

INSTALLATION MANUAL

Agra-GPS CAT-JD Bridge for Challenger-tractors



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Release Notice

This is the June 2026 release of the CAT-JD Bridge 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 CAT-JD Bridge IF YOU DISAGREE WITH THE DISCLAIMER.

Important Safety Information

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

- Be alert and aware of surroundings.
- Do not operate the CAT-JD Bridge system while under the influence of alcohol or an illegal substance.
- Remain in the operator's position of the machine at all times while the CAT-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the CAT-JD Bridge system when the safe working distance has been compromised.
- Ensure the CAT-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the CAT-JD Bridge system.
- Follow all safety instructions from the CAT system as well as the JD system!
- The CAT-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 CAT-JD Bridge. The CAT-JD Bridge is designed to bridge the communication between a CAT tractor (with ISO) 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 CAT-JD Bridge to create steering instructions for the CAT tractor. All conditions for autosteer such as minimum speed, steering enabled etc. must be met by the CAT system before the autosteer engage option in the tractor can be activated.

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

NOTICE

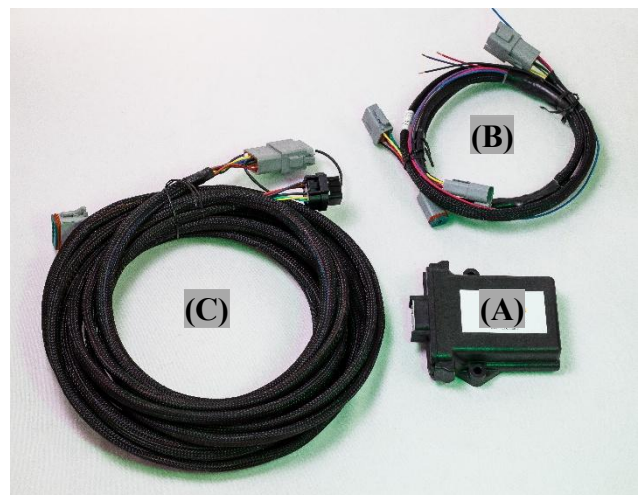
This manual is not intended to replace the manuals for the CAT tractor or the John Deere system. The operator must read and understand the manuals and instructions of these systems before using the CAT-JD Bridge.

What's In The Box

The CAT-JD Bridge has 3 different variants

A typical CAT-JD kit contains the following items:

- a. CAT-JD Bridge
- b. CAT-JD Harness kit
- c. JD12 Harness for connection to receiver and monitor (the CAT-JD-D will not get a JD12 and instead will have a circular adapter)



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

Please refer to Appendix B for a complete list of harness kits for CAT cabs.

The CAT-JD Bridge adapter harness has the 2* 4-pin deutsch connectors, a 12-pin deutsch connector, and optionally a 9-pin diagnostic connector. The 12-pin mini deutsch goes to the CAT-JD Bridge.

The adapter also has loose power cables!

You will need to wire power!

1. Red to constant 12V power
2. Purple to switched 12V power
3. Black to ground



OPTIONAL

4. Blue. This is only needed on older A or B series machine without an autosteer resume switch. Using a momentary switch, by shorting the blue wire momentarily to ground, autosteer is enabled or "resumed". You will need to purchase an autosteer resume button from your local dealer to complete the install!



Installation of the CAT JD Bridge

Step 1: Mounting the CAT-JD Bridge

Remove the access panel to the right of the driver seat.

The CAT-JD Bridge will be installed below this access panel.



The harness should come with the 12-pin female Deutsch mini connector pre plugged into the bridge.

Ensure that this is plugged in, then mount the bridge.



Find the the cabling with the 2 * 4-pin deutsch connectors.

The cabling has a "Bus extension" label.



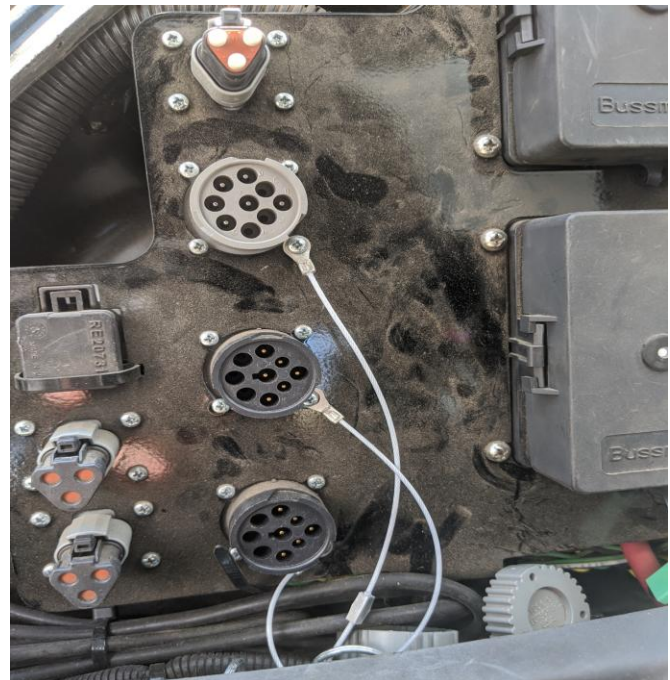
Open the 2 * 4-pin deutsch connector.

Insert the 2 * 4-pin deutsch connectors from the CAT-JD Bridge wire harness here.



For older CAT A,B or even without letter machines, at times the iso steering is not an option. AgraGPS also has a diagnostic port adapter for these machines.

If the adapter cable has a 9-pin circular diagnostic connector it should be connected to the 9 pin diagnostic plug second from the top of the fuse panel. The fuse panel is located under the same access panel as the connectors in the previous step.



The 12-pin male Deutsch connector should also be plugged into the 12-pin female Deutsch connector of the JD-12.

Note: Only CAT-JD-B and C models have the JD-12 if you have a CAT-JD-D this can be ignored.



Step 2: Mounting the JD Display

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

The JD-display may be mounted many different ways.

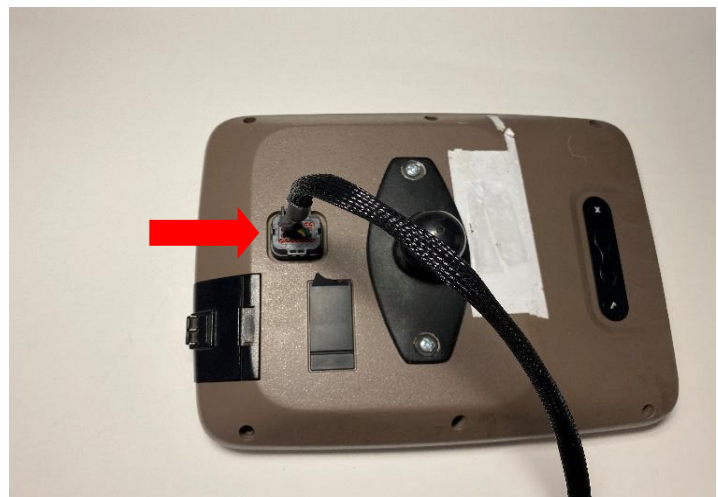
You may use the standard JD mounts or a RAM mount. RAM-270U + 2 * 1.5" balls (RAM-202U) + 4" double socket arm (RAM-201U)

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



Once the JD display is mounted route the display cable (black connector) to the display and connect it.

Note: on CAT-JD-B and C models this connector will be on the JD12 Harness however for the CAT-JD-D this will be a part of the Machine Adapter.



Step 3: Mounting the JD Receiver

The CAT-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.

Once the receiver is properly mounted route the final 12-pin male connector to the roof and connect it.

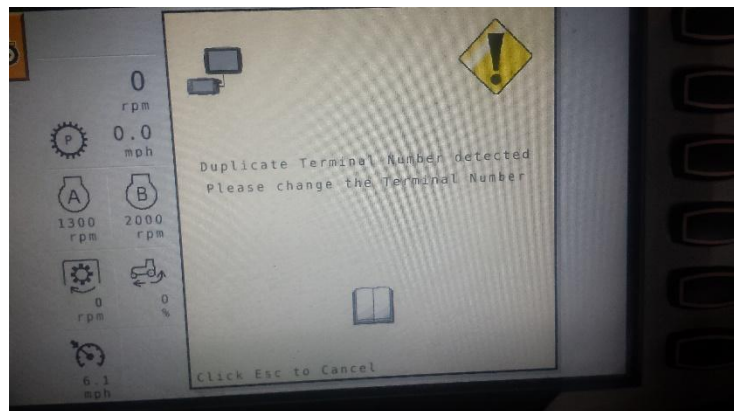


Note: The CAT-JD-D has its own roof adapter that will connect the 12-pin plug of the receiver to the circular port on the cab roof.

Note:

After the first startup of the system, you may see a "Duplicate Terminal Number..." message. Since the JD display and the CAT display are on the same harness they can have a conflict.

You can correct this assigning a different ID to the CAT-terminal.



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/>

Appendix A: Check autosteer compatibility on A or B type models

Step 1: CAN translator

Verify that your tractor has a CAN translator module through the MIDS display:

- Turn the upper knob to the 1 o'clock position
- Press the Enter key and the right arrow key at the same time.



Step 2:

The number next to "Translator Control" indicates the software version and hardware number.

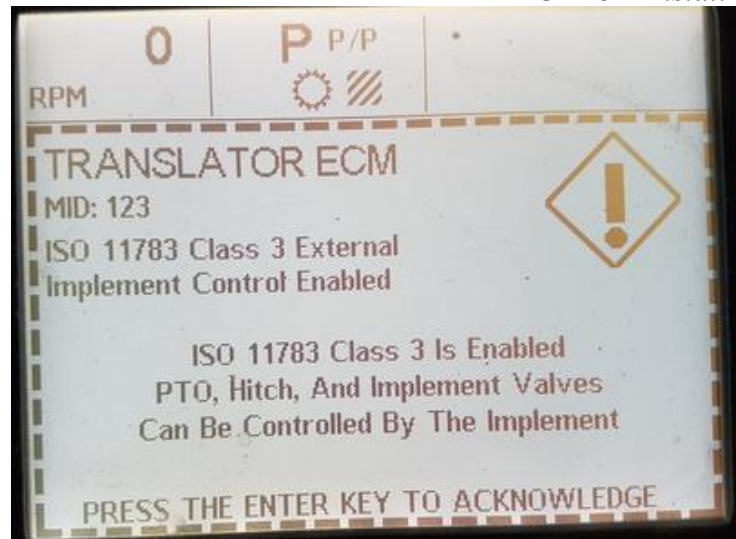
Hardware must be: 2019041-04 or newer (higher).

Software version must be: 2479952 or newer.

Machine Main Module	1789090-03	3220273-00
Hitch Control		
Implement Control	2160658.00	3139372-00
Translator Control	2019041-05	3220266-00
GPS Receiver		

Step 3:

If the ECM warning appears your tractor is ready to accept autosteer commands over the canbus.



Step 4:

Rotate the main selector knob to the M->E setting.

Then rotate the lower left knob to highlight "P3".

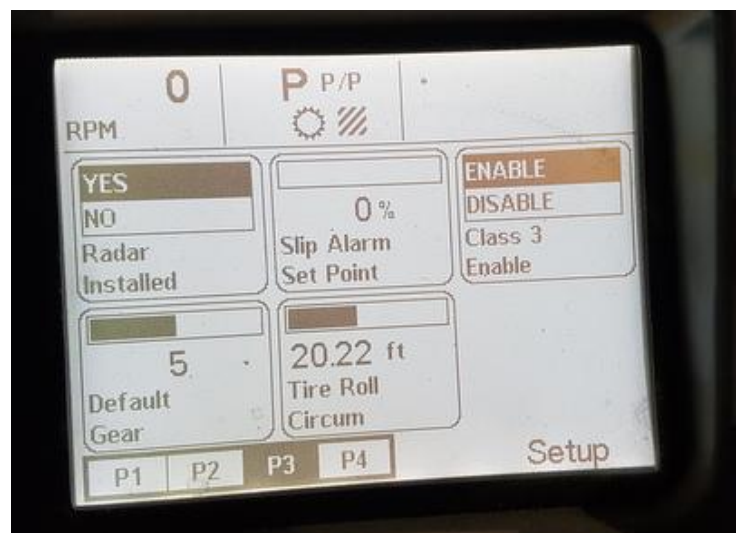


Step 5:

Press the left or right button to navigate to "Class 3" indicated by a thick, dark border around it.

Rotate the small block now to highlight "ENABLE".

A warning message appears that ISO is enabled. Acknowledge!



Appendix B: Complete List Of Harness Kits for CAT Cabs

CAT-JD-B Bridge Kit

Whats In The Box

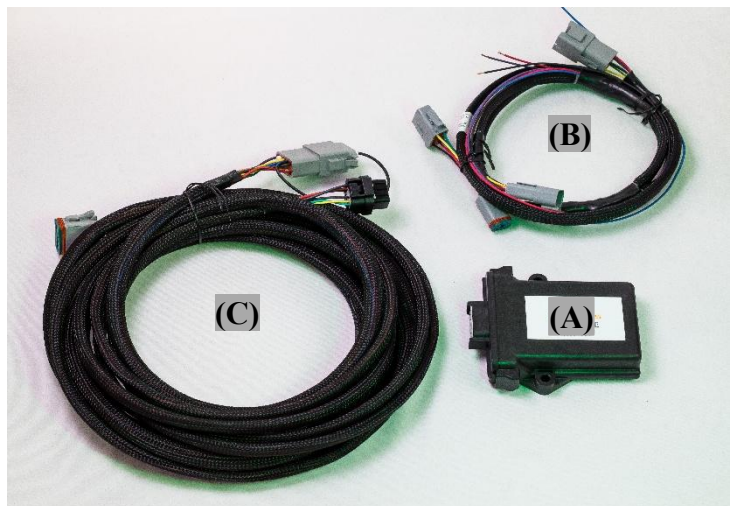
- a. CAT-JD-B Bridge
(SKU: CATJDBS2)
- b. CAT-JD-B Machine Adapter
(SKU:CATJDCMABS2)
- c. JD12 Harness for connection to
reciever and monitor
(SKU: JD12)



CAT-JD-C Bridge Kit

Whats In The Box

- a. CAT-JD-C Bridge
(SKU: CATJDBS2)
- b. CAT-JD-C Machine Adapter
(SKU: CATJDCMABS2)
- c. JD12 Harness for connection to
reciever and monitor
(SKU: JD12)



CAT-JD-D Bridge Kit

Whats In The Box

- a. CAT-JD-D Bridge
(SKU: CATJDBS2)
- b. CAT-JD-D Machine Adapter
(SKU:CATJDDMABS2)
- c. CAT-JD-D Roof Adapter
(SKU:CATJDDRABS2)

