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Integration Instructions

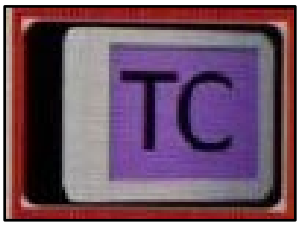
PinPoint™ III ENVELOP on AGCO RG-C

Note: Before performing the integration procedure, verify that Task Controller, located in the ISOBUS Information menu in the Ag Control Monitor, is enabled. If so, proceed to the Menu Setup procedure starting on page 2. If it is disabled, perform the following steps, then cycle the machine key switch and proceed with the Menu Setup procedure.

On the Ag Control Monitor, tap the **Settings** icon > **ISOBUS** icon > **Task Controller** icon.

Settings

ISOBUS



Task Controller

Note: prior to performing any setup on the machine, perform the factory reset procedure.

Tap the **Settings** icon  and select **Initial Setup > Configuration > Factory Reset > Check the "Format SD Card" Checkbox > Yes.**

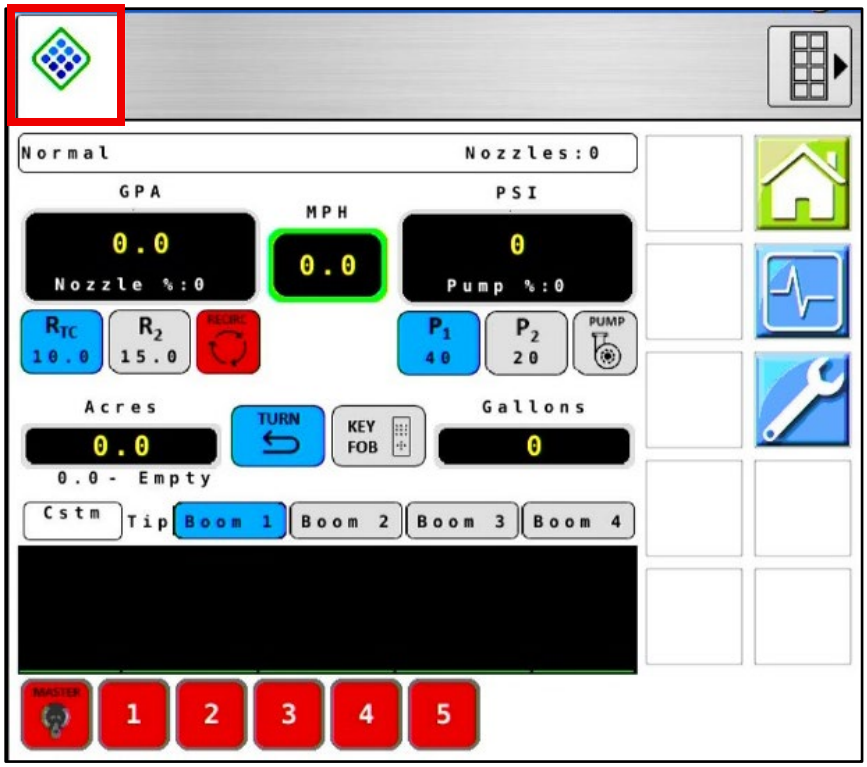


Figure 1 — PinPoint III Home Screen

Menu Setup

1. ***Figure 1***: Select the CapstanAG PinPoint™ III icon from the UT selection list. This icon may be located in slightly different places depending on the task controller.

2. Basic running settings and information are displayed on the PinPoint™ III home screen. The boom profile buttons can be selected here. To edit these configurations and set up other features of the PinPoint™ III software, tap the **Settings** icon at the right side of the screen.

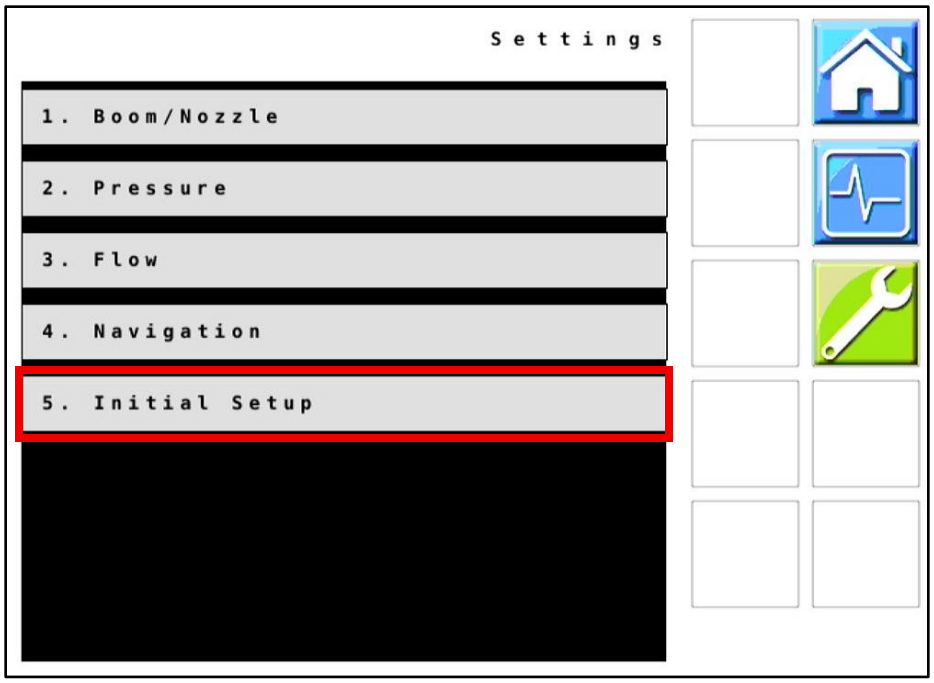


Figure 2 — Settings Menu

3. ***Figure 2:*** To begin setup, Tap the button > **Initial Setup** > and **Configuration** on the following page.

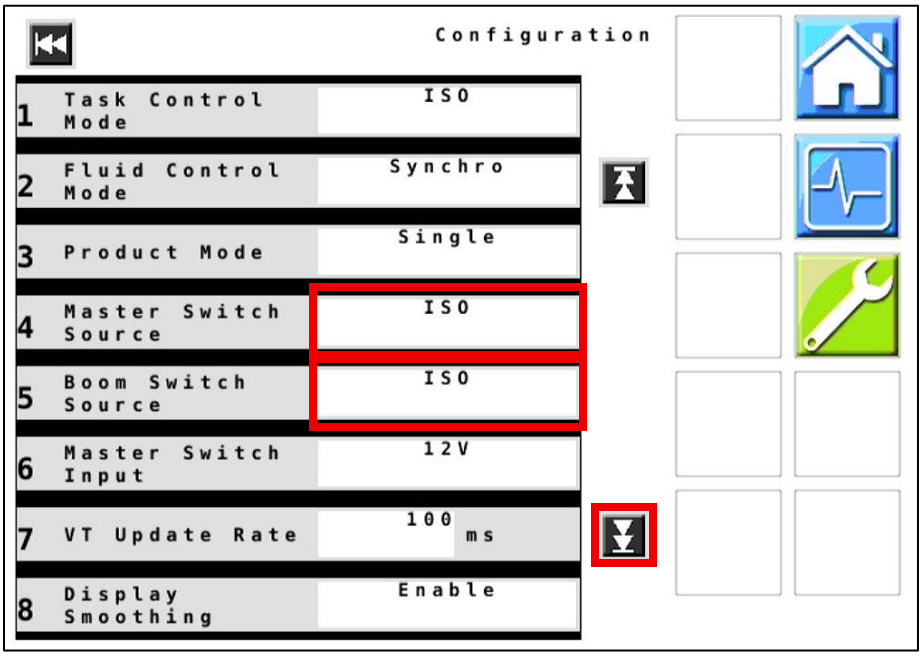


Figure 3 — Configuration Menu – Page 1

4. ***Figure 3:*** Change **Master Switch Source** and **Boom Switch Source** to **ISO.**

   Note: Older software revisions will have both selection options listed as None, which is their equivalent.

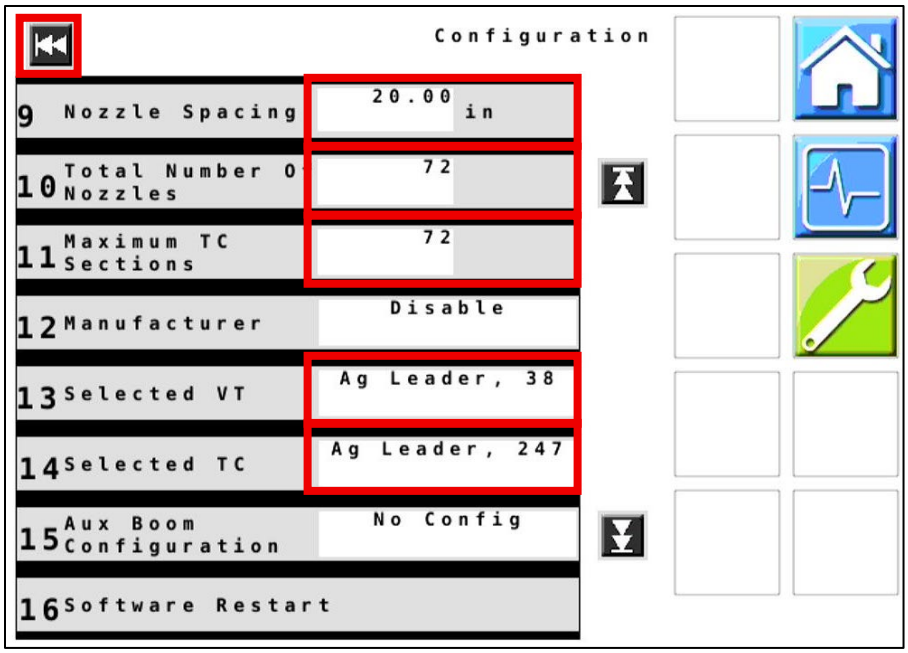


Figure 4 — Configuration Menu – Page 2

5. ***Figure 4:*** On Page 2 of the Configuration Menu:
    a. Enter the correct **Nozzle Spacing** for your machine
    b. Verify the **Total Number of Nozzles** matches the number on your machine
    c. Match the **Maximum TC Sections** number to the **Total Number of Nozzles**
    d. Change **Manufacturer** to **AGCO**
    e. Change the **Selected VT** option if desired
        i. This option will dictate which monitor the PinPoint III UT will be displayed
    f. Change the **Selected TC** to the desired Task Controller
        i. This will typically be a **Raven** device on an Agco Machine

It is atypical for the Agcontrol (NT01) Monitor to be set as the selected TC due to the number of Task Control sections it is able to regulate

6. Tap the **Back Arrow** to return to the Initial Setup menu and select **VCM Setup.**

7. **Leave all other items in Configuration Menu at default setting unless otherwise advised.**

IMPORTANT: Complete this step before performing any other boom setup.

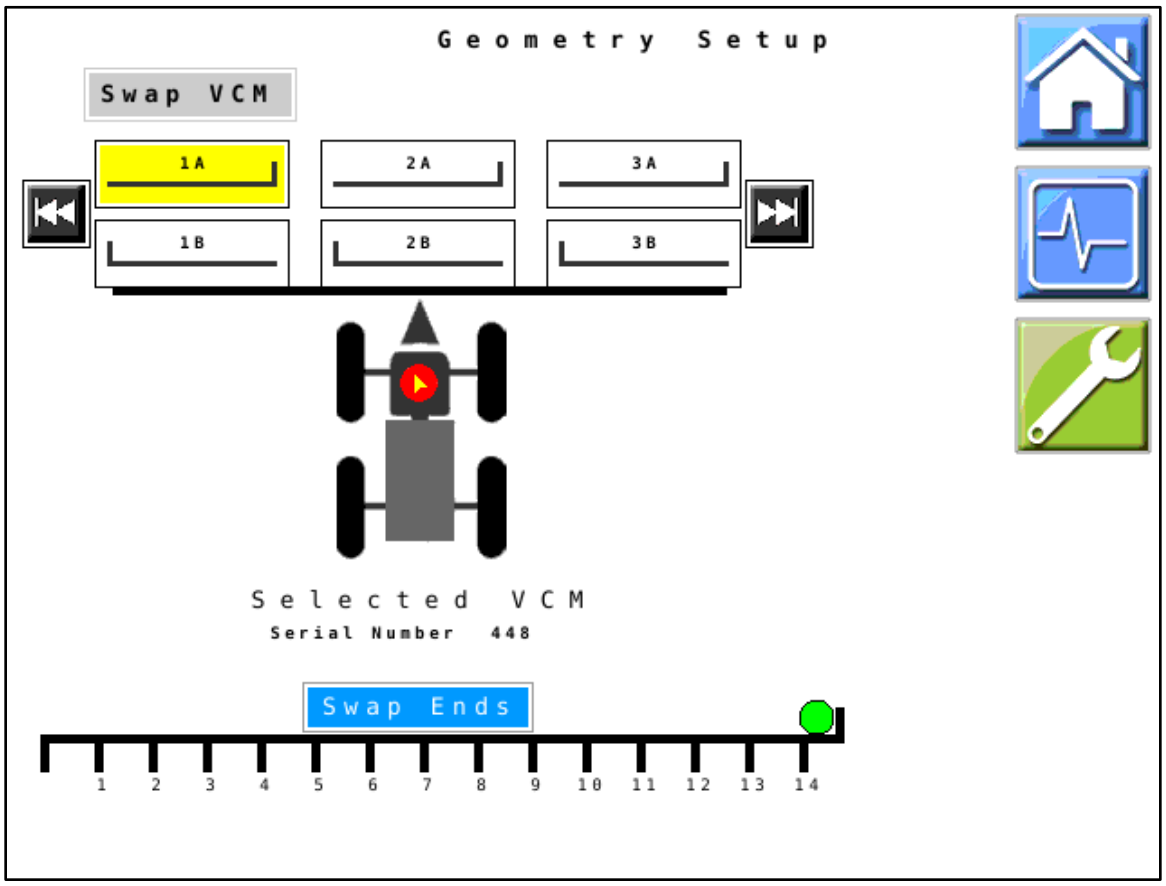


Figure 5 — Geometry Setup – Legacy VCMs

Note: The **green dot** on the display indicates the position of the selected VCM (highlighted in yellow) in relation to the nozzles on its hub CAN channel. Tapping a VCM again after highlighting will cause the nozzles attached to it to pulse to assist with recognition.

8. ***Figure 5:*** VCMs must be in the correct order and orientation on the boom. Tap the **Swap Ends** button with the highlighted VCM to orient the VCM correctly on the boom, if necessary. VCMs can be mounted with the tube towards the center of the machine (**green dot**) and the pigtail running towards the outside tip, or vice versa.
   If two VCMs are located on the same hub CAN channel, use the **Swap VCM** button with these VCMs highlighted to orient them correctly left to right, and then make sure the orientation (swap ends) is correct.

9. Use the **Left** and **Right Scroll** icons to scroll through all the VCMs installed on the machine. Verify each of their locations and serial numbers.

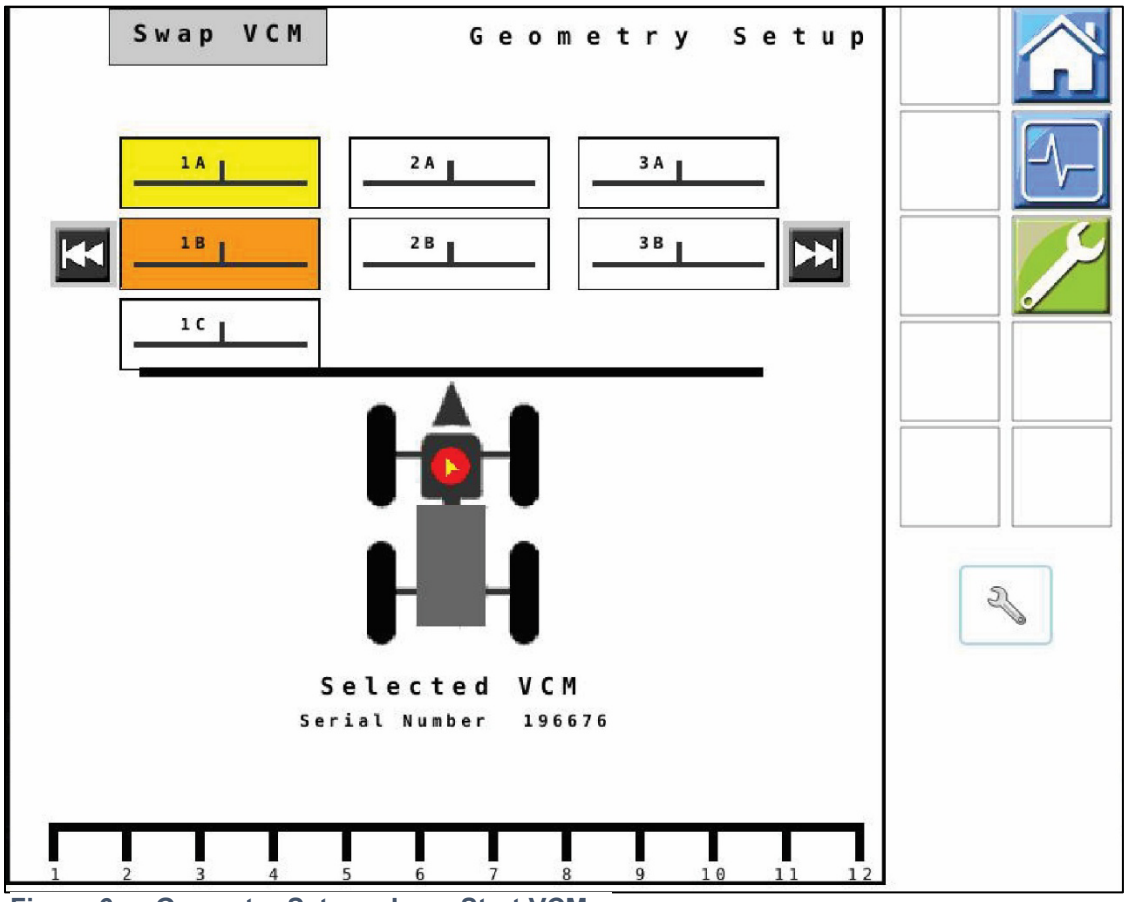


Figure 6 — Geometry Setup – Leap Start VCMs

Figure 6: If your machine is equipped with Leap Start VCMs, the process will be similar, with the exception of the necessity of swapping orientations of each VCM. Leap Start VCMs are labeled to assist with correct installation orientation. If nozzles are firing in reverse order from left to right, check installation orientation.

Leap Start VCMs should automatically order themselves across the boom but should be verified to ensure proper application.

To Swap VCMs:

- Locate the two VCMs that need to be swapped (tapping a single VCM twice will cause its associated valves to pulse)
- Tap the first to highlight **yellow**
- Tap the second to highlight **orange**
- Tap **Swap VCM**

Leap Start VCMs are labeled to assist with correct installation orientation. If nozzles are firing in reverse order from left to right, check installation orientation.

10. To verify correct order and orientation of the VCMs, perform a Key Fob test. This process is outlined in further detail in the PinPoint III Operator's Manual shipped with your kit, or on the CapstanAG website at: https://capstanag.com/pinpoint-iii-envelop/

    Note: This MUST be done before continuing any further with setup. Failure to verify the VCM orientation will result in incorrect automatic nozzle shutoff.

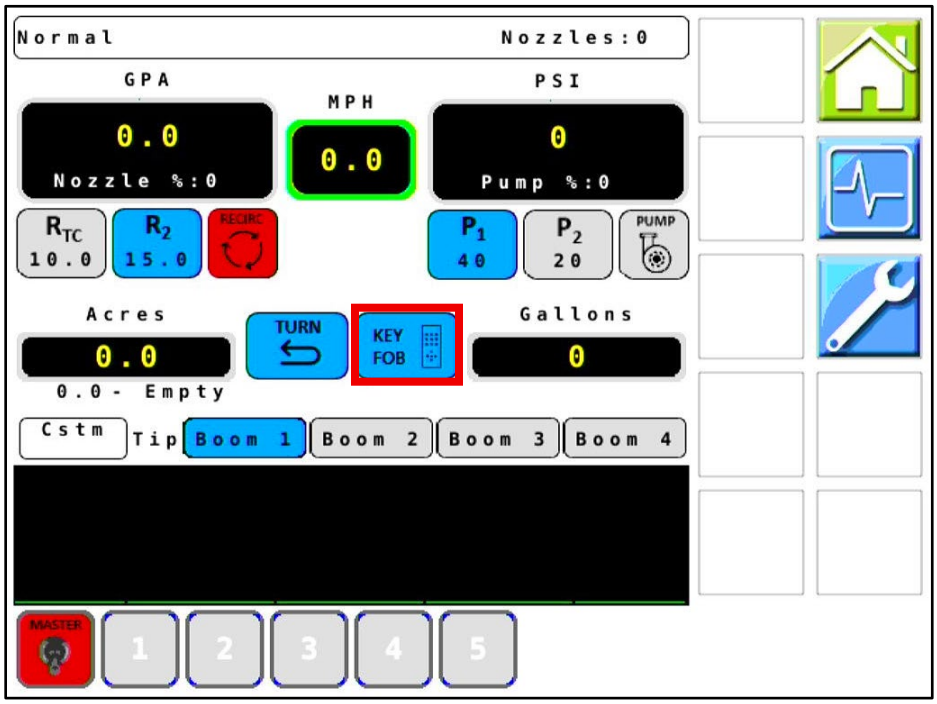


Figure 7 — Key Fob Verification

Note: The CapstanAG Mobile App must be used with the system in key fob mode for this test Procedure when using Leap Start VCMs

11. Tap the **Home** icon to return to the home screen.

12. ***Figure 7:*** Tap the **Key Fob** icon to set key fob mode to **ON**.

13. Locate the key fob remote control or use the Capstan app. Using the right arrow key on the key fob or the app, turn on each of the nozzles one at a time across the boom. If the VCM orientation and position is correct, the nozzles will turn on in order left to right across the boom. If the nozzles do not turn on in the correct order, navigate back to the **VCM Setup** screen and correct any errors.

14. Tap the **Wrench** icon and select **Boom/Nozzle** > **Nozzle Bounds**.

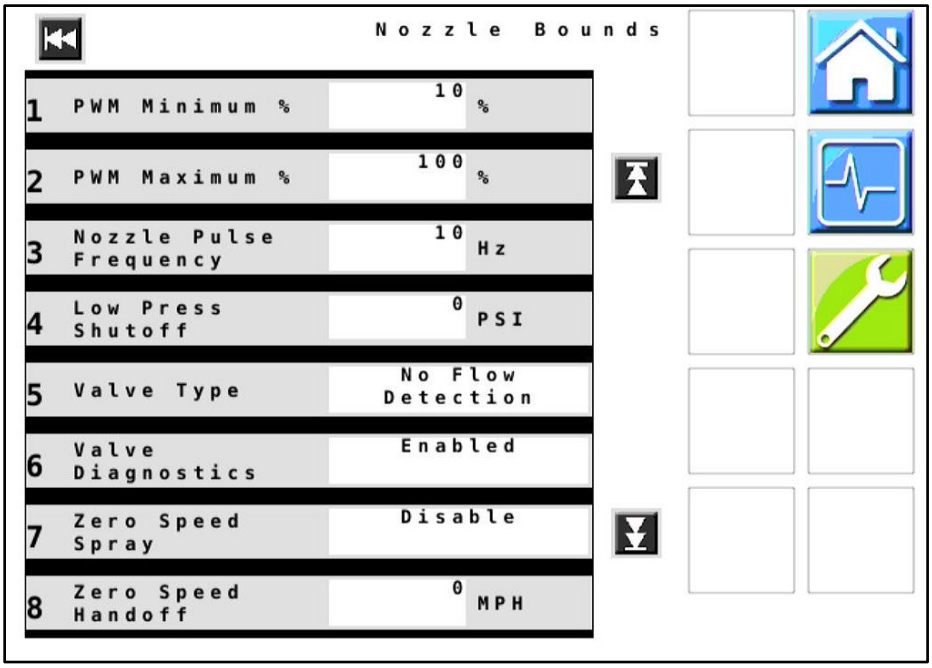


Figure 8 — Nozzle Bounds

15. ***Figure 8:*** The settings for Nozzle Bounds are generally left at default settings. Refer to the Operator's Manual for setting descriptions prior to making changes.

16. Tap the **Back** icon to return to the **Boom/Nozzle** menu. Select **Nozzle Setup**.

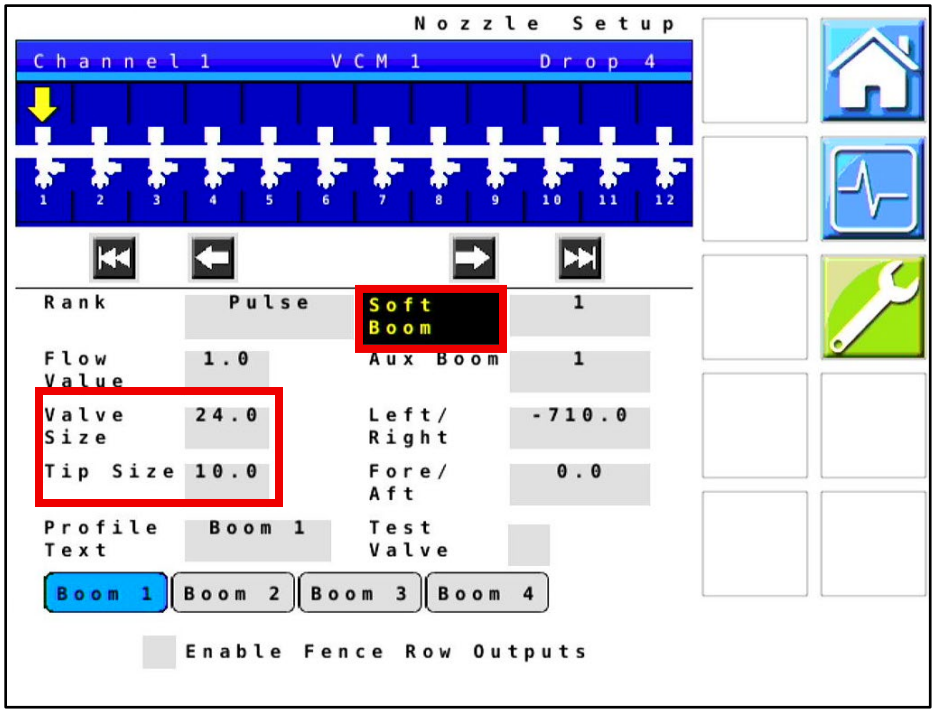


Figure 9 — Nozzle Setup

17. ***Figure 9:*** Use the Nozzle Setup screen to set up and name custom boom profiles.

18. Valve size value may be either 15.5 (for 7-watt valves with black heat shrink tubing) or 24 (for 12-watt valves with blue heat shrink tubing). Verify which valves your unit is equipped with.

19. Change the Tip Size to the correct value installed on your machine.

    Different nozzle profiles can be configured by selecting each Boom profile button and modifying nozzle size and ranks. Refer to the Operator's Manual for Nozzle Rank explanations if necessary.

20. Select the **Soft Boom** icon to configure the soft boom setup for each profile. Refer to the tables at the end of these instructions for the correct soft boom configuration for your machine.

21. Tap the **Wrench** icon to return to the **Settings** menu. Select **Pressure > Pump Setup.**

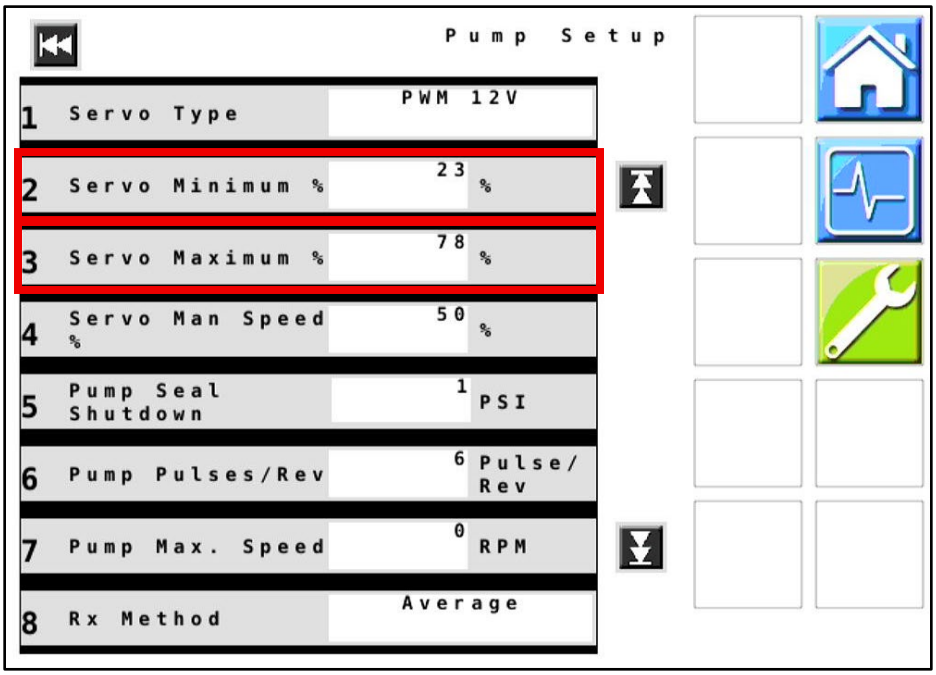


Figure 10 — Pump Setup – Page 1

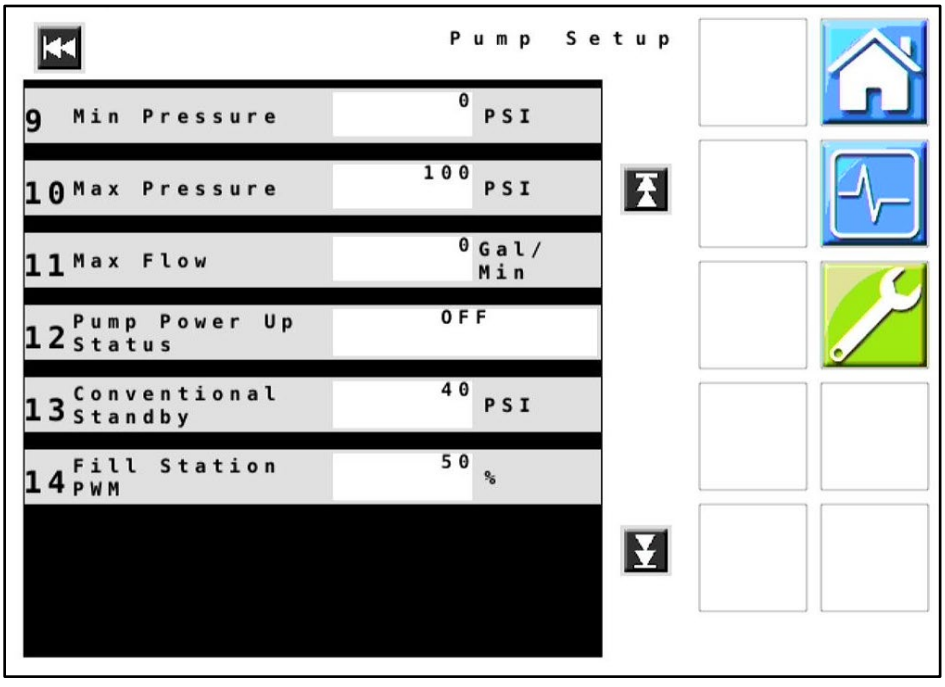


Figure 11 — Pump Setup – Page 2

22. ***Figures 10 & 11:*** Verify that all values displayed on your unit match those shown here. Change values if necessary.

23. Tap the **Back** icon to return to the **Pressure** menu. Select **Sensor Setup.**

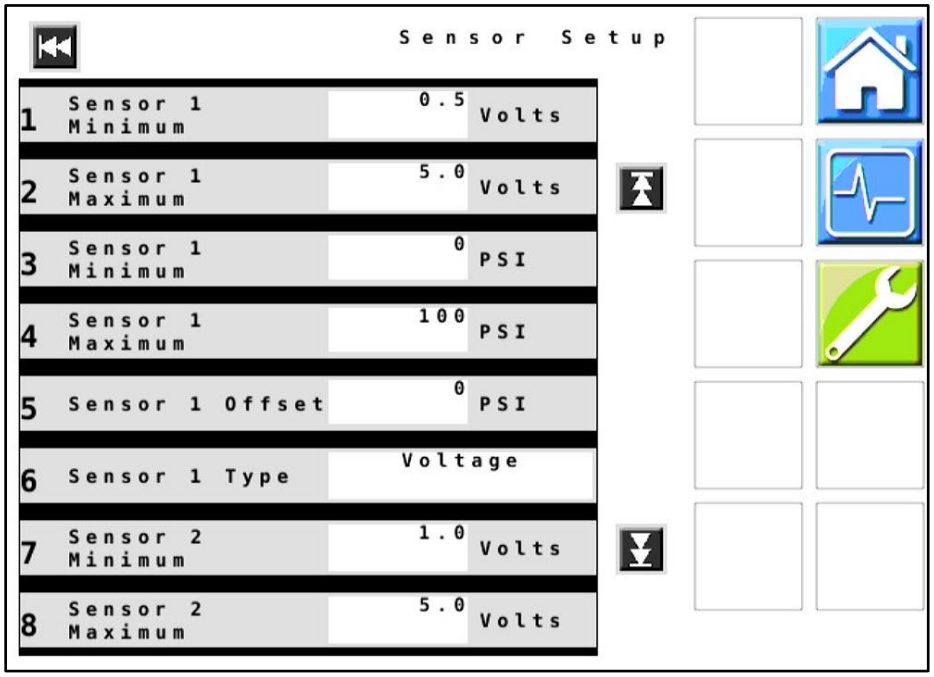


Figure 12 — Sensor Setup Page 1

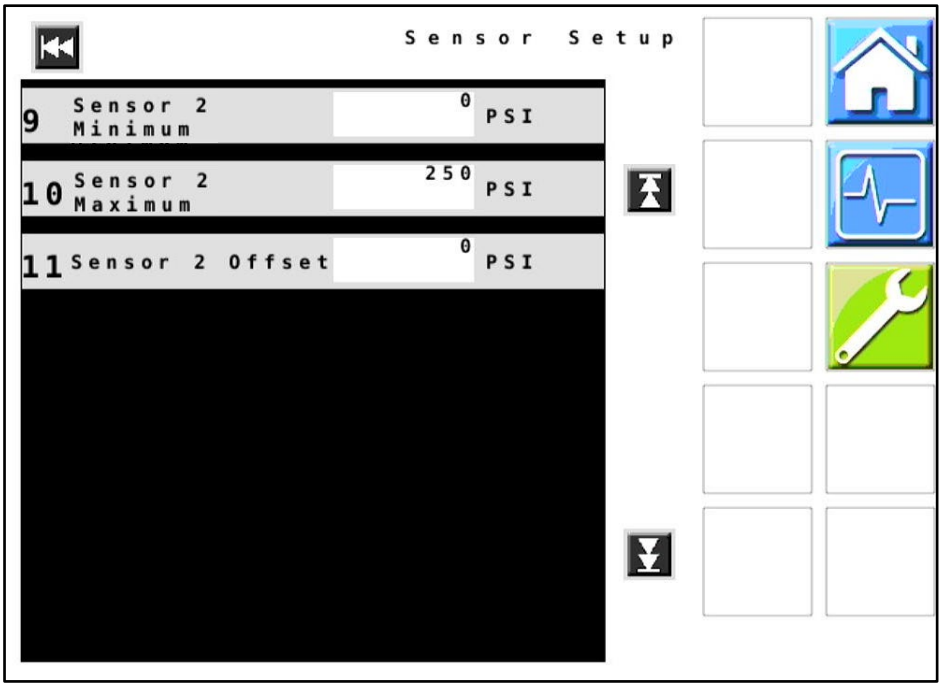


Figure 13 — Sensor Setup Page 2

Figures 12 & 13: Verify that all values displayed on your unit match those shown here. Change values if necessary.

24. Tap the **Back** icon to return to the **Pressures** menu. Select **Control Tuning.**

Figure 14 — Control Tuning

25. ***Figure 14:*** Verify that all values displayed on your unit match those shown here. Change values if necessary.

26. Tap the **Back** icon twice to return to the **Settings** menu. Select **Flow > Flowmeter.**

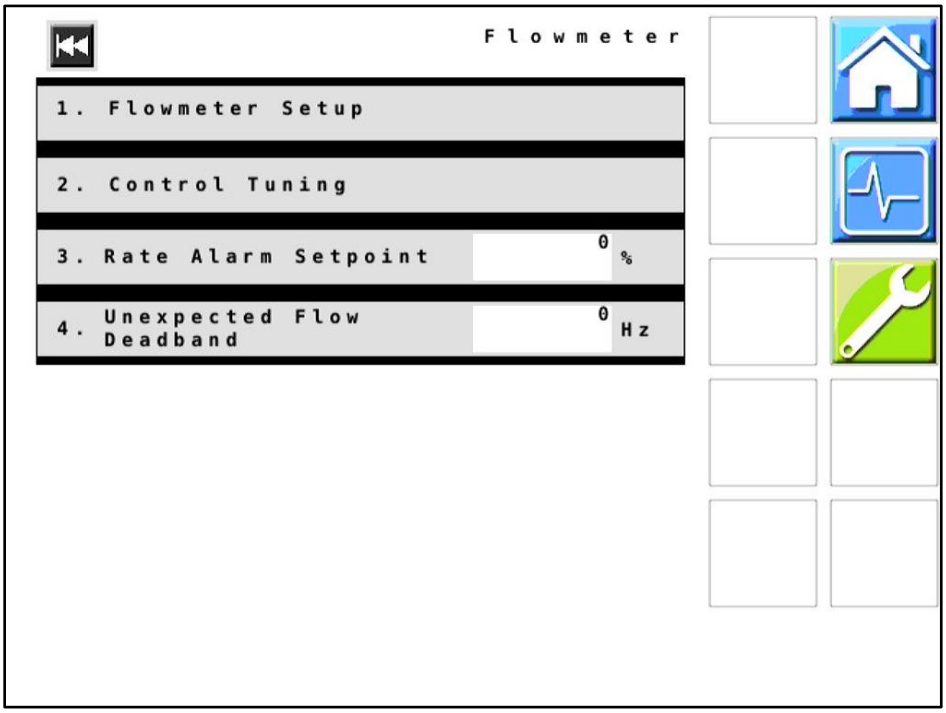


Figure 15 — Flowmeter

27. ***Figure 15:*** Verify that all values displayed on your unit match those shown here. Change values if necessary.

28. Select **Flowmeter Setup.**

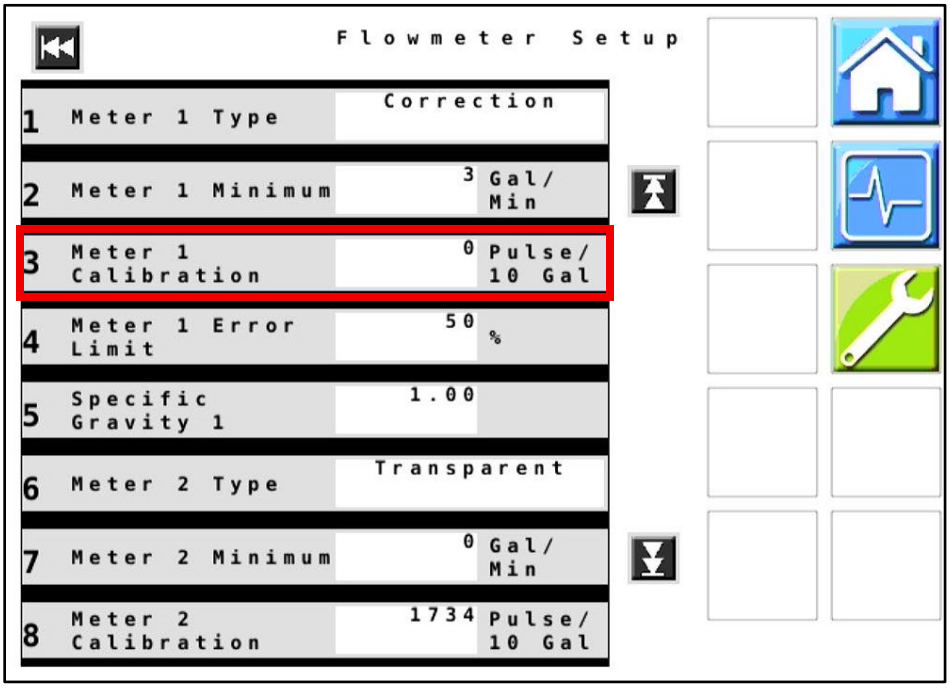


Figure 16 — Flowmeter Setup Page 1

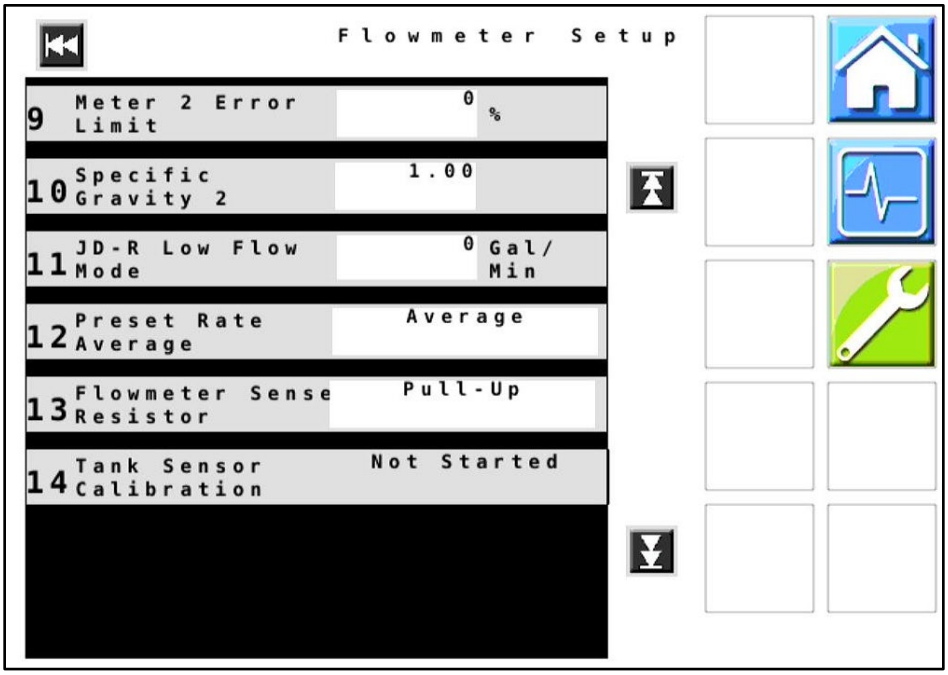


Figure 17 — Flowmeter Setup Page 2

29. ***Figures 16 & 17:*** Gather and record the Flowmeter Calibration numbers found on the Flowmeter's tag. The default value is 0 or 1734 depending on software revision. If Machine is equipped with a Fill Flowmeter, enter this number for Meter 2 Calibration.

Note: Other settings in this menu may be left at default settings unless otherwise required. Refer to Operator's Manual for setting descriptions.

30. Tap the **Back** icon to return to the **Flow** menu. Select **Control Tuning.**

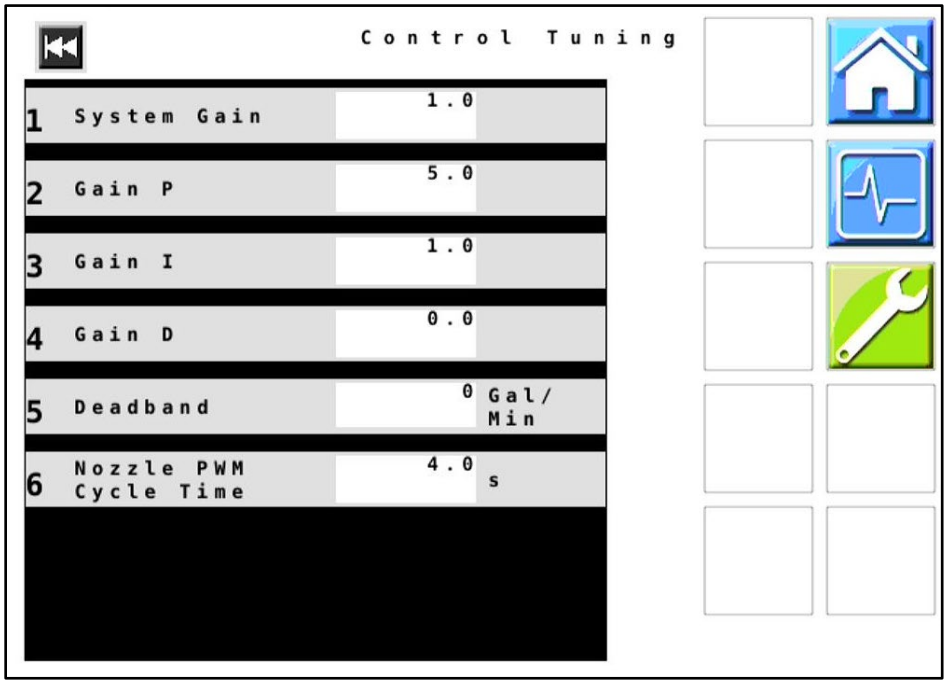


Figure 18 — Control Tuning

31. ***Figure 18:*** Verify that all values displayed on your unit match those shown here. Change values if necessary.

Note: Flow Control Tuning values do not need to be changed unless the sprayer will be operating in No Pulse or Conventional Mode. Refer to the Conventional Sprayer setup guide on the CapstanAg website at: https://capstanag.com/pinpoint-iii-envelop/.

32. Tap the **Back** icon twice to return to the **Settings** menu. Select **Navigation > Vehicle.**

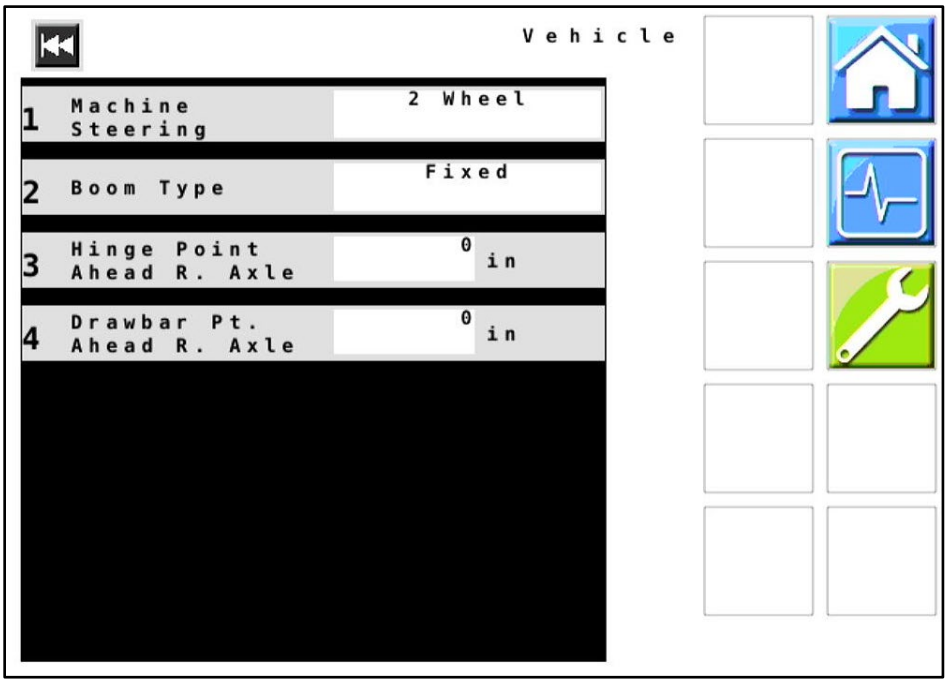


Figure 19 — Vehicle

33. ***Figure 19:*** Verify that all values displayed on your unit match those shown here. Change values if necessary.

34. Tap the **Back** icon to return to the **Navigation** menu. Select **Implement.**

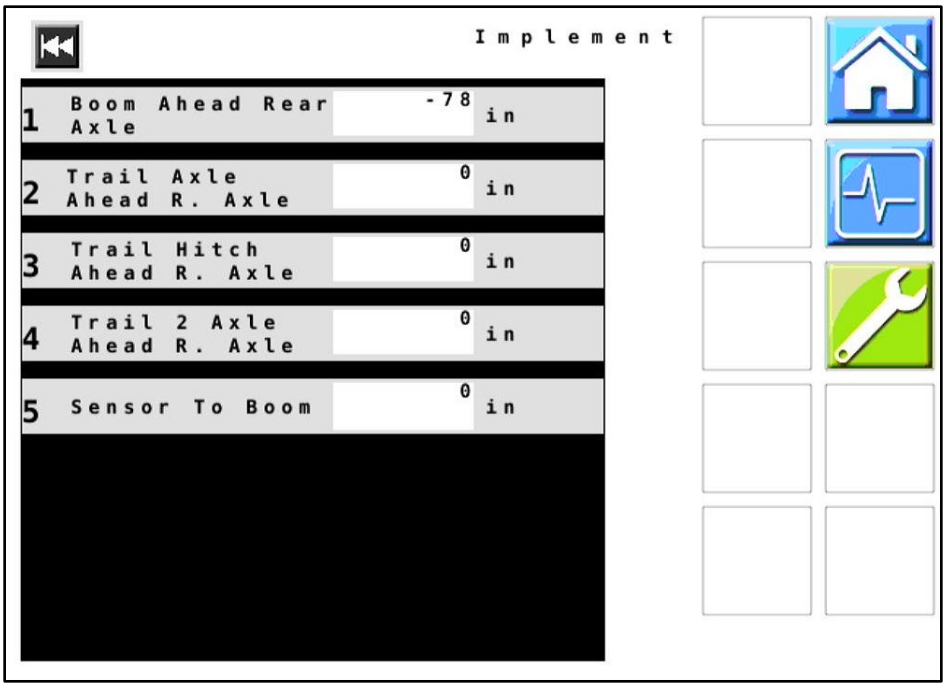


Figure 20 — Implement

35. ***Figure 20:*** The values in this menu are defaults. The measurement for **Boom Ahead Rear Axle** is an approximation and will be adequate in most instances. Measure the distance between the rear axle of the sprayer and application point for the best results.

36. Tap the **Back** icon to return to the **Navigation** menu. Select **ISO Look Ahead.**

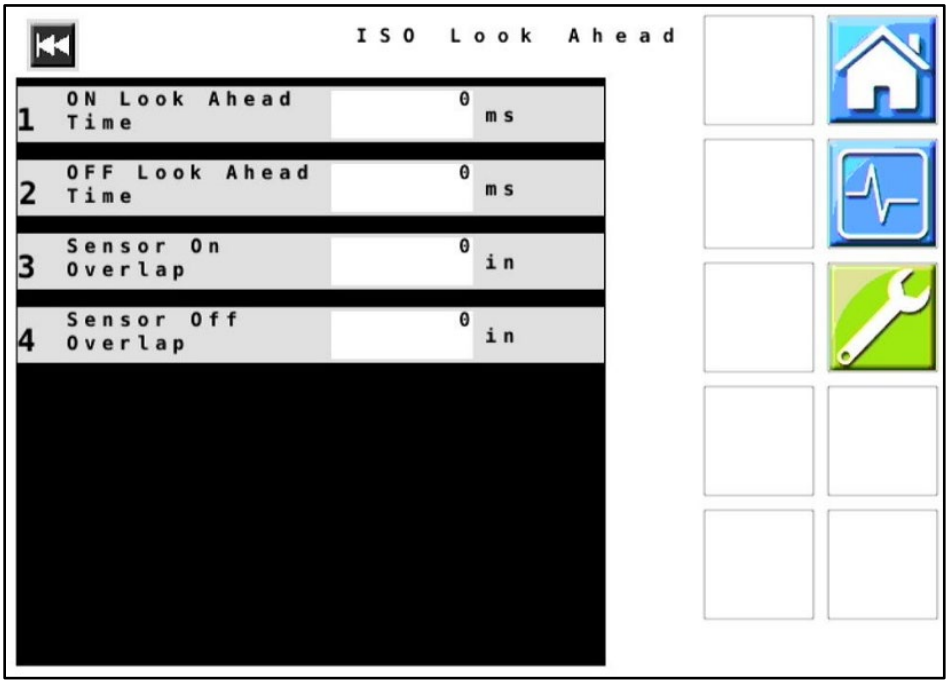


Figure 21 — ISO Look Ahead

37. ***Figure 21*:** Verify that all values displayed on your unit match those shown here. ISO Look Ahead settings are generally governed by the Task Controller attached. If preferred, the Look Aheads set on the Task Controller can be disabled and these values can be modified to take Look Ahead information from the PinPoint III.

38. Tap the **Back** icon to return to the **Navigation** menu. Select **GPS.**

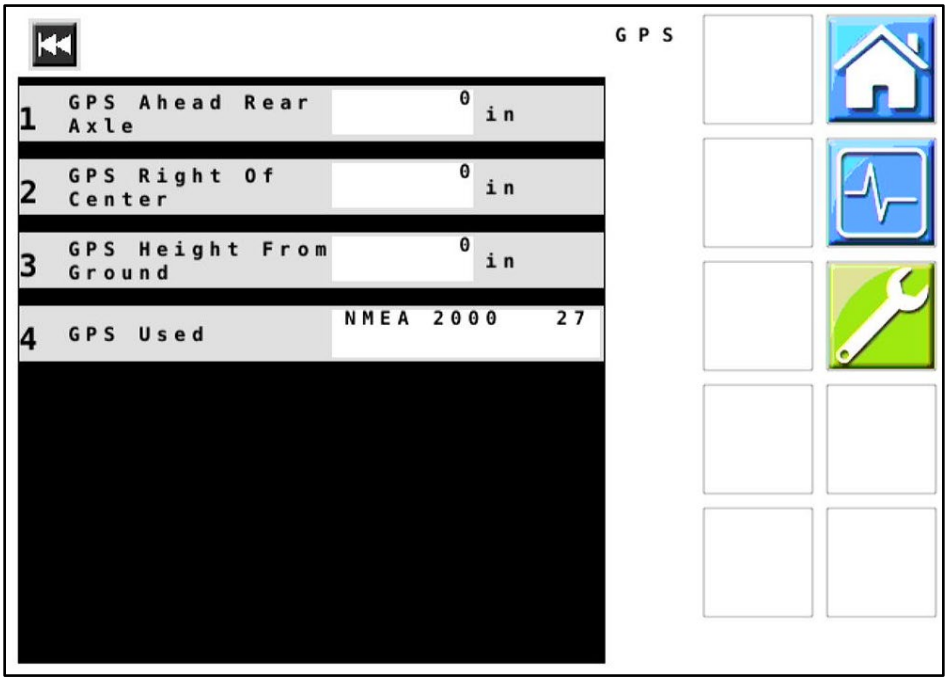


Figure 22 — GPS

39. ***Figure 22:*** Select the type of GPS from the list of available options. Not all the options listed here will be shown on your system. Only the types available for your system will show on your list.

    - If your machine has serial GPS, select NMEA0183
    - If your machine has CAN GPS, available types include—in preference order:
        a. J1939
        b. NMEA2000
        c. ISO 11783

    IMPORTANT: Machines with a Raven RS1 or Trimble receiver, GPS measurements will be left at the default values displayed. If any other GPS receiver, take measurements and record them here.

40. To complete setup, Tap the button > **Initial Setup** > and **Configuration** on the following page.

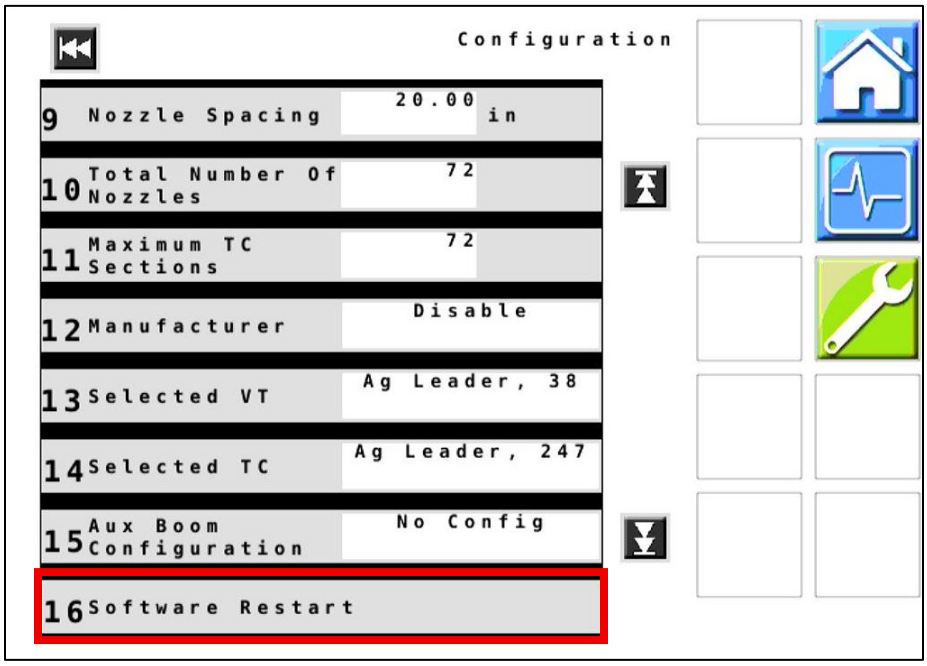


Figure 23 – Configuration Menu – Page 2

41. ***Figure 23:*** Navigate to **Page 2** and tap **Software Restart**.

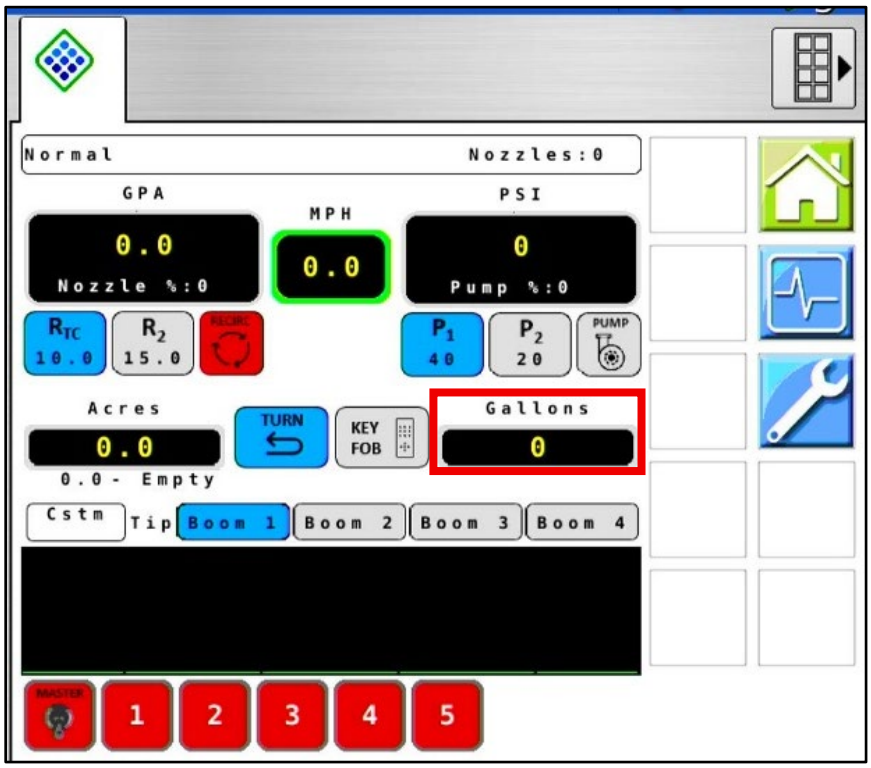


Figure 25 – PinPoint III Home Screen

42. ***Figure 25:*** Once system is restarted from previous step, tap the **Gallons** text input area to open the **Tank Meter** popup.

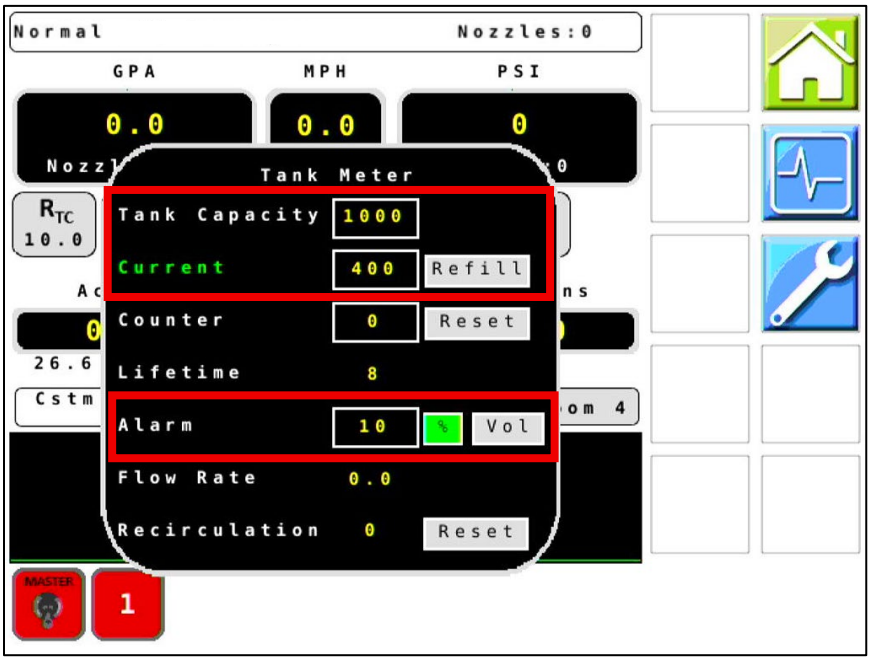
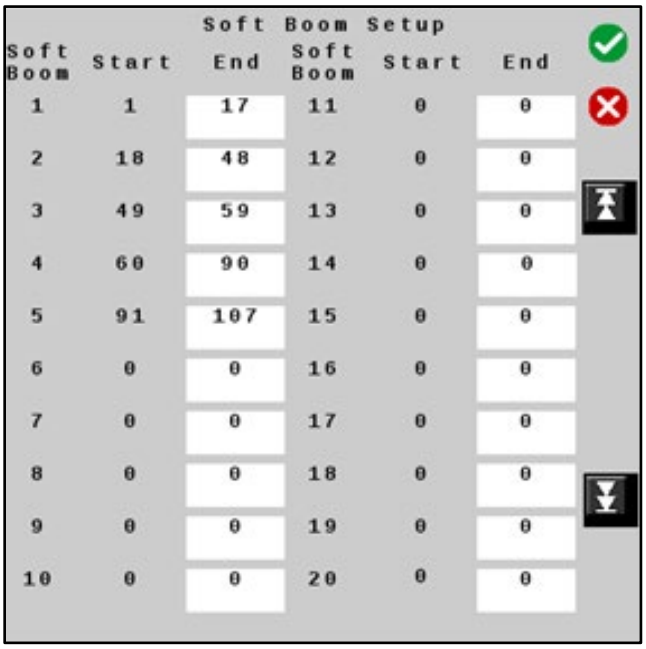


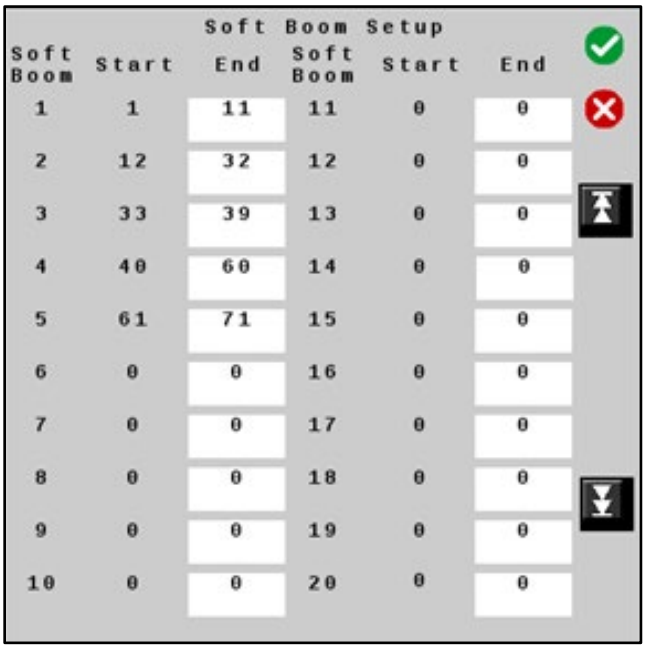
Figure 26 – Tank Meter Popup

43. ***Figure 26:*** Enter the **Tank Capacity**, **Current Volume** in the tank, and the **Alarm** threshold for alerting when volume is running low if desired.

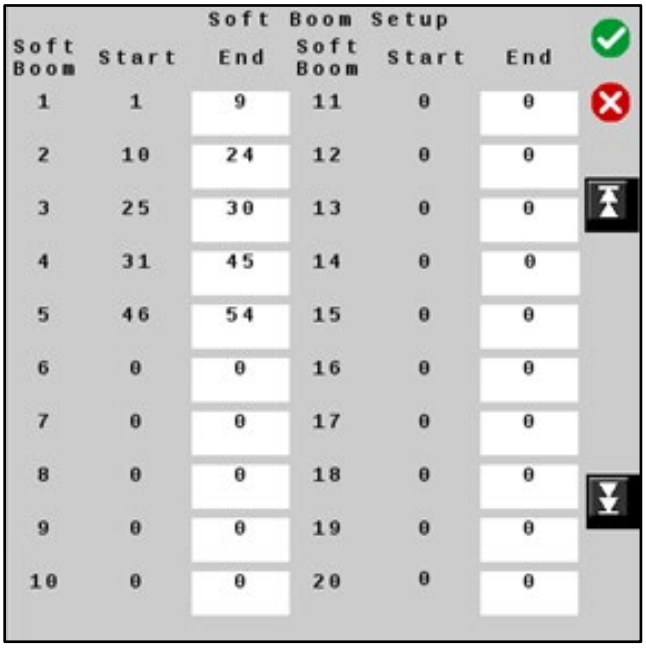
Soft Boom Configurations



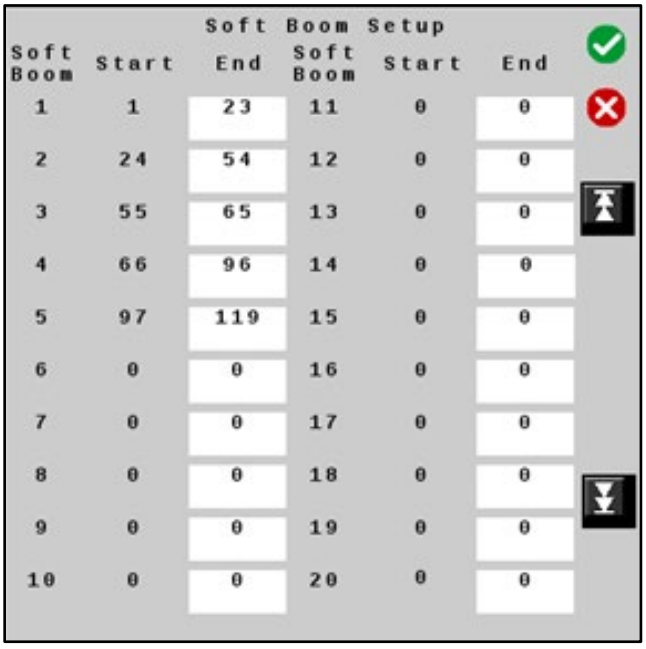
90’ x 10”



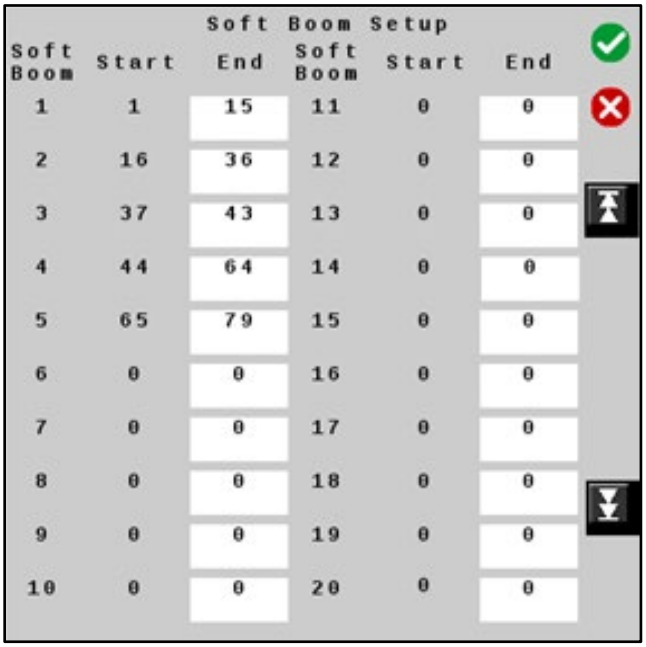
90’ x 15”



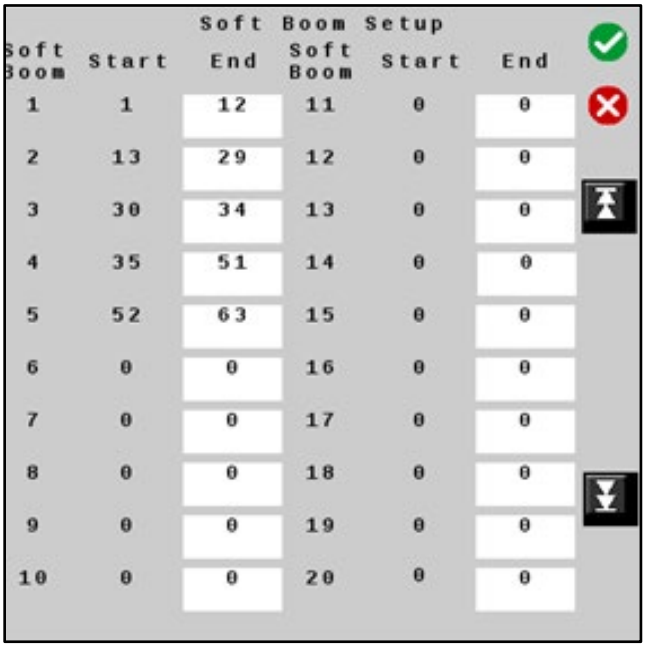
90’ x 20”



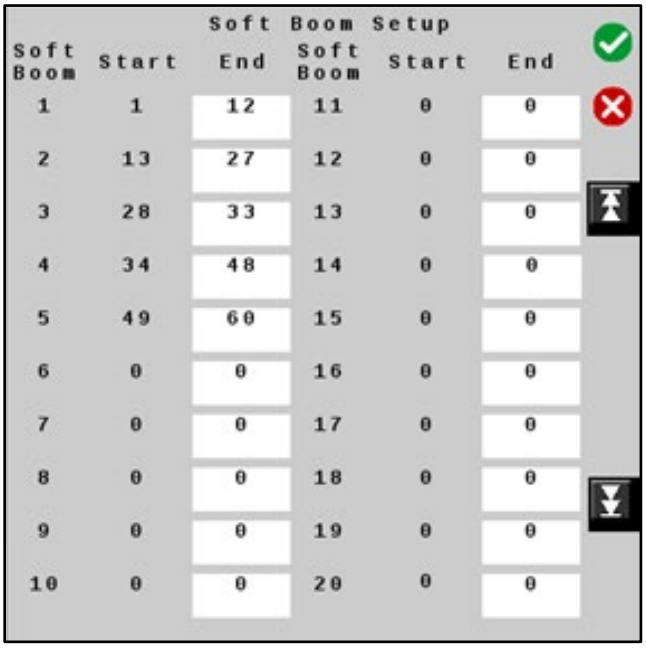
100’ x 10”



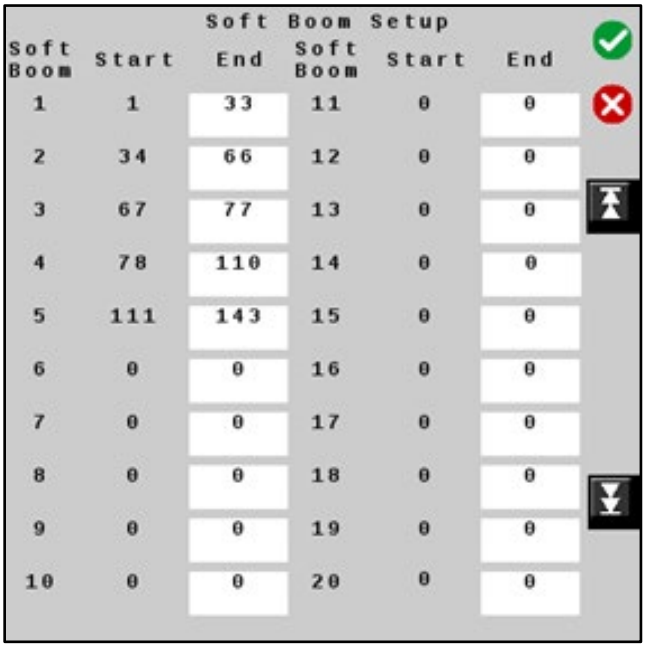
100’ x 15”



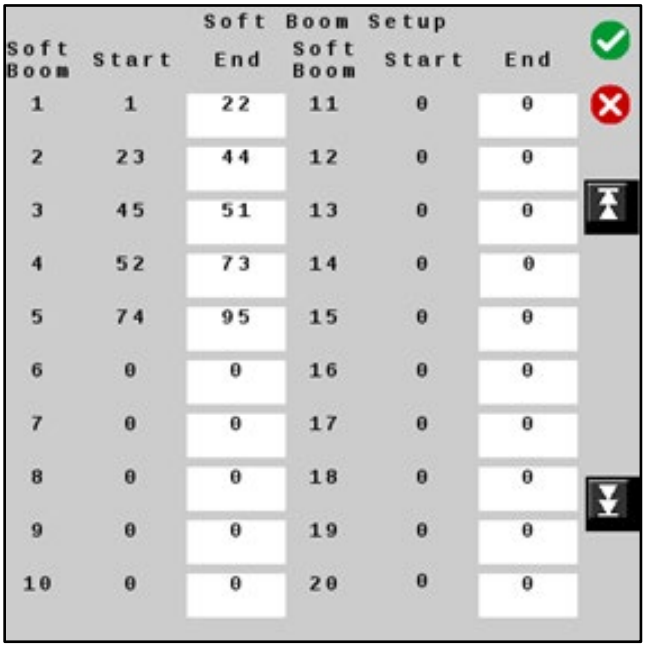
100’ x 19”



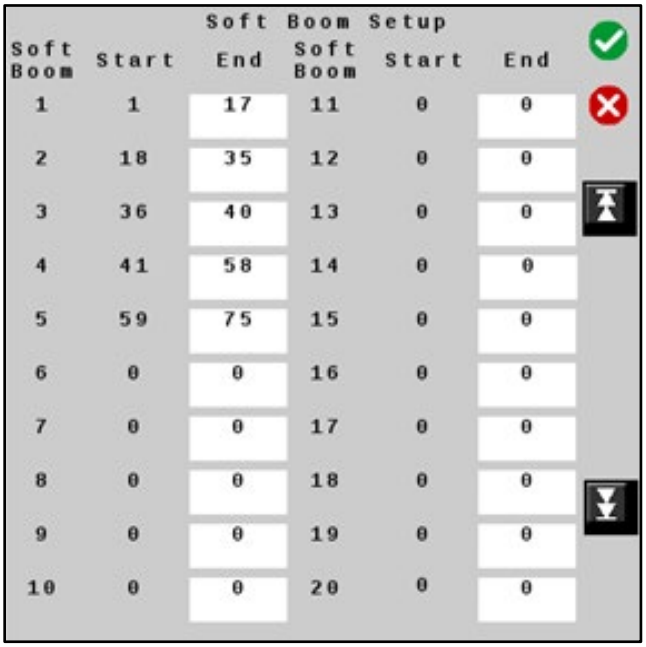
100’ x 20”



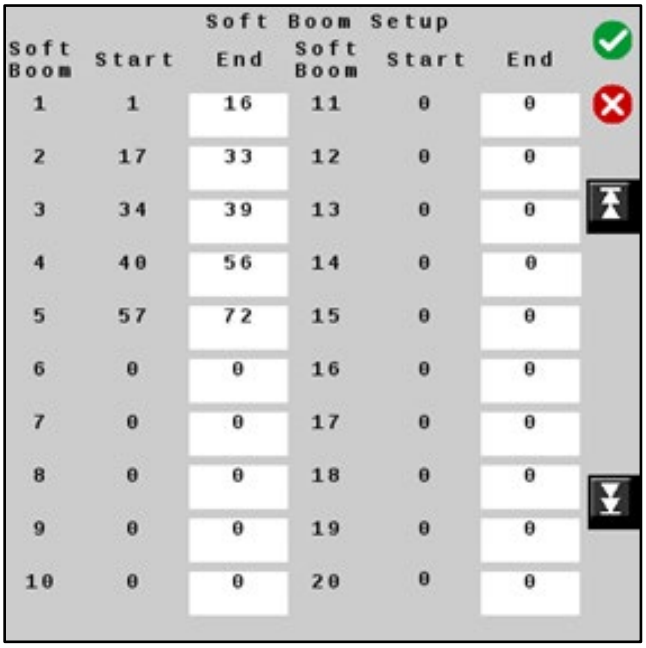
120’ x 10”



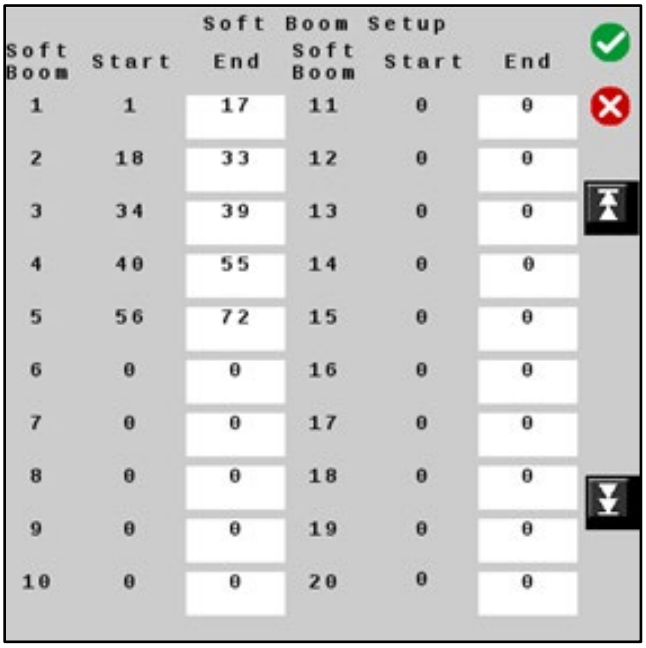
120’ x 15”



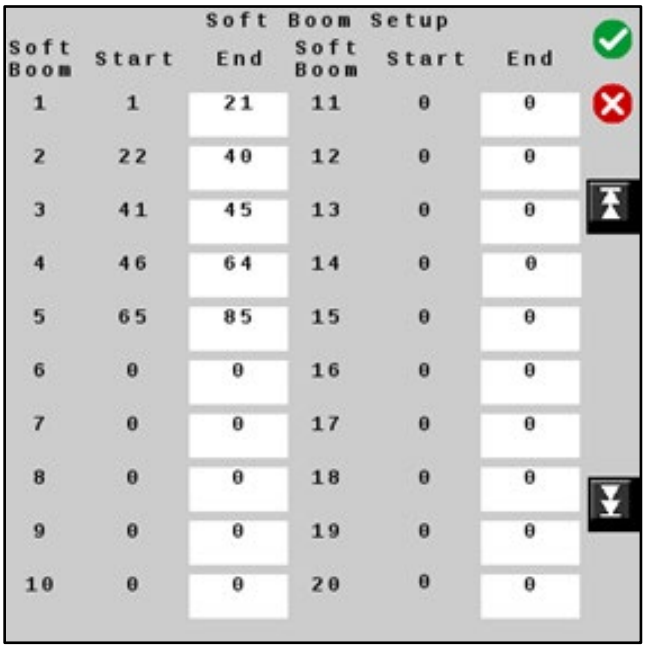
120’ x 19”



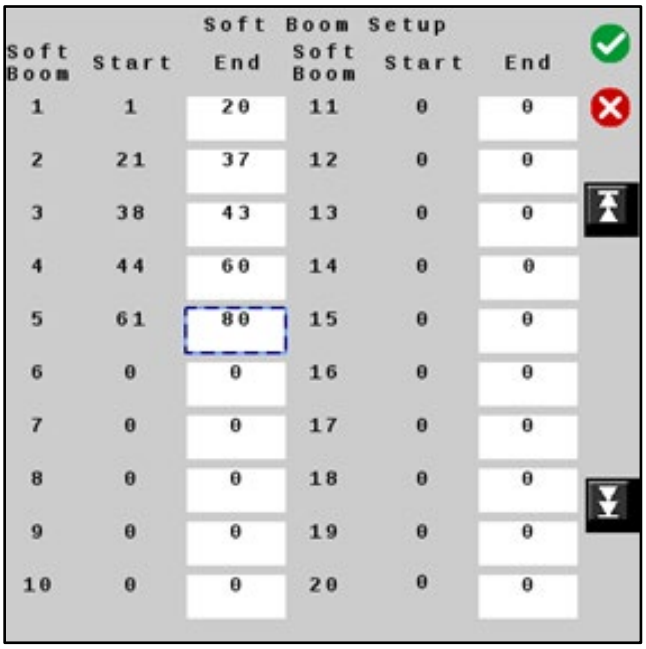
120’ x 20” Aluminum Boom



120’ x 20” Steel Boom



132’ x 19”



132’ x 20”