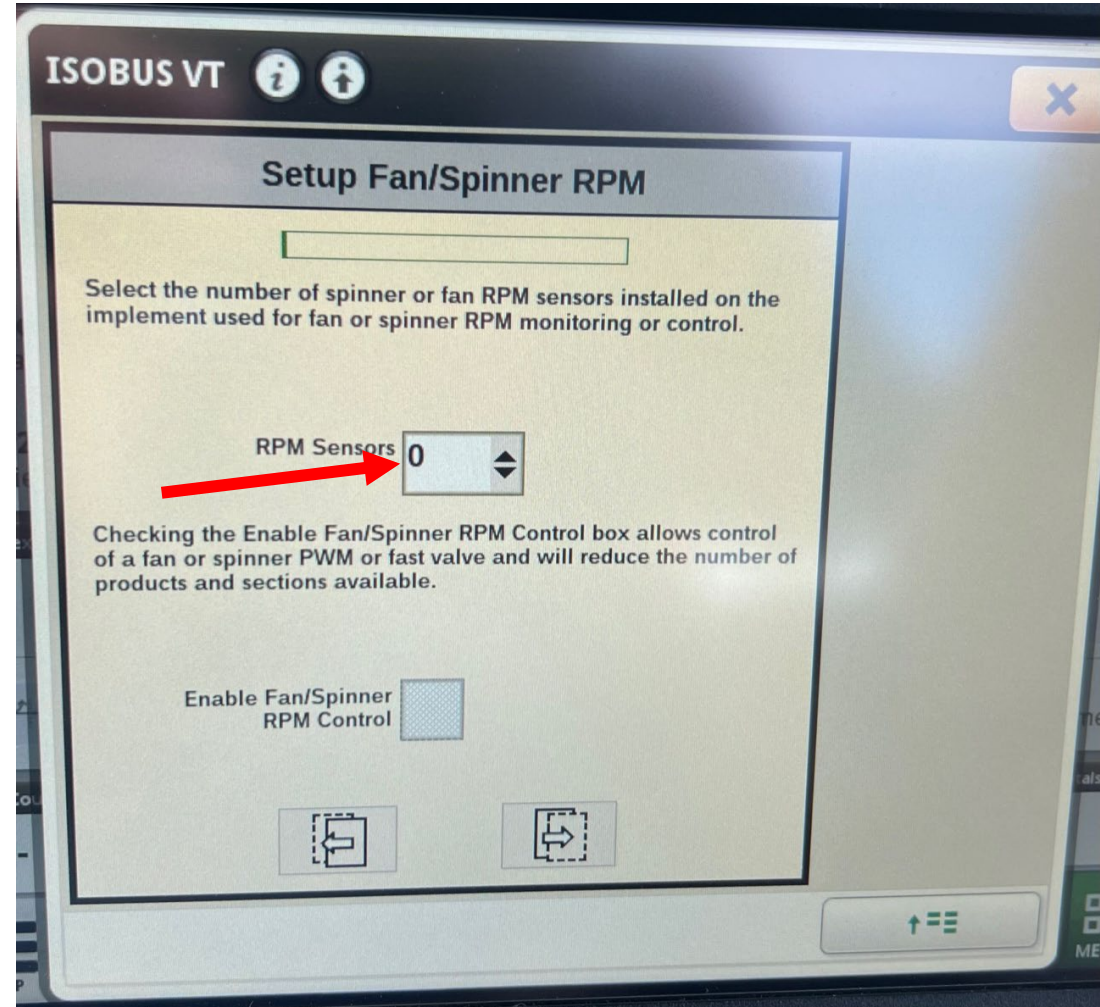- *Select New Profile from the drop down menu (H), Then Press Accept (I)*
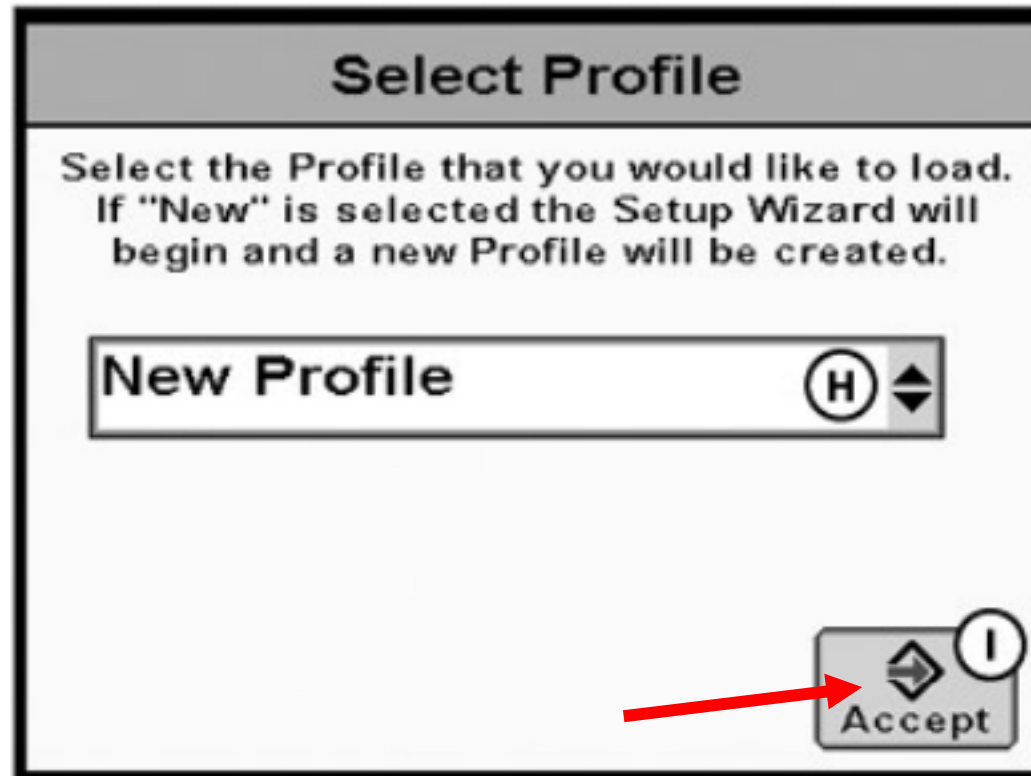
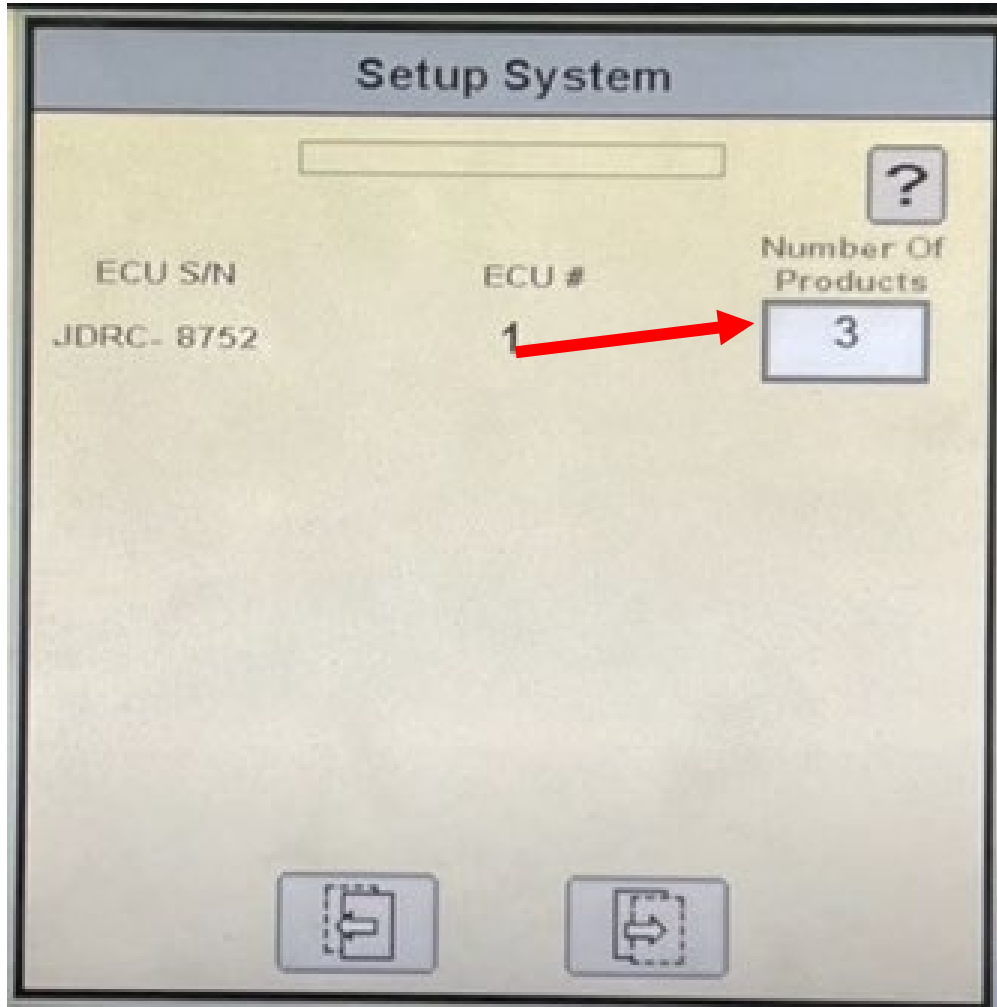- *Create a Profile Name (A), Select NH3 Machine as Machine Type (B), enter Application Width (C), and press the next Icon (E)*

- *Under Setup System enter 3 for the number of products*
- *Under Setup Fan Select "0" from the RPM Sensors dropdown*

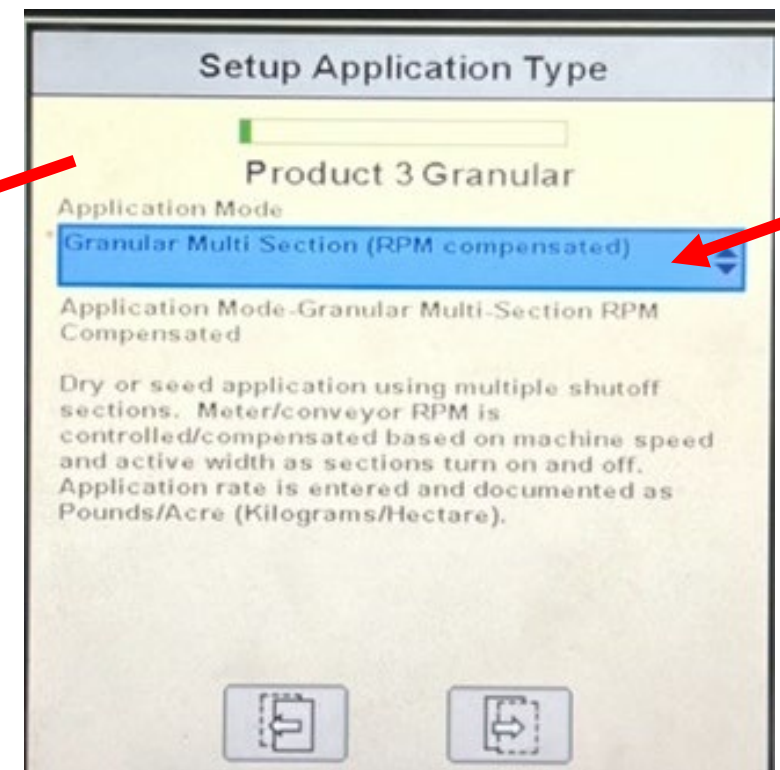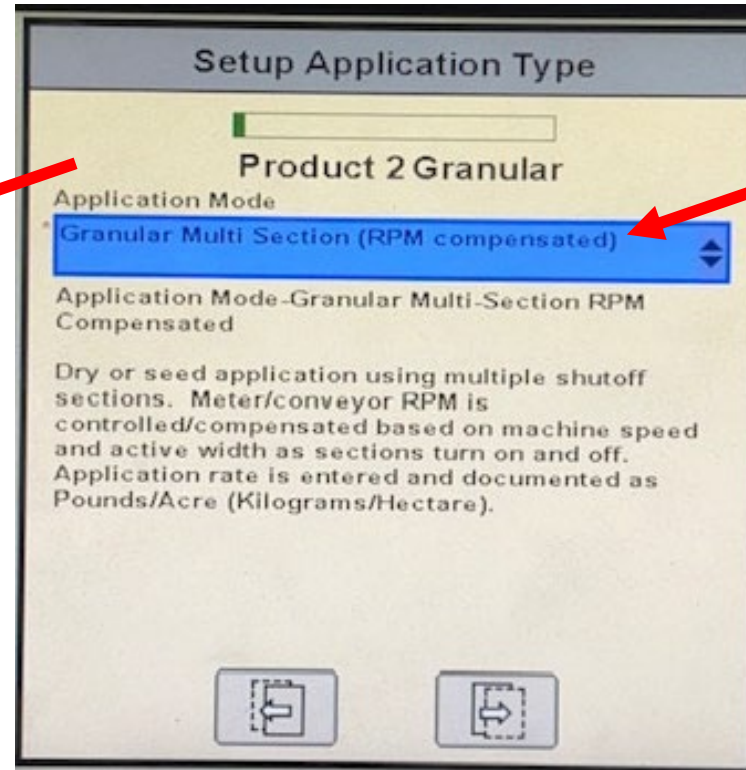- *Under Setup Application Type select "NH3" for Product 1*
- *Select "Granular Fertilizer" for Products 2 and 3*

- *Under Setup Application Type select "NH3" for Product 1 Application Mode*
- *Select "Granular Multi Section (RPM compensated)" for Products 2 and 3 Application Mode*
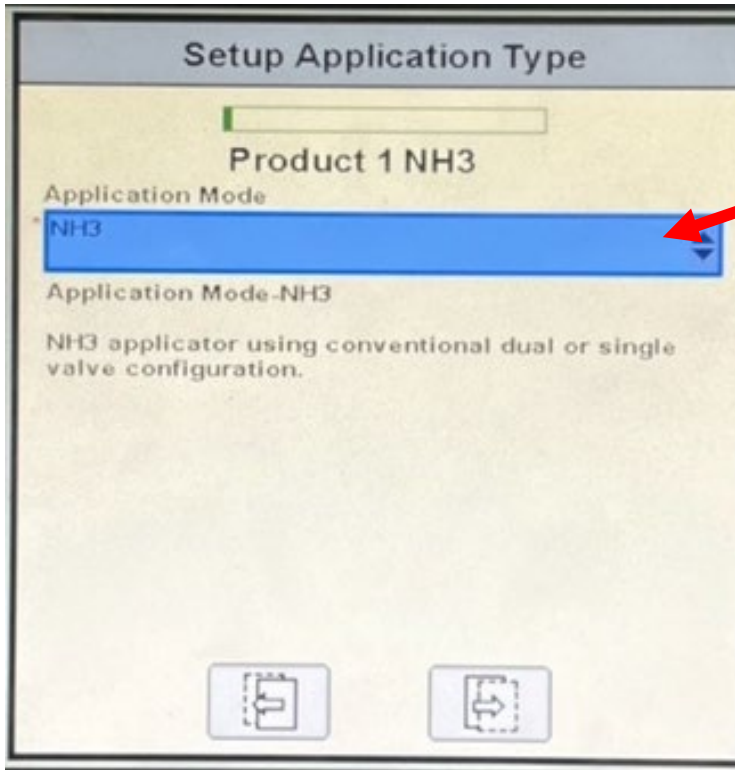
- *Under Setup Section Groups select "2"*
- *Check Granular Product Sections Power to Apply*
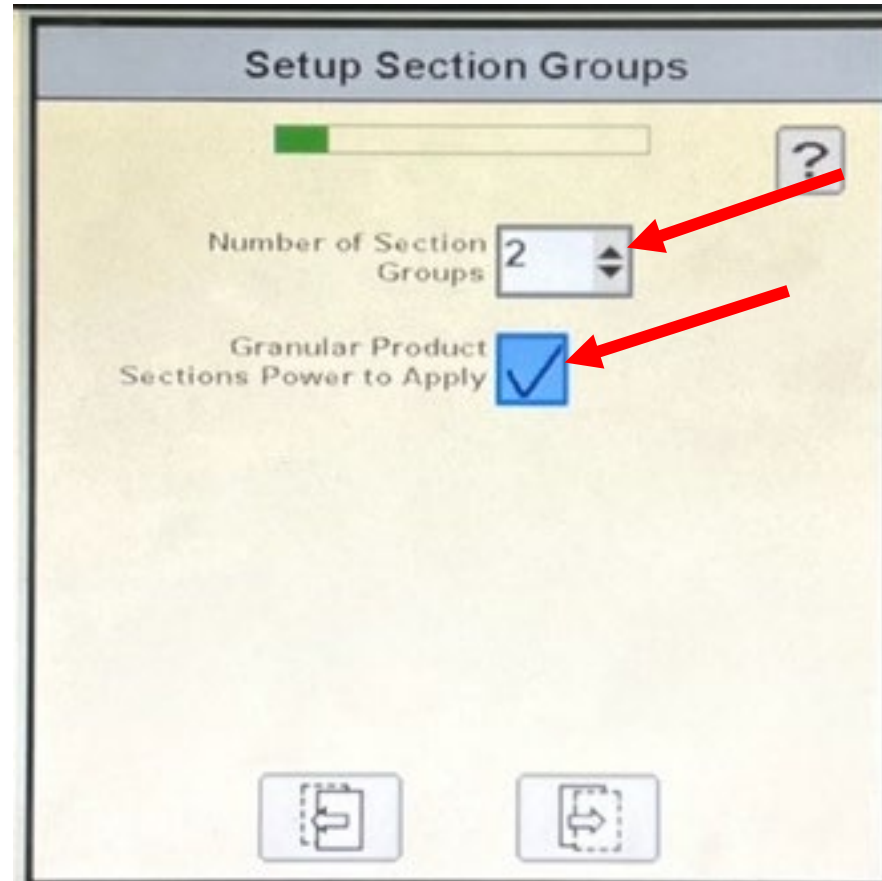
- *Under Setup Section Harnessing Enter "1" for Starting Section Driver and the correct number of sections for Section Group 1.*
- *Enter "7" for Starting Section Driver 2 and 2 Sections.*

- *Under Setup Section Groups Enter "1" for Starting Section Driver and the correct number of sections for Section Group 1 and select "Equal Section Widths".*
- *For Section Group 2 Enter "7" as the Starting Section Driver and the correct number of Sections and select "Equal Section Widths"*
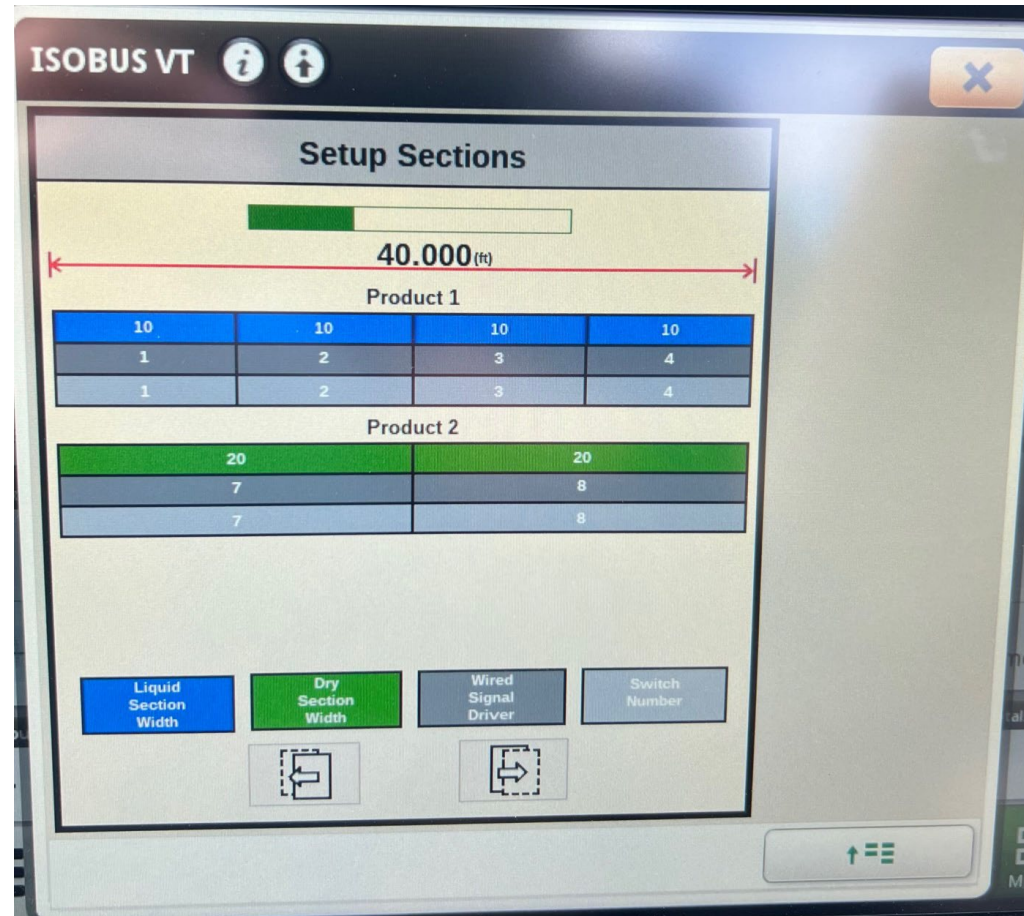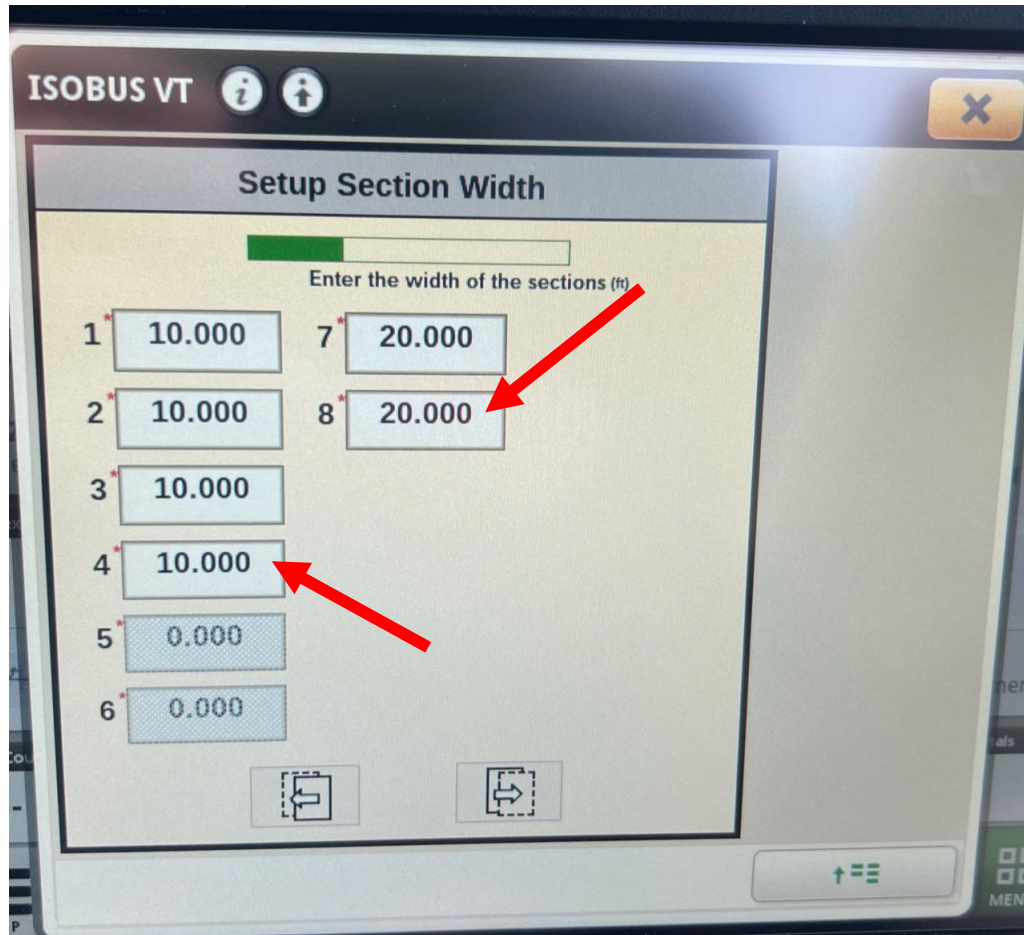- *The first 6 section groups are reserved for NH3 so Section Group 2 needs to start at 7 or higher*
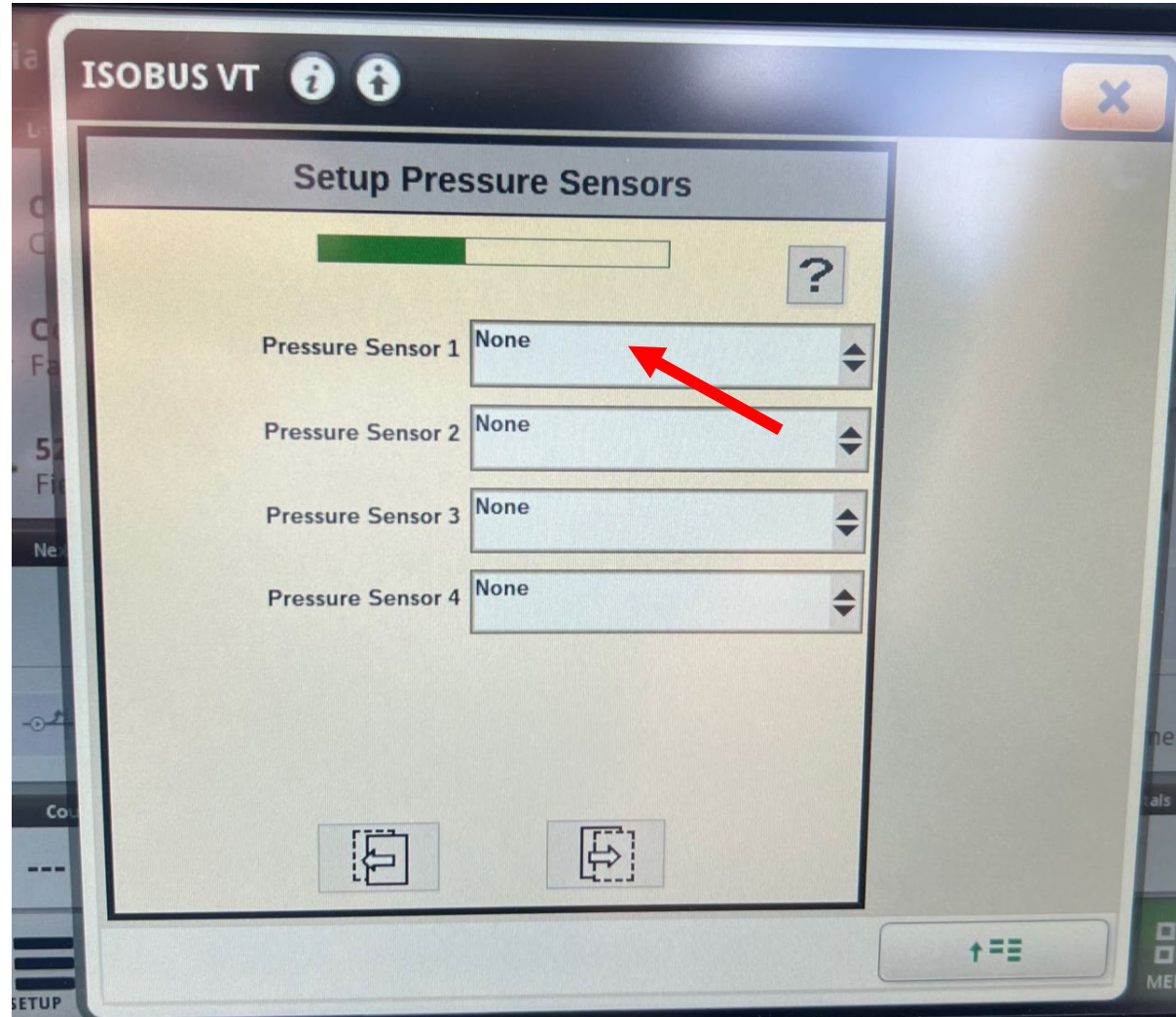
- *Under Setup Section Groups select "Section Group 1" for Product 1*
- *Select "Section Group 2" for Product 2*
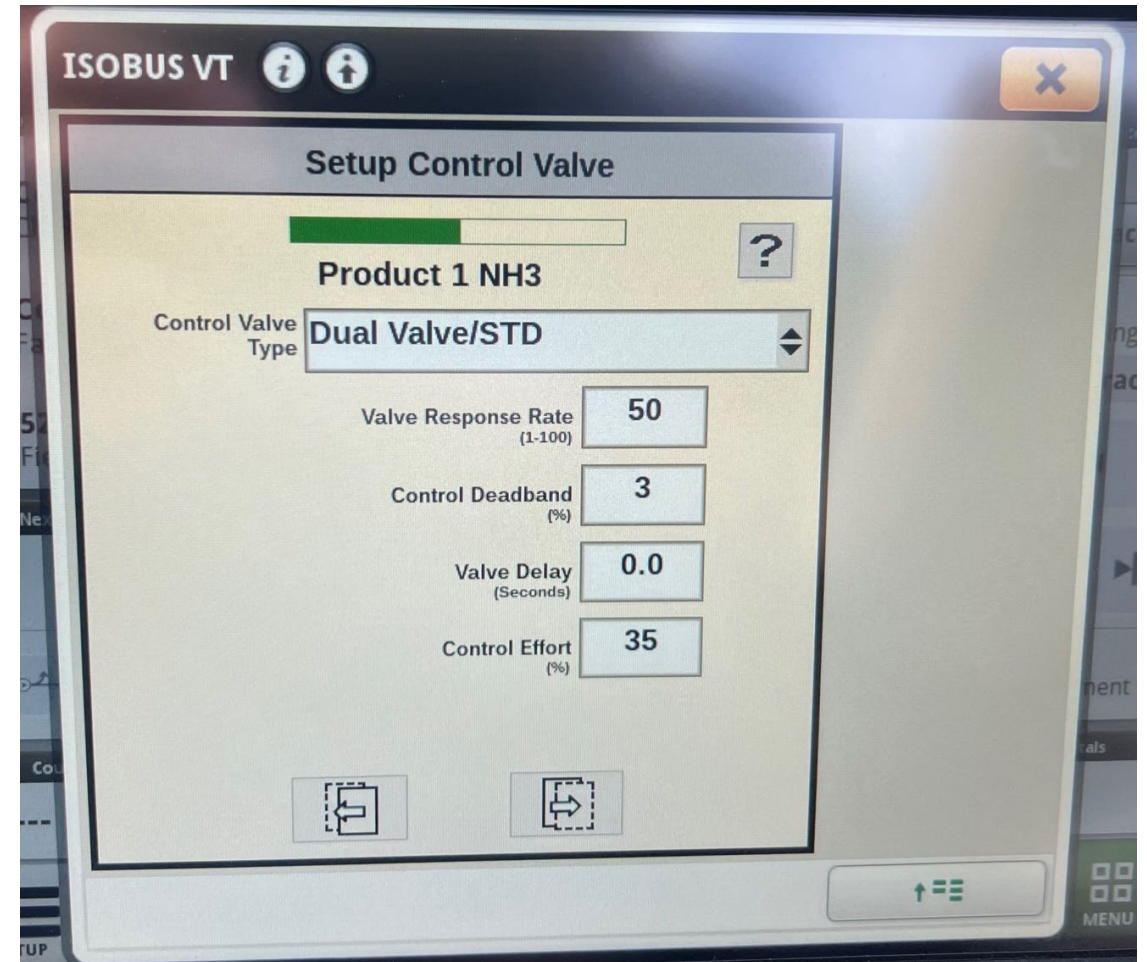- *Select "Section Group 2" for Product 3*
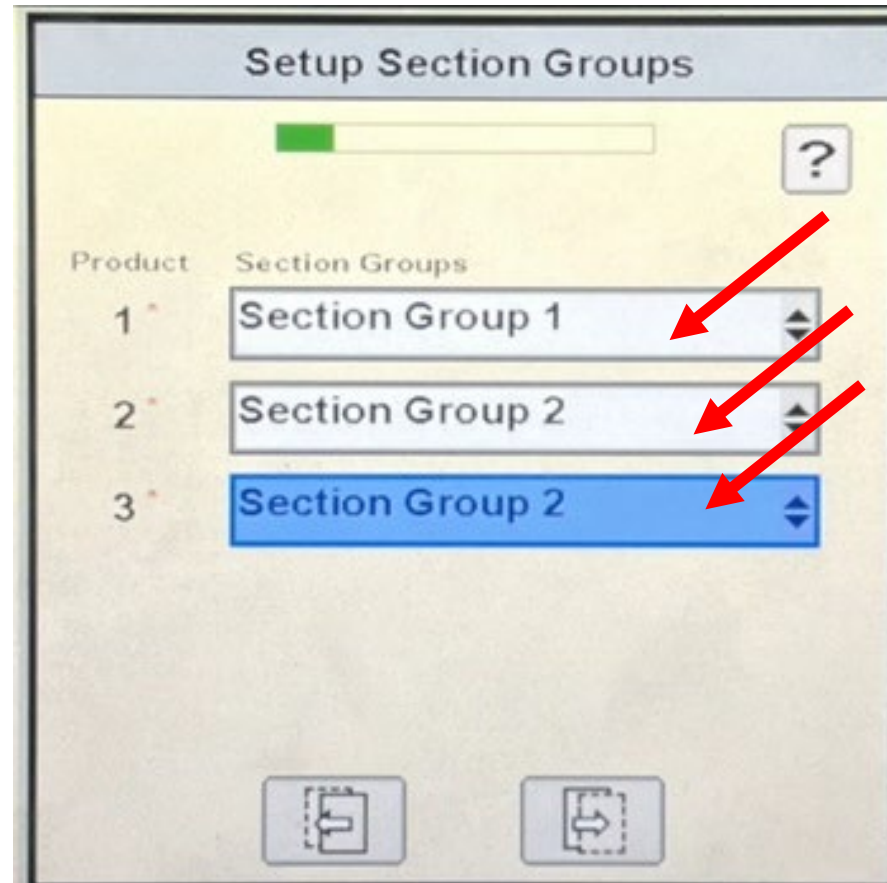
- *Under Setup Section Width enter the correct width for each section.*

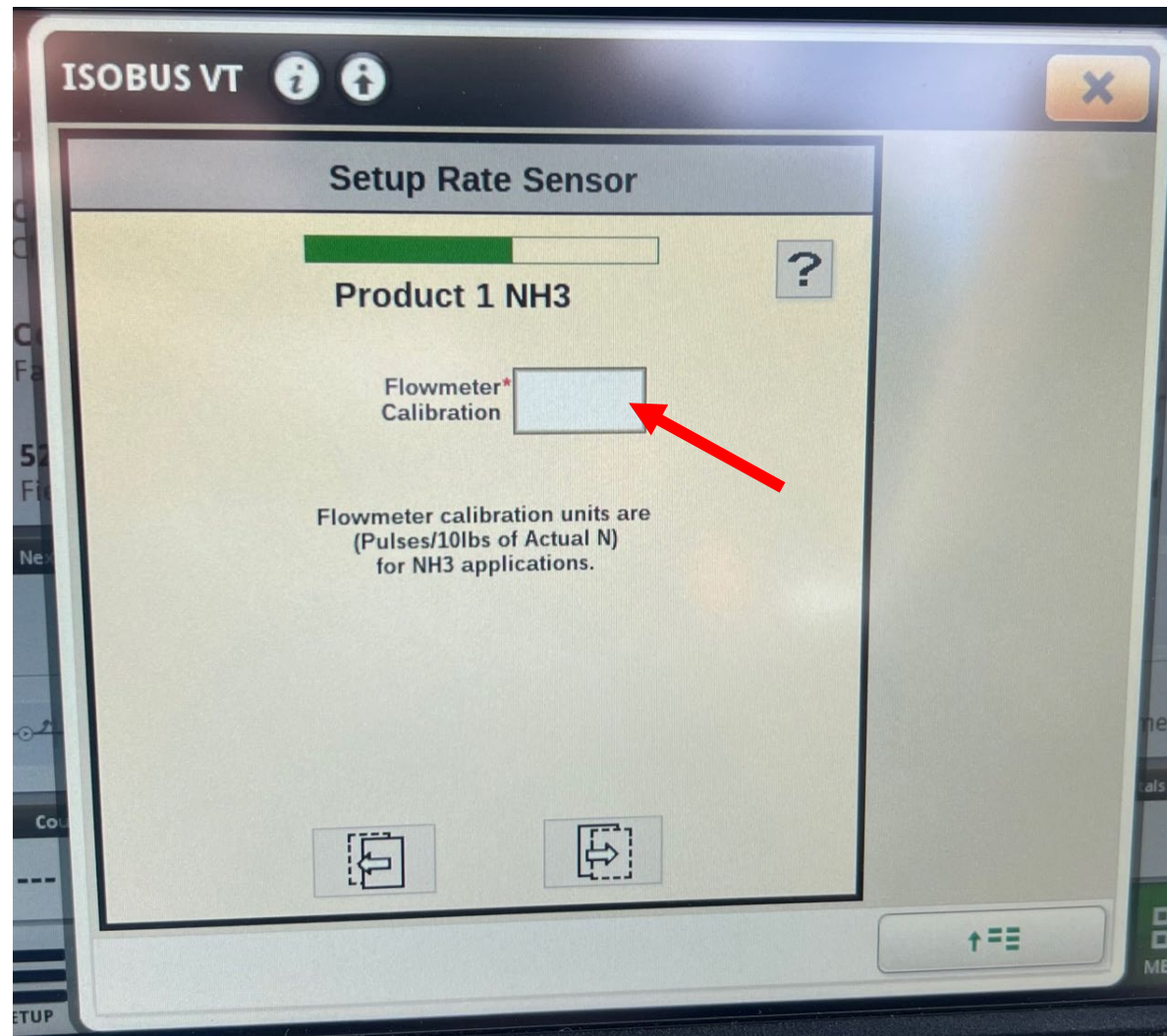- *Under Setup Pressure Sensors select "None"*
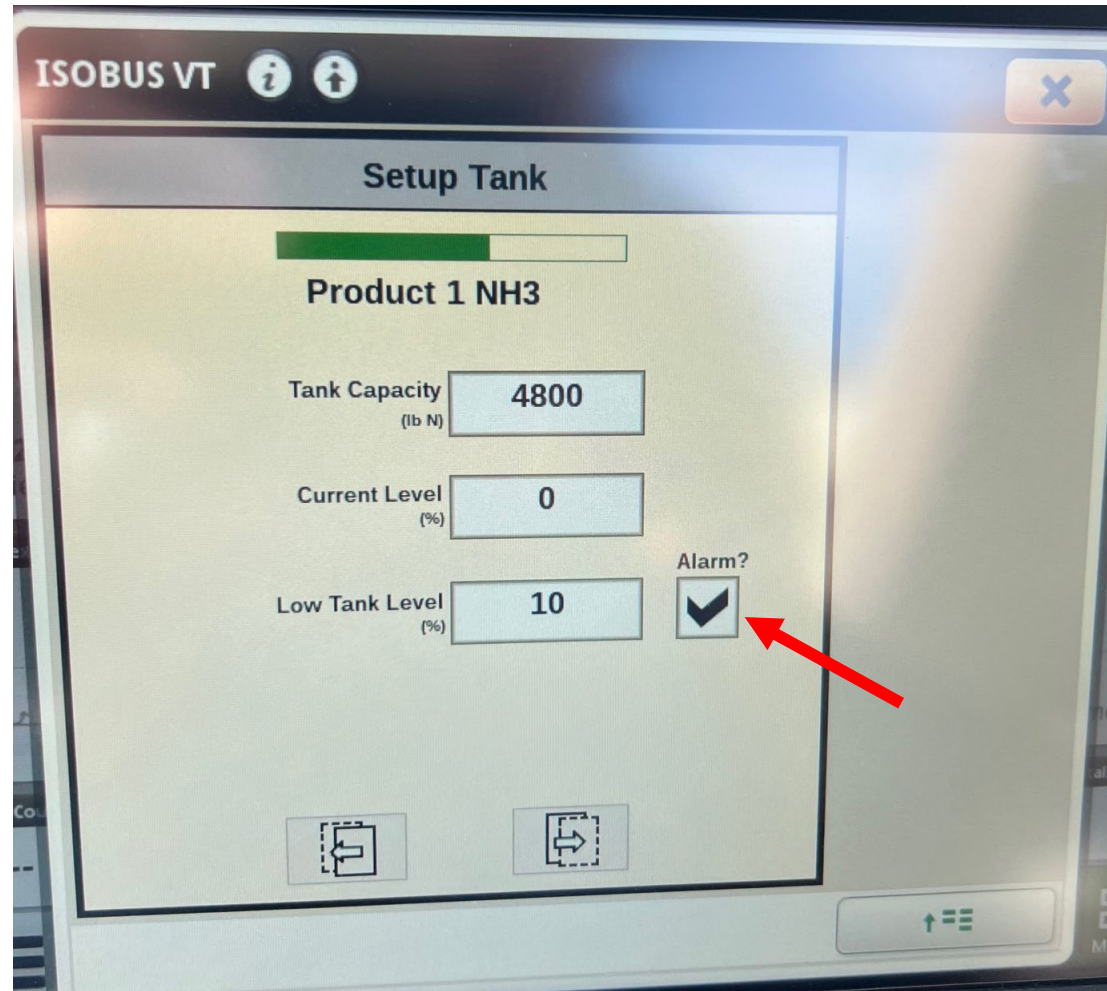
- *Under Setup Control Valve-Product 1 NH3 select "Dual Valve/STD" under Control Valve Type*
- *Enter "50" for Valve Response Rate*
- *Enter "3" for Control Deadband*
- *Enter "0" for Valve Delay*
- *Enter "35" for Control Effort*

- *Under Setup Rate Sensors-Product 1 NH3 enter the Flowmeter Calibration number from the tag on the flow meter*
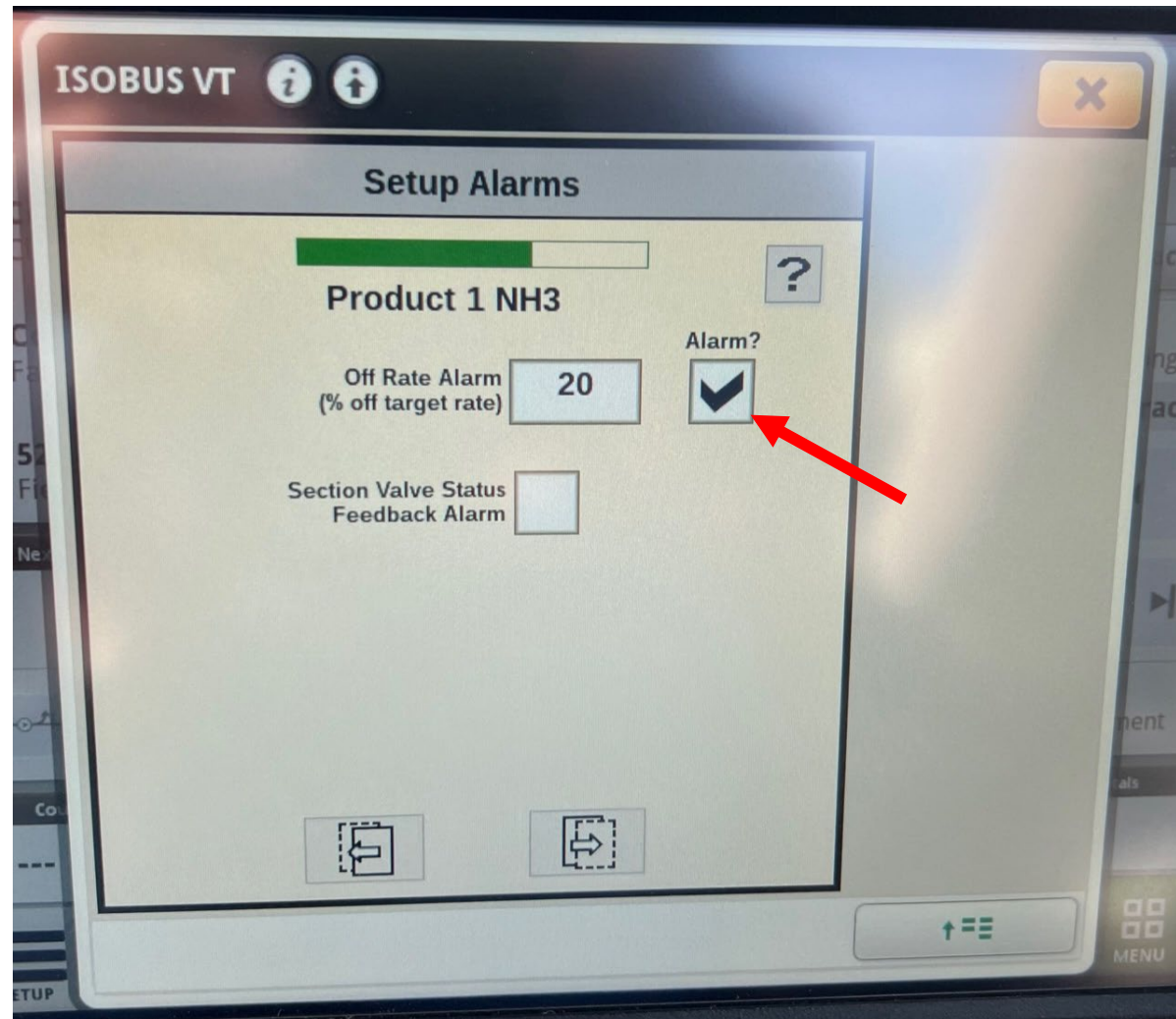
- *Under Setup Tank-Product 1 NH3 enter the desired Tank Capacity and*
- *Enter "10" for Low Tank Level and check "Alarm?" box*

- *Under Setup Rates-Product 1 NH3 enter the desired Preset Rate Values*
- *Enter "5" for Rate Bump*
- *Enter "5" for Rate Smoothing and check Rate Smoothing Box*
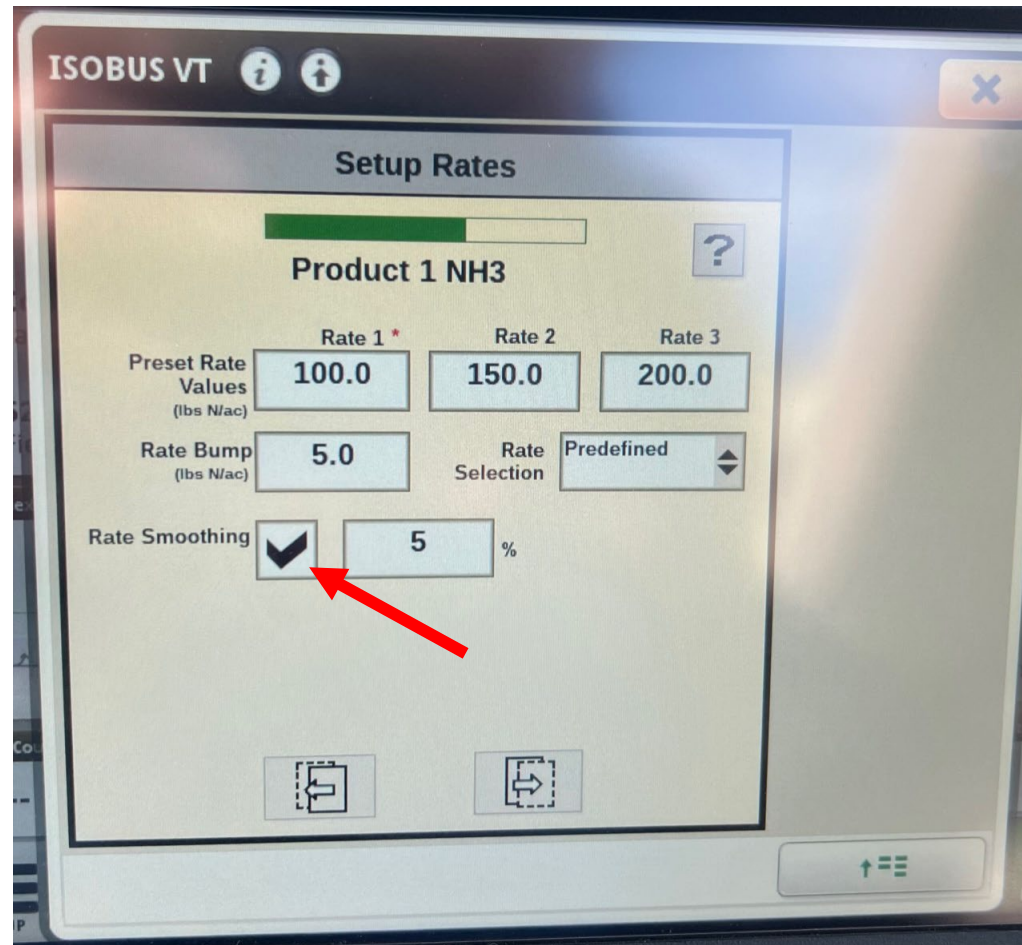
- *Under Setup Alarms-Product 1 NH3 enter the desired Off Rate Alarm and select the "Alarm?" Checkbox*

- *Under PWM Setup Valve-Product 2 Granular select "PWM Close" under Control Valve Type*

- *Enter "50" for Valve Response Rate*

- *Enter "2" for Control Deadband*
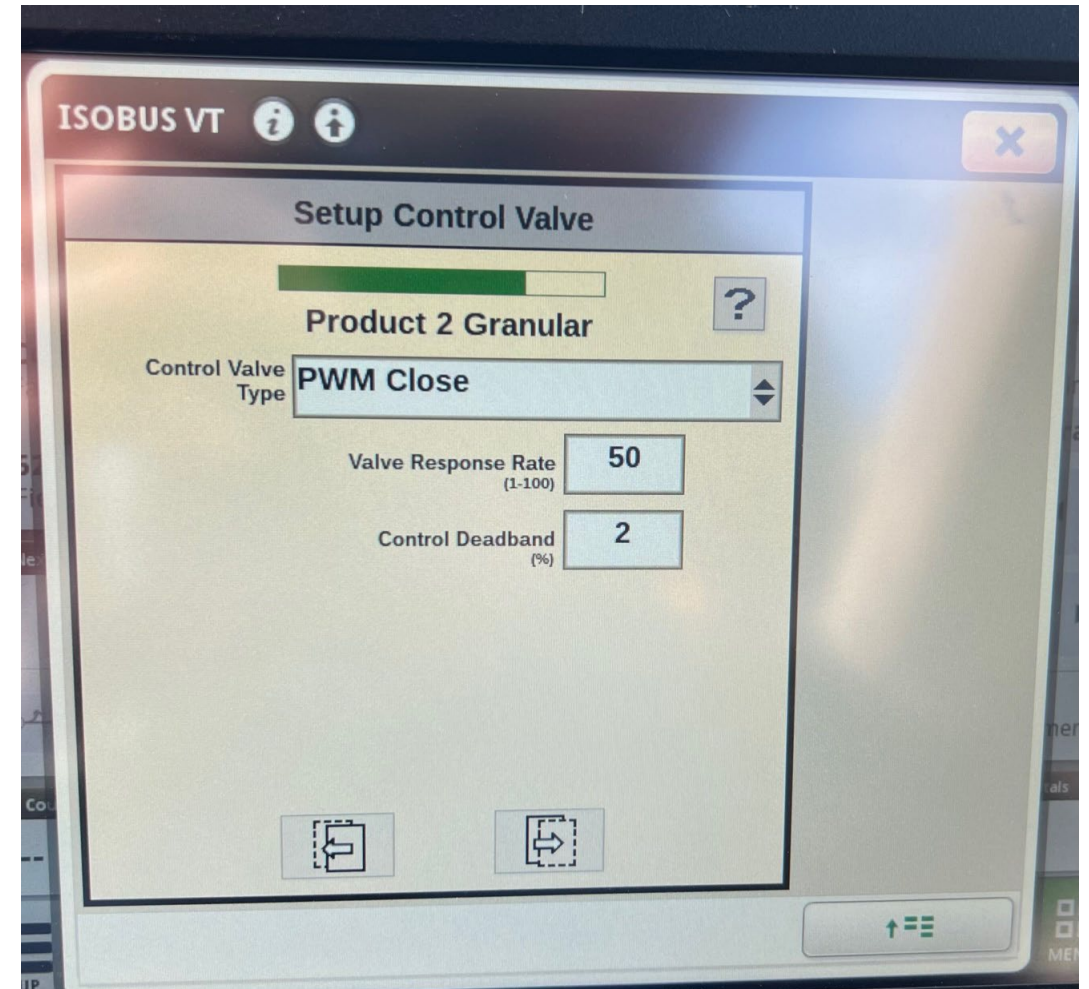
- *Under Setup PWM-Product 2 Granular enter "120" for Coil Frequency*
- *Enter "100" for High Limit*
- *Enter "1" for Low Limit*
- *Enter "30" for PWM Startup*
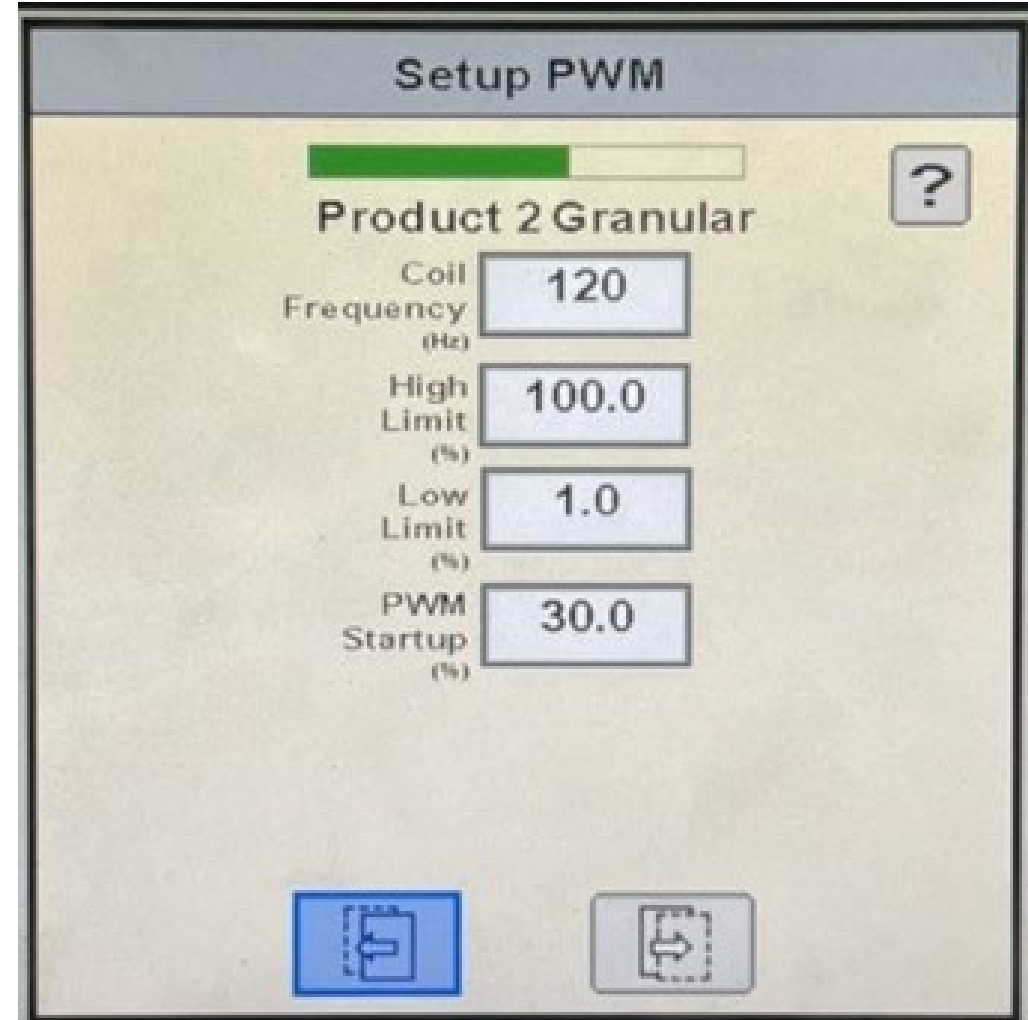
- *Under Setup Rate Sensor-Product 2 Granular*
- *Enter "600" for Pulses/Revolution*
- *Enter "38" for Product Density*
- *Enter Calibration Weight*
  - *Calibration Weight=1.2 x # of rows*

- *Under Setup Tank-Product 2 Granular*
- *Enter "9000" for Tank Capacity*
- *Enter "0" for Low Tank Level*
- *Select "Low Bin Level Sensor"*
  Checkbox

- *Under Setup Rates-Product 2 Granular*
- *Enter Desired Preset Rate Values*
- *Enter "1" for Rate Bump*
- *Enter "3" for Rate Smoothing*
- *Select "Rate Smoothing" Checkbox*

- *Under Setup Alarms-Product 2 Granular enter the desired Off Rate Alarm and Dual Encoder Alarm*
- *Select the "Alarm?" Checkboxes*

- *Under PWM Setup Valve-Product 3 Granular select "PWM Close" under Control Valve Type*
- *Enter "50" for Valve Response Rate*
- *Enter "2" for Control Deadband*

- *Under Setup PWM-Product 3 Granular enter "120" for Coil Frequency*
- *Enter "100" for High Limit*
- *Enter "1" for Low Limit*
- *Enter "30" for PWM Startup*

- ***Under Setup Rate Sensor-Product 3 Granular***

- ***Enter "600" for Pulses/Revolution***

- ***Enter Correct Value for Product Density***

- ***Enter Calibration Weight***
  - **Calibration Weight=.69375 x # of rows**

Setup Rate Sensor

Product 3 Granular

Pulses/Revolution*   600

Product Density
(lb/Cubic Feet)   38.0

Calibration
Weight
(lb/Revolution)   11.100

- *Under Setup Tank-Product 3 Granular*
- *Enter "9000" for Tank Capacity*
- *Enter "0" for Low Tank Level*
- *Select "Low Bin Level Sensor"*
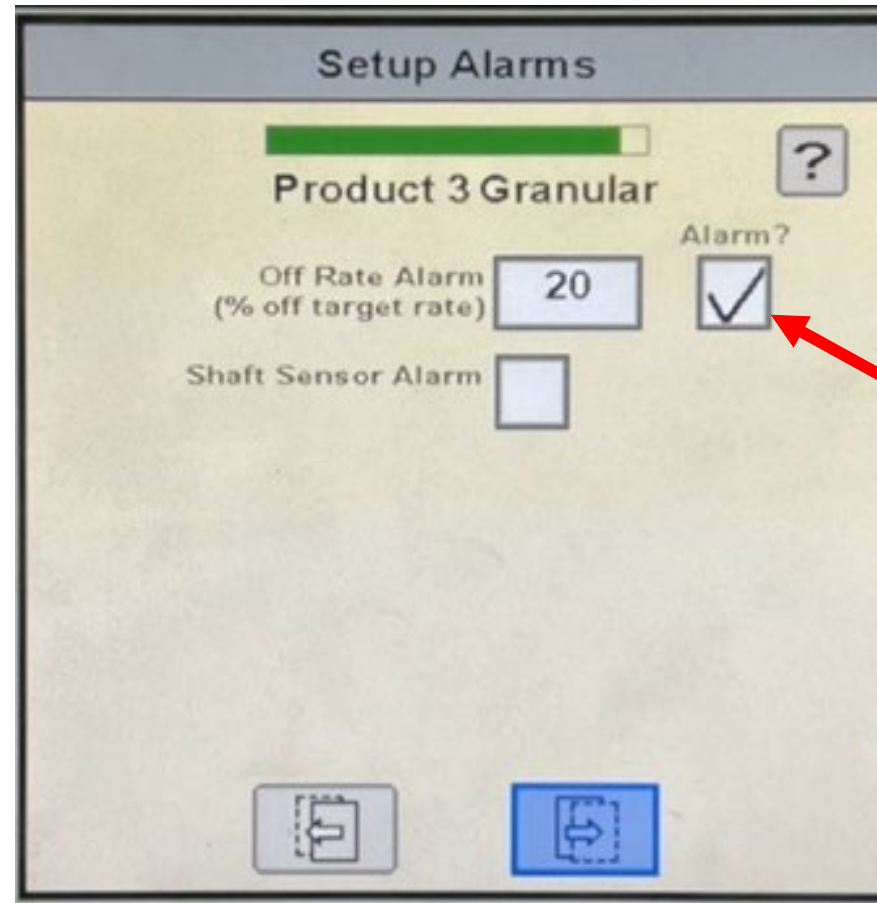 *Checkbox*

- *Under Setup Rates-Product 3 Granular*
- *Enter Desired Preset Rate Values*
- *Enter "1" for Rate Bump*
- *Enter "3" for Rate Smoothing*
- *Select "Rate Smoothing" Checkbox*

- *Under Setup Alarms-Product 3 Granular enter the desired Off Rate Alarm and Dual Encoder Alarm*
- *Select the "Alarm?" Checkboxes*

- *Setup is now complete*
- *Select "Accept" to close the Setup Wizard*