

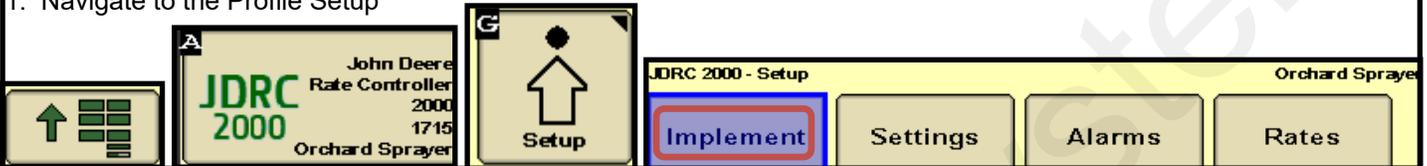
# 396-4138Y1 QuickStart Card



SurePoint *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.

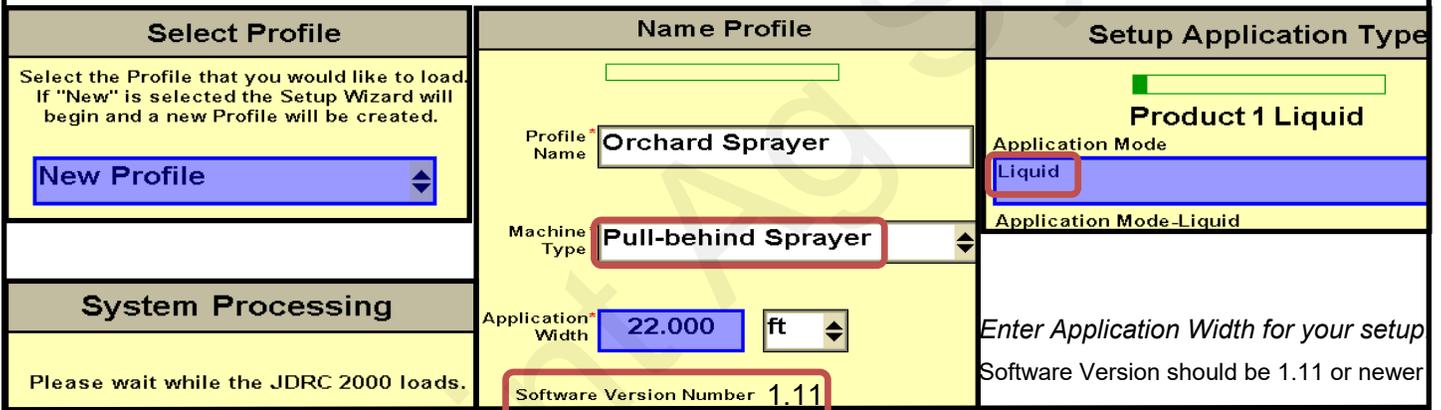
1. Navigate to the Profile Setup



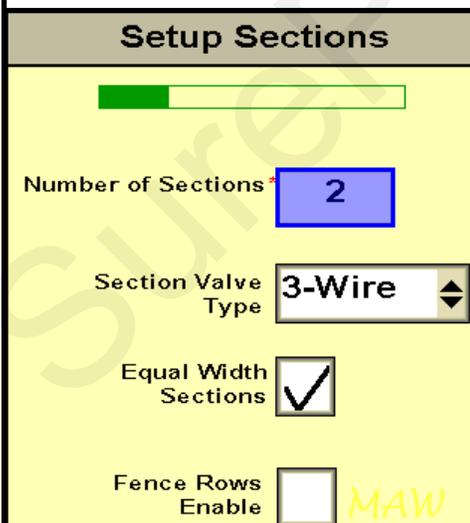
2. Enter a Profile Name.

3. Machine Type > Pull-Behind Sprayer

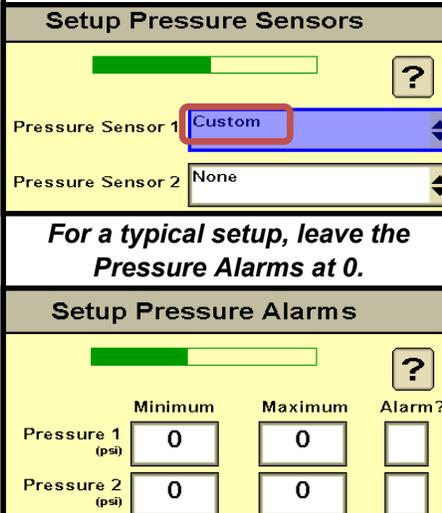
4. Application Mode > Liquid



5. Set up Sections as appropriate. Verify widths.



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



For a typical setup, leave the Pressure Alarms at 0.

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 (%) 10

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) **50**

Control Deadband (%) **3**

Valve Delay (Seconds) **0.0**

Valve Advance (Seconds) **0.0**

Control Effort (%) **35**

9. Set up **Rate Sensor (flowmeter)** as shown. (For SurePoint 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 **2000**

Flowmeter Pulse/Units **gal**

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) **0**

Current Level (gal) **0**

Low Tank Level (gal) **0** 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\* **150** Rate 2 **170** Rate 3 **200**

Rate Bump (gal/ac) **0** Rate Selection **Predefined**

Rate Smoothing  **10** %

Decimal Shift **0**

12. **Off Rate Alarm (optional)**

Start with 20%. Adjust as desired

**Setup Alarms**

Product 1 Liquid

Off Rate Alarm (% off target rate) **20** 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.

JDR 2000 - Setup Orchard Sprayer

Implement **Settings** Alarms Rates

Control Valve Setup

Flow/Rate Sensor Setup

Pressure Sensor Setup

Auxiliary Features Setup

JDR 2000

Setup

Totals 1 2 3

**Pressure Sensor Setup**

Pressure Sensor 1 **Custom**

Pressure Sensor 2 **None**

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

- Ensure there is zero pressure at the sensor to be calibrated.
- Enable the sections to spray.
- 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

- Ensure the sensor has 12V power supply.
- Enter the slope as reported by the implement pressure gauge manufacturer in the box below
- 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

### Section Switch Box

1

2

Press 1 or 2 to turn OFF and ON.

Quick Start

←

All On

Press on this bar for Section Switch Box

0.0

5.0

0.0

0

0.0

0.0

300 (gal)

Display Settings

**AUTO / MANUAL**

A

M

**ENABLE / DISABLE**

ON

OFF

**AUTO MODE / ENABLED**

0.0

20.0

A

ON

Rate 1  
20.0

Rate 2  
25.0

Rate 3  
30.0

0.0

Off

A

OFF

AUTO / DISABLED

0.0

Off

M

OFF

MANUAL/DISABLED

0.0

Man

M

ON

-

+

**MANUAL MODE / ENABLED**

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

Use radar as speed source

Area Counter

0

1864

Service Interval

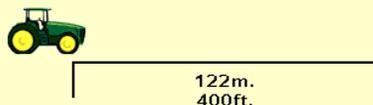
Time Since Last Reset

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.



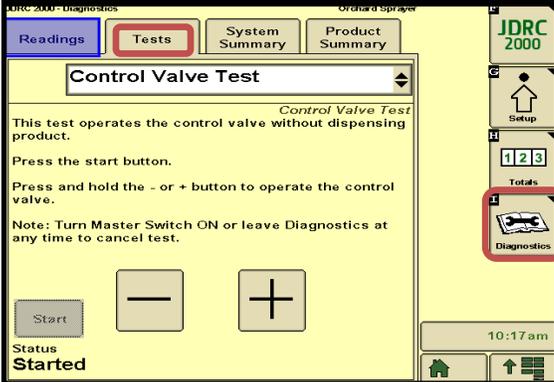
122m.  
400ft.

Cancel

Cal

## 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**.

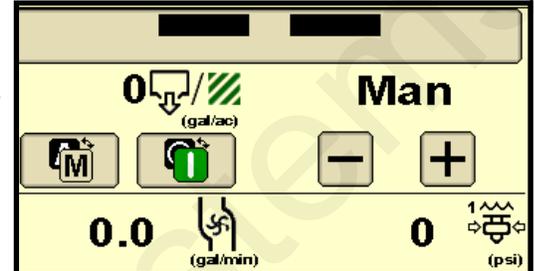


4. Start pump. Turn on Master Switch. Press + to increase flow.

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

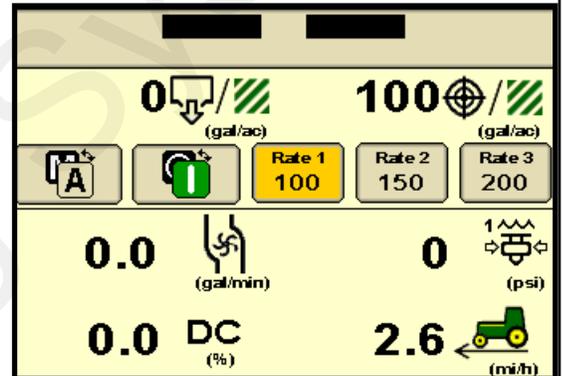
6. Go to Section Switch box (above). Reduce Flow. Turn Sections OFF and ON.

7. Turn Master Switch OFF.



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

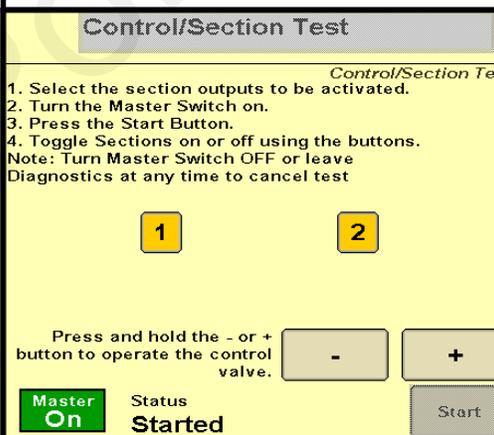
1. Enter a Test Speed at Setup > Implement
2. Navigate to **AUTO MODE / ENABLED**. Select a Rate. Start with a lower rate on the first startup.
3. Turn on Master Switch.
4. Monitor Actual Rate (gal/ac), Flow (gal/min), PSI. You can switch rates while the system is running.
5. Go to Section Switch box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



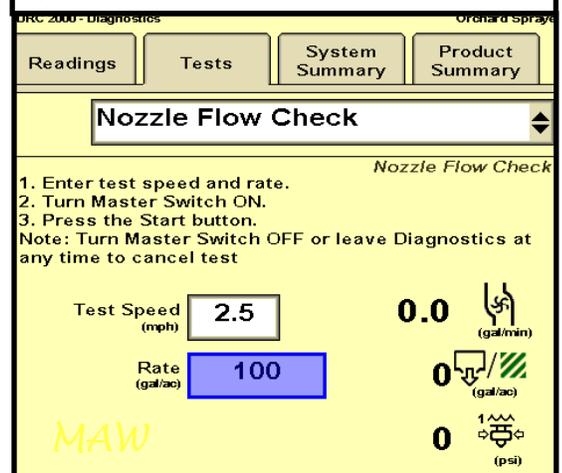
## Diagnostics > Tests > Pulldown Menu

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Configuration Test
Nozzle Flow Check
Rinse Cycle
Control/Section Test
Control Valve Test

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.*