

Trouble shooting

(NH3 / Liquid control)

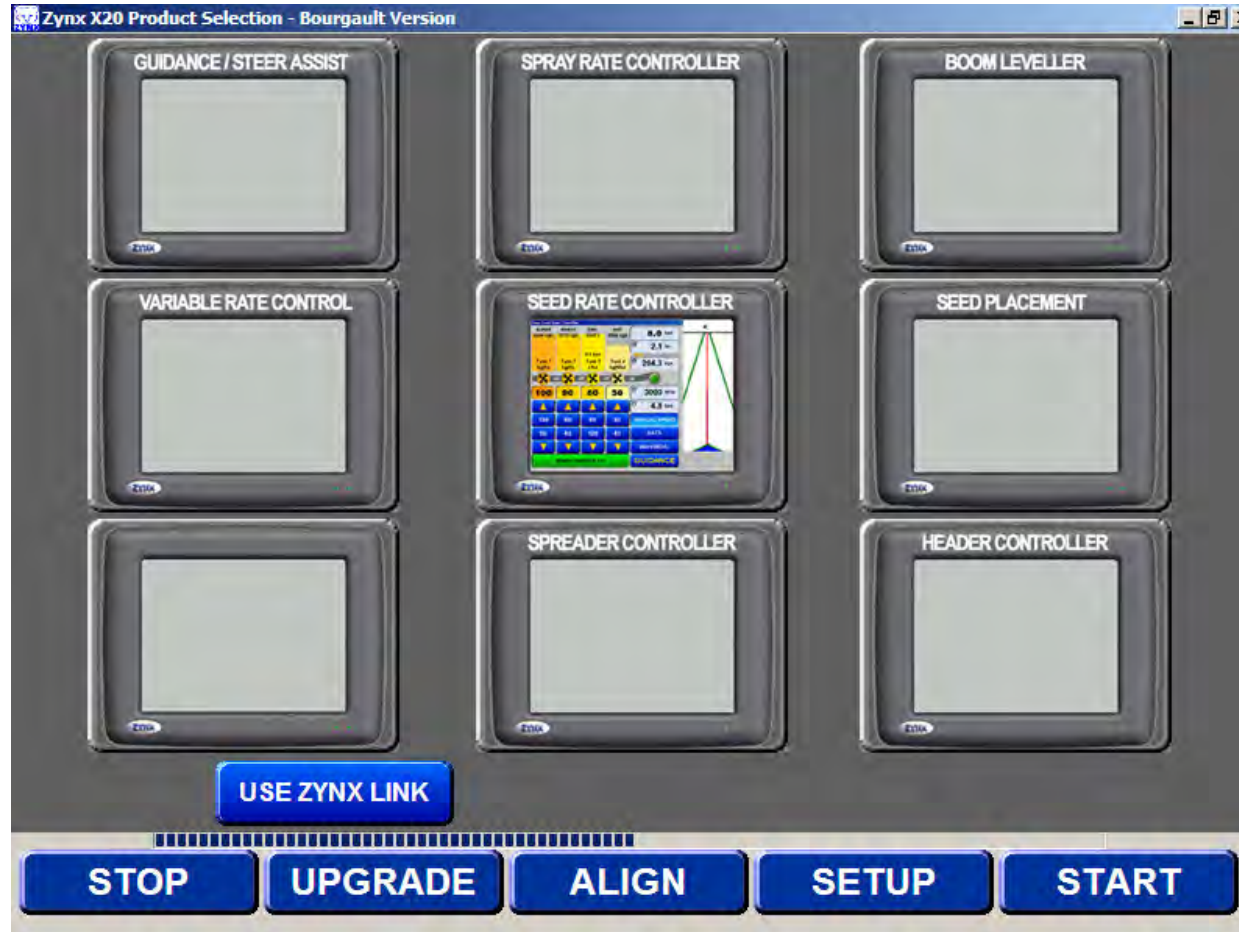
The following pages will give a basic overview of the steps that are required to trouble-shoot NH3 and/or Liquid control with the X20.

This procedure is for units with a Mini ECU

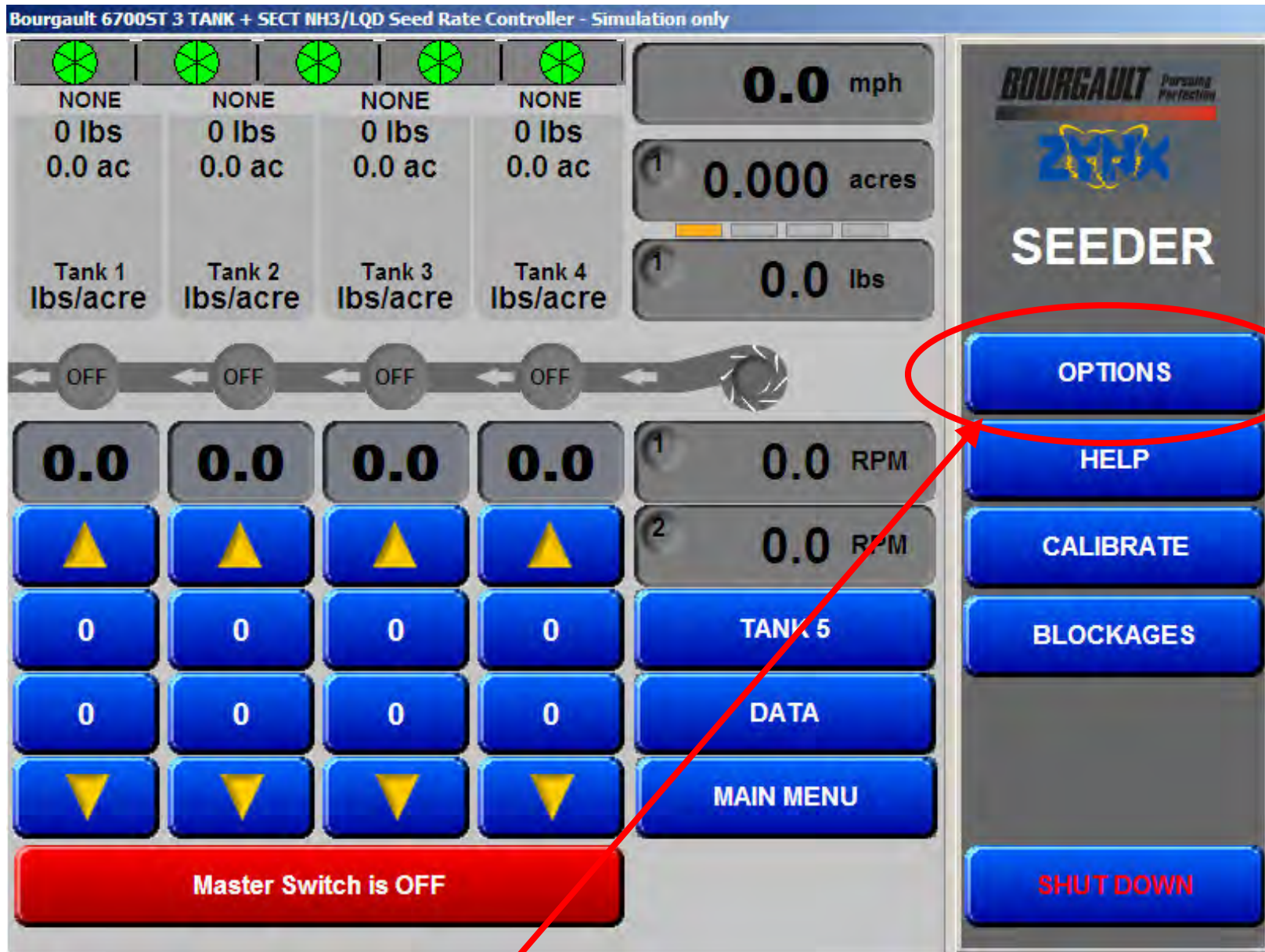
Mini ECU



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.

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)

Bourgault 6700ST 3 TANK + SECT NH3/LQD Seed Rate Controller - Simulation only

NONE NONE NONE NONE 0.0 mph

0 lbs 0.0 ac

Options

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

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

Tank 1 lbs/ac

OFF

0.0

0

0

Sections

Number

5

Widths

Total Width: 75 feet

Master Switch Is Independent

Single Section

Tank 1

Tank 2

Tank 3

Tank 4

Tank 5

Balanced Mode

Tank 1

Tank 2

Tank 3

Tank 4

Tank 5

Enable Diagnostics Simulation mode HELP CLOSE

Master Switch is OFF SHUT DOWN

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

NH3 as N
1640 lbs
41 ac

3.1 mph

Options

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

- Tank 1 ON
- Tank 2 ON
- Tank 3 ON
- Tank 4 ON
- Tank 5 ON

Tank 5 Mode

- Granular
- Liquid
- NH3

Total Width
75 feet

Simulation mode

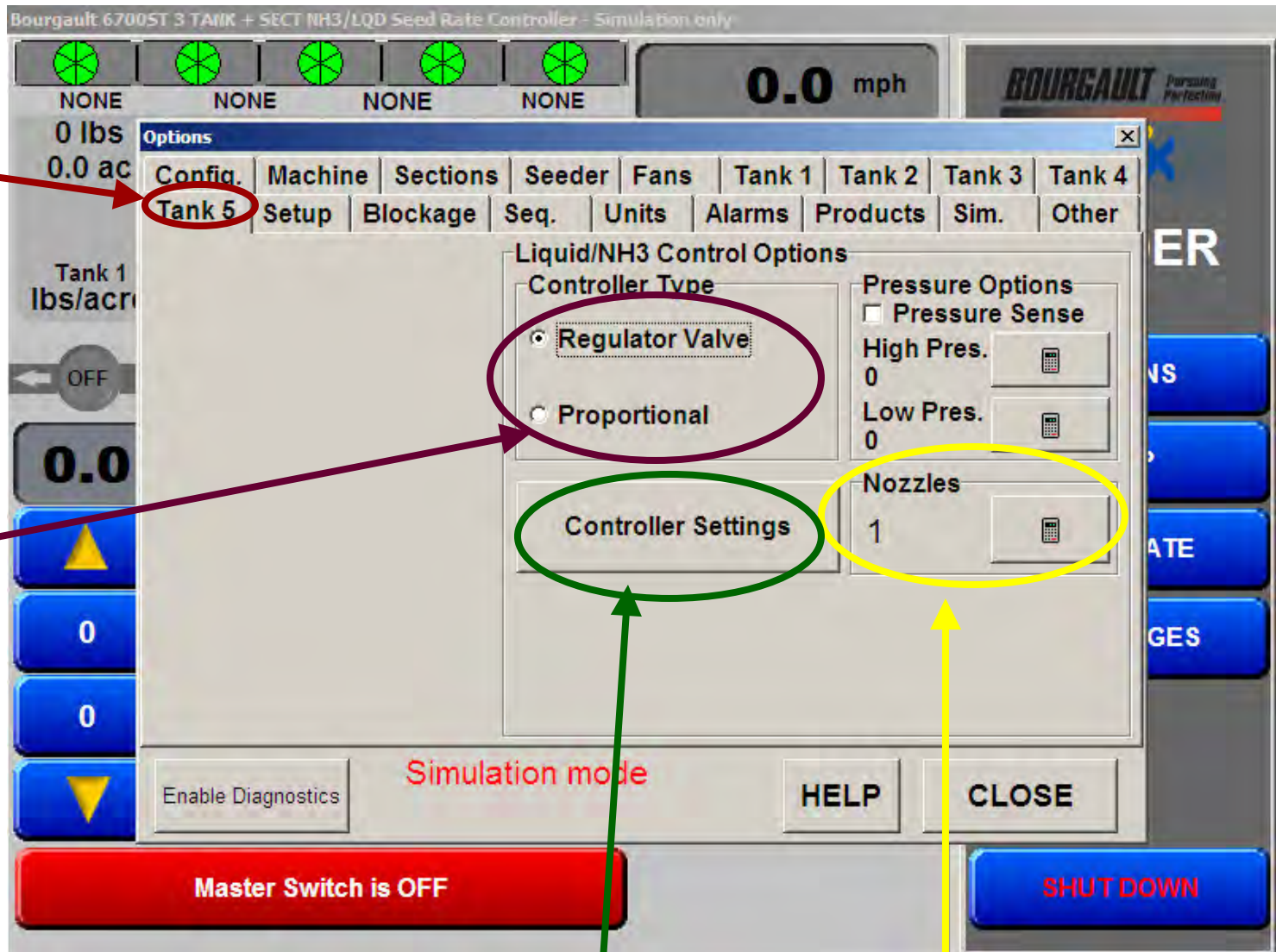
Master Switch is OFF

SHUT DOWN

Annotations:

- Next select the Seeder tab.
- Turns tanks on and off when not in use.
- Enter width here if not using sectional control

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

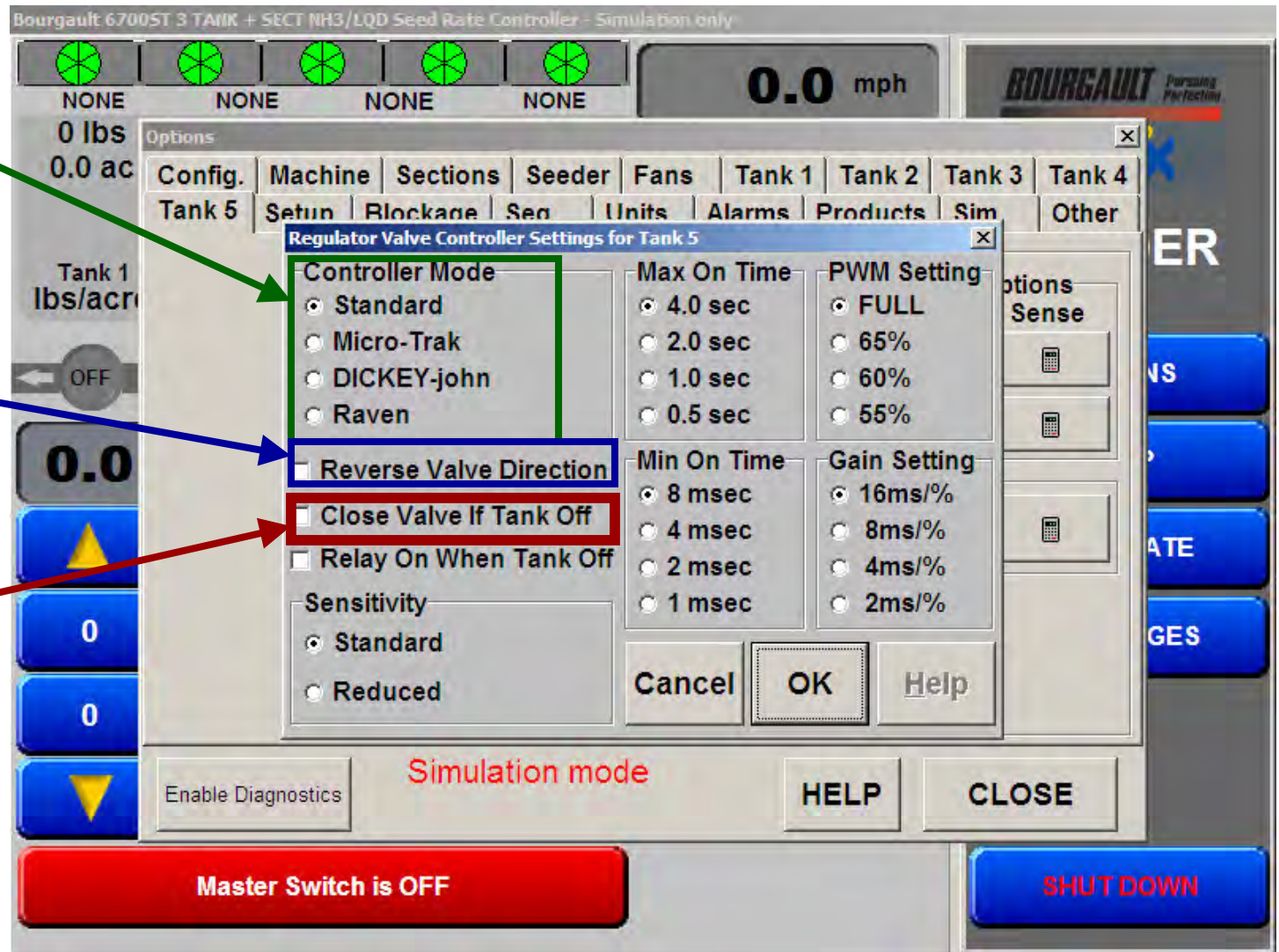


Next select the NH3 / Liquid tank if applicable.

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

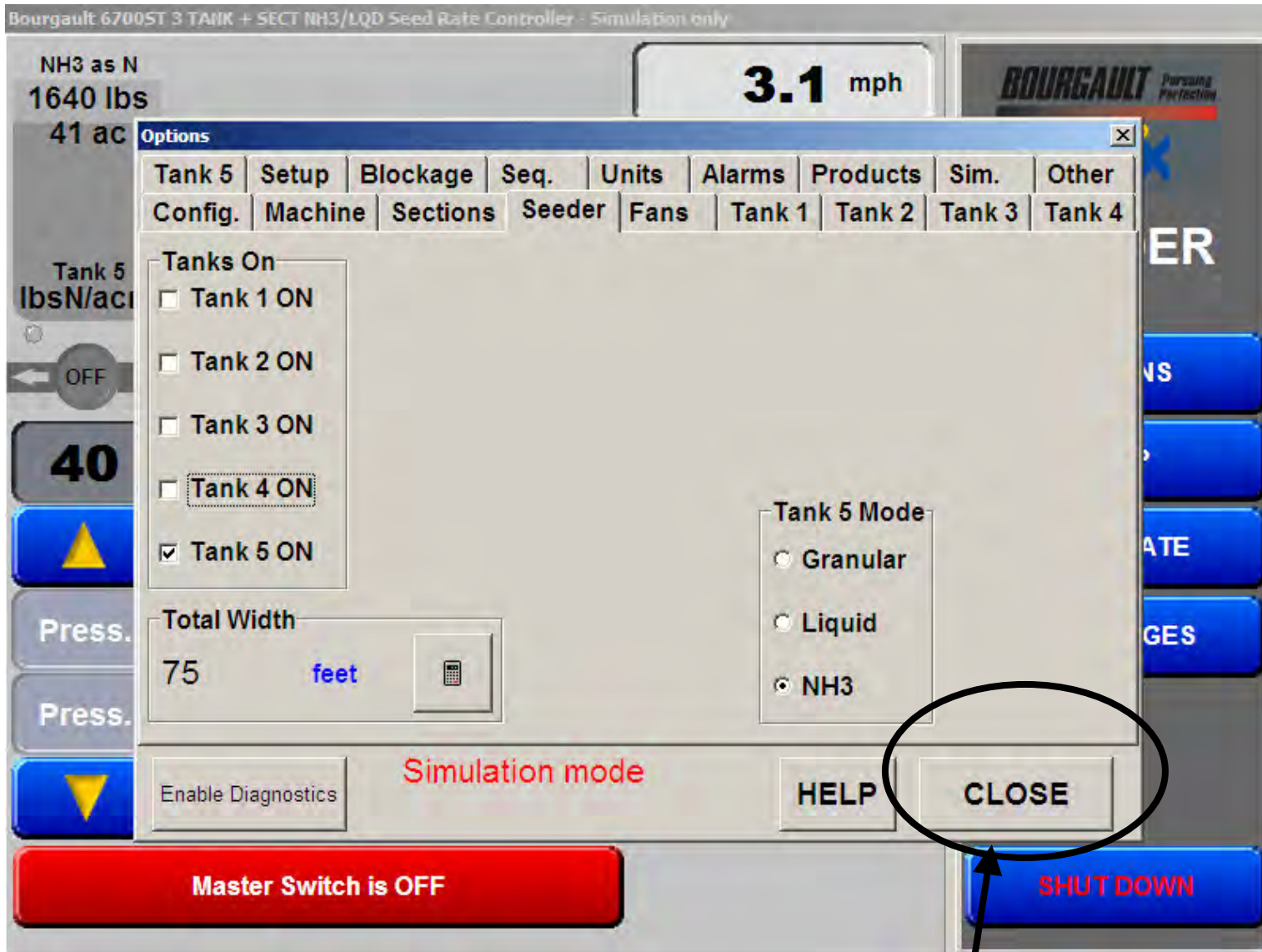


Select type of NH3/Liquid system

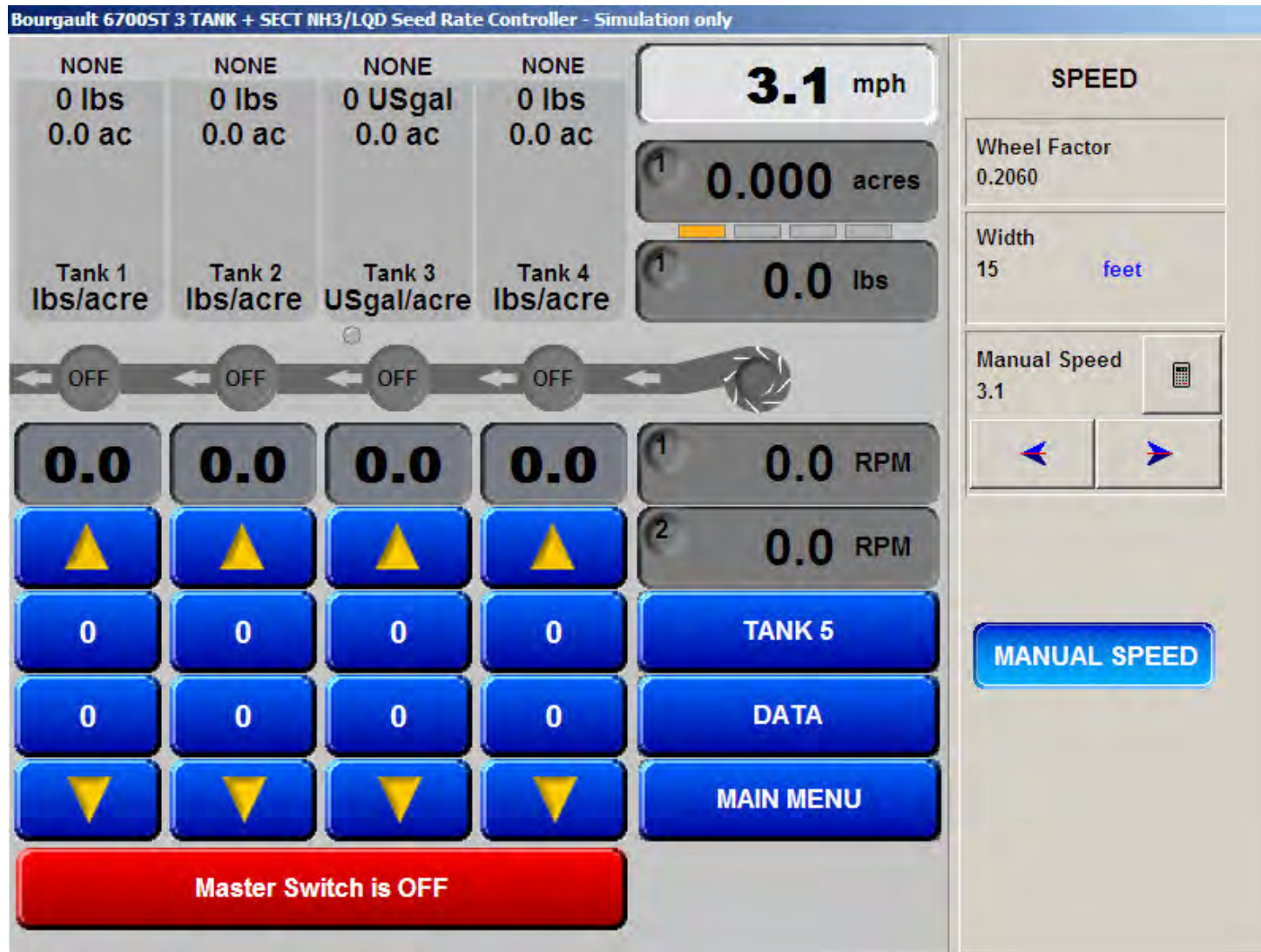
If the regulator valve is running the wrong direction you may reverse the polarity here.

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
0.0	17
Flow/Noz	
0.00	

OFF OFF OFF OFF

40

0.0 RPM

0.0 RPM

Press. Press.

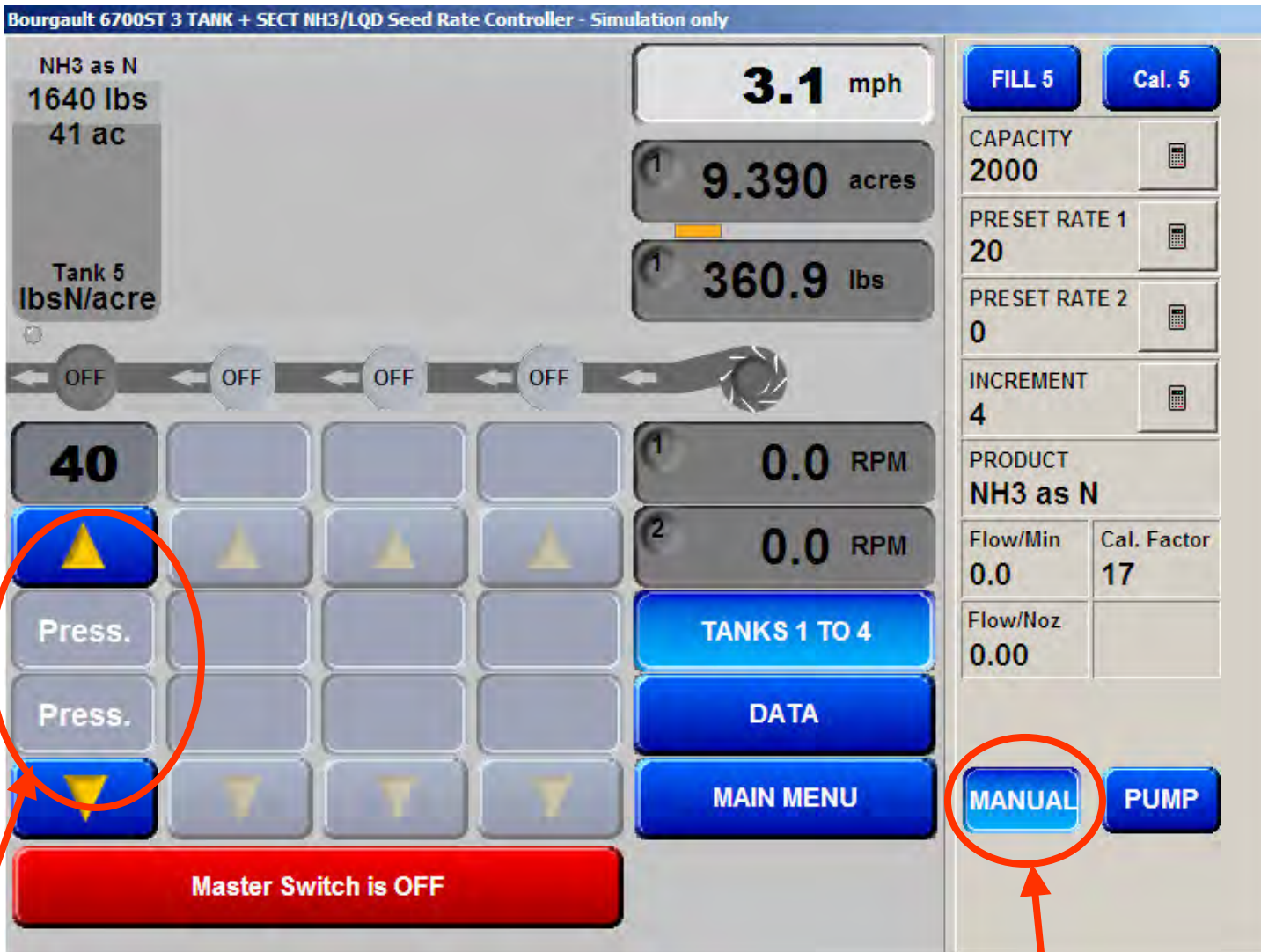
TANKS 1 TO 4

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



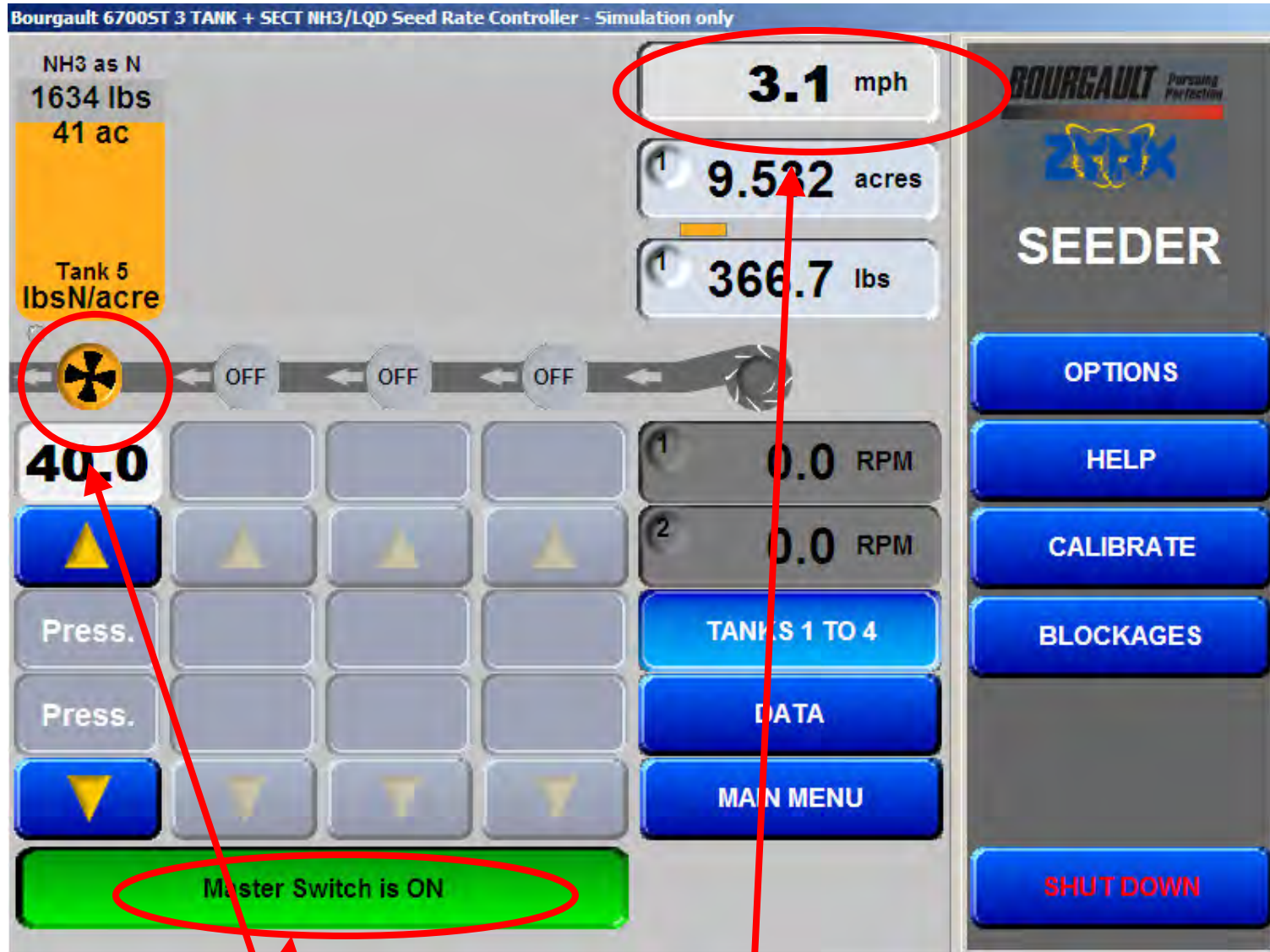
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Put your voltmeter leads on pins 5 and 6 unless you are checking at the valve and then it will be pins 3 and 4 **

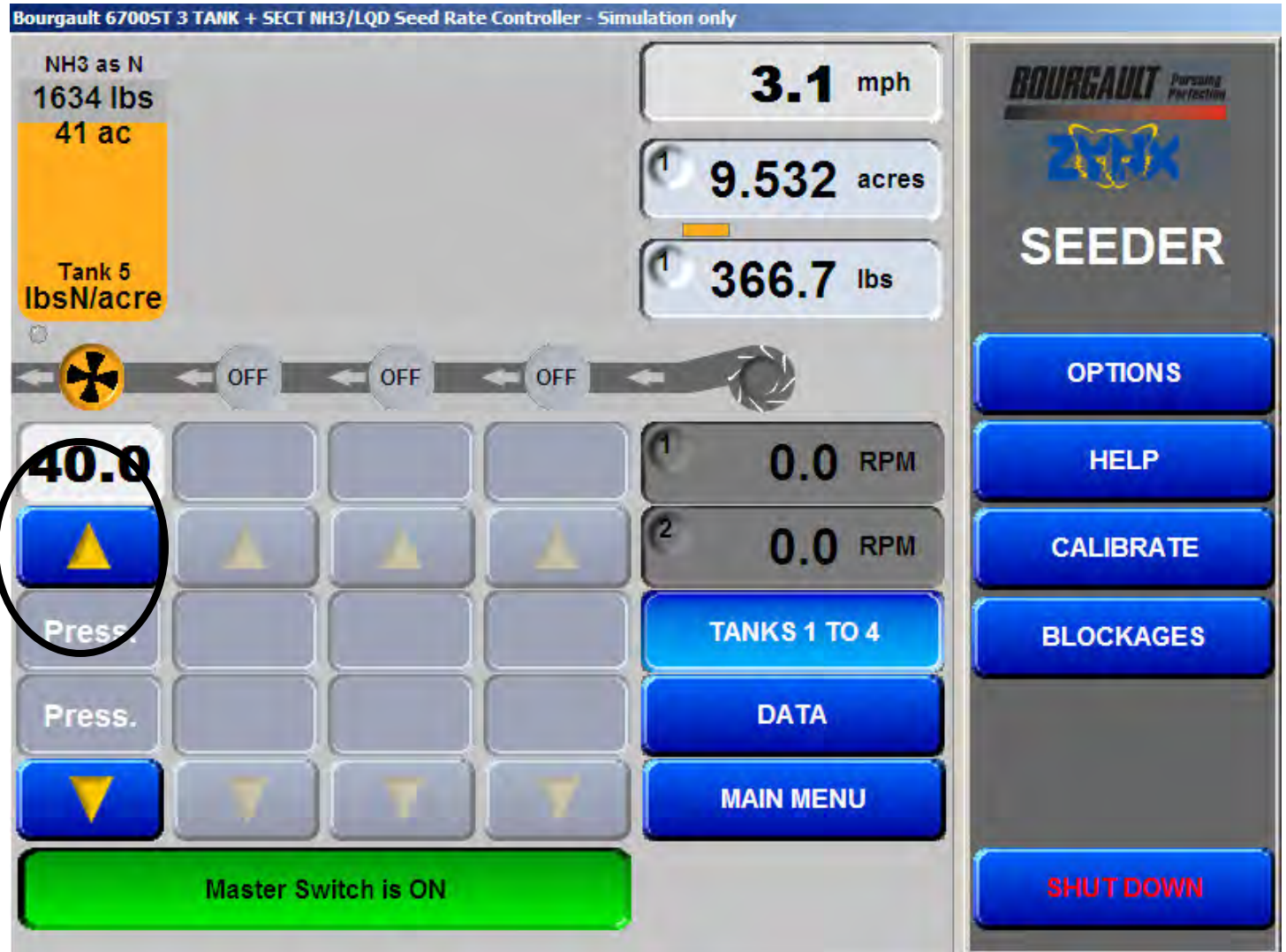
** note Bourgault harness part number 3131-87 is located close to the valves and it changes the pin configuration.

Pin 3 becomes 5 and pin 4 becomes 6 within the 3131-87 harness.

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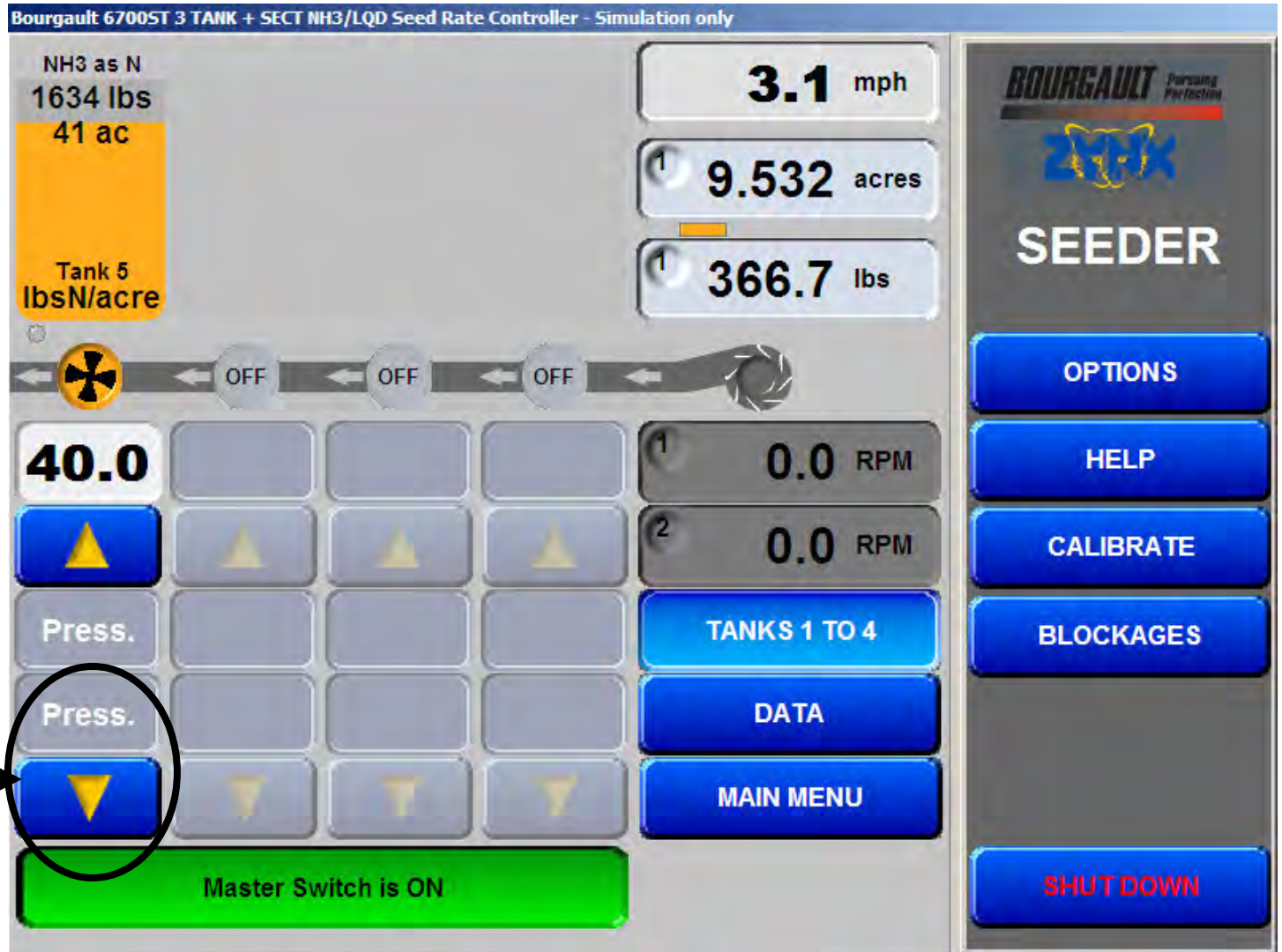


The master and tank clutches must be on as well as a manual ground speed.



Press and hold the up arrow.

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



Press and hold the down arrow.

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