

INSTALLATION MANUAL

Agra-GPS CLAAS-JD Bridge for Axion and Arion tractors



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Contact information
Agra-GPS Ltd.
Box 2585
Stony Plain, AB
T7Z 1X9
CANADA
001 780 990 4052 Phone
www.agra-gps.com

Release Notice

This is the February 2018 release (Revision A) of the CLAAS-JD Bridge Installation Manual.

Disclaimer

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

Important Safety Information

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

- Be alert and away of surroundings.
- Do not operate the CLAAS-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 CLAAS-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the CLAAS-JD Bridge system when a safe working distance has been diminished.
- Ensure the CLAAS-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the CLAAS-JD Bridge system.
- Follow all safety instructions from the CLAAS system as well as the JD system!
- The CLAAS-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 CLAAS-JD Bridge. The CLAAS-JD Bridge is designed to bridge the communication between a CLAAS Axion/Arion tractor 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 straight AB-Line autosteer.

The operator uses 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 CLAAS-JD Bridge to create steering instructions for the CLAAS tractor. All conditions for autosteer such as minimum speed, steering enabled etc. Must be met by the CLAAS system before the autosteer engage option in the tractor can be activated.

Steering is engaged with the existing "Autosteer" button in the CLAAS tractor. The JD-Monitor must have a valid AB-line and must be in "Steer On" mode.

NOTICE

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

Installation of the CLAAS JD Bridge

Your new 2018 models must have the OSI (Open Steering interface) enabled. Check for options: I40 0010 in your build code. Order no is: 1 403 629 0 in case your tractor was not ordered with the OSO option.

You will also need a “AgraGPS” unlock from Claas. Order no: 1 403 432 0

Step 1: Mounting the CLAAS-JD Bridge

To the right of the driver seat is a rectangle opening.

Remove it and find the ATP Module.



Remove the screw and put out the ATP Module.
Disconnect the grey 6 Pin connector from ATP.

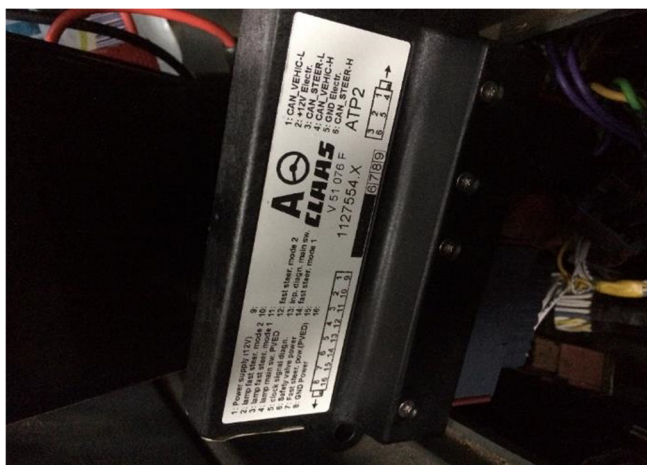
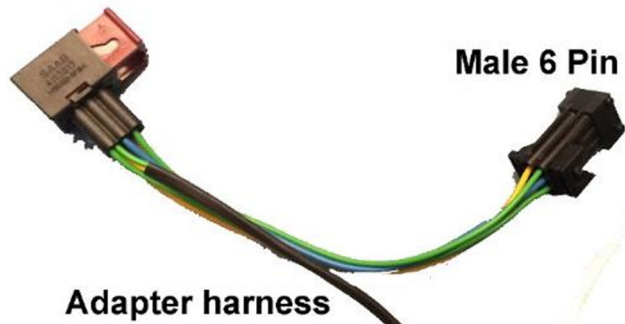
Connect the Female 6 Pin Connector of the adapter harness which comes with the bridge to the ATP.

Then connect the grey 6 Pin connector of the Axion to the male 6 Pin connector of the adapter.

Female 6 Pin

Male 6 Pin

Adapter harness

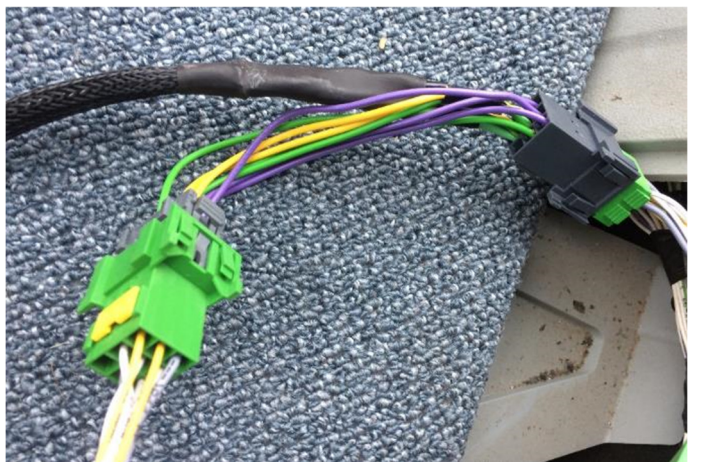


Now open the rectangle covering with the power and ISO plugs on the right side of the cab. Behind the cover you can find a couple of connectors.

Then remove one of the two green 6 Pin connectors of the power plugs. Connect the connectors of the adapter between them.



Then disconnect the green 9 Pin connector of the ISO plug. Also connect the connectors of the adapter between them.



Step 2: Mounting the JD Display

The mounts for the JD display are NOT part of the CLAAS-JD Bridge, but can easily be manufactured/ordered in the average shop.

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 CLAAS-JD Bridge does NOT include a standard JD-receiver bracket

You want to create a mount which is centered left-right on the cab roof and as far forward as possible!

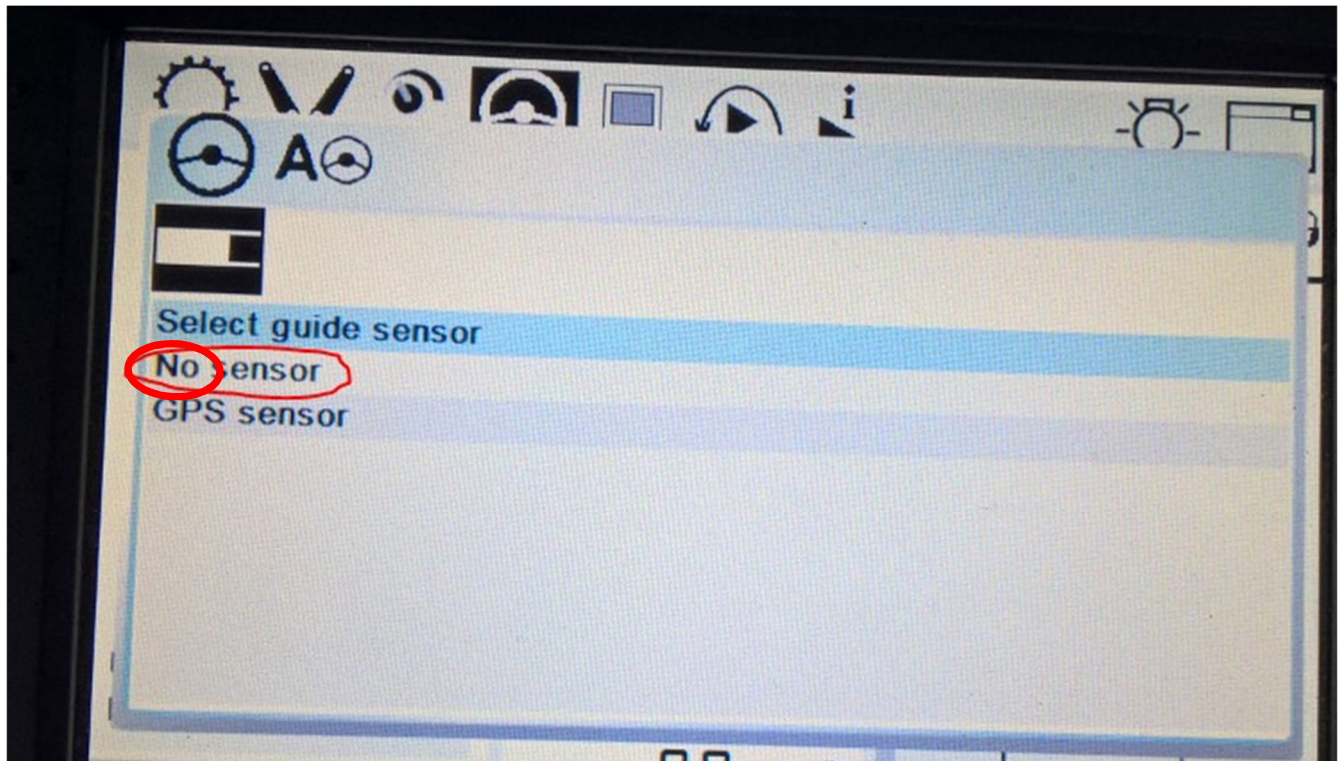


Step 4: Once the receiver is installed, check the settings for the JD Receiver in the display! Also make sure you do a TCM calibration.



The Claas Axion autosteer activation button is located to the back right of the seat. Once the engine is started it must be activated. It will light solid green when the tractor is ready for autosteer. If the tractor was shut-off with this button in the ON position, you will have to toggle it on-off before autosteer is enabled!

Make sure that in the AutoSteer settings of the CEBIS there is „No sensor” as guiding sensor selected.

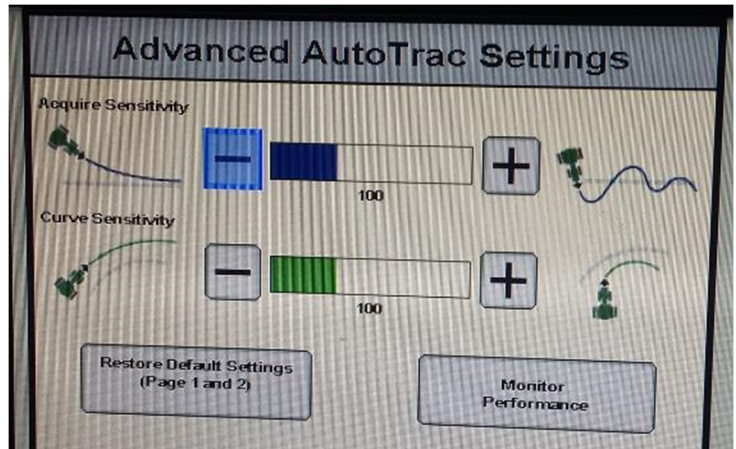
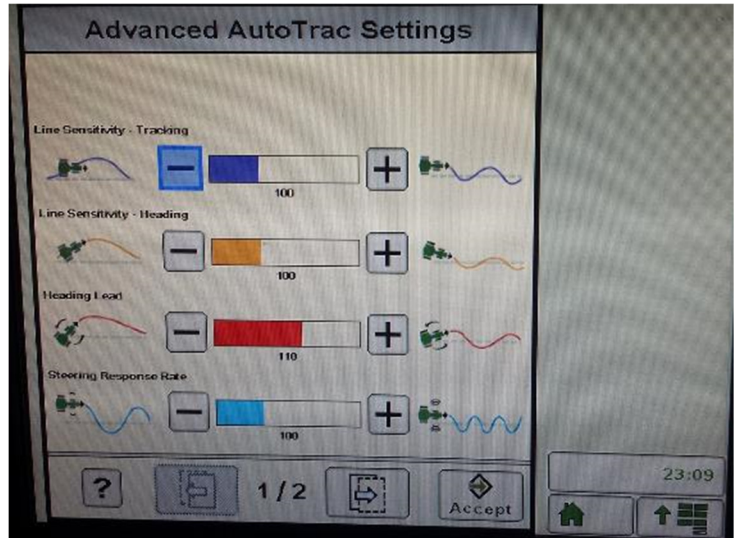


Important Notice:

It is necessary to calibrate the steering valve and the wheel angle sensor of the tractor with the Claas Diagnostic System (CDS) or with Claas S7/S10 autosteer system. As of mid 2018, an updated CDS tool allows the calibration. So it can be done without a S7 or S10!

Step 5: 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 6: ISO Application

The Claas 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 Claas app includes:

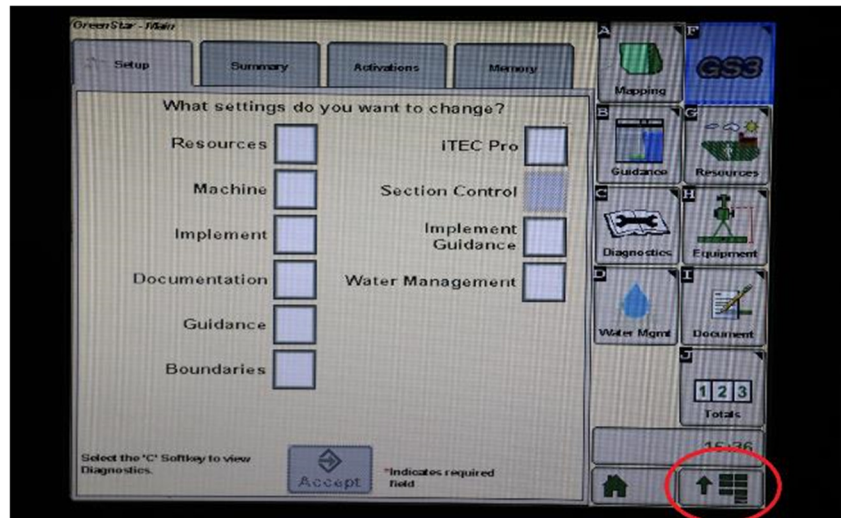
- Option to change work recording mode
- Option to change croptype list
- Option to change the machine type
- Machine info
- Help page

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

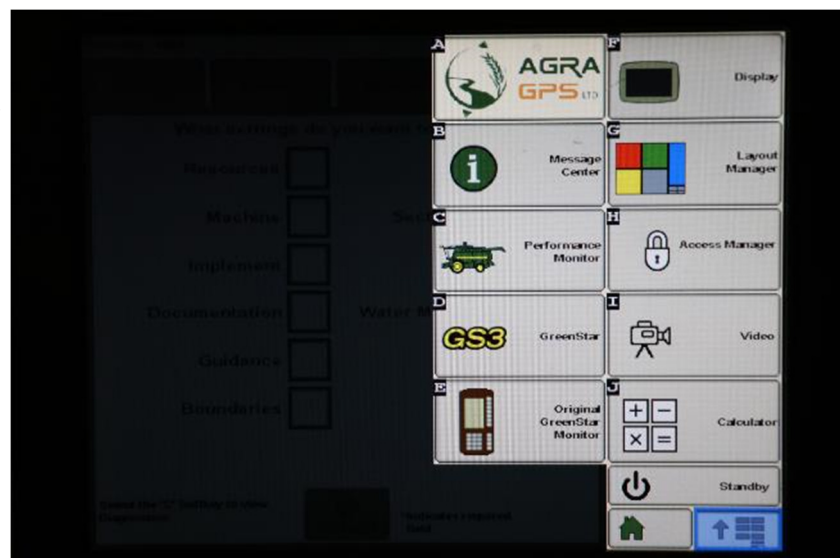
- On a John Deere 4640 the application will be loaded in the ISOBus VT section on the main page of the display.



- 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.