



# **INSTALLATION MANUAL**

## **Agra-GPS Gleaner-JD Bridge for S78 combines**

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#### Release Notice

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

### **Disclaimer**

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

## **Important Safety Information**

Read this manual and the operation and safety instructions carefully before installing the Gleaner-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 Gleaner-JD Bridge, observe the following safety measures:

- Be alert and aware of surroundings.
- Do not operate the Gleaner-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 Gleaner-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the Gleaner-JD Bridge system when the safe working distance has been diminished.
- Ensure the Gleaner-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the Gleaner-JD Bridge system.
- Follow all safety instructions from the Gleaner system as well as the JD system.
- The Gleaner-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 Gleaner-JD Bridge. The Gleaner-JD Bridge is designed to bridge the communication between a Gleaner combine (Autoguide ready) and a John Deere display (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 Gleaner-JD Bridge to create steering instructions for the Gleaner combine. All conditions for autosteer such as minimum speed, steering enabled etc. Must be met by the Gleaner system before the autosteer engage option can be activated.

### **NOTICE**

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

## Step 1: Mounting the Gleaner-JD Bridge

The Gleaner-JD Bridge is installed right of the driver seat.

Open the electrical panel to the right of your seat and expose the two diagnostic ports tucked into the lower side of the panel.



Use the two diagnostic port connections to connect to the Gleaner JD-Bridge. Both of these diagnostic ports are visually the same, so care is needed to make sure the proper connections are made. The main diagnostic port of the Gleaner-JD Bridge (labeled Main) is connected to the rightmost diagnostic port, while the secondary diagnostic port of the Gleaner-JD Bridge (labeled Secondary, and contains only 1 green and 1 yellow wire) is connected to the leftmost diagnostic port.

If these diagnostic ports are interchanged, an error will be displayed in the Agra-GPS ISOApp in the JD Display notifying the user that the ports have been switched, and need to be corrected.

The last loose wire of the Gleaner JD-Bridge needs to be tied in to the 12+ **constant** battery power bolt on the large PCB located above the two diagnostic ports.

Once the bridge is installed, route the JD receiver and JD Monitor end of the Gleaner-JD cable out through the opening below the panel.





## Step 2: Mounting the JD Equipment

The John Deere GPS receiver **MUST** be mounted at the front of the cab.

The square receiver mount can be bolted onto the default AGCO mount at the front of the cab.



Use the provided adapter cable to connect the 12-pin deutsch of the JD GPS receiver with the 12-pin deutsch of the Gleaner-JD cable.

It is best to route the JD receiver end of the Gleaner-JD cable out through the right side of the cab and up to the roof.

Mount the JD Monitor somewhere sturdy inside the cab and connect it to the Gleaner-JD cable.

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: Operating notes for the AgraGPS Gleaner-JD Bridge

Make sure your autoguide button is set to the ON position. It is located under the raising cover of the armrest, to the left of the driver's seat.



For autosteer activation you must follow the "normal" JD steps to be autosteer ready:

- create an AB-line
- Move from "Steer OFF" to "Steer ON" on the JD display.

Your machine must also be in "autosteer ready" mode, which means you must have a field gear selected, drive at a minimum speed and have moved your steering wheel at least once after engine start.

The autosteer is then enabled by pressing the built-in resume button on your armrest.

Autosteer settings can be tweaked within the JD display.







#### **Step 4: Additional information for Gleaner-JD Bridge**

- Work recording in the Gleaner-JD Bridge is done based off of header height. In order to configure this, the set 'Work Position' must be set in the ISOApp to the desired height at which recording should start. Whenever the current header position goes below this work position, recording will start. These instructions will also be found within the ISOApp itself.

## Step 5: ISO Application

The Gleaner 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 Gleaner app includes:

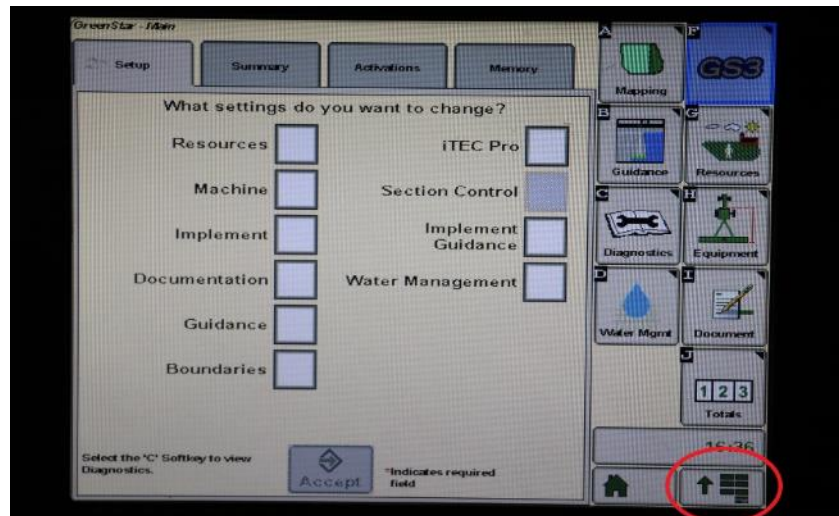
- Optional autosteer engage button & status
- Help page
- Support page
- Diagnostic page

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

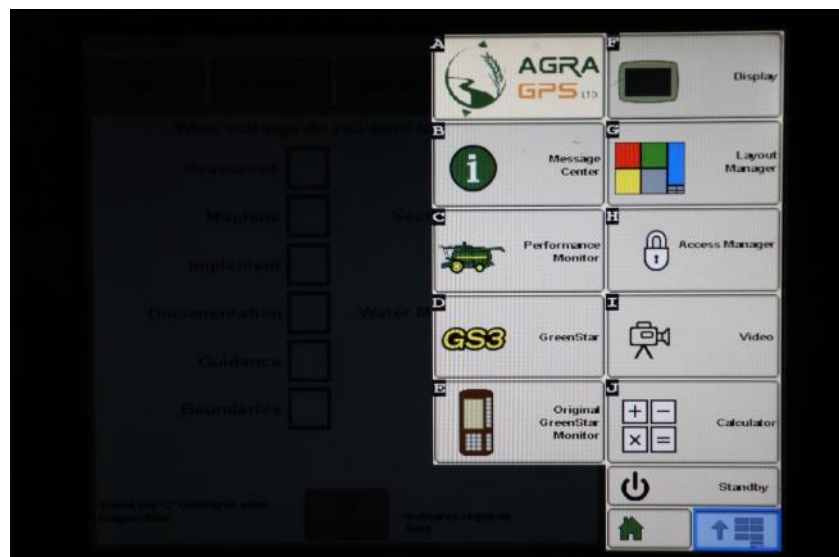
- On a John Deere 4640 the application will be loaded in the ISOBus VT section on the main page of the display.



- 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 Center 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.