

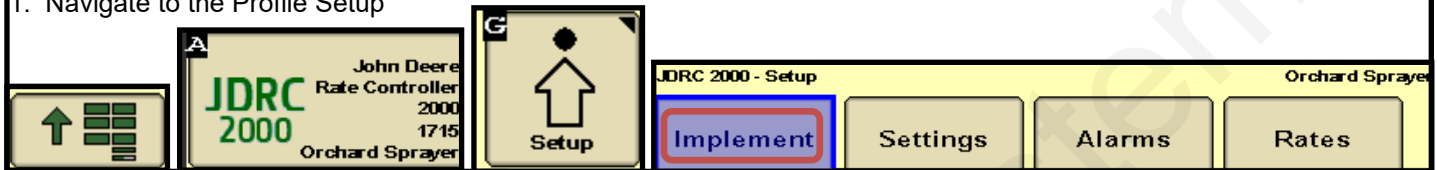
396-4138Y1 QuickStart Card



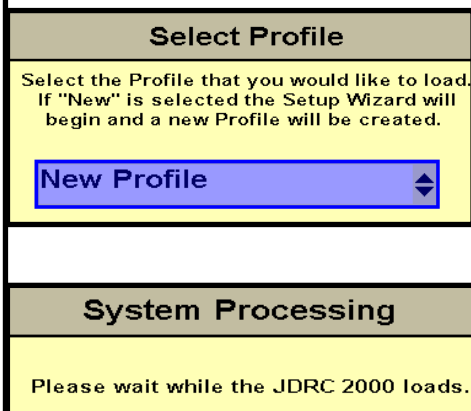
SureFire Orchard Sprayer System with Servo control for JDRC 2000

The following screenshots show the setup settings that are typically good initial settings. Actual settings on your system may vary from those shown here. Adjust settings as necessary in the field to get the best operation from your system.

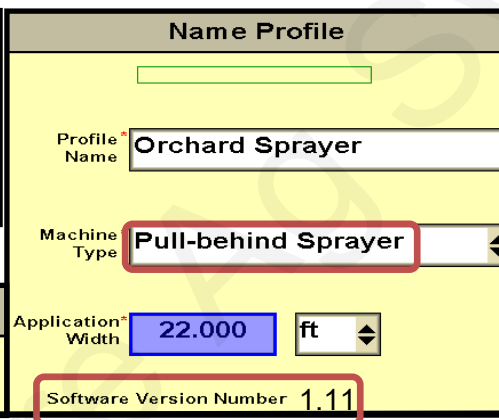
1. Navigate to the Profile Setup



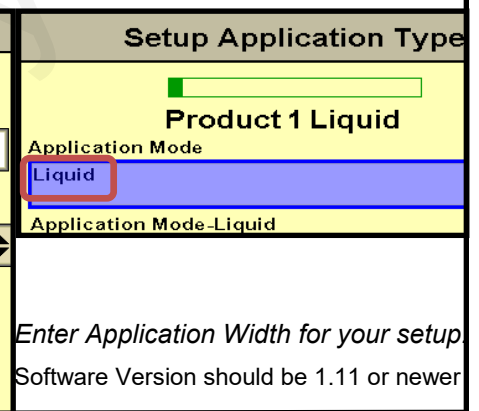
2. Enter a Profile Name.



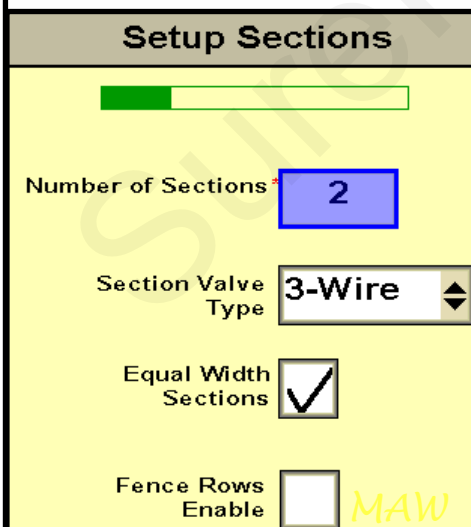
3. Machine Type > Pull-Behind Sprayer



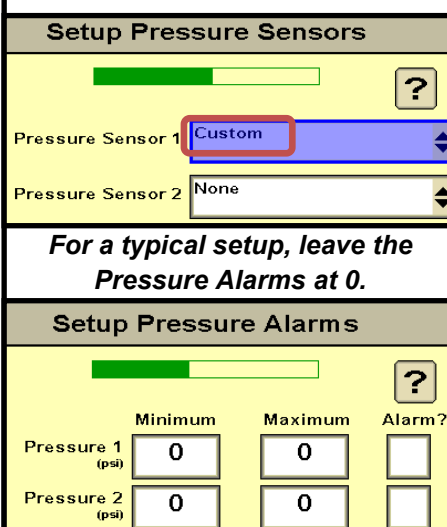
4. Application Mode > Liquid



5. Set up Sections as appropriate. Verify widths.



6. The SureFire pressure sensor will be set up as a Custom sensor. Calibration will be done later.



If Minimum and Maximum numbers are entered and the Alarm box is checked, those pressures will become control limits, and the system will not go above or below those limits. You may or may not want to do that. Set as desired for your setup.

Your system will adjust the flow as your speed changes to maintain a constant application rate. The pressure will change as your speed changes.



7. Set up **Aux Functions** as shown.

Setup Aux Functions

Agitator Valve Installed ☐

Agitator Duty Cycle (%)

Flow Return Installed ☐

8. Control Valve Type > Standard

Start with the **Default Values (shown)**.

Adjust as needed for stable rate and Quick response.

Use the "?" for Help Screens that explain each item.

Setup Control Valve

Product 1 Liquid

Control Valve Type

Standard

Valve Response Rate (1-100)

Control Deadband (%)

Valve Delay (Seconds)

Valve Advance (Seconds)

Control Effort (%)

9. Set up Rate Sensor (flowmeter) as shown.

(For SureFire Electromagnetic 0.6—13 gpm and larger flowmeters). *Flow cal number is printed on Serial Number label on side of flowmeter.*

Setup Rate Sensor

Product 1 Liquid

Flowmeter Calibration

Flowmeter Pulse/Units

10. Tank Setup (optional)

Use as desired to keep track of Tank level. Tank level will show up on Run Screen.

Setup Tank

Product 1 Liquid

Tank Capacity (gal)

Current Level (gal)

Low Tank Level (gal)

Alarm? ☐

11. Rates-Enter 1,2,or 3 Rates

Set up other boxes as shown

Setup Rates

Product 1 Liquid

Preset Rate Values (gal/ac) Rate 1 Rate 2 Rate 3

Rate Bump (gal/ac) Rate Selection

Rate Smoothing ☒ %

Decimal Shift

12. Off Rate Alarm (optional)

Start with 20%. Adjust as desired

Setup Alarms

Product 1 Liquid

Off Rate Alarm (% off target rate) Alarm? ☒

If Pressure Sensor 1 has a minimum pressure alarm enabled the system will not drop below that pressure to maintain spray pattern

13. Pressure Sensor must be calibrated. Unplug sensor to calibrate. **Setup > Settings > Pressure Sensor Setup > Calibrate Pressure Sensor. Sensor 1 > Voltage Based Calibration.** Enter 12.5 mv/psi.

JDRC 2000 - Setup

Orchard Sprayer

Implement

Settings

Alarms

Rates

Control Valve Setup

Pressure Sensor Setup

Flow/Rate Sensor Setup

Auxiliary Features Setup

JDRC 2000

Setup

Totals

Pressure Sensor Setup

Pressure Sensor 1

Pressure Sensor 2

Pressure Sensor calibration continued on next page.

Calibrate Pressure Sensor



13. (cont) Pressure Sensor must be calibrated. Unplug sensor to calibrate. **Setup > Settings > Pressure Sensor Setup > Calibrate Pressure Sensor. Sensor 1 > Voltage Based Calibration.** Enter 12.5 mv/psi.

Pressure Sensor Setup

Sensor-1

1. Ensure there is zero pressure at the sensor to be calibrated.
2. Enable the sections to spray.
3. Press the Calibration button for the desired type of calibration to begin test and set zero point.

Voltage-based Calibration

Operation-based Calibration

Calibrate Pressure Sensor

Sensor-1

Voltage-based

1. Ensure the sensor has 12V power supply.
2. Enter the slope as reported by the implement pressure gauge manufacturer in the box below
3. Select Accept

12.5

 (mv/psi)

Pressure Sensors

Diagnostics>Readings

Sensor-1

0 Pressure Voltage (V) 0.00

Pressure Sensor (V) 0.00

Pressure (psi) 0

Slope (mv/psi) 12.5

14. Set these 3 items in **Setup > Settings > Display Settings**

Gal/min

Pressure (PSI)

Mi/hr

Press on this bar for Section Switch Box

Press 1 or 2 to turn OFF and ON.

Quick Start

All On

Section Switch Box

1 2

Press 1 or 2 to turn OFF and ON.

Quick Start

All On

Rate Setup

Quick Start

Master Off

0.0 (gal/ac)

5.0 (gal/ac)

Rate 1 5.0

Rate 2 7.0

Rate 3 9.0

0.0 (gal/min)

0 (psi)

0.0 DC (%)

0.0 (mi/h)

300 (gal)

Display Settings

0.0 (gal)

0 (rpm)

AUTO / MANUAL

ENABLE / DISABLE

AUTO MODE / ENABLED

0.0 (gal/ac)

20.0 (gal/ac)

0.0 (gal/ac)

Off

0.0 (gal/ac)

Off

0.0 (gal/ac)

Man

15. Radar Speed Sensor Setup (if needed)

Performance Monitor

Access Manager

GS3 GreenStar

Video

Original GreenStar Monitor

Calculator

Standby

Performance Monitor - Settings

AUTO

30.0 ft

Use radar as speed source

Area Counter

AUTO

0 h

1864 h

Time Since Last Reset

Calibrate Radar

Calibrate Radar

1/3

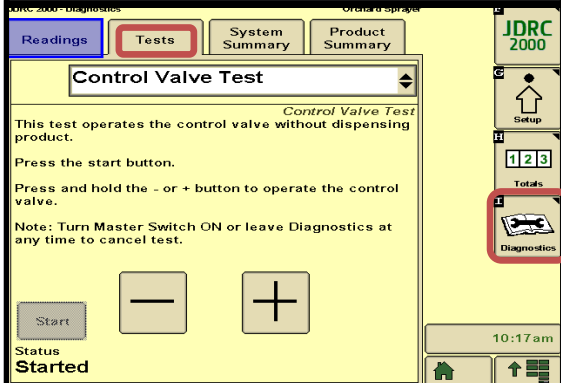
Measure a straight 122 m (400 ft) course. Drive an unloaded vehicle at approximately 3.2 km/h (2 mi/h). Start calibration at the beginning of the course.

122m. 400ft.

Cancel

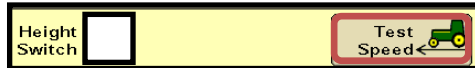
Initial Testing and Startup

16. Do the **Control Valve Test** first to verify that the control valve is operating correctly. Leave the valve closed when finished.



17. Initial Operation in **MANUAL** mode: (Or do Control/Section Test)

1. Fill the system with water.
2. Enter a Test Speed at Setup > Implement



3. On the Run Screen go to **MANUAL MODE / ENABLED**.

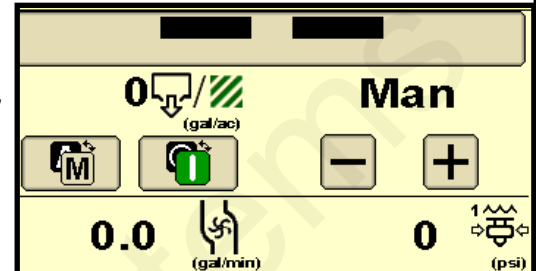


4. Start pump. Turn on Master Switch. Press + to increase flow.

5. Read Flow (gal/min), PSI, gal/ac on Run Screen.

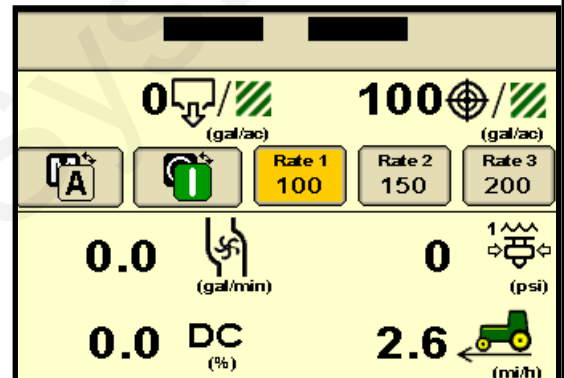
6. Go to Section Switch box (above). Reduce Flow. Turn Sections OFF and ON.

7. Turn Master Switch OFF.

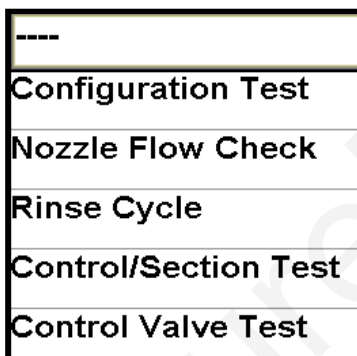


18. Initial Operation in **AUTO** mode: (Or do Diagnostics > Tests > Nozzle Flow Check).

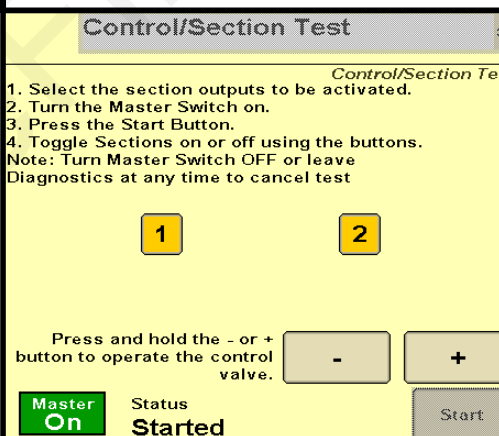
1. Enter a Test Speed at Setup > Implement
2. Navigate to **AUTO MODE / ENABLED**. Select a Rate. Start with a lower rate on the first startup.
3. Turn on Master Switch.
4. Monitor Actual Rate (gal/ac), Flow (gal/min), PSI. You can switch rates while the system is running.
5. Go to Section Switch box (above). Turn Sections OFF and ON.
6. Turn Master Switch OFF.



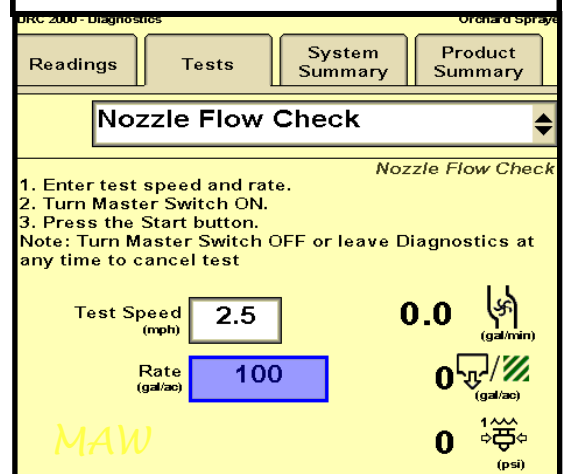
Diagnostics > Tests > Pulldown Menu



Do the **Control/Section Test** to see if the section valves work and to operate the Control Valve.



Do the **Nozzle Flow Check** to test operation at a Test Speed and Rate.



Go to **Diagnostics > System Summary** for a quick look at the System Settings.

Go to **Diagnostics > Product Summary** for a quick look at the settings for each product setup.

Go to **Diagnostics > Readings** for important information and feedback: *Hardware/Software, Delivery System, Section Status, System Voltage, Pressure Sensors, and more.*