# **INSTALLATION MANUAL**



Agra-GPS CNHSwather-JD Bridge for New Holland and CNH swathers



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Release Notice

This is is the April 2019 release (Revision A) of the CNHSwather-JD Bridge Installation Manual.

#### **Disclaimer**

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DO NOT USE THE CNHSwather-JD Bridge IF YOU DISAGREE WITH THE DISCLAIMER.

### **Important Safety Information**

Read this manual and the operation and safety instructions carefully before installing the CNHSwather-JD Bridge.

- Follow all safety information presented within this manual.
- If you require assistance with any portion of the installation or service of your equipment, contact your Agra-GPS for support.
- Follow all safety labels affixed to the system components. Be sure to keep safety labels in good condition and replace any missing or damaged labels. To obtain replacements for missing or damaged safety labels, contact Agra-GPS.

When operating the machine after installing the CNHSwather-JD Bridge, observe the following safety measures:

- Be alert and away of surroundings.
- Do not operate the CNHSwather-JD Bridge system while under the influence of alcohol or an illegal substance.
- Remain in the operator's position in the machine at all times CNHSwather-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the CNHSwather-JD Bridge system when a safe working distance has been diminished.
- Ensure the CNHSwather-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the CNHSwather-JD Bridge system.
- Follow all safety instructions from the CNHSwather system as well as the JD system!
- The CNHSwather-JD Bridge must only be used in the field, never on the street!

#### **Electrical Safety**

- Always verify that the power leads are connected to the correct polarity as marked. Reversing the power leads could cause severe damage to the equipment.
- Verify that all cables and connectors are not going over sharp edges and are not pinned, as this could cause power shortages and/or malfunctions.

#### Introduction

Congratulations on your purchase of the CNHSwather-JD Bridge. The CNHSwather-JD Bridge is designed to bridge the communication between a CNH Swather (Autoguide ready) and a John Deere display (1800, 2600, 2630 or 4640). This allows a JD display to create maps in the John Deere format and also provides autosteer.

The operator used the JD display to create AB-lines. The current position is determined by a John Deere receiver and all this information is used by the CNHSwather-JD Bridge to create steering instructions for the CNHSwather tractor. All conditions for autosteer such as minimum speed, steering enabled etc. Must be met by the CNHSwather system before the autosteer engage option in the tractor can be activated.

#### **NOTICE**

This manual is not intended to replace the manuals for the machine or the John Deere system. The operator must read and understand the manuals and instructions of these systems, before using the CNHSwather-JD Bridge.

## Step 1: Disconnecting pre-installed autoguide system

Disconnect and remove the pre-installed receiver mounted on the roof of the machine.

Inside the cab, move the seat forward to expose the pre-installed steering controller located at the back of the cab.

Disconnect the cables and remove or disconnect the pre-installed steering controller.



## **Step 2: Mounting the CNHSwather-JD Bridge**

The CNHSwather-JD Bridge is installed right of the driver seat, inside the armrest.

Remove the plastic insert inside the armrest, exposing the area below.

This will give you access to power and CANbus wiring hidden inside the armrest.



Disconnect the 3-pin Deutsch connector from its terminating plug inside the armrest. Insert the 3-pin Deutsch plug of the AgraGPS adapter harness to the connector.

Connect the black 26-pin end of the AgraGPS adapter into the John Deere Monitor.

Connect the 6-pin Deutsch end of the AgraGPS adapter into the CNHSwather-JD Bridge.

**Inside the armrest,** disconnect the black 4-pin Deutsch (has orange, black, red wires) male and female from each other. Insert the grey 4-pin Deutsch male and female plugs of the AgraGPS machine adapter **in between** those two connectors.

Next, disconnect the smaller grey 4-pin Deutsch mini (has orange, black, green, yellow wires) male and female from each other. Insert the grey 4-pin Deutsch mini male and female plugs of the AgraGPS machine adapter **in between** those two connectors.

Lastly, insert the 6-pin Deutsch end of the AgraGPS machine adapter into the CNHSwather-JD Bridge. Close up the armrest.

On the roof, attach the smaller 12-pin Deutsch mini end of the AgraGPS roof adapter into the 12-pin connector on the roof, previously attached to the pre-installed receiver.

Connect the other end of the AgraGPS roof adapter into the John Deere GPS.





## **Step 2: Mounting the JD Display**

The mounts for the JD display are NOT part of the CNHSwather-JD Bridge, however they can either be ordered as an optional item from AgraGPS or directly from RAM.



The JD-display may be mounted many different ways.

You may use the standard JD mounts or a RAM mount. RAM-270U + 2 \* 1.5" balls (RAM-202U) + 4" double socket arm (RAM-201U)

http://www.rammount.com/part/RAM-270U

# **Step 3: Mounting the JD Receiver**

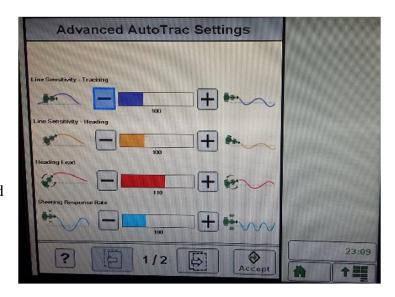
The CNHSwather-JD Bridge does NOT include a standard JD-receiver bracket.

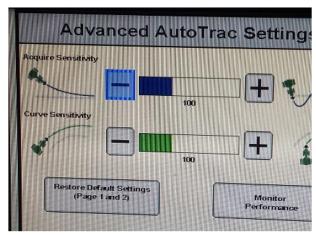
You will want to create a mount which is centered left-right on the cab roof.



# **Step 4: Adjusting steering**

Using the JD display you may adjust your steering performance. Most machines will perform optimally with all JD settings at 100. If a change is required, find an open area where you can travel at target speed and adjust one parameter at a time until you are satisfied with the steering performance.





## **Step 5: ISO Application**

The CNHSwather bridge comes with an ISO application that will be loaded onto the John Deere monitor. The app should automatically store itself on the monitor after the first few minutes of the initial startup. On subsequent runs the app will load itself from memory as soon as possible. The CNHSwather app includes:

- Option to change work recording mode
- Option to change the machine type
- Option to disable throttle autosteer engage button
- Help page

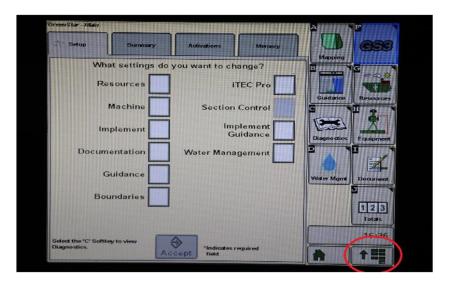
Where to find the CNHSwather ISO application on the John Deere monitor:

On a John Deere 4640
 the application will be loaded in the ISOBus
 VT section on the main page of the display.





 On John Deere 1800, 2600, 2630 the application will be shown in the side menu of the John Deere display. The side menu is opened by clicking the button on the bottom right of the display.



 NOTE: John Deere 1800 and 2600 monitors do not show a loading bar for ISO applications, while 2630 and 4640 monitors do.



#### If the ISO application is not loaded:

- Try clearing the monitor's memory. On 2630 monitors this can be done in the Message Ce0nter in the side menu. Go to the Cleanup tab, check controllers, then Begin Cleanup. On 4640 monitors this can be done in the info page of the ISOBus VT. Navigate to the ISOBus VT window and click the info button at the top of the page, then press Clean Up ISO Bus VT.
- Do a hard reset of the John Deere monitor (Unplug it, then plug it back in).
- Do a full restart of the machine. Remember the app may take a few minutes to load.

# Step 6: Additional information for CNHSwather-JD Bridge

Important – Currently, 2600/2630 monitors do NOT have the ability to record with hydraulics while the windrower machine type is selected. If you need to record on the John Deere monitor then you must select a different machine type or no machine type.

Currently, 4640 monitors do not have the option to select windrower as a machine type.