

# JDRC 2000 Controller Set-Up for Montag

- If running NH3, then machine type set as NH3
- These slides show dry only options, but may reference NH3. Dry only machine type is air cart (most applications) or spreader (for bin chaining purposes).
- GEN 1 and GEN 2 = air cart

**Setup Fan/Spinner RPM**

Select the number of spinner or fan RPM sensors installed on the implement used for fan or spinner RPM monitoring or control.

RPM Sensors  ← **Enter 0**

Checking the Enable Fan/Spinner RPM Control box allows control of a fan or spinner PWM or fast valve and will reduce the number of products and sections available.

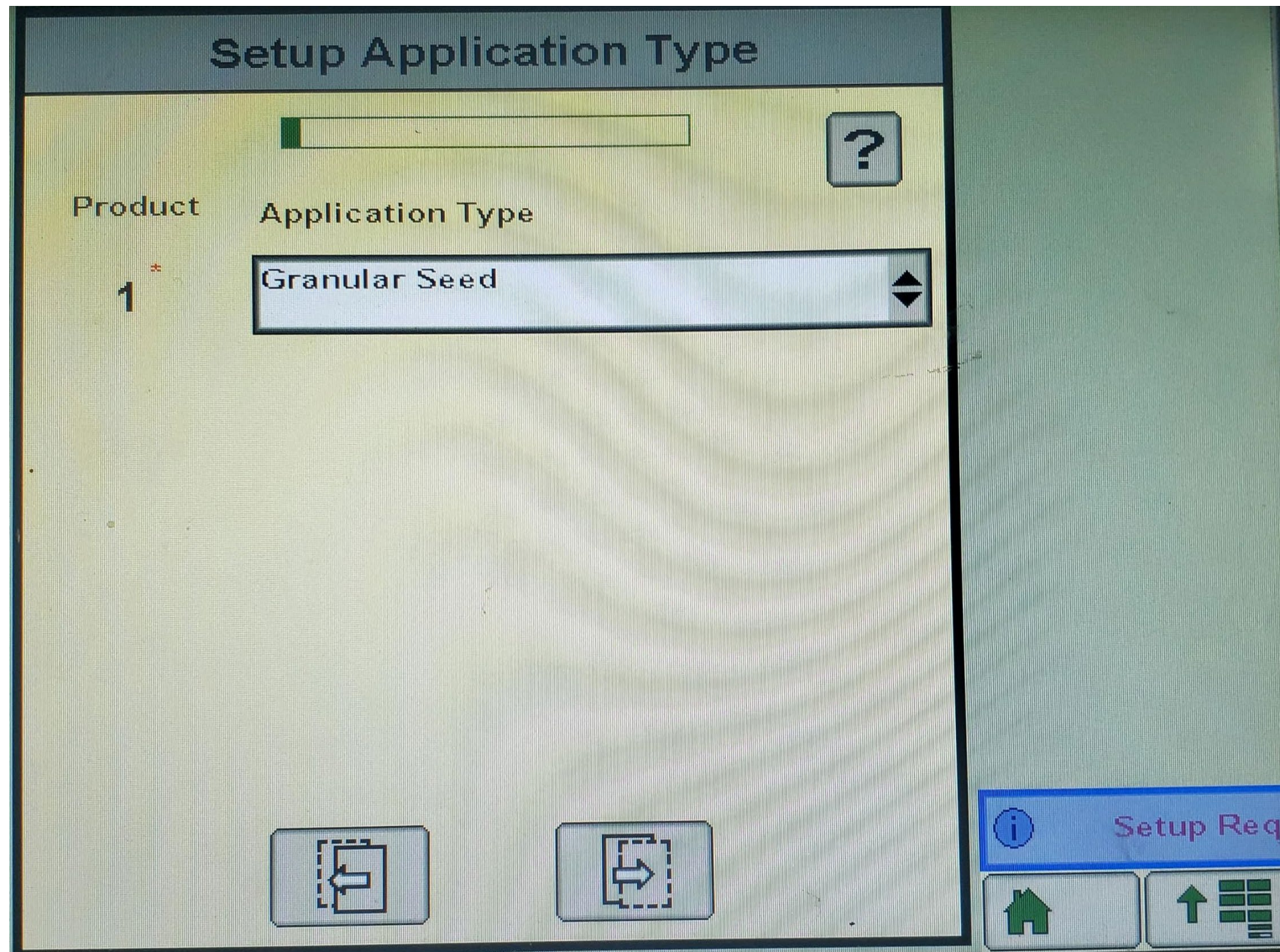
Enable Fan/Spinner RPM Control  ← **No check**

Navigation buttons: Back, Forward, Home, and Menu.

Setup Req



- GEN 1 Single Section = Granular Full Width Section
- GEN 1 Two Section = Dual Control Valve
- GEN 2 – 2218, 2208, 2108 = Granular Multi-Section (RPM maintained)
  
- If running NH3, Product 1 NH3
- Product 2 Granular





## Setup Sections



Number of Sections\*

1

Equal Width  
Sections

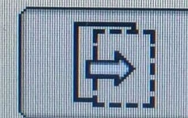
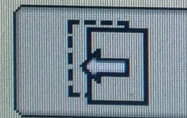
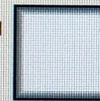


Check

Granular Product  
Sections Power to Apply



Master Clutch



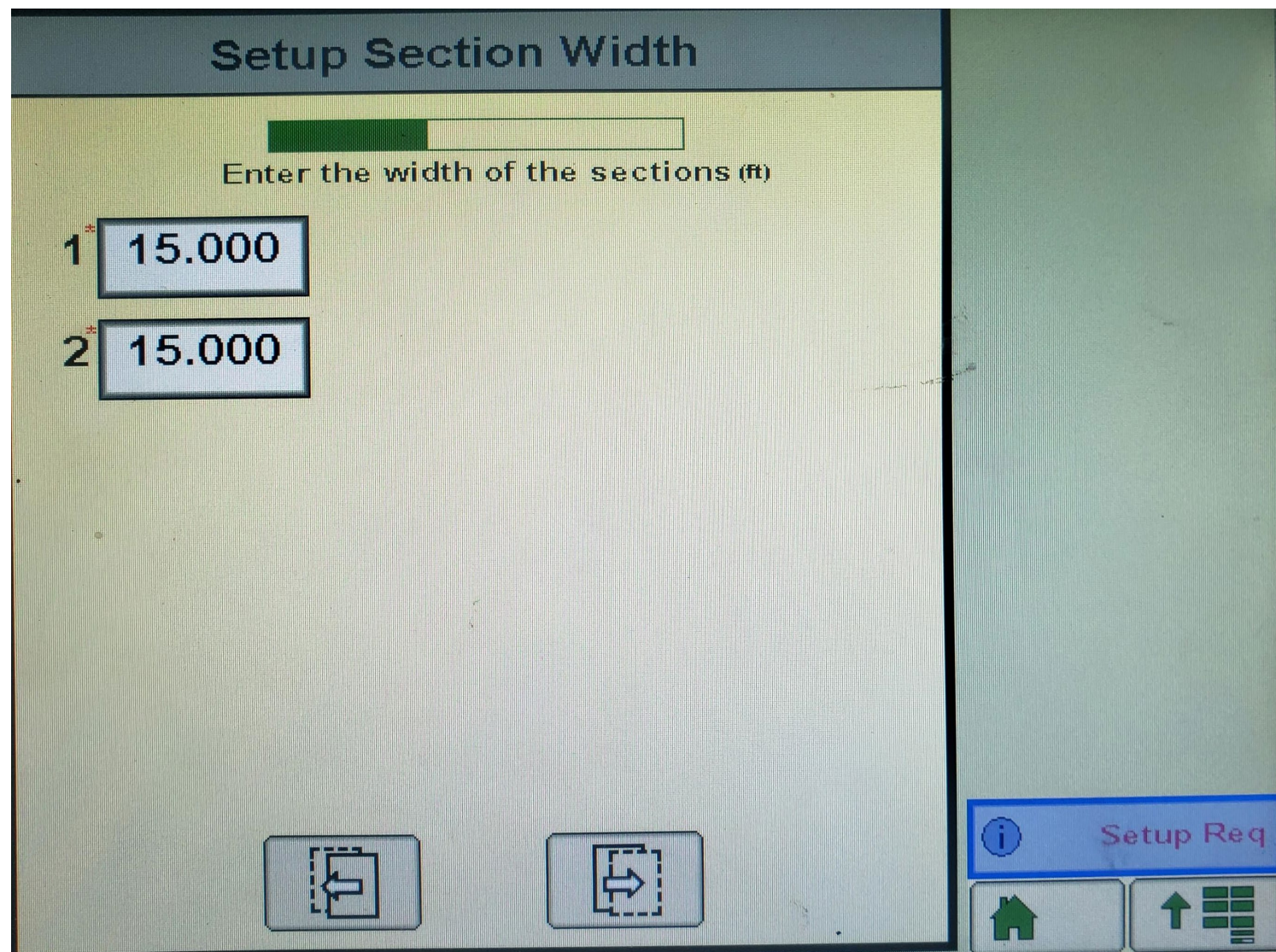
Setup Req



- Check only Equal Width Sections, leave other two boxes unchecked



- Optional – this is for 2 Section Machines only
- This is where you will set the section width





- Optional – this is for 2 Section Machines only
- Approve your sections

### Setup Sections

30.000(m)

Product 1

15	15
1	2
1	2

Liquid Section Width    Dry Section Width    Wired Signal Driver    Switch Number

Setup Req



## Setup Control Valve

Product 1 Granular

Control Valve  
Type

PWM Close

Valve Response Rate  
(1-100)

43

Control Deadband  
(%)

2



Setup Req



- PWM Close, 42-44 Starting, raise for more aggressive, Lower for less aggressive, leave control deadband at 2%.



- Coil Frequency 110, high limit 100, low limit 20-30 (need to test)
- PWM start-up 30-40 (need to test)
- For the JDRC the High Limit is 255 Low Limit is 10-20

**Setup PWM**

Product 1 Granular

Coil Frequency (Hz)	110
High Limit (%)	100.0
Low Limit (%)	25.0
PWM Startup (%)	35.0

Navigation buttons: Home, Back, Forward, Menu, Info, Setup Req



- Pulses/ Rev =

- GEN 1 Eaton = 94
- GEN 1 Parker = 47
- GEN 2 = 188

- Product density = Measure with density scale (provided).

- Cal Weight = CFR x Density

- CFR = Standard GEN 1 = .0016 X # rows
- High Output GEN 1 = .0032 X # rows
- GEN 2 = .0026 X # rows

- EXAMPLE

- Calibration

- CFR vs Lbs. Per Rev.

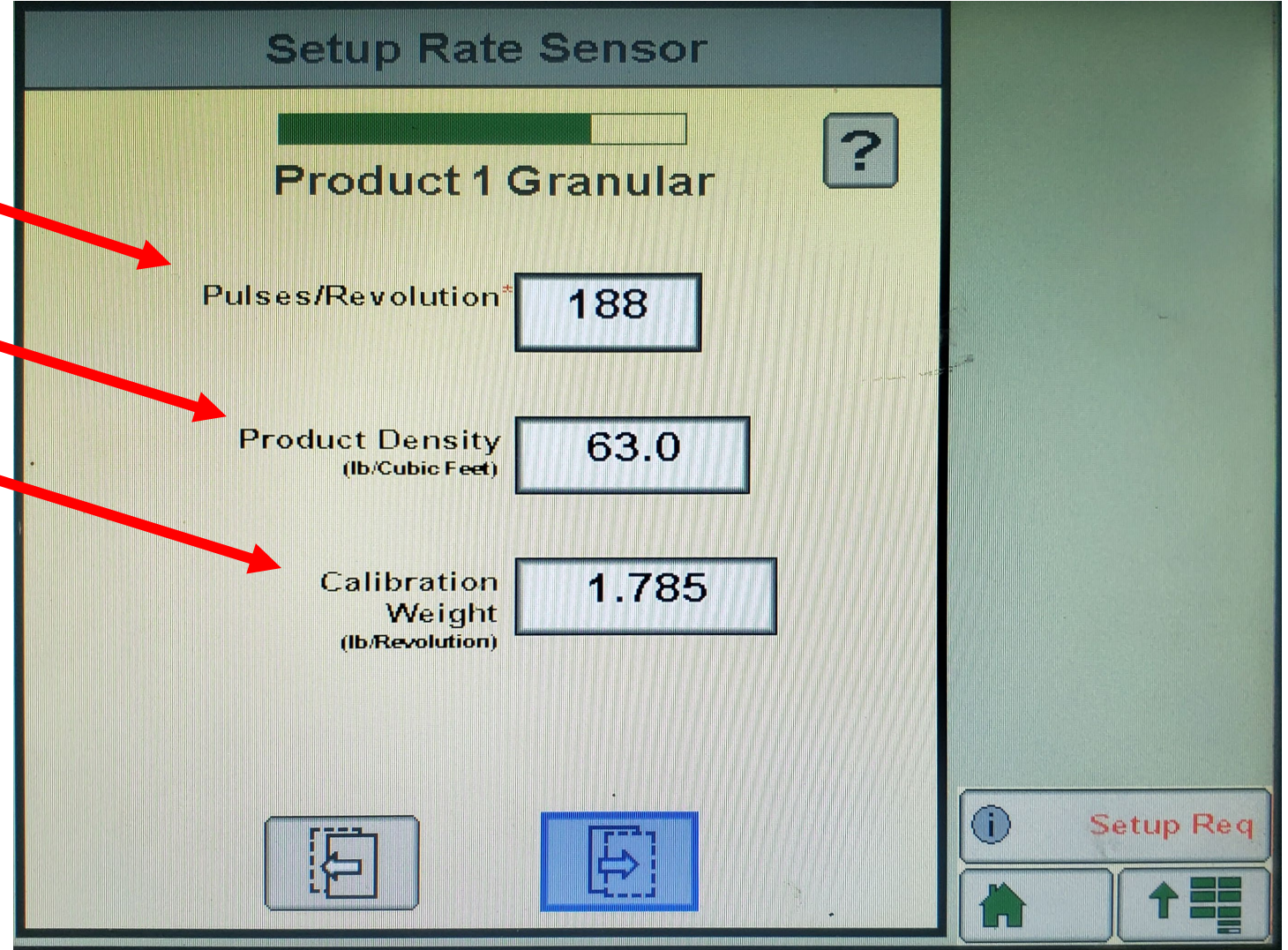
- CFR

- Displacement per row X  
Number of Rows

- $0.0032 \times 16 = .0512$

- Lbs. Per Rev


- Density x CFR = Lbs. Per Rev





- 6 Ton = 12000
- 9 Ton = 18000
- GEN 2 = 9500/tank
  
- Low tank level = operator preference

### Setup Tank





#### Product 1 Granular


Tank Capacity (lb)




Current Level (lb)

Low Tank Level (lb)  Alarm?

Low Bin Level Sensor

 Setup Req



- All Operator preference
- Common rates, 100, 250, 500
- Bump rate 10-25
- Rate selection either predefined or map based

### Setup Rates

Product 1 Granular



Rate 1 \*    Rate 2    Rate 3


Preset Rate Values (lb/ac)    50    100    200



Rate Bump (lb/ac)    10    Rate Selection    Predefined

Rate Smoothing        3 %

Decimal Shift    0

 Setup Req



- Setup Alarms is operator preference

