

# Trouble shooting

(NH3 / Liquid control)

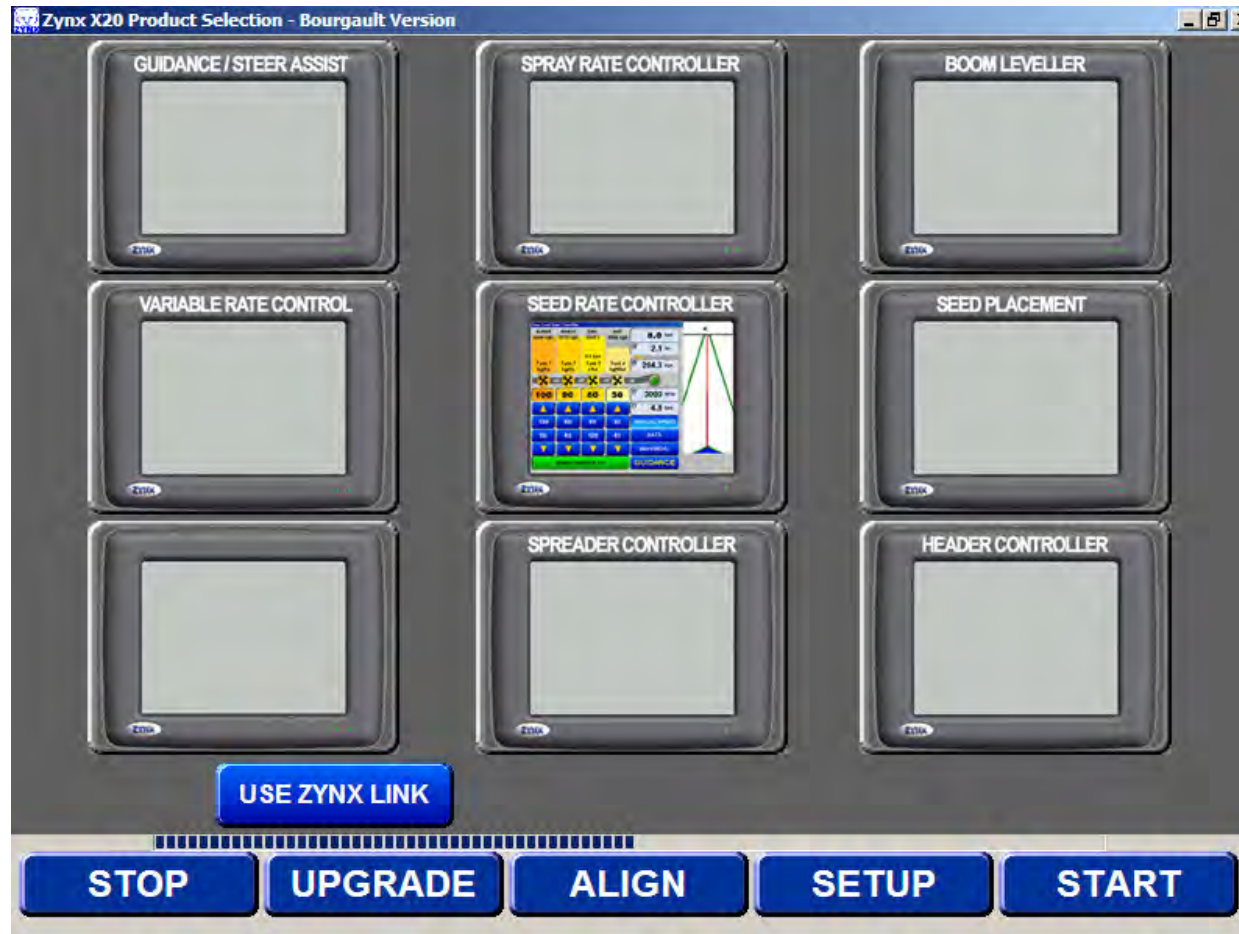
The following pages will give a basic overview of the steps that are required to trouble-shoot NH3 and/or Liquid control with the X20.

This procedure is for units with a 30S ECU

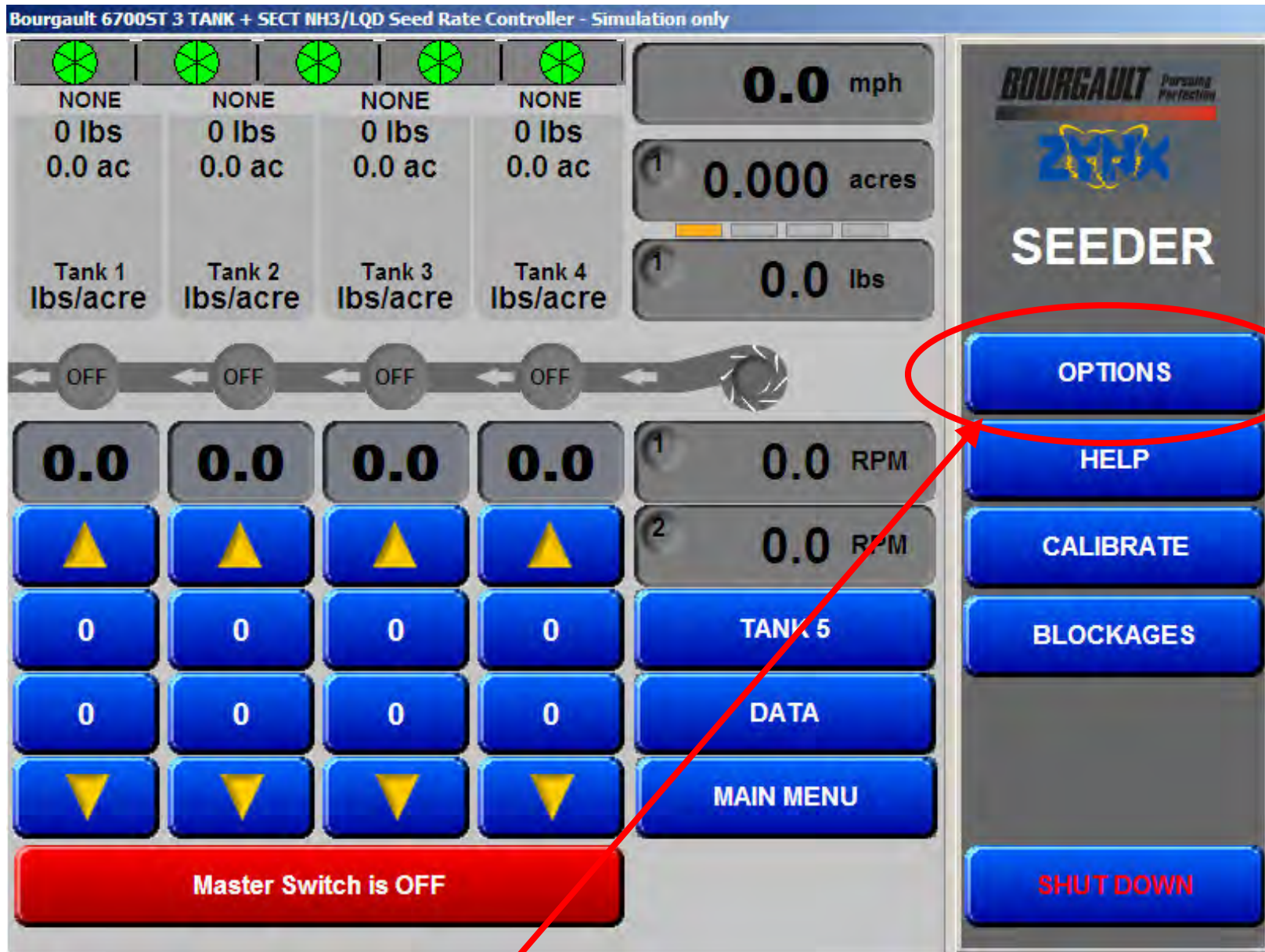
30S ECU



# SRC Initial Set up



**The X20 can run various programs. If you press STOP in the lower left corner you will have time to select the desired program before it auto starts.**



Above is the basic SRC operating screen. Touch the blue **OPTIONS** tab to enter the set up pages.

Options

Tank 5 | Setup | Blockage | Seq. | Units | Alarms | Products | Sim. | Other

Config. | Machine | Sections | Seeder | Fans | Tank 1 | Tank 2 | Tank 3 | Tank 4

Com Port

- Simulation
- COM1
- COM2
- COM3
- COM4
- COM5
- COM6
- COM7
- COM8

Speed From

- Seeder
- Tractor Radar
- GPS

External Switch Box

- Using External Switch Box
- Enable Master Switch
- Enable Tank Switches
- Toggle Switch UP is ON
- Auto Clutch Switch Enabled
- VRC Enabled
- Guidance Master Enabled

Simulation mode

Enable Diagnostics

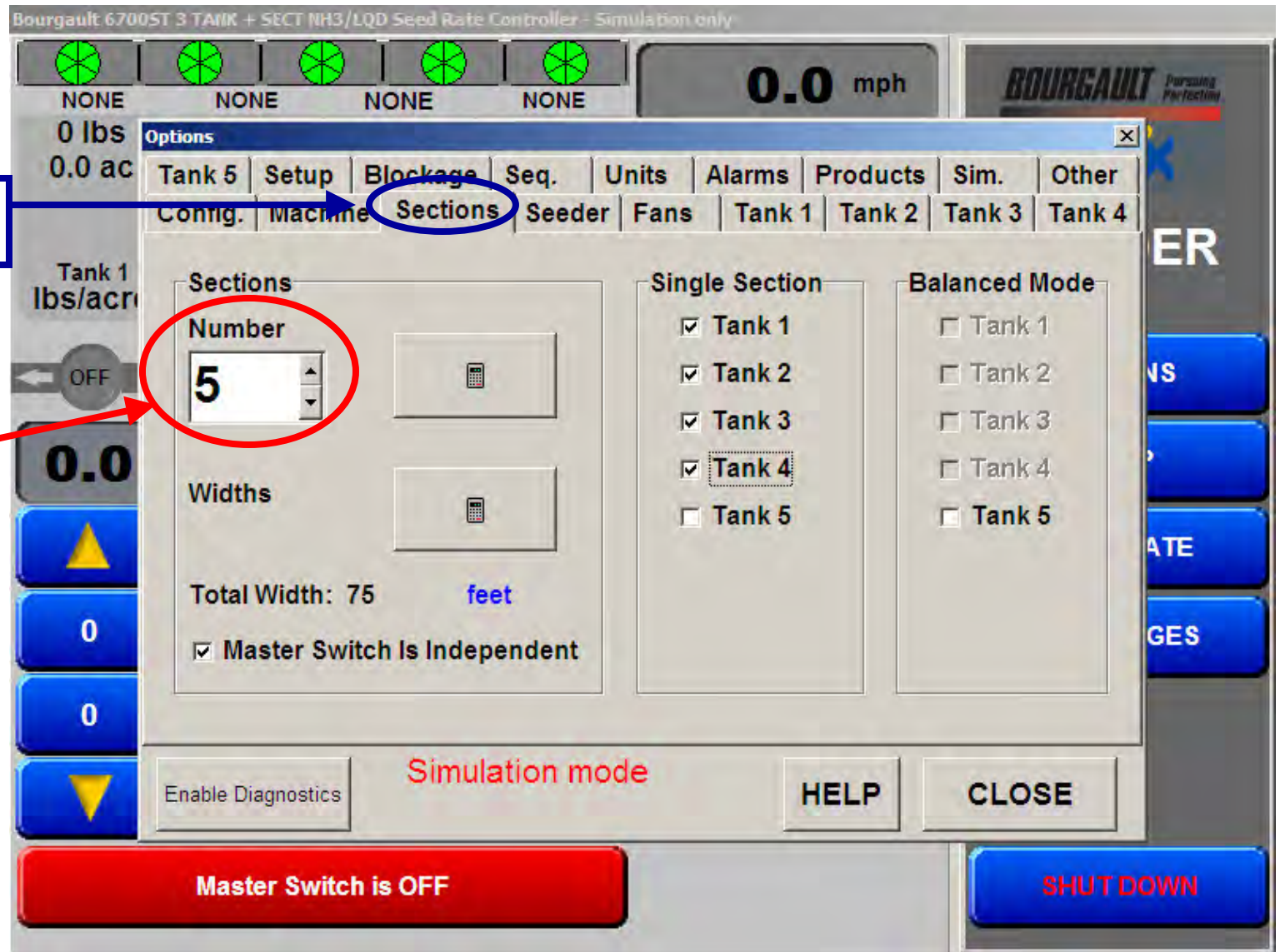
HELP

CLOSE

Master Switch is OFF

SHUT DOWN

The external switch box has only 4 tank switches so this can only be selected if the Bourgault Air Seeder is metering out of 4 or less tanks. (NH3 / Liquid is Tank 5)



Next is the Sections tab.

Only enter a Value here if using sectional control. If not using section control enter "0"

# SRC Initial Set up

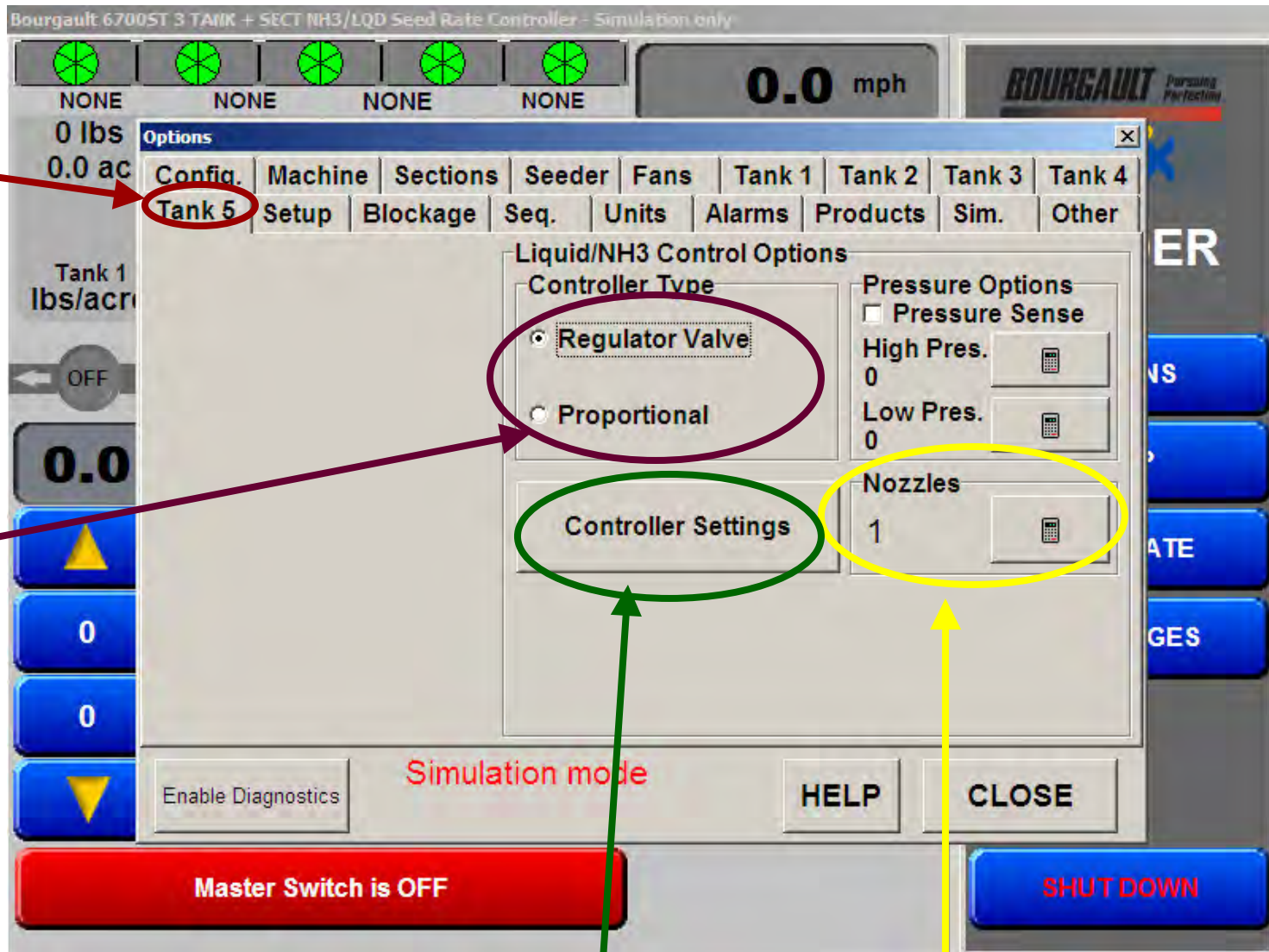
Next select the Seeder tab.

Turns tanks on and off when not in use.

Enter width here if not using sectional control

The screenshot shows the following details:  
- Top status: NH3 as N, 1640 lbs, 41 ac, 3.1 mph.  
- 'Options' menu tabs: Tank 5, Setup, Blockage, Seq, Units, Alarms, Products, Sim., Other, Config., Machine, Sections, **Seeder**, Fans, Tank 1, Tank 2, Tank 3, Tank 4.  
- 'Tanks On' panel: Tank 1 ON, Tank 2 ON, Tank 3 ON, Tank 4 ON,  Tank 5 ON.  
- 'Total Width' panel: 75 feet.  
- 'Tank 5 Mode' panel: Granular, Liquid,  NH3.  
- Bottom status: Master Switch is OFF, Simulation mode, HELP, CLOSE, SHUT DOWN.

**To run only the NH3 / Liquid turn granular tanks off.**

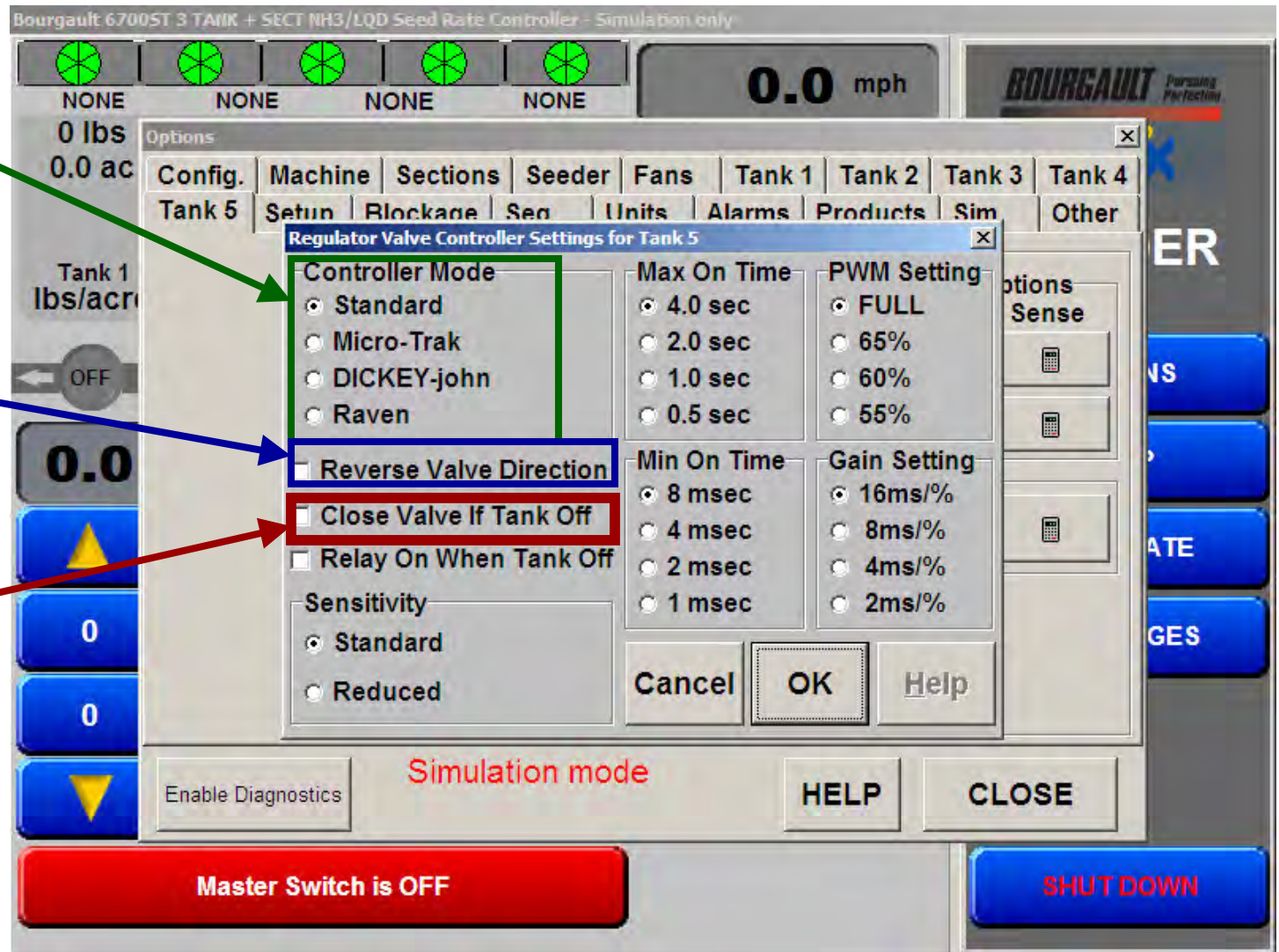


Next select the NH3 / Liquid tank if applicable.

Select the controller type. Regulator is an electrical valve to control the flow of the product and a Proportional valve controls the hydraulic flow to the motor.

Press the Controller Settings tab

Enter 1 for # of Nozzles



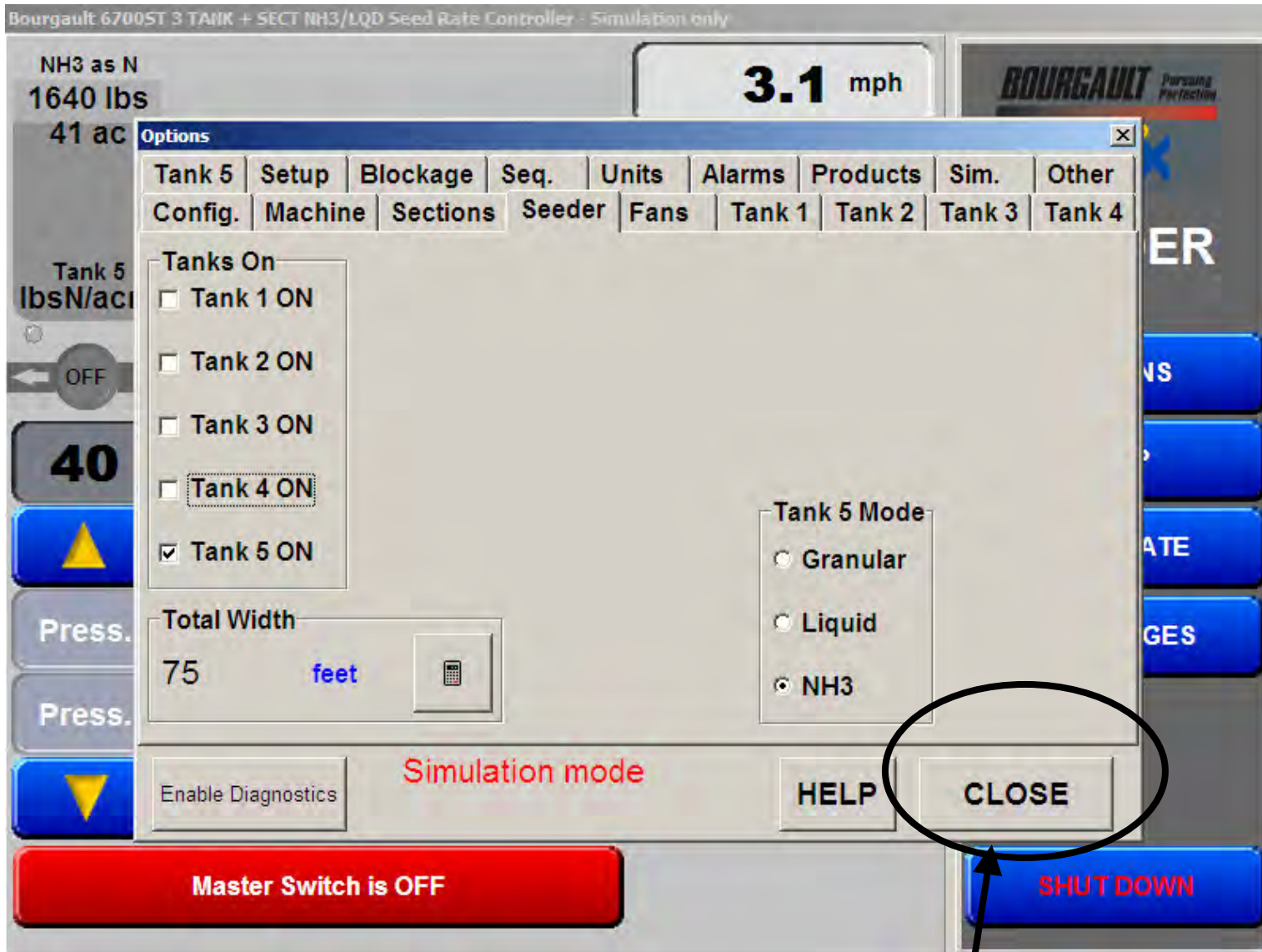
Select type of NH3/Liquid system

If the regulator valve is running the wrong direction you may reverse the polarity here.

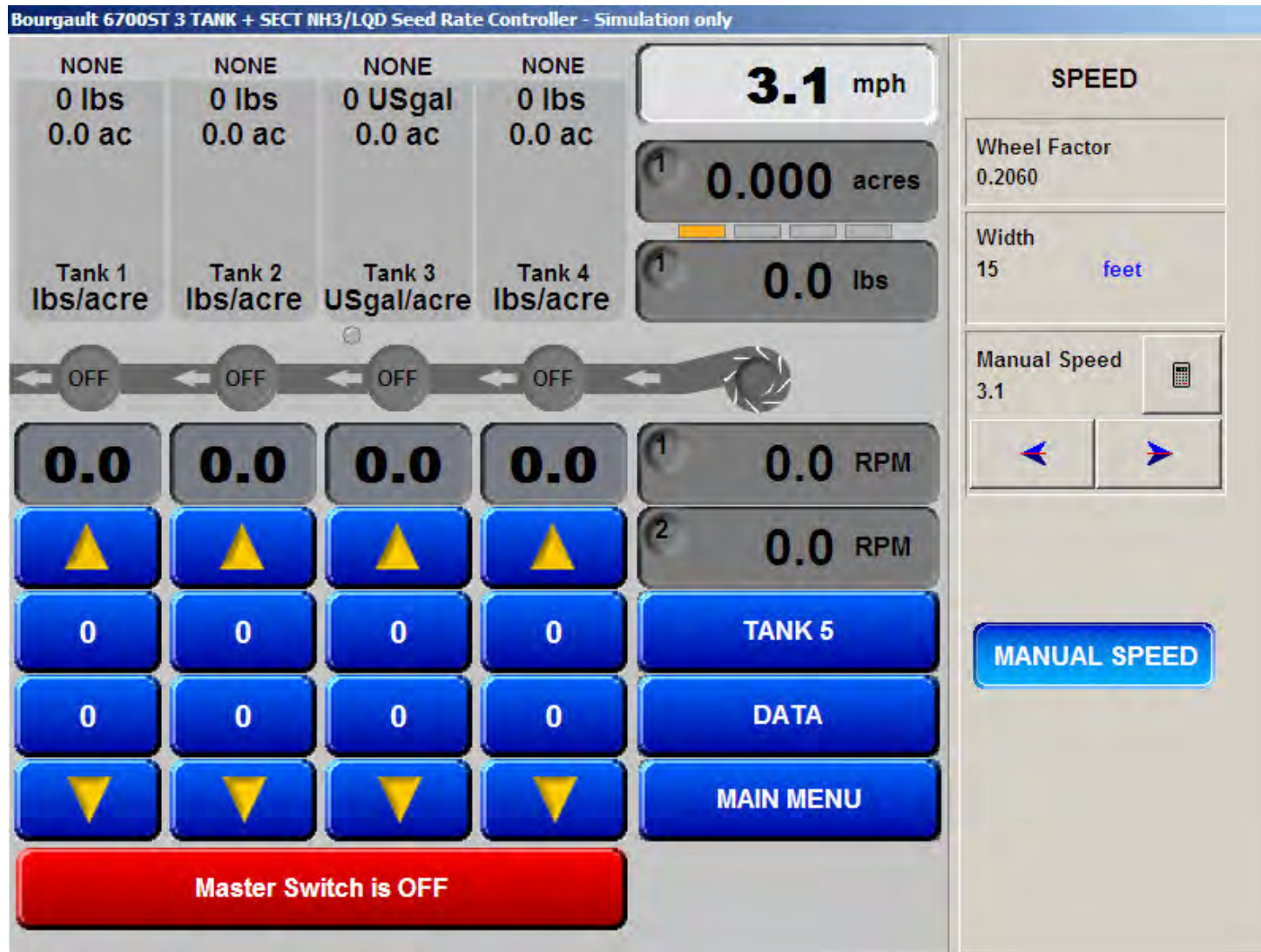
This option is for Fast Valves or single NH3 only!! DO NOT CHECK for two valve systems!

Leave Sensitivity, Max on time, Min on time, PWM settings and Gain settings at factory defaults unless advised by authorized technician!





**Press Close to get back to main page**



**You must enter a manual speed to simulate movement, also remember to close the tank valve!**

Press here to access the right-hand menu.

NH3 as N  
1640 lbs  
41 ac

Tank 5  
lbsN/acre

**3.1** mph

**9.390** acres

**360.9** lbs

**FILL 5** **Cal. 5**

CAPACITY  
**2000**

PRESET RATE 1  
**20**

PRESET RATE 2  
**0**

INCREMENT  
**4**

PRODUCT  
**NH3 as N**

|             |             |
|-------------|-------------|
| Flow/Min    | Cal. Factor |
| <b>0.0</b>  | <b>17</b>   |
| Flow/Noz    |             |
| <b>0.00</b> |             |

OFF OFF OFF OFF

**40**

**0.0** RPM

**0.0** RPM

Press. Press.

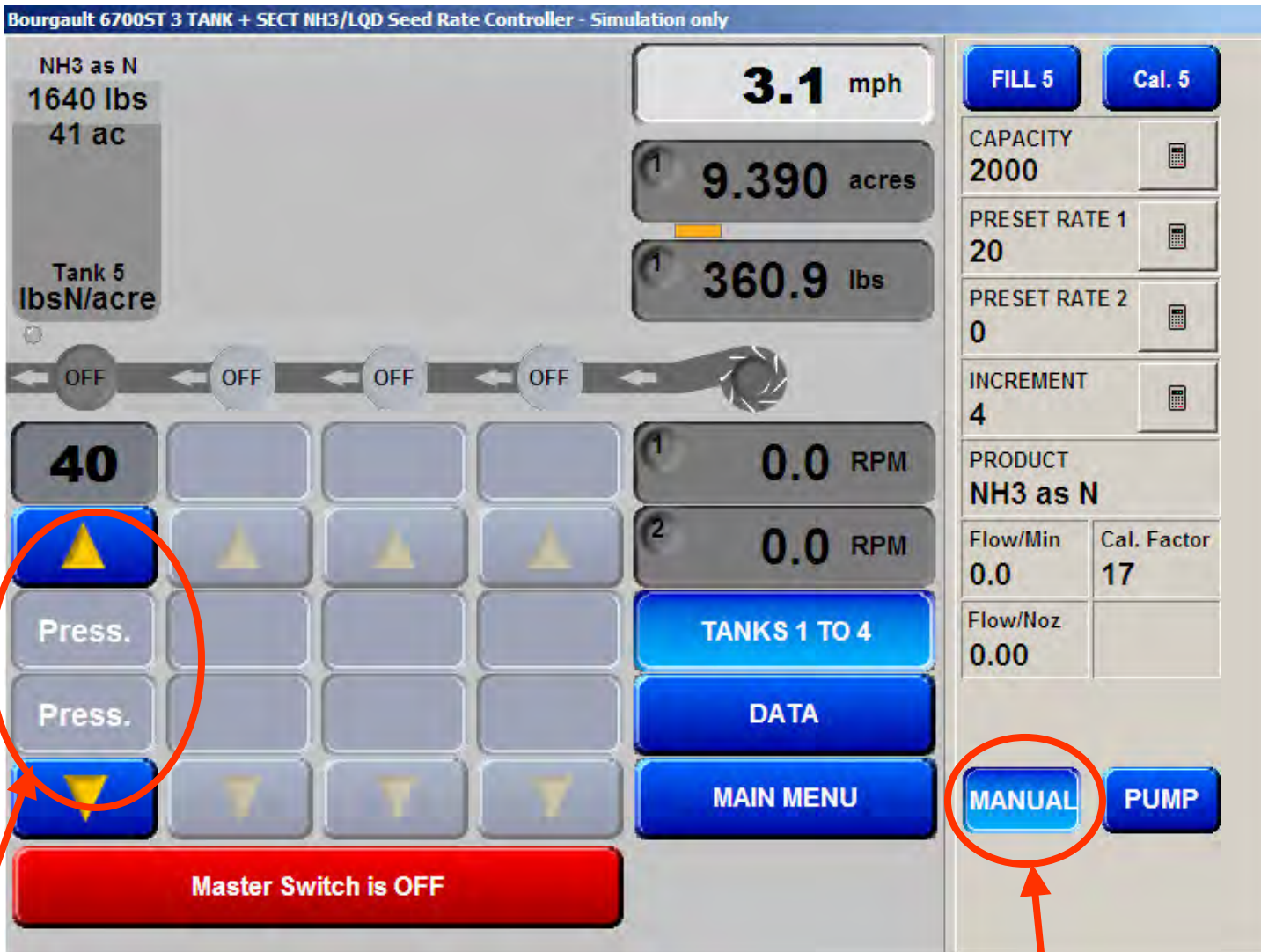
**TANKS 1 TO 4**

**DATA**

**MAIN MENU**

**Master Switch is OFF**

**MANUAL** **PUMP**



**Confirms that you are in manual mode**

**Press the manual button**

**There will be a connector like this going from the ECU to the NH3 / Liquid valve**

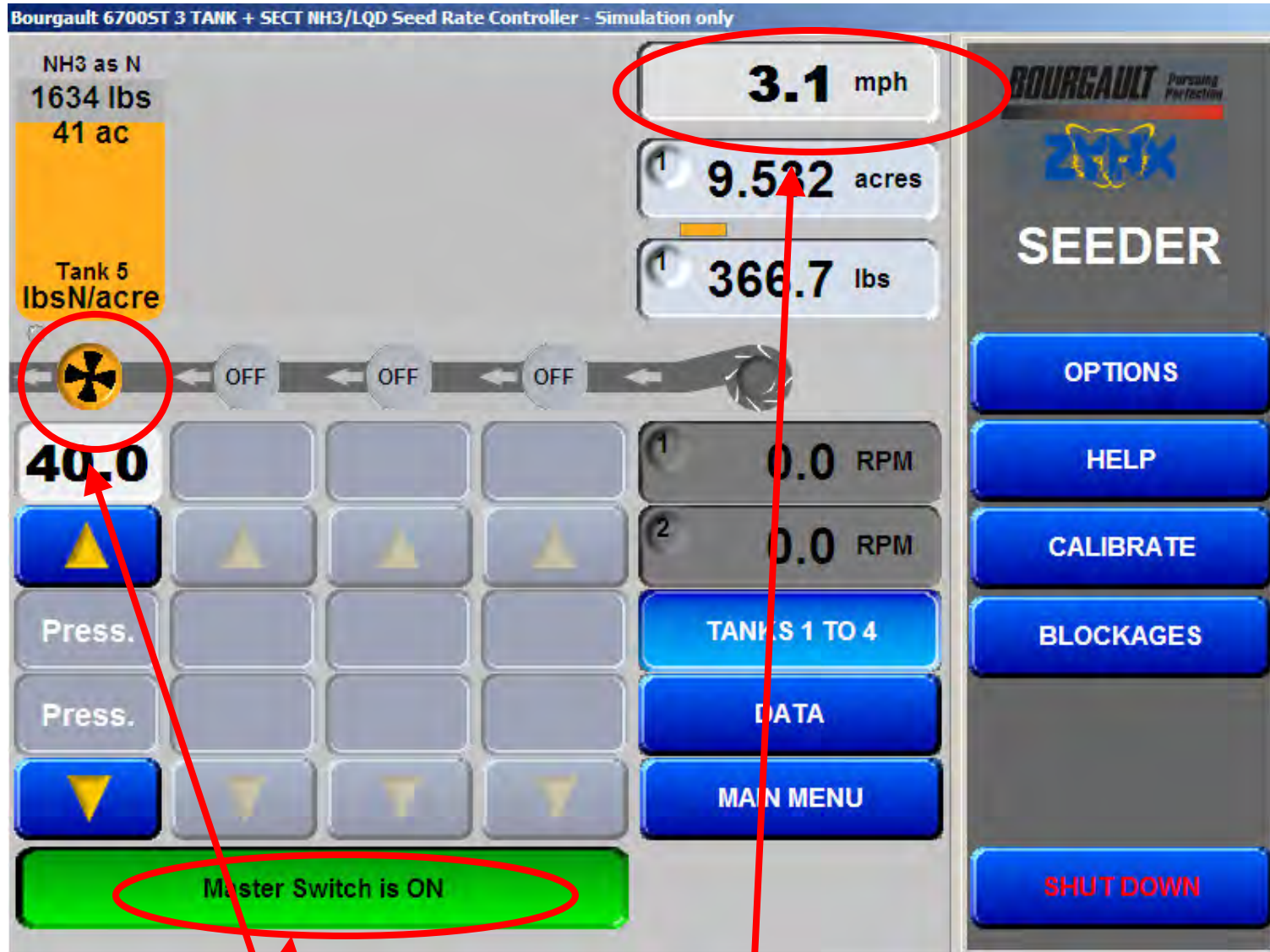


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**Put your voltmeter leads on  
pins 3 and 4**



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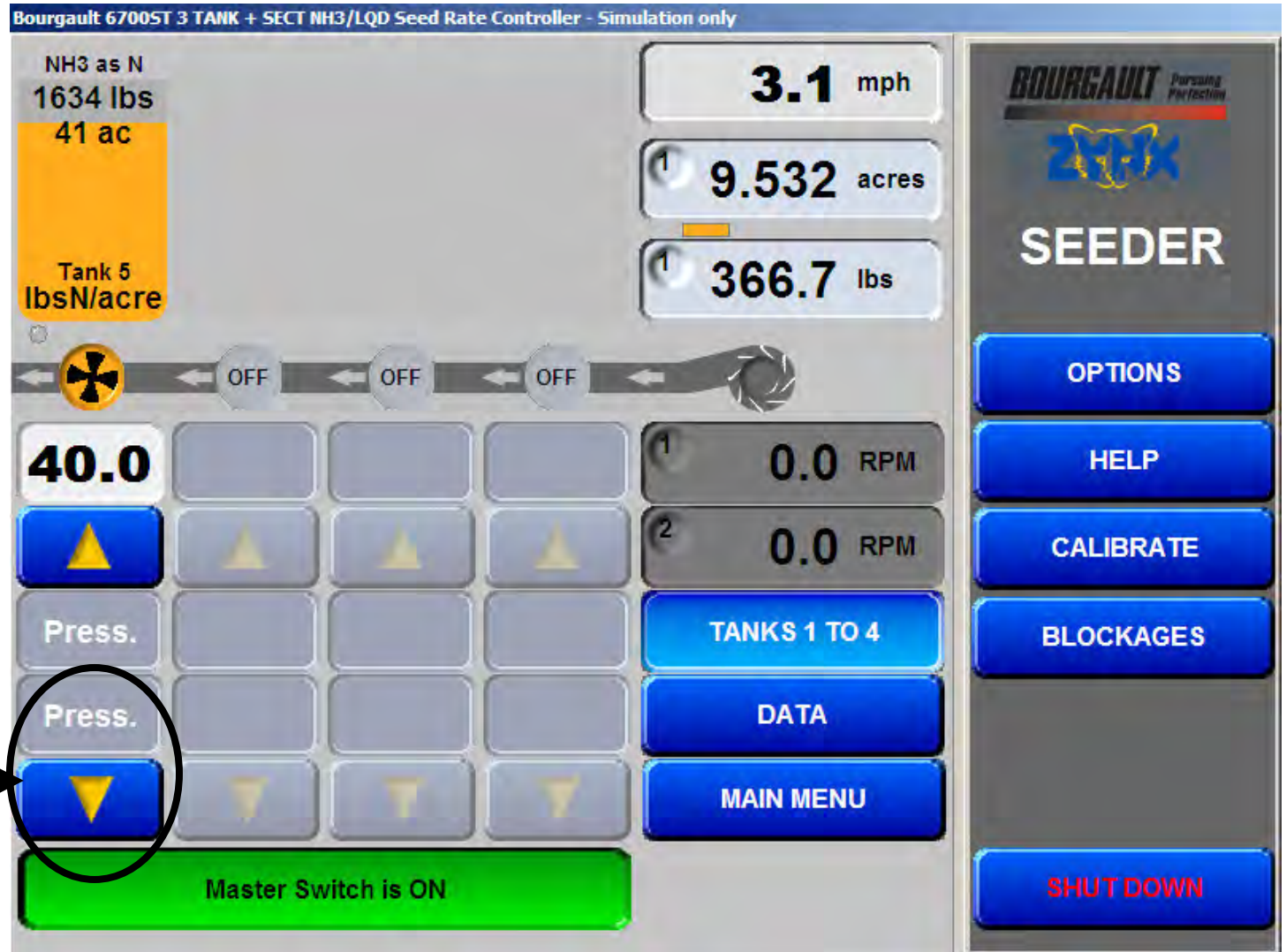
**The master and tank clutches must be on as well as a manual ground speed.**



Press and hold the up arrow.

While holding the up arrow your volt meter should show positive 8 to 10 volts





While holding the down arrow your volt meter should show negative 8 to 10 volts