

INSTALLATION MANUAL

Agra-GPS CNH-JD R-15 Bridge for 2012-2019 row crop tractors (analog steer)



MAKE: Case IH or New Holland

MODEL: Magnum Tier 4B - 180, 200, 220, 240, 250, 280, 310, 340, and 380 or T8.380

YEAR: 2012-2019

Version 1.3

July 2026

July 2026

Contact information

Agra-GPS Ltd.

Box 2585

Stony Plain, AB

T7Z 1X9

CANADA

+1 (825) 247-2477

support@agragps.com

www.agra-gps.com

Release Notice

This is the July 2026 release of the CNH-JD R-15 Bridge for CNH row crop tractors (2012-2019) installation manual.

Disclaimer

While every effort has been made to ensure the accuracy of this document, Agra-GPS Ltd assumes no responsibility for omissions and errors. Nor is any liability assumed for damages resulting from the use of information contained herein. Agra-GPS Ltd shall not be responsible or liable for incidental or consequential damages or a loss of anticipated benefits or profits, work stoppage or loss, or impairment of data arising out of the use, or inability to use, this system or any of its components.

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

Important Safety Information

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

- Be alert and away of surroundings.
- Do not operate the CNH-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 while the CNH-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the CNH-JD Bridge system when a safe working distance has been diminished.
- Ensure the CNH-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the CNH-JD Bridge system.
- Follow all safety instructions from the CNH system as well as the JD system!
- The CNH-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 CNH-JD Bridge. The CNH-JD Bridge is designed to bridge the communication between a Case or New Holland row crop tractor (2012-2019) (autosteer ready) and John Deere or Vision displays. 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 CNH-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 CNH system before the autosteer engage option in the tractor can be activated.

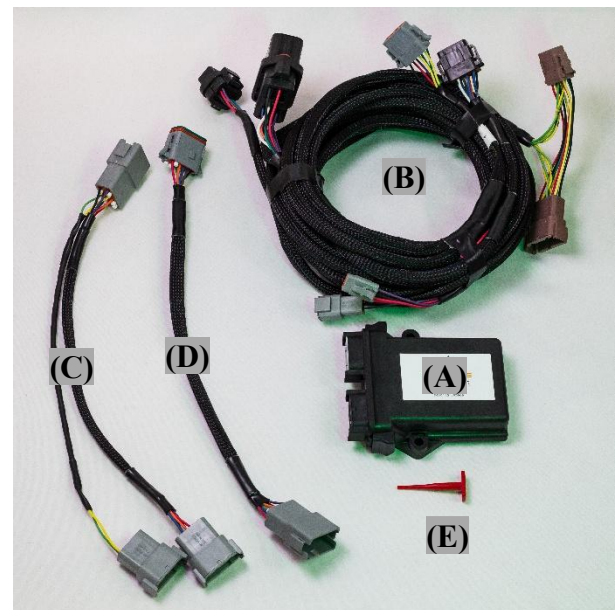
NOTICE

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 AgraGPS CNH-JD Bridge.

What's In The Box

In your order you should receive the following items:

- a. CNH-JD-R-15 Bridge
- b. CNH-JD-R-15 Machine Adapter
(SKU: CNHJDR15MABS2)
- c. CNH-JD-R-15 Roof Adapter
(SKU: CNHJDR15RABS2)
- d. Optional Alternate Roof adapter
- e. Red Hand Removal Tool
(SKU: 0411-240-2005)



NOTE: If you are missing any of these items or they appear to be damaged please contact +1 (825) 247-2477 or support@agragps.com

Installation of the CNH-JD-R-15 Bridge

Park the machine where the ground is level, dry and clean. Leave the machine OFF during the installation.

Follow safety practices and read the instructions carefully as you proceed in the install process.

Step 1: Installing the Machine Adapter

Open the control panel on the right side, inside you will find the brown 12-pin DTM connector and the grey 3-pin connector.



The Machine Adapter connects to the brown connector for canbus and ISO communications. It also connects to the grey 3-pins for power supply.

Open the connections and install the Machine Adapter in between.

Note: The bridge itself can be placed behind that control panel once the install is complete.



Depending on the cab model, your nav controller connections may be on the outside below the cab rear window (top photo) under the plastic panel or inside the cab under a metal plate (bottom photo). At the back of the cab, remove the black metal cover so you can access the wiring behind.

Locate the 40-pin deutsch and 24-pin deutsch which may be connected to a nav controller (if equipped). Disconnect both from the nav controller.

Note: The nav controller is not required and can be removed if it is installed.



(With the steer controller exposed)



Use the red deutsch removal tool, to remove a number of connections on the 24-pin deutsch connector and re-pin them to the 40-pin deutsch on the same cable.

From the 24pin, move the following cables:

From

pin 3 to pin 7 of the 40-pin deutsch

pin 4 to pin 16 of the 40-pin deutsch



Next, connect the black 40-pin deutsch of the Machine Adapter to the 40-pin from the machine that was modified in the last step.

Run the 2-pin deutsch under the cab to the front left side of the tractor.

The valve sits right in the front of the cab and may be difficult to reach. Lift the tractor hood to allow for better access.

Remove the existing 2-pin connector from the valve block and connect the 2-pin from the Machine Adapter. Secure the cable away from any heat source and moving parts. Use plastic cable ties.



Then run the display adapter of the Machine Adapter to the John Deere display (here a 4640).



Once the JD display is mounted route the black display connector to the monitor and connect it.



Once all connections have been made on the machine adapter. Take the two remaining 12-pin mini plugs (1 black 1 grey) and connect them to the bridge.

Thn secure the bridge behind the control panel as mentioned earlier.



Step 2: Installing the Roof Adapter

The Roof Adapter will connect the portA (X-295) + portB (X-433A) connectors of the machine to the John Deere GPS receiver (here a SF6000). The receiver must be mounted at the front of the roof!

The adapter cables should be marked with an A or B label to match the machine ports. If they are not marked:

The 12-pin deutsch that has the pins:

Pin 1 – Yellow

Pin 12 – Green

Connects to portB of the machine

The other 12-pin deutsch connects to portA



Important – The steer enable switch must be active in order to begin autosteering. To make this switch active, move the switch to the downwards position from the upwards position (So the switch is not lit up) AFTER the machine has already been started.

Once all connections are made, reinstall covers on the tractor and secure all loose cables away from moving parts and heat sources.

Step 4: Once the receiver is installed, move on to the Bridge User Manual for instructions on how to access the ISO app

NOTE: If you do not have the Bridge User Manual it can be found at <https://www.agragps.com/bridge-user-manual-english/>