



DCY

# AutoTrac™ RowSense™ Universal

## OPERATOR'S MANUAL AutoTrac RowSense Universal OMPC21474 ISSUE E9 (ENGLISH)

### CALIFORNIA

#### Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

If this product contains a gasoline engine:

### **WARNING**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.

**John Deere Ag Management Solutions**

North American Version  
PRINTED IN USA



OMPC21474

# Introduction

## Foreword

READ THIS MANUAL carefully to learn how to operate the system correctly. Failure to do so could result in personal injury or equipment damage. This manual and safety signs on your machine may also be available in other languages. (See your John Deere dealer to order.)

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your system and should remain with the system when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction the machine will travel when going forward.

WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their equipment as described in this manual. The GreenStar hardware warranty is explained on the warranty certificate which you should have received from your dealer.

This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the system be abused or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied.

DT31797\_0000234 -19-30JAN09-1/1

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*Original Instruction. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.*

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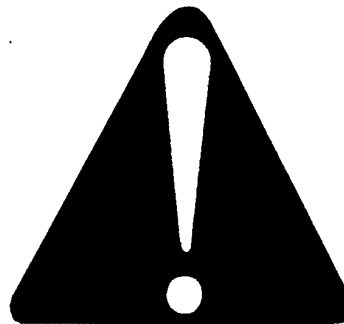


# Safety

## Recognize Safety Information

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



T81389 —UN—07DEC88

DX,ALERT -19-29SEP98-1/1

## Understand Signal Words

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.



TS187 —19—30SEP88

DX,SIGNAL -19-03MAR93-1/1

## Follow Safety Instructions

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.



TS201 —UN—23AUG88

DX,READ -19-03MAR93-1/1

### Handle Global Positioning Receivers and Brackets Safely

Falling while installing or removing a global positioning receiver can cause serious injury. Use a ladder or platform to easily reach a mounting location.

Use sturdy and secure footholds and handholds. Do not install or remove the receiver in wet or icy conditions.

The receiver mast used on implements is heavy and can be awkward to handle. Two people are required when mounting locations are not accessible from the ground or from a service platform. Use proper lifting techniques and wear proper protective equipment.



TS249 —JUN—23AUG88

DX,WW,RECEIVER -19-08JAN08-1/1

### Operate Guidance Systems Safely

Do not use AutoTrac system on roadways.

- Always turn off (Deactivate and Disable) AutoTrac system before entering a roadway.
- Do not attempt to turn on (Activate) AutoTrac system while transporting on a roadway.

The AutoTrac system is intended to aid operator in performing field operations more efficiently. Operator is always responsible for machine path. To prevent injury to operator and bystanders:

- Remain alert and pay attention to surrounding environment.
- Take control of steering wheel when necessary to avoid field hazards, bystanders, equipment, or other obstacles.
- Stop operation if poor visibility conditions impair your ability to operate the machine or identify people or obstacles in machine path.

OUC6050,0000F2B -19-03APR08-1/1

### Read The Guidance Manual

**Before attempting to operate Parallel Tracking or AutoTrac, fully read the Guidance manual to understand components and procedures required for safe and proper operation.**

**The Guidance manual is for both Parallel Tracking and AutoTrac guidance systems applications.**

OUC6050,0000F2C -19-03APR08-1/1

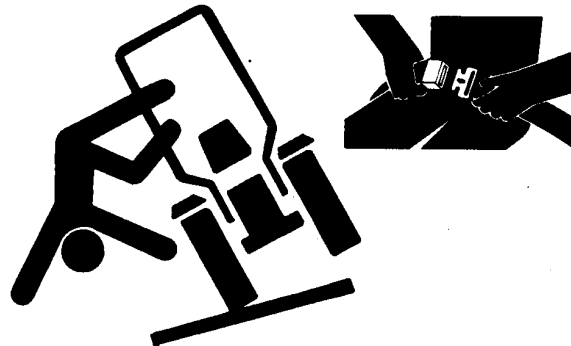
### Use Seat Belt Properly

Use a seat belt when you operate with a roll-over protective structure (ROPS) or cab to minimize chance of injury from an accident such as an overturn.

Do not use a seat belt if operating without a ROPS or cab.

Replace entire seat belt if mounting hardware, buckle, belt, or retractor show signs of damage.

Inspect seat belt and mounting hardware at least once a year. Look for signs of loose hardware or belt damage, such as cuts, fraying, extreme or unusual wear, discoloration, or abrasion. Replace only with replacement parts approved for your machine. See your John Deere dealer.



TS205 —JUN—23AUG88

DX,ROPS1 -19-29OCT07-1/1

# AutoTrac RowSense Universal

## Overview

AutoTrac™ RowSense™ Universal is an enhancement to AutoTrac Universal when harvesting corn. Sensors are mounted on a point of the corn head to detect the cornstalks and send a signal to the existing AutoTrac Universal system to aid in steering the combine keeping it on row. If there is no signal from the row sensors, the

normal GPS guidance still works to steer the combine. AutoTrac RowSense Universal offers four operating modes, Straight Track, Adaptive Curves, AB Curves, and Circle Track, which work with all existing tracking patterns and most standard harvesting patterns.

*AutoTrac is a trademark of Deere & Company  
RowSense is a trademark of Deere & Company*

DT31797.000021A -19-11FEB09-1/1

## Requirements to Operate AutoTrac RowSense Universal

Requirements to operate AutoTrac RowSense Universal:

- Approved combine with one of the following corn heads installed:
  - John Deere 90 Series— 30 in. and 20/22 in. (MY02—07)
  - John Deere 600 Series— 30 in. and 20/22 in.

*StarFire is a trademark of Deere & Company  
GreenStar 2 System is a trademark of Deere & Company*

- Case IH® 2200, 2400, 3200, and 3400s— 30 in.
- Geringhoff— 30 in.
- Row guidance sensor assembly
- AutoTrac Universal with upgraded AutoTrac Universal software for RowSense installed on the combine
- StarFire™ receiver
- GreenStar 2 System™ 2600 Display
- AutoTrac SF1, SF2 or RTK software activation
- AutoTrac RowSense Activation

DT31797.00002DC -19-14APR09-1/1

# AutoTrac Universal Resume Switch

## Resume Switch Setup

For original AutoTrac Universal, service part ATU200 Internal Resume Switch (PF90616), is required to be installed to be compatible with AutoTrac RowSense Universal.

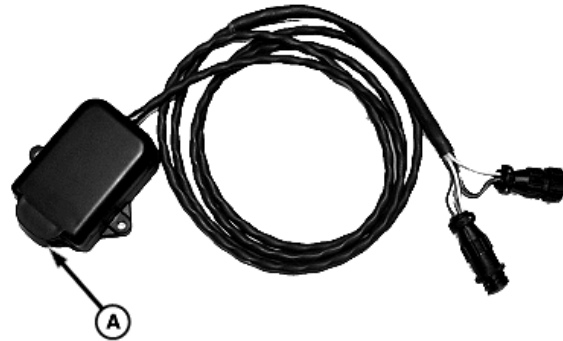
A—AutoTrac Universal  
(ATU200) Resume Switch



PC8700—UN—11AUG05

DT31797,00002DD -19-16APR09-1/2

A—AutoTrac Universal  
Auxiliary Resume Switch  
(PF90453)



PC11610—UN—28JAN09

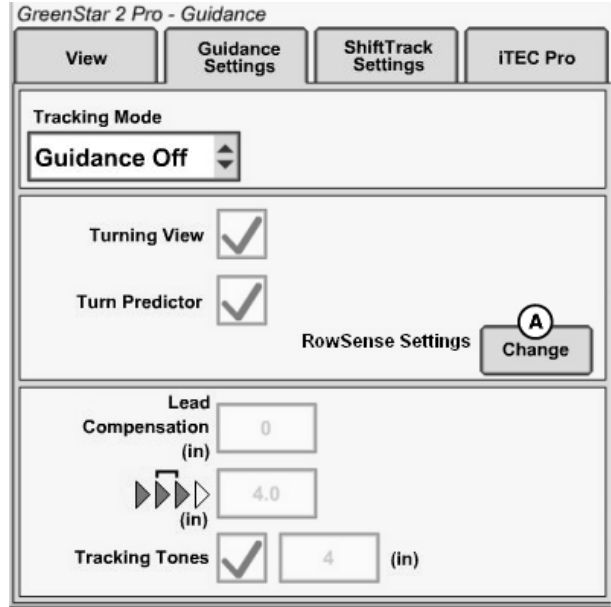
DT31797,00002DD -19-16APR09-2/2

# Enabling the System

## Enable RowSense Universal

Select: MENU>> GREENSTAR2 PRO softkey>> GUIDANCE softkey

1. Select RowSense Settings button (A).



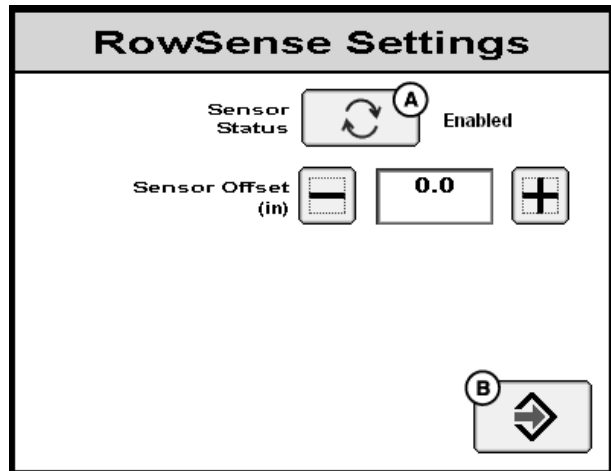
PC11986—UN—20APR09

DT31797,00002D3 -19-20APR09-1/2

2. Toggle the sensor status button (A) to ENABLED.
3. Select accept button (B).

A—Sensor Status Button

B—Accept Button



PC11977—UN—16APR09

DT31797,00002D3 -19-20APR09-2/2

## Row Sensor Offset Setup

**NOTE:** Use in field, running, and when you observe point is not in center of row.

An offset can be added to the row sensors to change the alignment of the stalks entering the corn head.

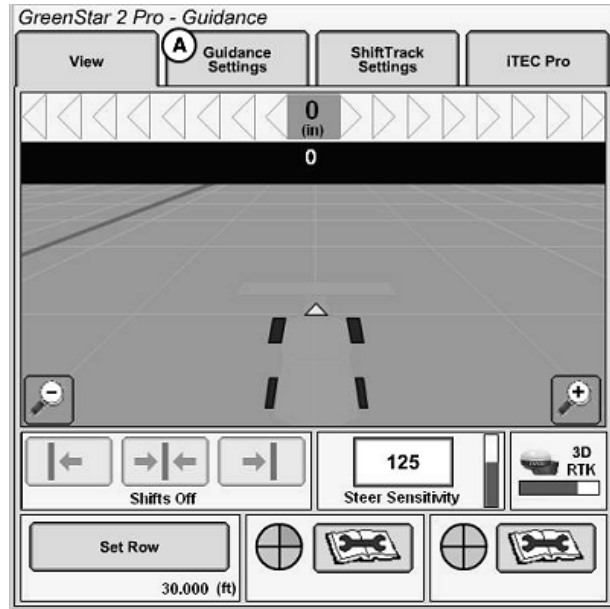
Examples of when changing alignment is needed:

- The planted guess row is in the middle of the corn head, and rows have been pushed over by the head. An offset can be applied to “split the difference” so all rows lean, but not as severely as without the offset.
- Crop divider with a row sensor attached is not aligned with the row. Until mechanical repairs can be made to align the sensor, an offset can be applied to help make up for misalignment.

The sensor offset can be adjusted in increments of 1 in. (up to a maximum of 5 in.) to the left or right of recorded center.

- Entering a negative (—) sensor offset value causes the combine to drive slightly to the left of recorded center. Example: A display showing “Sensor Offset —2” causes the combine to drive 2 in. to the left of recorded center.
- Entering a positive (+) sensor offset value causes the combine to drive slightly to the right of recorded center. Example: A display showing “Sensor Offset +2” causes the combine to drive 2 in. to the right of recorded center.

1. Select guidance settings tab (A).



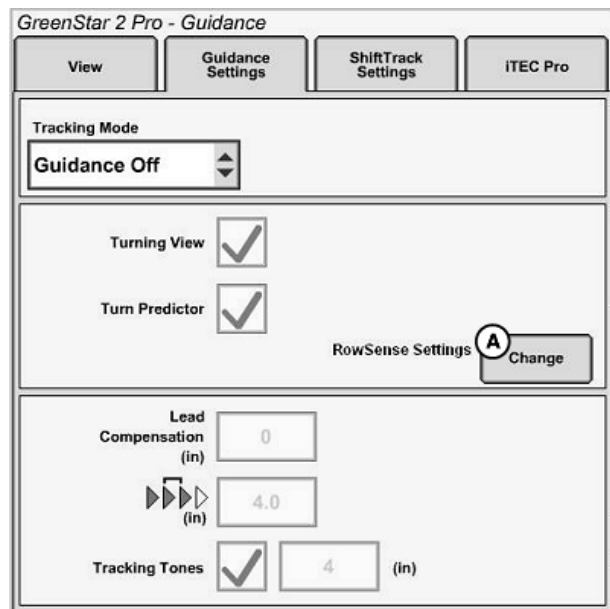
A—Guidance Settings Tab

PC11625 —UN—26JAN09

DT31797,00002D4 -19-17APR09-1/3

2. Select RowSense settings button (A).

A—RowSense Settings Button



PC11626 —UN—28JAN09

Continued on next page

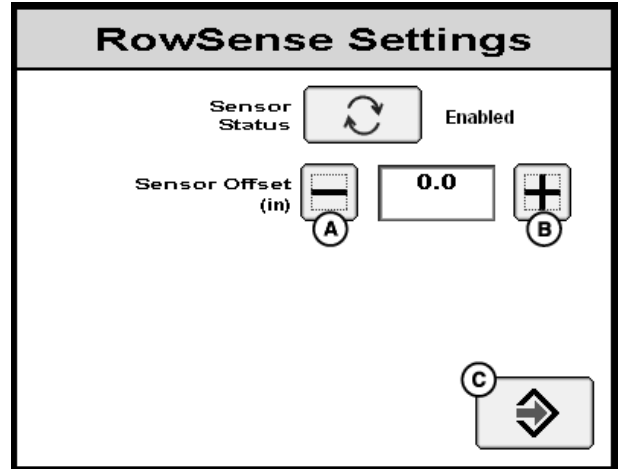
DT31797,00002D4 -19-17APR09-2/3

*NOTE: Ensure Sensor Status is set to Enabled before changing Sensor Offset.*

3. Select the minus (—) button (A) to move the combine to the left of center. Select the plus (+) button (B) to move the combine to the right of center. Make adjustments until point is centered.
4. Navigate back to View tab by selecting the accept button (C). The RowSense Settings screen can remain viewable to make additional adjustments as harvesting continues.

A—Minus (—) Button  
B—Plus (+) Button

C—Accept Button



PC11982—UN—16APR09

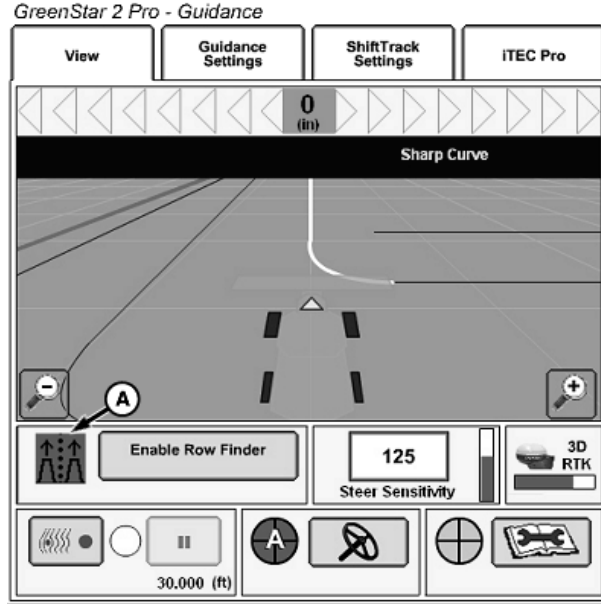
DT31797,00002D4 -19-17APR09-3/3

## Displays and Indicators

The AutoTrac RowSense Universal Icon (A) will now be available on the Guidance Page under the View tab.

When using AutoTrac RowSense Universal, the icon on the screen indicates which sensors are controlling the combine at that time. The icon changes from grey to a colored, animated form indicating which sensors are controlling the combine.

**A**—AutoTrac RowSense Universal Icon



PC10042C —UN—04FEB08



System Installed (Grey Background)

PC10042 —UN—04FEB08



System Active, Operating with both, row sensor and GPS data (Green Background)

PC10042A —UN—04FEB08



Lost GPS, Operating with Row Sensor data only (Yellow Background)

PC10042B —UN—04FEB08



Lost Row Sensor Signal, Operating with GPS only (Orange Background)

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PC11978 —UN—16APR09

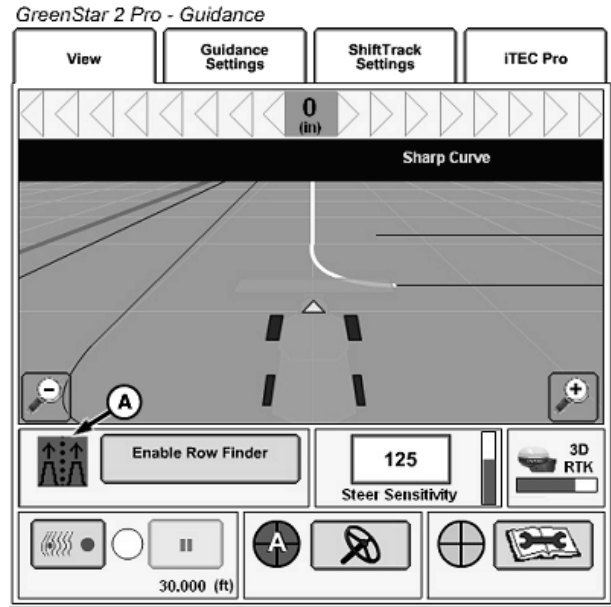
## Engaging the Row Sensors

### Engage Row Sensors

- The row sensor guides the combine whenever it can determine a row position. The operator is notified the row sensor is guiding the combine by the AutoTrac RowSense Universal icon (A) changing to green and showing motion.
- Once the initial path has been set (an AB line or an initial recorded Curve Track Pass), the AutoTrac Universal resume switch can be pressed when the combine is within half the track spacing and at an acceptable angle to the rows. The row sensor guides the combine when activity on the row sensor is detected.

### Making a Headland Turn

Headland turns are accomplished the same as with GPS based AutoTrac. The operator drives to line up with the desired path to follow. Pressing the AutoTrac Universal resume switch causes combine to drive to the guidance path. The row sensor then detects the position of the row and follows it. The line extension feature of AB Curves can be used to extend the adjacent path projection into the headlands.



A—AutoTrac RowSense Universal Icon

PC11978—UN—16APR09

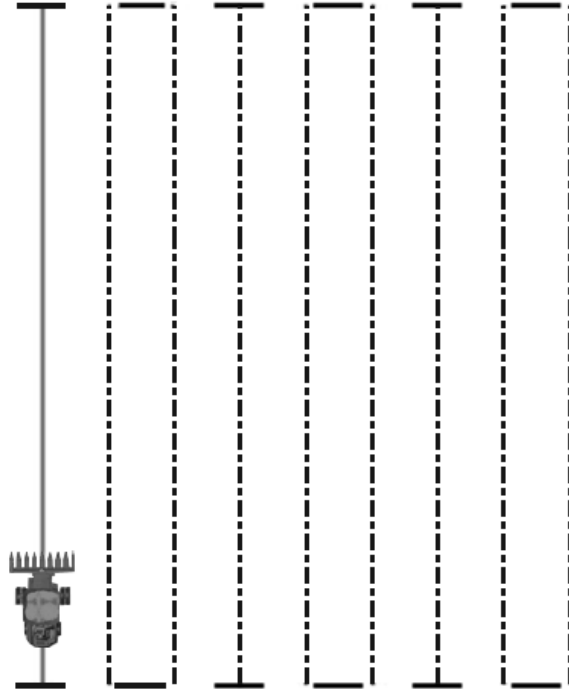
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# Straight Track

## Straight Track

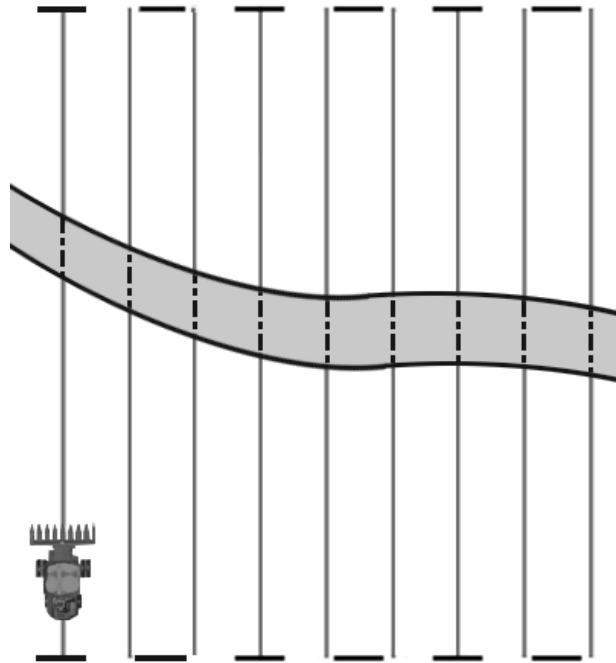
Straight Track is recommended to be used when the rows are straight and do not vary by more than approximately 1 m (3-1/4 ft.). Straight Track projects all lines off of the first path.

If the field is relatively straight and the heading does not change, using Straight Track allows for row entry on adjacent paths. Performance with row entry is improved when the field is planted with AutoTrac Universal. Performance is improved during periods of row dropout in waterways. When in Straight Track mode, the GPS line is automatically centered ensuring the GPS path is properly aligned with the corn rows.



*Straight Track*

PC11596—UN—26JAN09



*Row Dropout*

PC11597—UN—26JAN09

DT31797.00002DE -19-16APR09-1/1

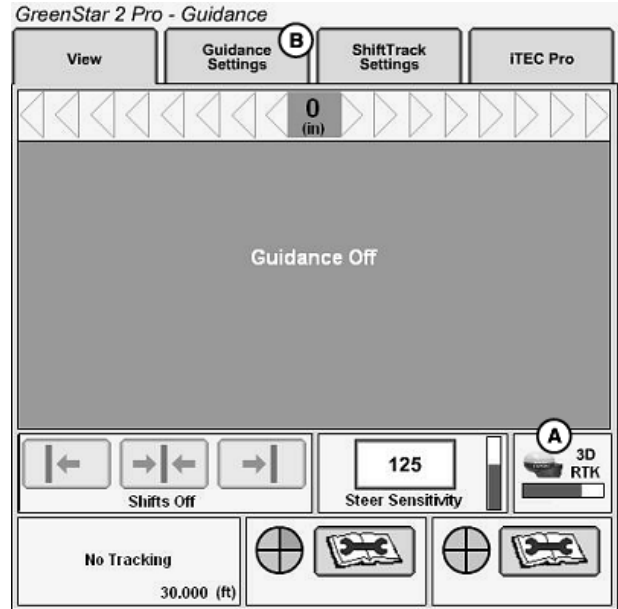
### Set Up Straight Track

Select: MENU>> GREENSTAR2 PRO softkey>> GUIDANCE softkey

Before starting, ensure an SF1, SF2, or RTK signal is present by viewing the GPS receiver icon (A) on the View page.

1. Select guidance settings tab (B).

A—GPS Receiver Icon      B—Guidance Settings Tab

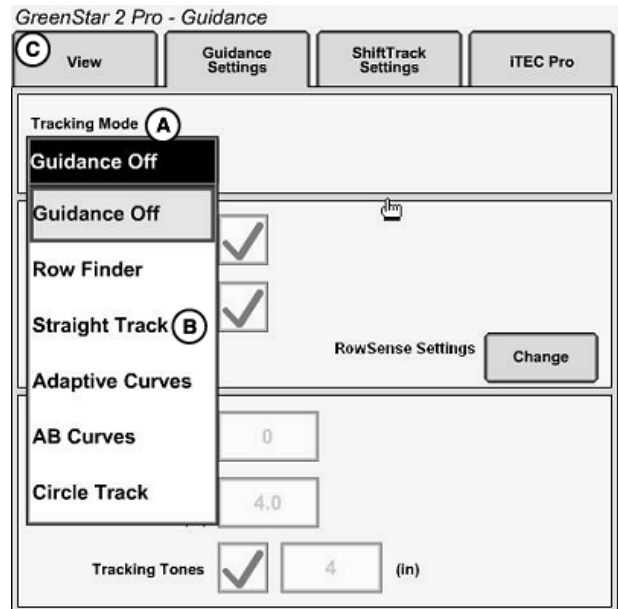


PC11931 —UN—08APR09

DT31797,00002D5 -19-04MAY09-1/7

2. Select the tracking mode drop-down menu (A).
3. Select straight track (B).
4. Select view tab (C).

A—Tracking Mode Drop-down Menu  
B—Straight Track      C—View Tab



PC11615 —UN—28JAN09

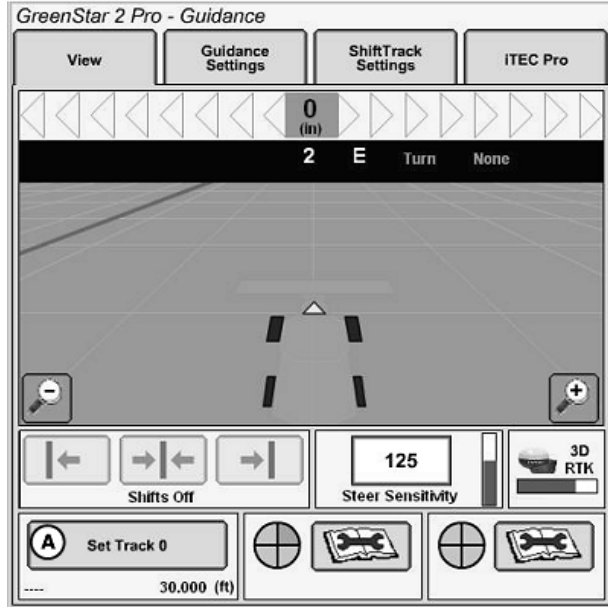
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## Straight Track

5. Select set track 0 button (A).

**A—Set Track 0 Button**



PC11614 —UN—26JAN09

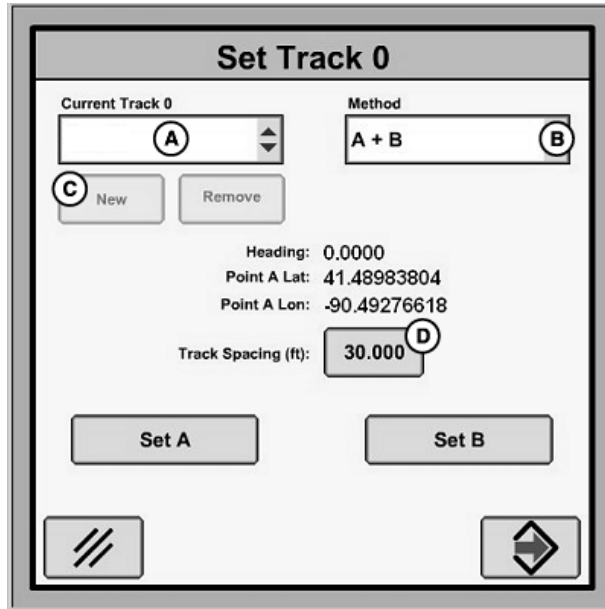
DT31797,00002D5 -19-04MAY09-3/7

6. Select a track name from the current track 0 drop-down menu (A). If no name exists, create one by selecting the new button (C).

7. Select track method (A+B) from the method drop-down menu (B).

8. Select track spacing button (D).

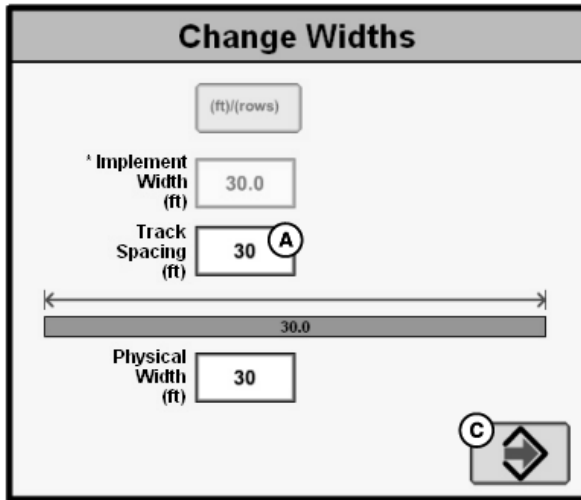
**A—Current Track 0 Drop-down Menu**    **C—New Button**  
**B—Method Drop-down Menu**         **D—Track Spacing Button**



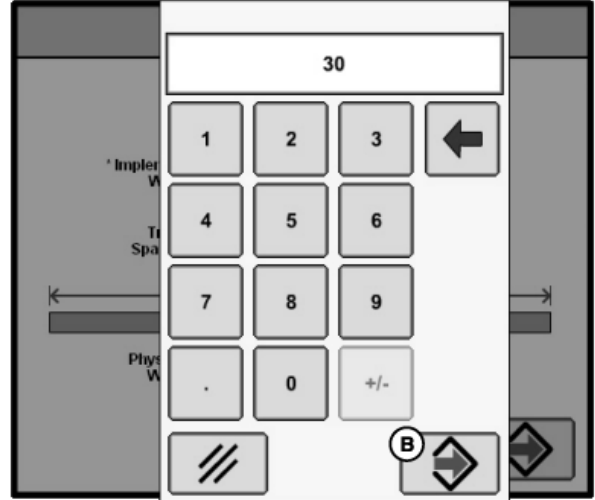
PC11657 —UN—20APR09

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DT31797,00002D5 -19-04MAY09-4/7



PC11926—UN—20APR09



PC12025—UN—04MAY09

A—Track Spacing Button

B—Accept Button

C—Accept Button

9. Select track spacing button (A).
10. Enter track spacing distance using the keypad.
11. Select accept button (B).

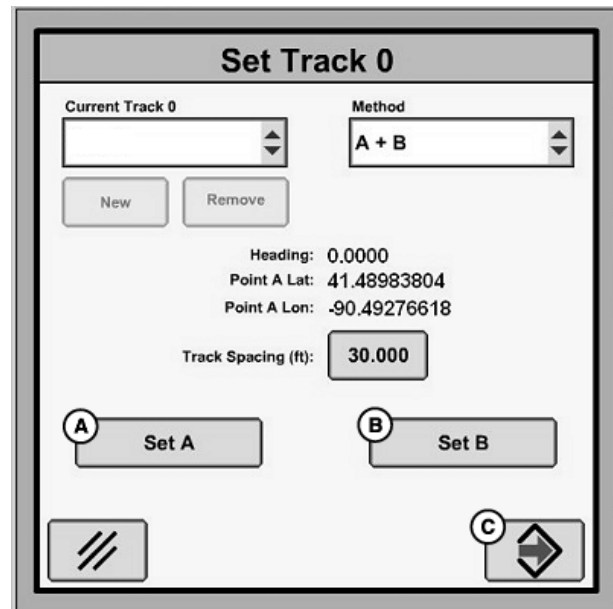
12. Select accept button (C).

DT31797,00002D5 -19-04MAY09-5/7

13. Drive to the start of the track and select Set A button (A).
14. Drive to the end of the track and select Set B button (B). A line projecting across the field is created on the View page.
15. Select accept button (C) to return to View page.

A—Set A Button  
B—Set B Button

C—Accept Button



PC11986—UN—20APR09

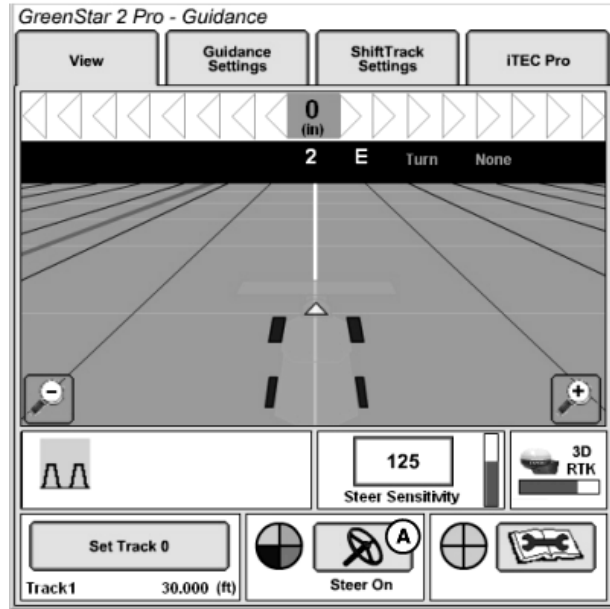
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DT31797,00002D5 -19-04MAY09-6/7

## Straight Track

16. Select steering button (A) to enable AutoTrac Universal.
17. Press the AutoTrac Universal resume switch to fully engage system.

**A—Steering Button**



PC11921 — UN — 07APR09

DT31797,00002D5 -19-04MAY09-7/7

# Adaptive Curves

## Adaptive Curves



PC10399 —UN—04FEB08

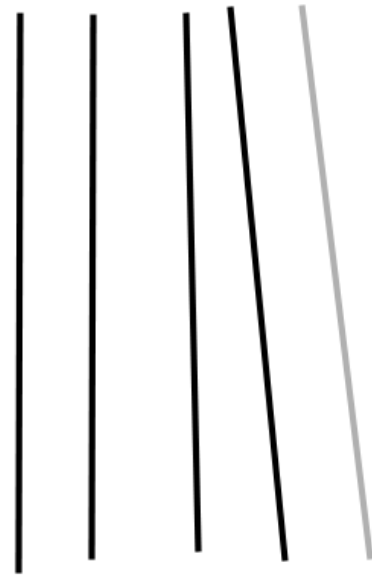
*Path changes while going through the field*

Adaptive curves can be used in all fields, but is highly recommended when the path changes while going through the field, heading changes significantly, or the curve is U-shaped. Adaptive Curves has an added feature making RowFinder able to be selected with a toggle button. The row sensors can be used to steer the combine whenever they are engaged on a row.

Adaptive Curves are projected to the adjacent pass, and have the advantage of handling different curve shapes, while potential guess row errors do not get accumulated throughout the field.

If multiple combines are in the field, Adaptive Curves does not allow skipping a pass. In this scenario, Adaptive Curves may only work if the track spacing of the other combine(s) is added to its own. Example: A 12 row head is following an 8 row head on 30 inch rows while harvesting together in the same field, each combine would need a track spacing of 20 rows (50 feet).

The use of adaptive curves is recommended when the path frequently changes throughout the field. Adaptive Curves only projects the next path over.



PC10400 —UN—04FEB08

*Heading changes through the field*



PC11000 —UN—04FEB08

*Curves are U-shaped*

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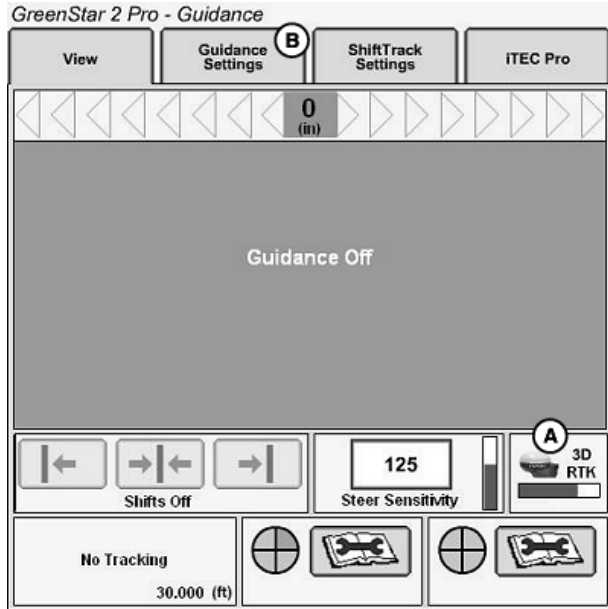
### Set Up Adaptive Curves

Select: MENU>> GREENSTAR2 PRO softkey>> GUIDANCE softkey

Before starting, ensure an SF1, SF2, or RTK signal is present by viewing the GPS receiver icon (A) on the View page.

1. Select guidance settings tab (B).

A—GPS Receiver Icon      B—Guidance Settings Tab



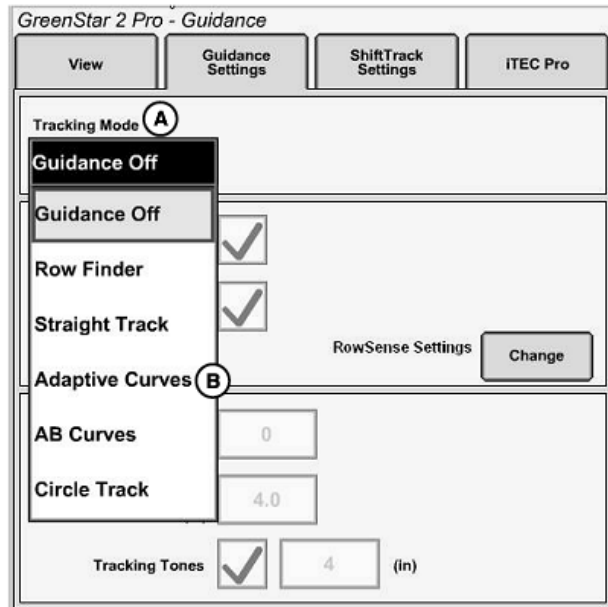
PC11931 — UN — 06APR09

DT31797,00002D6 -19-04MAY09-1/7

*NOTE: When in AutoTrac mode, recording is stopped when steering wheel is turned. When in documentation mode, recording is stopped when header is raised.*

2. Select the tracking mode drop-down menu (A).
3. Select adaptive curves (B).

A—Tracking Mode Drop-down Menu      B—Adaptive Curves Menu



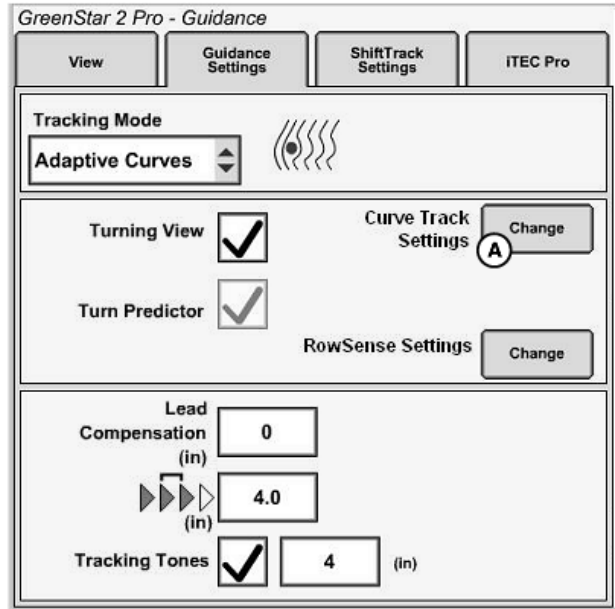
PC11984 — UN — 17APR09

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4. Select curve track settings button (A).

**A—Curve Track Settings Button**

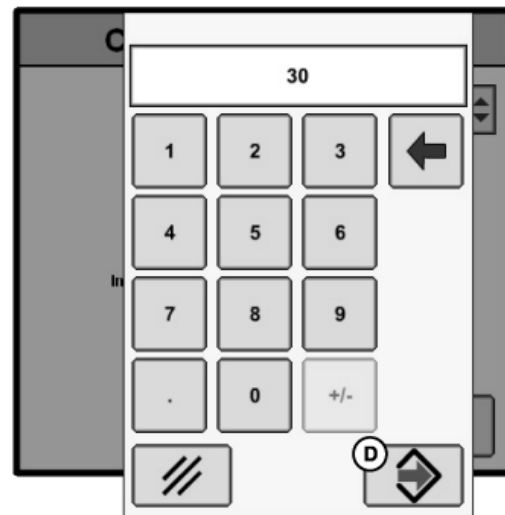
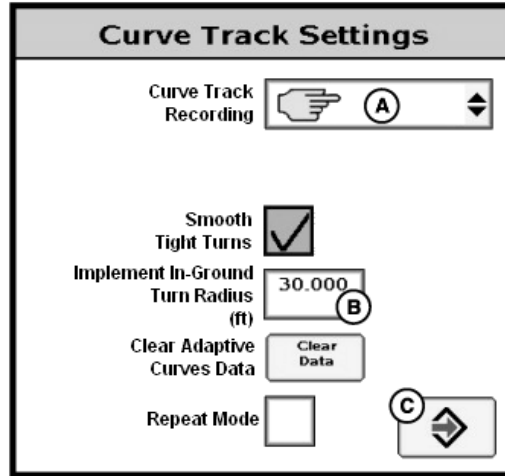


PC11617 —UN—20APR09

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5. Select the drop-down menu of curve track recording button (A).
6. The Adaptive Curve mode is changed using the drop-down menu by selecting the desired mode from the following list of Adaptive Curve Mode Options:
  - **AutoTrac** — If the operator wants improved row entry for the adjacent pass only, tie Adaptive recording to AutoTrac. This mode is recommended only if the field is relatively straight with no extreme curves and AutoTrac Universal is rarely deactivated due to manual steering or loss of GPS.
  - **Documentation (Only valid for GreenStar-ready combines)** — Tie Adaptive Curves to Documentation. This mode allows the operator to take control of the steering wheel during operation and continue to record the path they are on. Line extensions are available on the next pass, however, they are not useful in row entry because of the delay in picking up the head on the end rows. Performance is marginal in periods of row dropout.
  - **Manual** — The operator can tie Adaptive recording to Manual recording. If the operator does not turn off recording, it can lead to issues such as incorrect curvature projection. Example: If the operator pulls out of the row to unload and does not press pause, the path is recorded. When the operator drives down the adjacent path, the combine is pulled slightly off row because the projected line is off.
7. Select implement in-ground turn radius button (B).
8. Enter radius distance on keypad.
9. Select accept button (D).
10. To record an adaptive curve:
  - In Sensor Only option, see Record Adaptive Curve in Sensor Only Mode.
  - In Normal option, see Record Adaptive Curve in Normal Mode.
11. Select accept button (C).



- A—Curve Track Recording Button
- B—Implement In-Ground Turn Radius Button
- C—Accept Button
- D—Accept Button

PC11929 —UN—20APR09

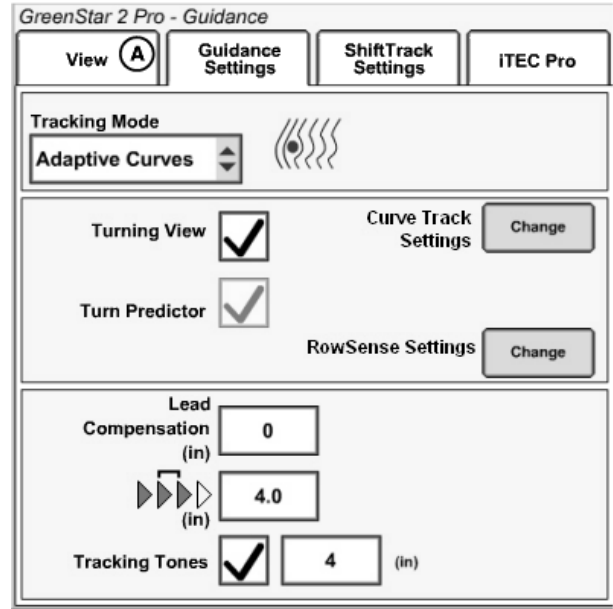
PC12026 —UN—04MAY09

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12. Select view tab (A).

A—View Tab



PC11985 —UN—20APR09

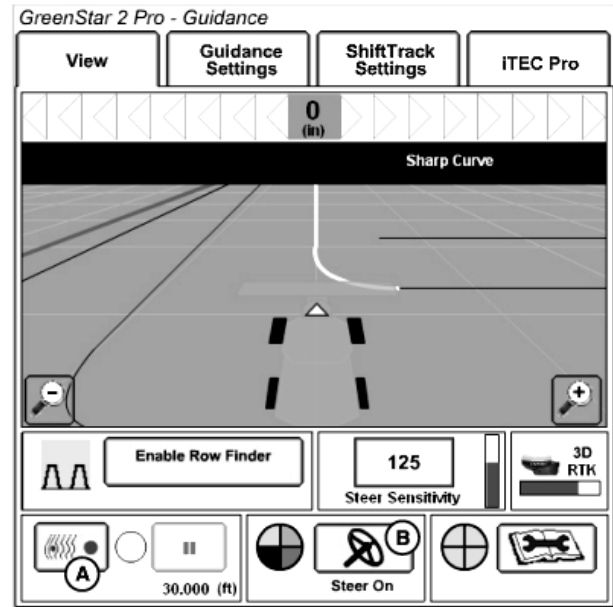
DT31797,00002D6 -19-04MAY09-5/7

**Record Adaptive Curve in Sensor Only Mode**

*NOTE: If recording is tied to AutoTrac Universal, recording and operating in Sensor Only mode begins when the AutoTrac Universal resume switch is activated. With recording tied to documentation or manual mode, recording must be activated before pressing the resume switch. Once initial pass is completed, the next pass is projected, and the combine is guided with GPS and the row sensor.*

1. Ensure AutoTrac Universal is turned on via GreenStar2 Pro.
2. Ensure that row sensor is engaging crop.
3. Select adaptive curves record button (A).
4. Select steering button (B).
5. Press the AutoTrac Universal resume switch to fully engage system.

A—Adaptive Curves Record Button      B—Steering Button



PC11979 —UN—16APR09

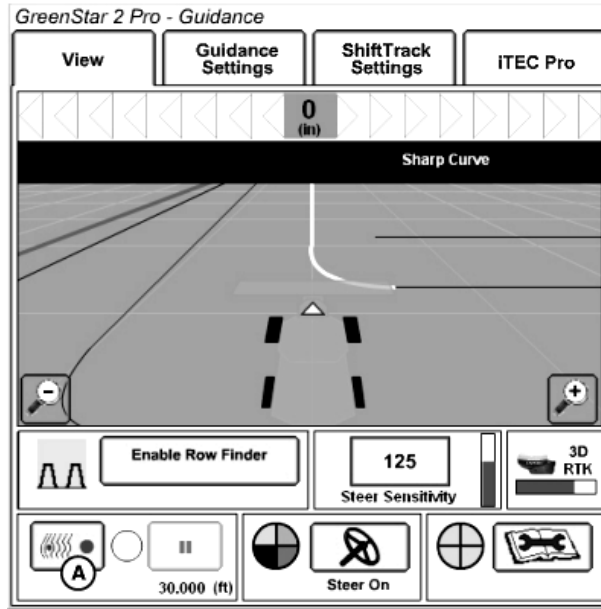
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DT31797,00002D6 -19-04MAY09-6/7

**Record Adaptive Curve in Normal Mode**

1. Select adaptive curves record button (A) to begin recording a path.
2. Select steering button (B) to Steering On.
3. Drive a path through the field. After driving through the first path, a projection of only the next path will be created.
4. Press the AutoTrac Universal resume switch to fully engage system.

**A—Adaptive Curves Record Button**



PC12027 — UN—04MAY09

DT31797,00002D6 -19-04MAY09-7/7

**RowFinder**

RowFinder can be used when operating in Adaptive Curves mode to find a row that is two or more passes away.

*NOTE: The recorded position and heading is discarded if AutoTrac Universal is not disengaged within 3 minutes of first toggling the enable/disable RowFinder button (A) to enable.*

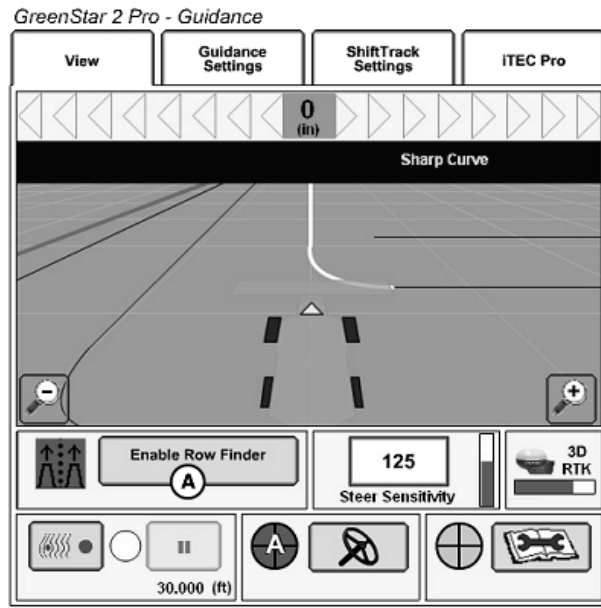
**Approaching the headland in Adaptive Curves mode:**

- Select enable/disable RowFinder button (A). This will record the vehicle position and heading.
- At the end of the row, ensure that recording is turned off. The display projects parallel rows.
- Proceed in the headland toward the desired row and enter the row.
- Select enable/disable RowFinder button to change the system back to Adaptive Curves mode.

**Before harvesting:**

- Ensure that recording is activated.
- Press the AutoTrac Universal resume switch.
- AutoTrac Universal will guide the combine down the row and a new first path is recorded.

**A—Enable/Disable RowFinder Button**



PC11983 — UN—16APR09

DT31797,00002E1 -19-16APR09-1/1

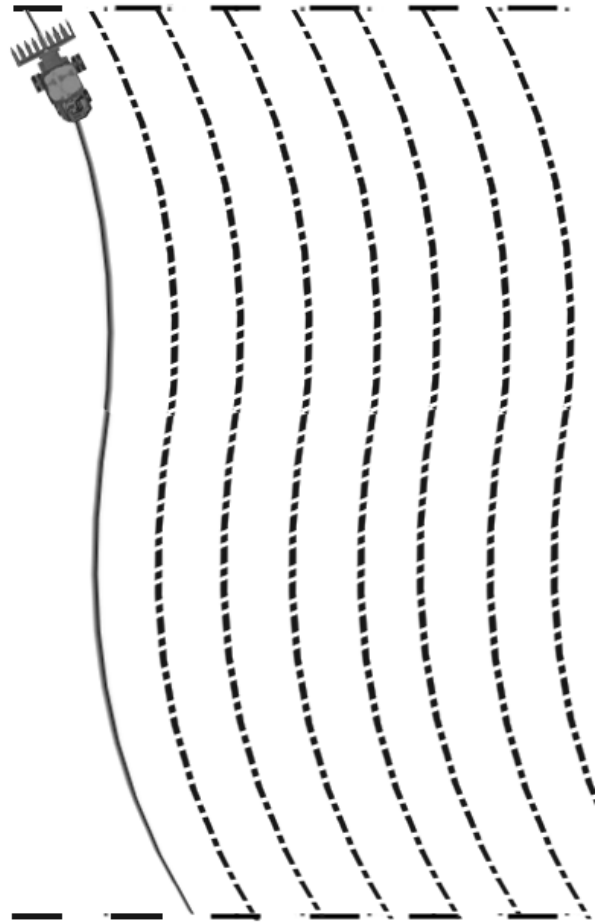
# AB Curves

## AB Curves

The use of AB Curves is recommended when there is a continuous curve throughout the field. This allows for row entry on adjacent paths. Performance is improved when the field is planted with AutoTrac Universal. AB Curves improves performance through periods of row dropout.

AB Curves have the advantage of projecting a curved track all the way across a field as parallel lines, but the shape of the curve is the same on each pass.

When in AB Curves mode, the GPS curve is automatically centered ensuring the GPS path is properly aligned with the corn rows. **This feature is not available in adaptive curves.**



PC10393—JUN—08JAN08

*AB Curves projects all lines off of the first pass*

DT31797.0000224 -19-29JAN09-1/1

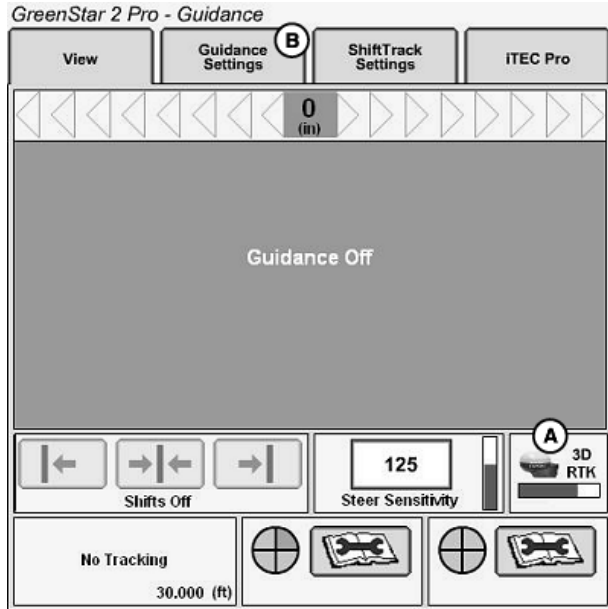
### Set Up AB Curves

Select: MENU>> GREENSTAR2 PRO softkey>> GUIDANCE softkey

Before starting, ensure an SF1, SF2, or RTK signal is present by viewing the GPS receiver icon (A) on the View page.

1. Select guidance settings tab (B).

**A**—GPS Receiver Icon      **B**—Guidance Settings Tab

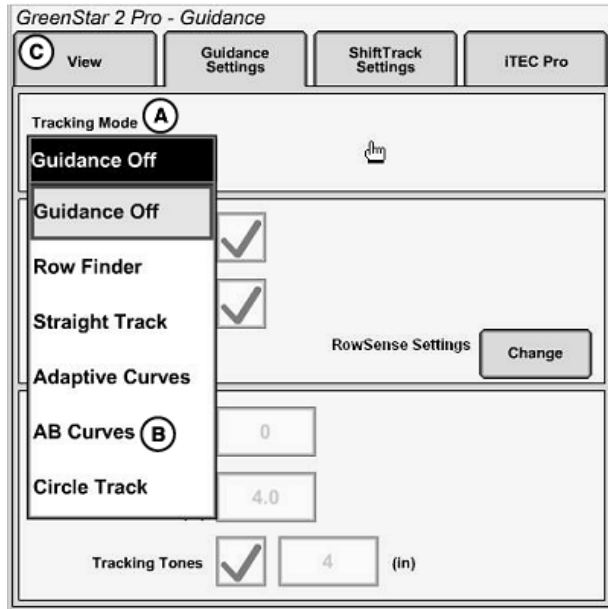


PC11931 — JUN—06APR09

DT31797,00002D7 -19-04MAY09-1/7

2. Select tracking mode drop-down menu (A).
3. Select AB curves (B).
4. Select view tab (C).

**A**—Tracking Mode Drop-down Menu      **C**—View Tab  
**B**—AB Curves



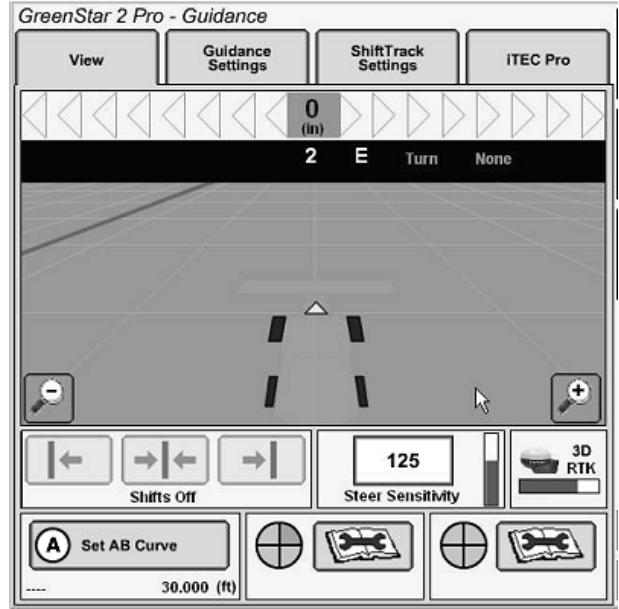
PC11619 — JUN—28JAN09

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DT31797,00002D7 -19-04MAY09-2/7

5. Select set AB curve button (A).

A—Set AB Curve Button



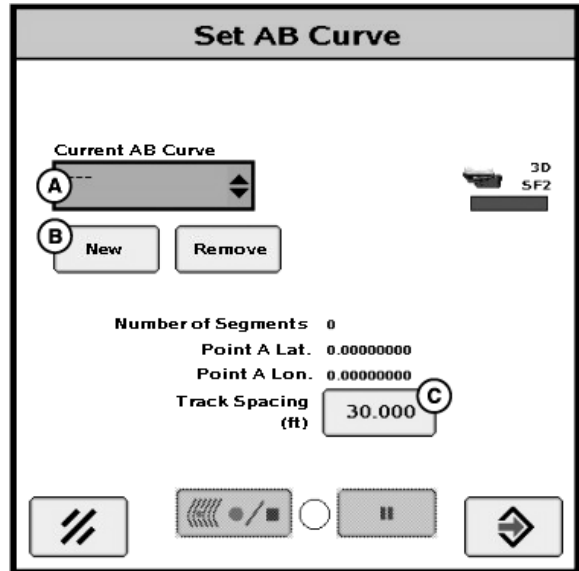
DT31797,00002D7 -19-04MAY09-3/7

6. Select a name from the current AB curve drop-down menu (A). If no name exists, create one by selecting the new button (B).

7. Select track spacing button (C).

A—Current AB Curve Drop-down Menu  
B—New Button

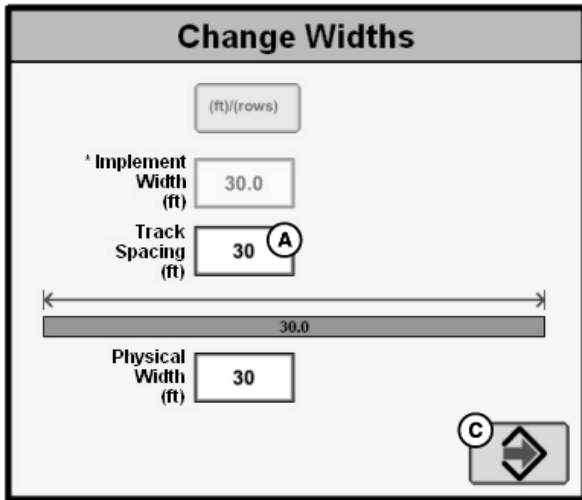
C—Track Spacing Button



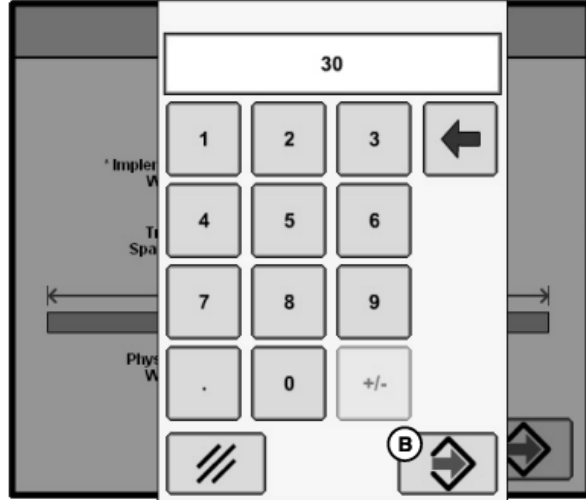
PC11980 —UN—16APR09

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DT31797,00002D7 -19-04MAY09-4/7



PC11926—UN—20APR09



PC12025—UN—04MAY09

A—Track Spacing Button

B—Accept Button

C—Accept Button

- 8. Select track spacing button (A).
- 9. Enter track spacing distance using the keypad.
- 10. Select accept button (B).

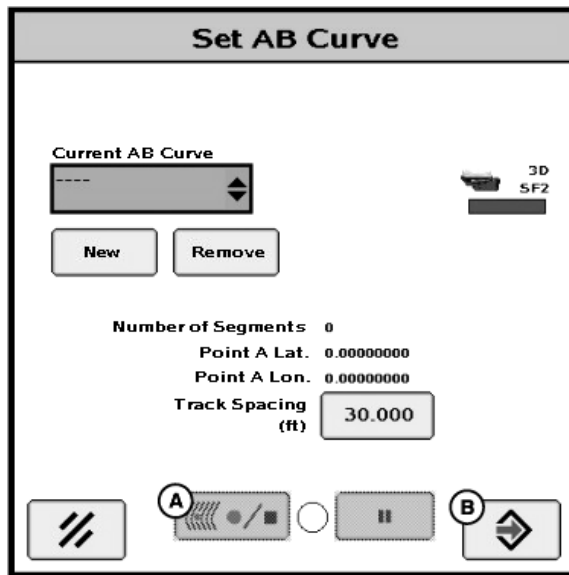
- 11. Select accept button (C).

DT31797,00002D7 -19-04MAY09-5/7

- 12. Select the record/stop button (A) at the beginning of the first pass.
- 13. Select the accept button (B) at the end of the first pass. Curves are projected across the field.

A—Record/Stop Button

B—Accept Button



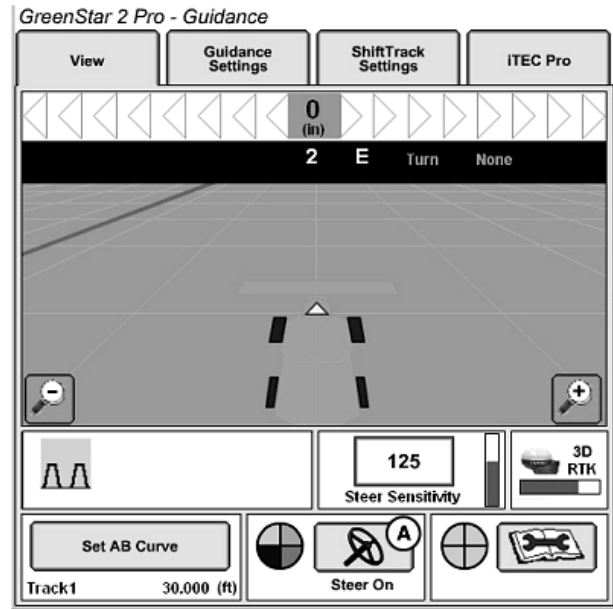
PC11981—UN—16APR09

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DT31797,00002D7 -19-04MAY09-6/7

- 14. Select steering button (A).
- 15. Press the AutoTrac Universal resume switch to fully engage system.

**A—Steering Button**



PC11923 —UN—07APR09

DT31797,00002D7 -19-04MAY09-7/7

# Circle Track

## Circle Track

The use of Circle Track is recommended when the field is planted in a center pivot field. If the rows to be harvested are in circles, Circle Track should be used. This allows input from the GPS curvature to be applied to the row sensors.



Circle Track

PC10853 —UN—31JAN08

DT31797,000021D -19-29JAN09-1/1

## Set Up Circle Track

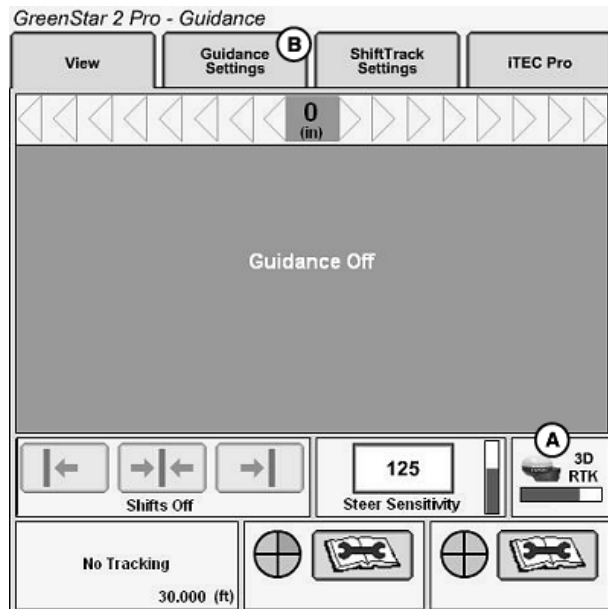
Select: MENU>> GREENSTAR2 PRO softkey>> GUIDANCE softkey

Before starting, ensure an SF1, SF2, or RTK signal is present by viewing the GPS receiver icon (A) on the View page.

1. Select guidance settings tab (B).

A—GPS Receiver Icon

B—Guidance Settings Tab



PC11931 —UN—08APR09

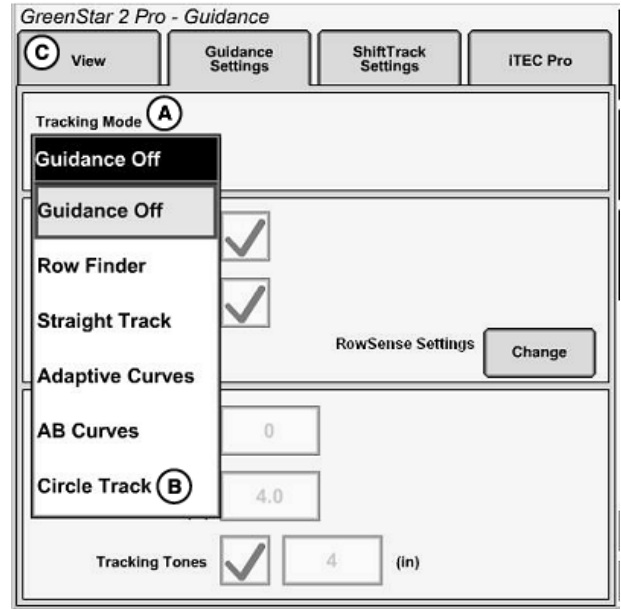
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DT31797,00002D8 -19-04MAY09-1/7

## Circle Track

2. Select tracking mode drop-down menu (A).
3. Select circle track (B)
4. Select view tab (C).

A—Tracking Mode Drop-down Menu  
 B—Circle Track  
 C—View Tab

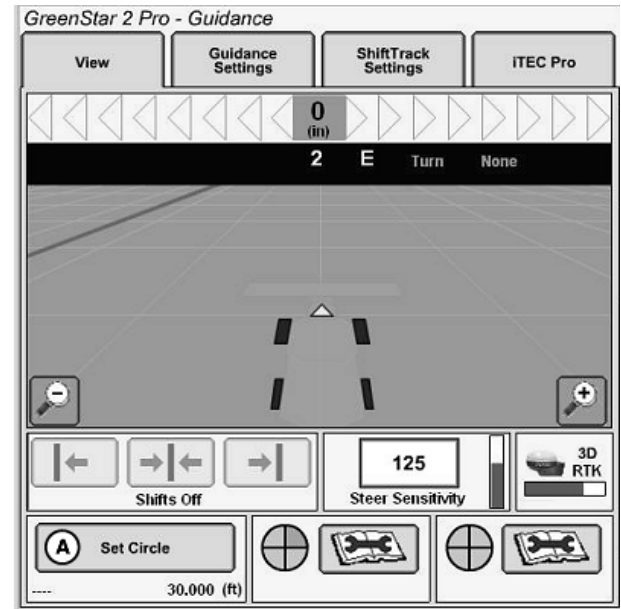


PC11621 —UN—28JAN09

DT31797,00002D8 -19-04MAY09-2/7

5. Select set circle track button (A).

A—Set Circle Track Button



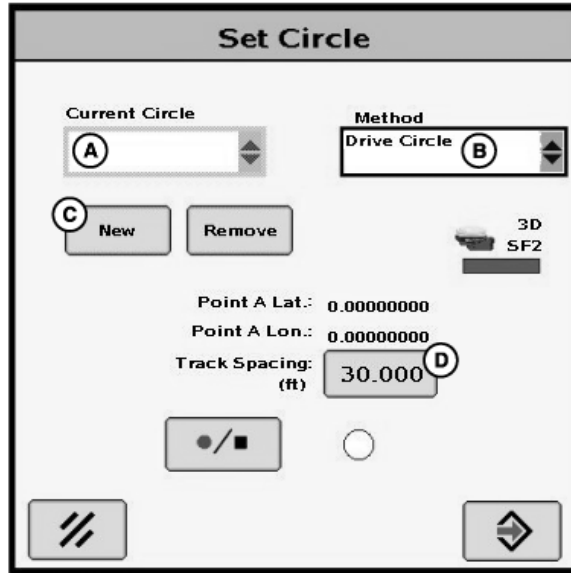
PC11622 —UN—28JAN09

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DT31797,00002D8 -19-04MAY09-3/7

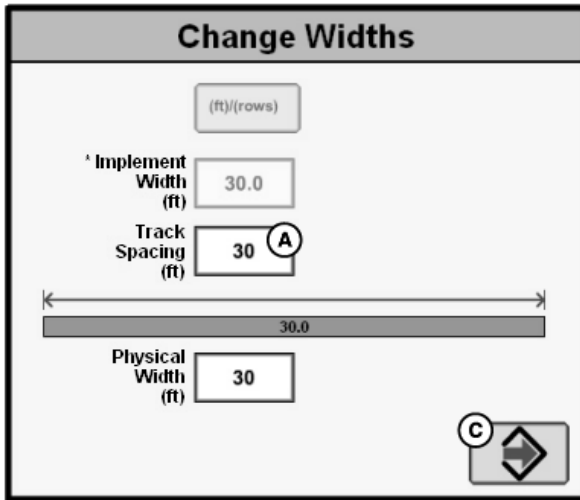
6. Select a circle name from the current circle drop-down menu (A). If no name exists, create one by selecting the new button (C).
7. Select track spacing button (D).

A—Current Circle Drop-down Menu  
 B—Method Drop-down Menu  
 C—New Button  
 D—Track Spacing Button

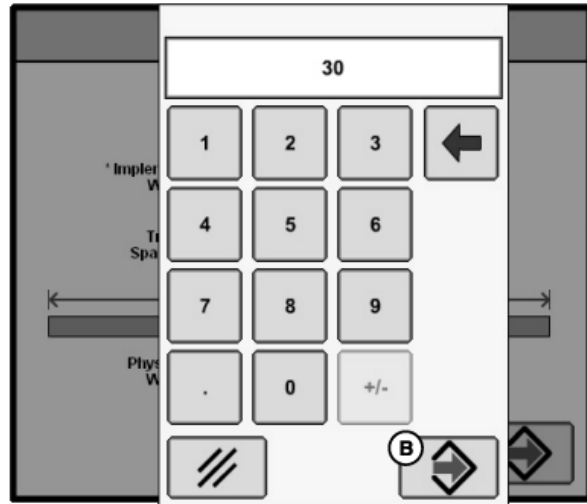


PC12024 —UN—04MAY09

DT31797,00002D8 -19-04MAY09-4/7



PC11926 —UN—20APR09



PC12025 —UN—04MAY09

A—Track Spacing Button      B—Accept Button      C—Accept Button

8. Select track spacing button (A).
9. Enter track spacing distance using the keypad.
10. Select accept button (B).
11. Select accept button (C).

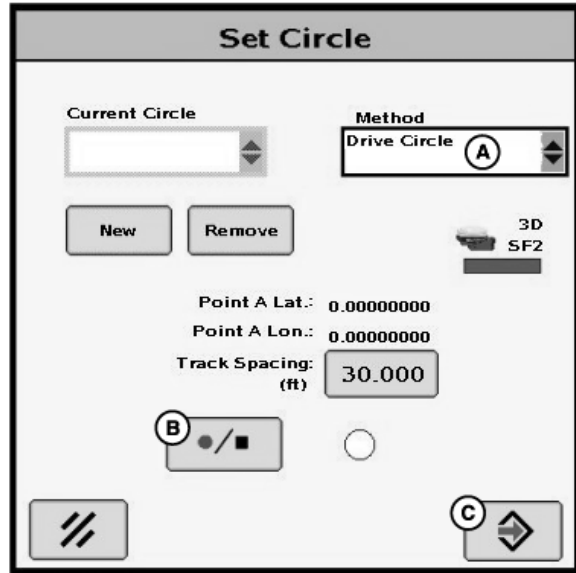
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DT31797,00002D8 -19-04MAY09-5/7

Circle Track

12. Select the drive method from the method drop-down menu (A).
13. Select the record button (B) at the start of the first pass.
14. Select record button (B) at the end of the first pass to stop recording.
15. Select the accept button (C) after driving the first circle. A circle is projected in the field on the View page.

A—Method Drop-down Menu    C—Accept Button  
 B—Record Button

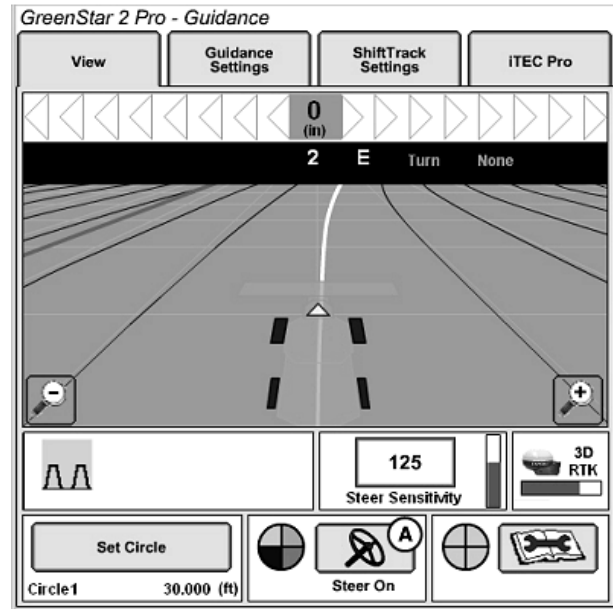


PC12023 —UN—04MAY09

DT31797,00002D8 -19-04MAY09-6/7

16. Select steering button (A).
17. Press the AutoTrac Universal resume switch to fully engage system.

A—Steering Button



PC11924 —UN—07APR09

DT31797,00002D8 -19-04MAY09-7/7

# Cleaning Row Sensors

## Cleaning Row Sensors

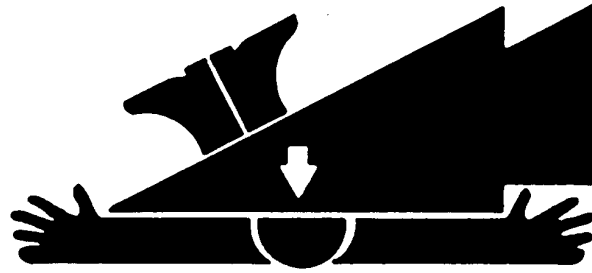
**⚠ CAUTION:** Shut OFF engine, set parking brake and remove key.

Raise header and lower safety stop (A) onto hydraulic cylinder rod.

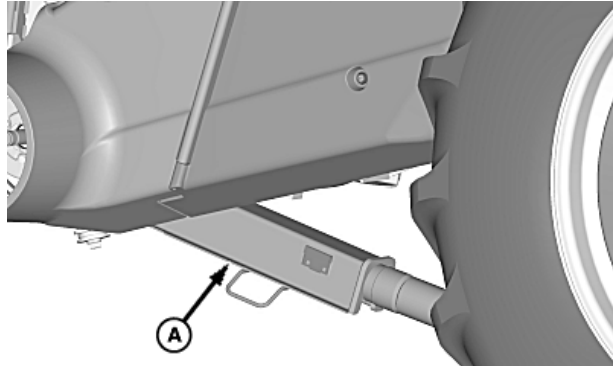
Row Sensors should be checked daily to see if cleaning is necessary. If material has accumulated on sensors it may prevent free movement and affect performance. To clean row sensors, remove debris from sensors and surrounding area. Check that sensors move freely without obstruction.

Annually check sensor components for excessive wear and damage. Replace as necessary.

**A—Safety Stop**



TS696 —UN—21SEP89



H90891 —UN—26FEB08

DT31797,0000272 -19-11FEB09-1/1

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# John Deere Service Literature Available

## Technical Information

Technical information can be purchased from John Deere. Some of this information is available in electronic media, such as CD-ROM disks, and in printed form. There are many ways to order. Contact your John Deere dealer. Call **1-800-522-7448** to order using a credit card. Search online from <http://www.JohnDeere.com>. Please have available the model number, serial number, and name of the product.

Available information includes:

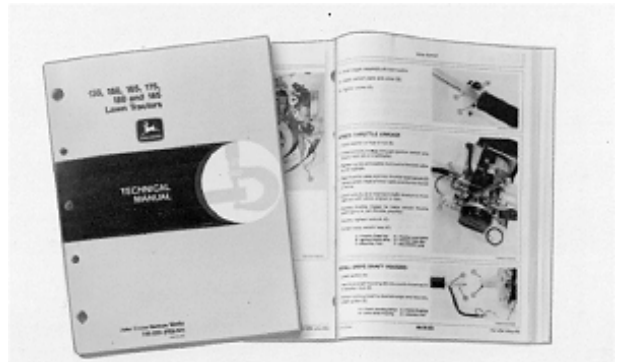
- **PARTS CATALOGS** list service parts available for your machine with exploded view illustrations to help you identify the correct parts. It is also useful in assembling and disassembling.
- **OPERATOR'S MANUALS** providing safety, operating, maintenance, and service information. These manuals and safety signs on your machine may also be available in other languages.
- **OPERATOR'S VIDEO TAPES** showing highlights of safety, operating, maintenance, and service information. These tapes may be available in multiple languages and formats.
- **TECHNICAL MANUALS** outlining service information for your machine. Included are specifications, illustrated assembly and disassembly procedures, hydraulic oil flow diagrams, and wiring diagrams. Some products have separate manuals for repair and diagnostic information. Some components, such as engines, are available in separate component technical manuals
- **FUNDAMENTAL MANUALS** detailing basic information regardless of manufacturer:
  - Agricultural Primer series covers technology in farming and ranching, featuring subjects like computers, the Internet, and precision farming.
  - Farm Business Management series examines "real-world" problems and offers practical solutions in the areas of marketing, financing, equipment selection, and compliance.
  - Fundamentals of Services manuals show you how to repair and maintain off-road equipment.
  - Fundamentals of Machine Operation manuals explain machine capacities and adjustments, how to improve machine performance, and how to eliminate unnecessary field operations.



TS189 —UN—17JAN89



TS191 —UN—02DEC88



TS224 —UN—17JAN89



TS1663 —UN—10OCT97

DX,SERVLIT -19-31,JUL03-1/1



# John Deere Service Keeps You On The Job

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CUSTOMER SATISFACTION is important to John Deere.

Our dealers strive to provide you with prompt, efficient parts and service:

- Maintenance and service parts to support your equipment.
- Trained service technicians and the necessary diagnostic and repair tools to service your equipment.



## CUSTOMER SATISFACTION PROBLEM RESOLUTION PROCESS

Your John Deere dealer is dedicated to supporting your equipment and resolving any problem you may experience.

1. When contacting your dealer, be prepared with the following information:

- Machine model and product identification number
- Date of purchase

-Nature of problem

2. Discuss problem with dealer service manager.
3. If unable to resolve, explain problem to dealership manager and request assistance.
4. If you have a persistent problem your dealership is unable to resolve, ask your dealer to contact John Deere for assistance. Or contact the Ag Customer Assistance Center at 1-866-99DEERE (866-993-3373) or e-mail us at [www.deere.com/en\\_US/ag/contactus/](http://www.deere.com/en_US/ag/contactus/).

TS201 —UN—23AUG88

DX,IBC,2 -19-01MAR06-1/1

