

INSTALLATION MANUAL

Agra-GPS McCormick - JD Bridge



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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 April 2022 release (Revision A) of the McCormick-JD Bridge Installation Manual.

Disclaimer

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

Important Safety Information

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

- Be alert and away of surroundings.
- Do not operate the McCormick-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 when the McCormick-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the McCormick-JD Bridge system when a safe working distance has been diminished.
- Ensure the McCormick-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the McCormick-JD Bridge system.
- Follow all safety instructions from the McCormick system as well as the JD system!
- The McCormick-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 McCormick-JD Bridge. This product is designed to bridge the communication between a McCormick X7 or X8 tractor (autosteer ready) and a John Deere display (1800, 2600, 2630, 4240 or 4640). This allows a JD display to create maps in the John Deere format and also provides 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 McCormick-JD Bridge to create steering instructions for the tractor. All conditions for autosteer such as minimum speed, steering enabled, etc., must be met by the McCormick system before the autosteer engage option in the tractor can be activated.

NOTICE

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

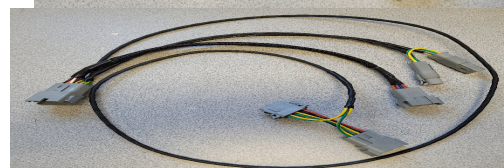
Parts Overview

A. McCormick-JD Bridge



B. Under-Cab Cable

1. C136 – Auto Steer connector
2. Connected to transducer on the steering valve
3. Connected to hydraulic steering valve
4. C198 – Steering angle sensor

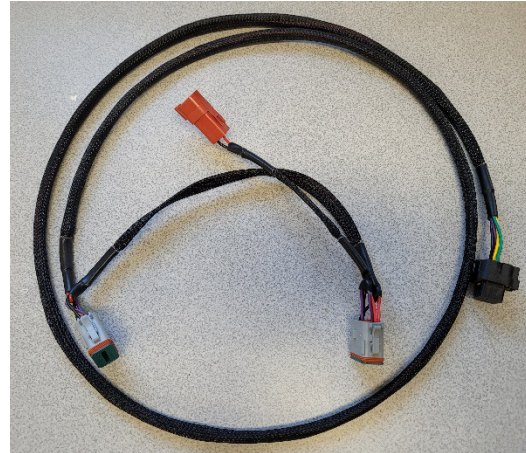


C. Machine Bus Cable – inside cab

1. Connected to Bridge
2. C434A/B
3. C430
4. C490A/B (iso integration)

D. ISO Bus Cable – connects to JD monitor

1. Connected to Bridge
2. C901 (to roof)
3. JD monitor connector
4. C482 (power supply)



E. Receiver Cable

1. JD GPS receiver globe connector
2. C903 (901 pass through)



Step 1: Outside the cab

Find the 2 * 12-pin Deutsch connectors on the roof. You will only use one (EC27/1) to connect the Agra-GPS GPS roof adapter to the 12-pin Deutsch.



The EC27/1 has more wires, so peel off the back cover if you are uncertain which connector to use.

Do NOT plug this connector directly into your John Deere receiver!

You must always use the adapter delivered with the McCormick kit!



Installed SF6000 with AgraGPS adapter cable.



Step 2: Inside the cab

Find the diagnostic port in the back of the cab. Remove the cover and connect the 9pin round diagnostic port from the McCormick-JD kit.



For power, use the convenient plug located just below the fuse panel.

Connect the bridge to the power and diagnostic port adapter.



Run the cable for the display from the JD-Bridge to the right side of the cab. An optional CAB-RAM mount may be used to mount your JD display.

Step 3: Operation

1. Make sure your autosteer switch is ON.

This switch provides power to your tractors autosteer components.



Right to the joystick are 2 important buttons. Enable steering by holding the “E-Steer” button until it blinks, press briefly and the button should be lit green.

The same process is required on the “Auto” resume button. Make sure it is green as well.

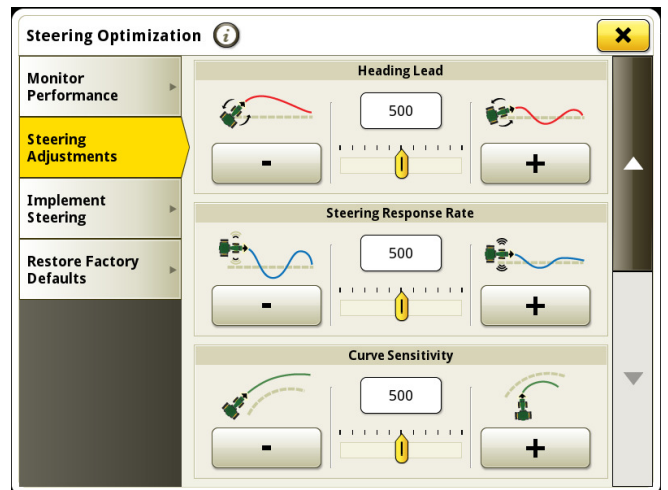
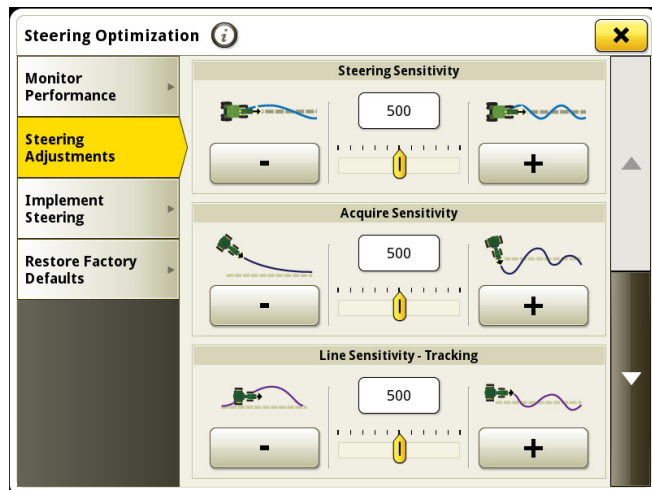
The resume button indicated can be used to engage or disengage auto-steering, if all other conditions are met.



Forcing the steering wheel will also disengage auto-steering.

Adjusting steering

Using the JD display you may adjust your steering performance. Most machines will perform optimally with all JD settings centered. 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.



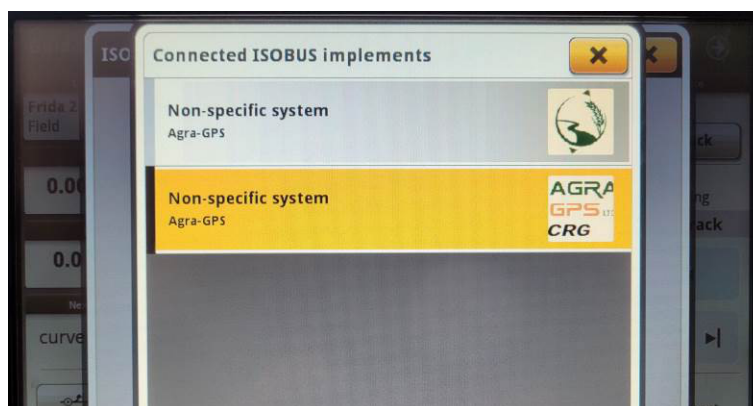
Step 5: ISO Application

The McCormick 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 McCormick app includes:

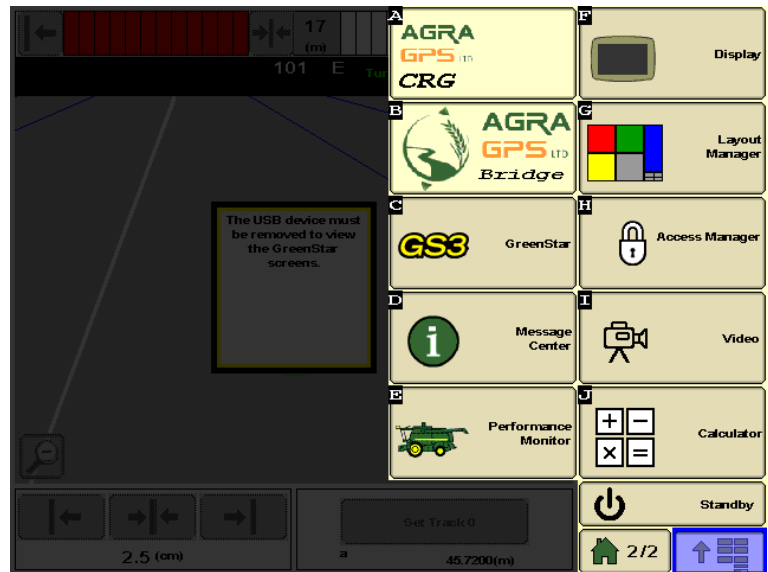
- Option to change work recording mode
- Option to change the machine type
- Help page
- Calibration

Where to find the McCormick 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, 4240 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.