

Section Contents

AUTOTRAC CONTROLLER- RAVEN CALIBRATION 2

- Raven Calibration Procedure2
- Steering Input Device (SID) Calibration.....3
- Wheel Angle Sensor (WAS) Calibration3
- Valve Autocalibration.....4

ADVANCED SETTINGS 5

- Accessing Advanced Settings5
- Health Test5
- Valve Drive Configuration.....5
- WAS/SID Configuration6
- Advanced Tuning.....7

Section Contents

AUTOTRAC CONTROLLER- RAVEN CALIBRATION 2

- Raven Calibration Procedure2
- Steering Input Device (SID) Calibration.....3
- Wheel Angle Sensor (WAS) Calibration3
- Valve Autocalibration.....4

ADVANCED SETTINGS 5

- Accessing Advanced Settings5
- Health Test5
- Valve Drive Configuration.....5
- WAS/SID Configuration6
- Advanced Tuning.....7

John Deere AutoTrac Controller- Raven Calibration






The AutoTrac Controller - Raven calibration procedure must be completed with a passing status prior to using AutoTrac.

Raven Calibration Procedure



- Calibration procedure will require a large, open, level surface to complete the required steps.
- Calibration procedure will require the tractor to be driven slowly at full throttle for approximately 2 to 5 minutes to bring hydraulic fluid to operating temperature before beginning calibration procedure.

IMPORTANT: Read all instructions before calibrating the AutoTrac Controller.

Calibrate AutoTrac Controller without an implement connected to the tractor to avoid damage to the tractor and/or implement.

1. **Menu** 
2. **AutoTrac Controller** 
3. **CAL** 
4. **AutoTrac Home** 
5. Select **Reset Controller to Factory Defaults** button from the Calibration Assistant Main screen 

*NOTE: Once system has been calibrated for the first time, choosing the **Reset Controller to Factory Defaults** option will also reset the Advanced AutoTrac Settings to the factory default values.*

6. Select **Yes**  to proceed or select **No**  to cancel.

John Deere AutoTrac Controller- Raven Calibration






The AutoTrac Controller - Raven calibration procedure must be completed with a passing status prior to using AutoTrac.

Raven Calibration Procedure



- Calibration procedure will require a large, open, level surface to complete the required steps.
- Calibration procedure will require the tractor to be driven slowly at full throttle for approximately 2 to 5 minutes to bring hydraulic fluid to operating temperature before beginning calibration procedure.

IMPORTANT: Read all instructions before calibrating the AutoTrac Controller.

Calibrate AutoTrac Controller without an implement connected to the tractor to avoid damage to the tractor and/or implement.

1. **Menu** 
2. **AutoTrac Controller** 
3. **CAL** 
4. **AutoTrac Home** 
5. Select **Reset Controller to Factory Defaults** button from the Calibration Assistant Main screen 

*NOTE: Once system has been calibrated for the first time, choosing the **Reset Controller to Factory Defaults** option will also reset the Advanced AutoTrac Settings to the factory default values.*

6. Select **Yes**  to proceed or select **No**  to cancel.

7. Select Machine Type from drop down menu



8. **Next**

9. Select Kit Type from drop down menu

*NOTE: If the Kit was installed by the factory, select **Factory**. If it was not installed at the factory, select **Field**.*



10. **Next**

Steering Input Device (SID) Calibration



1. Select **Start** to calibrate the SID

NOTE: Do not touch the steering wheel until instructed.

2. When instructed, turn the steering wheel at a normal rate until full right or left position is reached.



3. **Next**

4. Press and release the resume switch

When the resume switch is pressed, the red **OFF** text will change to green **ON**. When the resume switch is released, the green **ON** text will change back to red **OFF**.

When successful the screen will change to the Wheel Angle Sensor (WAS) Calibration screen.

Wheel Angle Sensor (WAS) Calibration

1. Turn wheels until LEFT stop.



2. Select the **Left Tractor** button

3. Turn wheel back to CENTER with wheels straight.

NOTE: It is recommended to pick a point in the horizon ahead of machine, slowly drive forward while adjusting steering wheel until driving in a straight line.

7. Select Machine Type from drop down menu



8. **Next**

9. Select Kit Type from drop down menu

*NOTE: If the Kit was installed by the factory, select **Factory**. If it was not installed at the factory, select **Field**.*



10. **Next**

Steering Input Device (SID) Calibration



1. Select **Start** to calibrate the SID

NOTE: Do not touch the steering wheel until instructed.

2. When instructed, turn the steering wheel at a normal rate until full right or left position is reached.



3. **Next**

4. Press and release the resume switch

When the resume switch is pressed, the red **OFF** text will change to green **ON**. When the resume switch is released, the green **ON** text will change back to red **OFF**.

When successful the screen will change to the Wheel Angle Sensor (WAS) Calibration screen.

Wheel Angle Sensor (WAS) Calibration



1. Turn wheels until LEFT stop.



2. Select the **Left Tractor** button


3. Turn wheel back to CENTER with wheels straight.



NOTE: It is recommended to pick a point in the horizon ahead of machine, slowly drive forward while adjusting steering wheel until driving in a straight line.


- 4. Select the **Center Tractor** button 
- 5. Turn wheels until RIGHT stop.
- 6. Select the **Right Tractor** button 

NOTE: Screen will automatically advance to the next step of the process (Valve Autocalibration).



Valve Autocalibration

To start the Valve autocalibration process, read and accept the on-screen caution page by selecting the **Accept** button 

- 1. To start autocalibration move machine forward at 1 to 4 mph and press the resume switch.
- 2. When autocalibration is complete the main screen will appear. System State will read the following:
 - o **Ready**
 - Calibration was completed successfully 
 - Tool box icon will appear
 - o **Fault**
 - Calibration has failed 
 - Select **CAL** to recalibrate
 - o **Calibration Started**
 - Calibration was aborted or not completed


If the calibration was successful and experiencing performance issues, select the **CAL** button and then select Recalibrate Hydraulic System. 



- Perform appropriate steps in Valve Autocalibration to recalibrate the valve


- 4. Select the **Center Tractor** button 
- 5. Turn wheels until RIGHT stop.
- 6. Select the **Right Tractor** button 

NOTE: Screen will automatically advance to the next step of the process (Valve Autocalibration).

Valve Autocalibration

To start the Valve autocalibration process, read and accept the on-screen caution page by selecting the **Accept** button 

- 1. To start autocalibration move machine forward at 1 to 4 mph and press the resume switch.
- 2. When autocalibration is complete the main screen will appear. System State will read the following:
 - o **Ready**
 - Calibration was completed successfully 
 - Tool box icon will appear
 - o **Fault**
 - Calibration has failed 
 - Select **CAL** to recalibrate
 - o **Calibration Started**
 - Calibration was aborted or not completed

If the calibration was successful and experiencing performance issues, select the **CAL** button and then select Recalibrate Hydraulic System. 

- Perform appropriate steps in Valve Autocalibration to recalibrate the valve

Advanced Settings

Accessing Advanced Settings

1. **Tool Box**
2. Read and accept the on-screen caution page by selecting the



Accept button



Health Test

1. **Health Test**
2. Refer to local John Deere Dealer for further information.



Valve Drive Configuration

Valve drive values can be modified for more consistency. Lower values are less aggressive.

If left and right values are drastically different, there may be an issue. Recommendation is to recalibrate the system.

1. **Valve Configuration**
2. Minimum Command Left/Right will steer as slow as possible in that direction while button is held.



• **Minimum Command Left**



• **Minimum Command Right**



3. Maximum Command Left/Right will steer as fast as possible in that direction while button is held.

• **Maximum Command Left**



Advanced Settings

Accessing Advanced Settings

1. **Tool Box**
2. Read and accept the on-screen caution page by selecting the



Accept button



Health Test

1. **Health Test**
2. Refer to local John Deere Dealer for further information.



Valve Drive Configuration

Valve drive values can be modified for more consistency. Lower values are less aggressive.

If left and right values are drastically different, there may be an issue. Recommendation is to recalibrate the system.

1. **Valve Configuration**
2. Minimum Command Left/Right will steer as slow as possible in that direction while button is held.



• **Minimum Command Left**




• **Minimum Command Right**




3. Maximum Command Left/Right will steer as fast as possible in that direction while button is held.


• **Maximum Command Left**




• **Maximum Command Right** 


4. Medium Command Left/Right will steer at moderate speed in that direction while button is held.

• **Medium Command Left** 

• **Medium Command Right** 


5. **Home** 

WAS/SID Configuration

1. **WAS/SID Configuration** 


WAS Recalibration

1. Turn wheels until LEFT stop.


2. Select the **Left Tractor** button 


3. Turn wheel back to CENTER with wheels straight.

NOTE: It is recommended to pick a point in the horizon ahead of machine, slowly drive forward while adjusting steering wheel until driving in a straight line.


4. Select the **Center Tractor** button 


5. Turn wheels until RIGHT stop.


6. Select the **Right Tractor** button 

• **Maximum Command Right** 


4. Medium Command Left/Right will steer at moderate speed in that direction while button is held.

• **Medium Command Left** 

• **Medium Command Right** 


5. **Home** 

WAS/SID Configuration

1. **WAS/SID Configuration** 


WAS Recalibration

1. Turn wheels until LEFT stop.


2. Select the **Left Tractor** button 

3. Turn wheel back to CENTER with wheels straight.

NOTE: It is recommended to pick a point in the horizon ahead of machine, slowly drive forward while adjusting steering wheel until driving in a straight line.

4. Select the **Center Tractor** button 

5. Turn wheels until RIGHT stop.

6. Select the **Right Tractor** button 

SID Pressure Readings

SID 1 Pressure displays current steering wheel pressure.

SID 1 Pressure 0

SID 2 Pressure displays current steering wheel pressure (only applicable for systems requiring 2nd SID).

SID 2 Pressure 0

AutoTrac Disengage


The AutoTrac steering disengagement force can be adjusted if AutoTrac is disengaging too easily or not easily enough by selecting the Steering Disengagement buttons.

• Increase Steering Disengagement Force 

• Decrease Steering Disengagement Force 

To exit WAS/SID Configuration select Home button 

Advanced Tuning

Advanced Tuning  will be locked out and requires a password that will be provided as needed.

SID Pressure Readings

SID 1 Pressure displays current steering wheel pressure.

SID 1 Pressure 0

SID 2 Pressure displays current steering wheel pressure (only applicable for systems requiring 2nd SID).


SID 2 Pressure 0

AutoTrac Disengage


The AutoTrac steering disengagement force can be adjusted if AutoTrac is disengaging too easily or not easily enough by selecting the Steering Disengagement buttons.

• Increase Steering Disengagement Force 

• Decrease Steering Disengagement Force 

To exit WAS/SID Configuration select Home button 

Advanced Tuning

Advanced Tuning  will be locked out and requires a password that will be provided as needed.

NOTES

Large empty rectangular box for notes.

NOTES

Large empty rectangular box for notes.

