

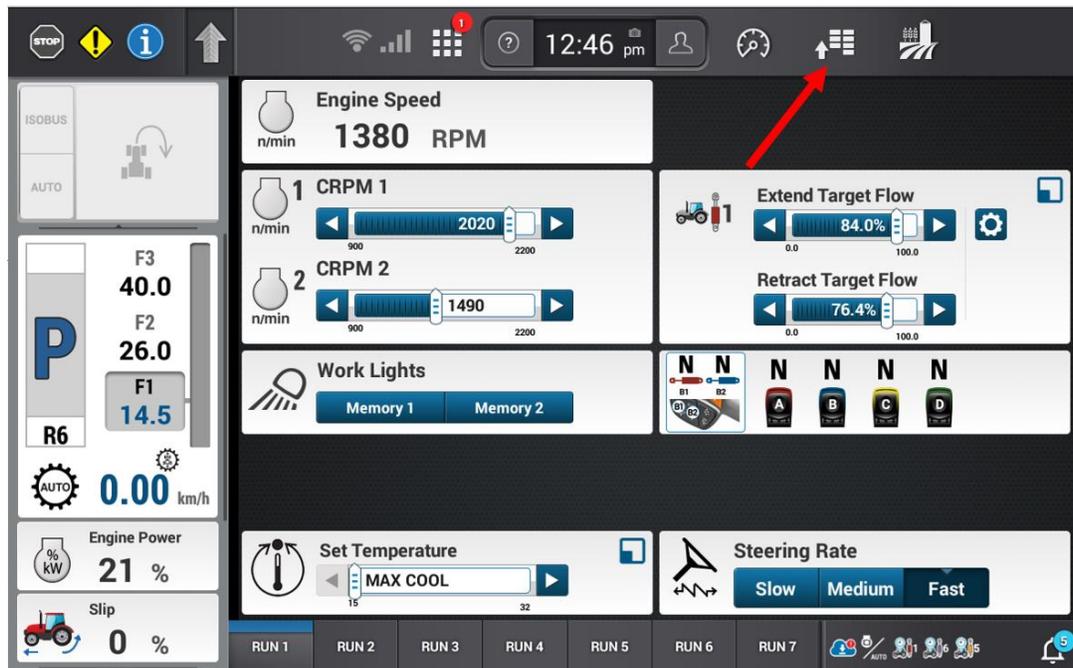
Directions for using external guidance systems on CNH tractors. The external guidance system communicates via ISOBus Class 3 Steering interface.

Prerequisites:

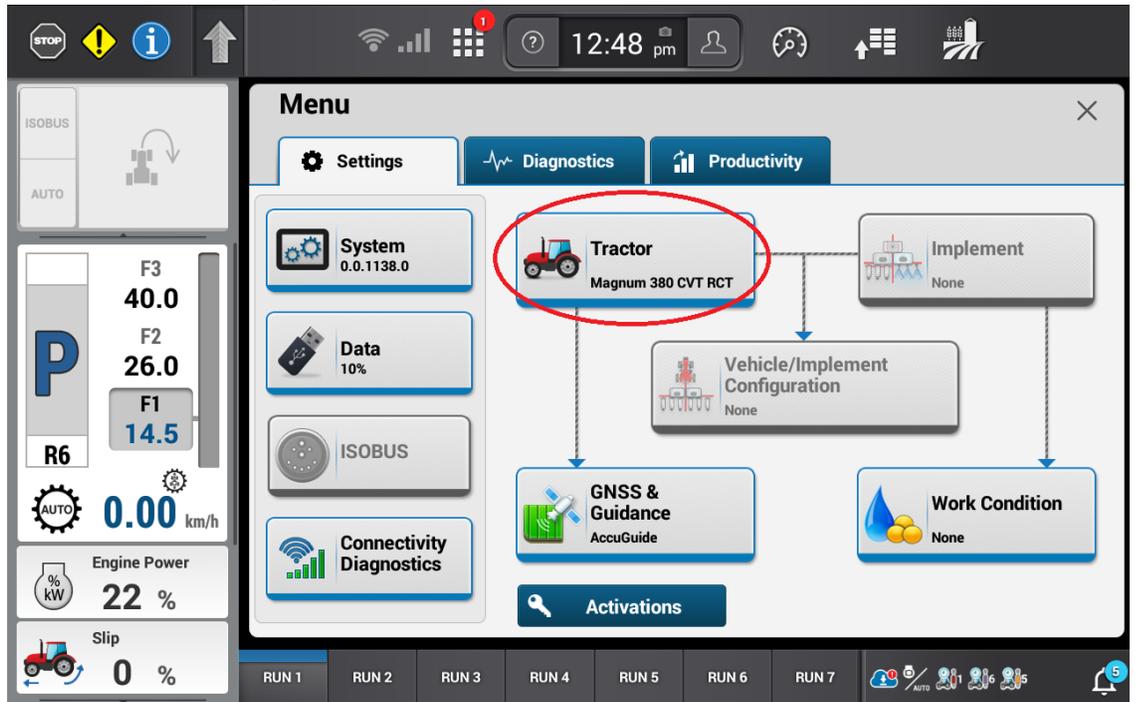
- Must have one of the following models:
 - CaseIH AFS Connect Magnum
 - CaseIH AFS Connect Steiger/Quadtrac
 - New Holland Genesis T8 with PLM Intelligence
 - New Holland T9 with PLM Intelligence
- Tractor must be ISOBus Class 3 Steering activated
 - This is activated by a CNH dealer
- Must have external guidance system kit (from a supplier that is supported by CNH) installed
- Tractor must have no active steering faults
- Wheel Angle Sensor and Steering Valve calibration have been performed

Directions:

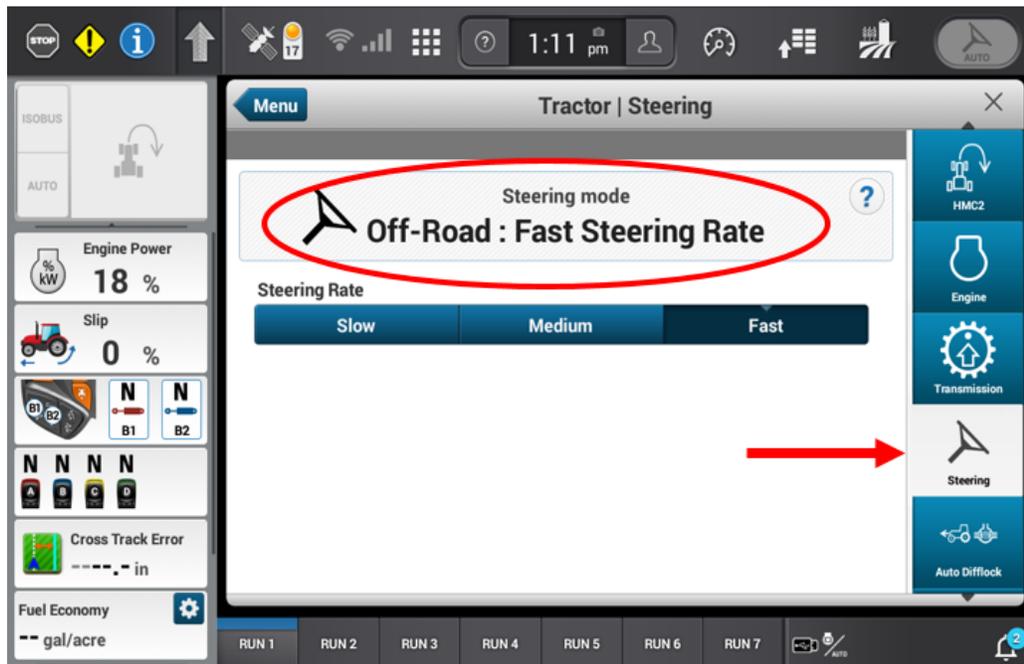
1. Turn on tractor
2. Startup external guidance system
 - a. Turn on display/turn on controller/initialize system
 - b. Refer to supplier information for more details
3. Go to ISOBus diagnostic page on Pro 1200 display
 - a. Select the “Menu” icon where the red arrow is



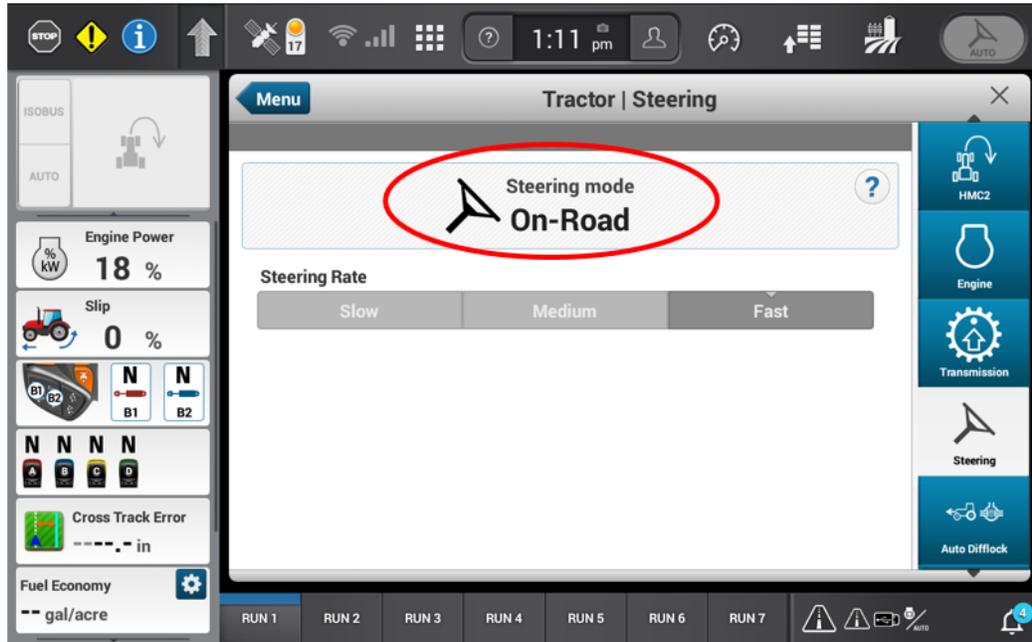
b. Select Tractor settings



c. Scroll down on the right side to the steering page and check to make sure the steering mode is in off-road mode. The tractor must be in off road mode for external guidance to work.

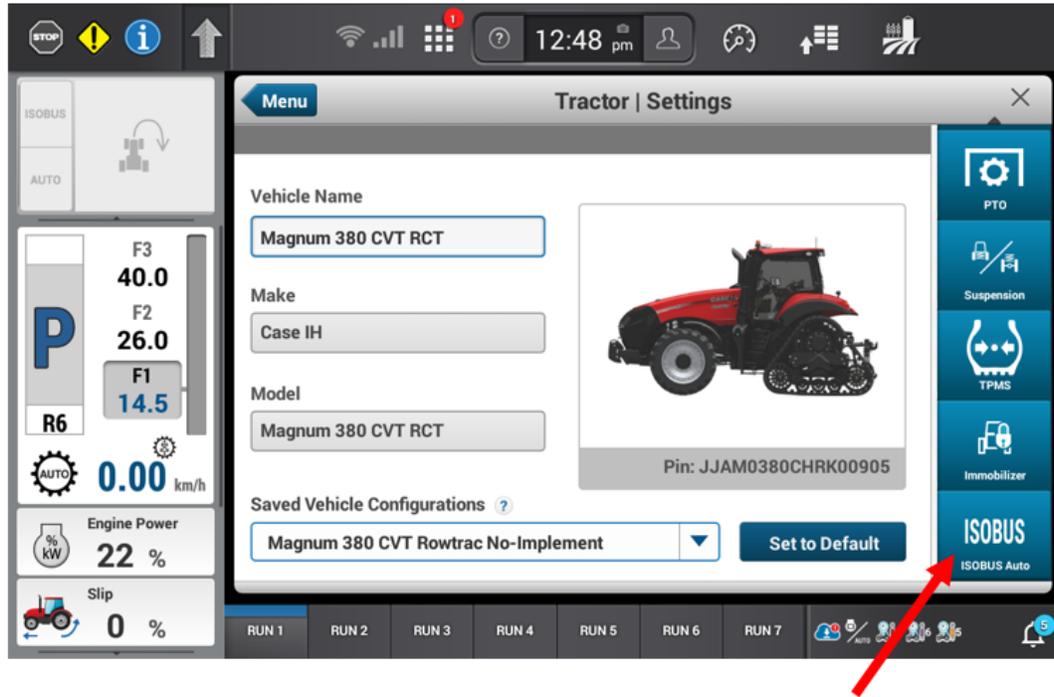


- d. If the page is in on-road mode (as seen below), select off road mode by pressing the roading switch in. This will set it to off-road mode

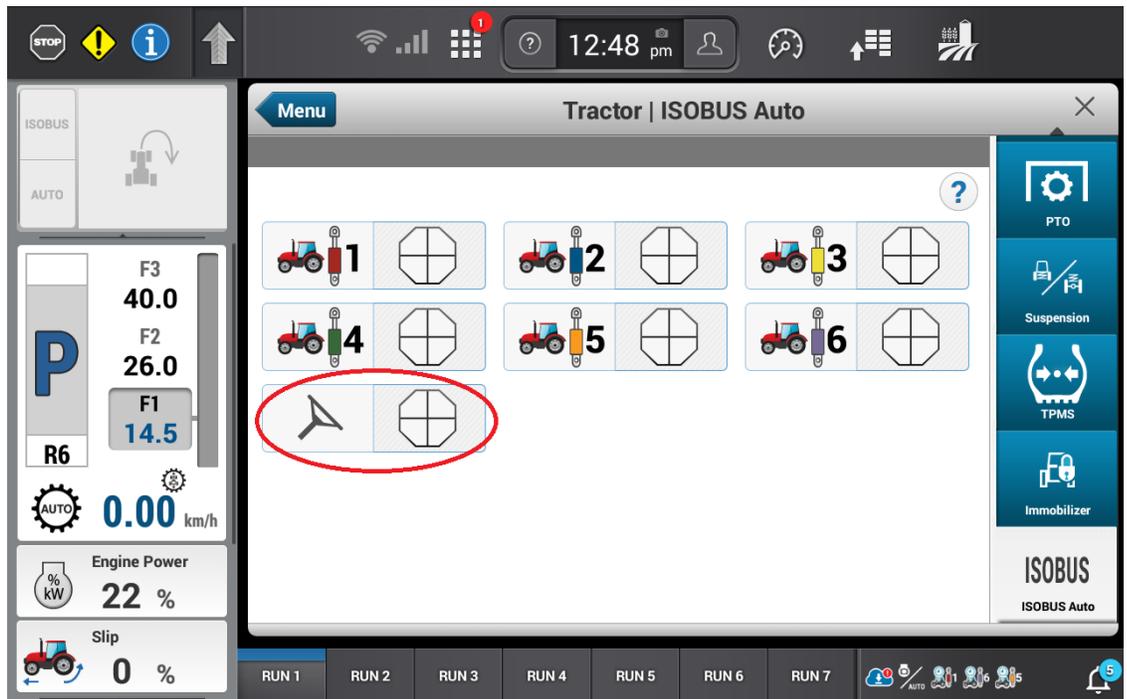


Headliner Roothing Switch

- e. Scroll to the ISOBus diagnostic page. This page will not be present on a tractor that is not ISObus Class 3 activated. The tractor will have to be activated by a CNH dealer.



- f. Depending on what ISOBus Class 3 activations the tractor has, this page may have different icons on it. For external guidance, look for the icon with the steering wheel, as shown below. If the icon isn't present, ISOBus Class 3 Steering isn't activated.



4. View the status cake symbols– Refer to Appendix A for more information on what the symbols mean
5. Press the top side of the headliner switch labeled “AUTO”. This button needs to be fully pressed for at least half a second for it to register.



Headliner "AUTO" Switch

- a. If the tractor controller is ready to receive guidance commands and the external guidance system is ready to send guidance commands, the status cake should go to three green pieces
 - b. If the external guidance system is not ready, the status cake will go to two orange pieces.
 - c. If the tractor controller is not ready, the status cake will go to two orange pieces with an exclamation point.
6. Verify that the steering cake has 3 green pieces filled in
 7. Press the “auto” button on the armrest to engage external guidance
 - a. The display does not have to be on the ISOBus diagnostic page to engage guidance. This page is only to monitor the status of the external guidance. Any other page on the display can be selected. The left-hand area has an ISOBus

status icon that is viewable on any page on this display. See Appendix B for more information about the left-hand area.

- b. While the external guidance system is engaged, the steering settings page will display “GPS – ISO” as the steering mode.



Case IH Armrest Auto Button

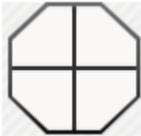


New Holland Armrest Auto Button

8. There will be an audible beep and the status cake should move to full green with swirl inside. If the tractor is stationary, the wheels will not turn. It is only when the tractor starts moving that the external guidance system will begin to command vehicle direction.
9. If the external guidance is cancelled, check the status cake
 - a. If the status cake goes to three green pieces after being cancelled, press the Auto button on the armrest to re-engage. Examples of when this would happen:
 - i. Moving the steering wheel
 - ii. Operator being out of seat
 - iii. Cycling the roading switch
 - b. If the status cake goes to white after kicking out, the headliner Auto switch will have to be pressed again before engaging with the armrest Auto button. Examples of when this would happen:
 - i. Going over 25 kph

Appendix A

These symbols will appear next to each function that can be activated for ISOBus Class 3. There are 4 pieces to the cake. When the cake is full and green, the external guidance system is commanding the tractor.

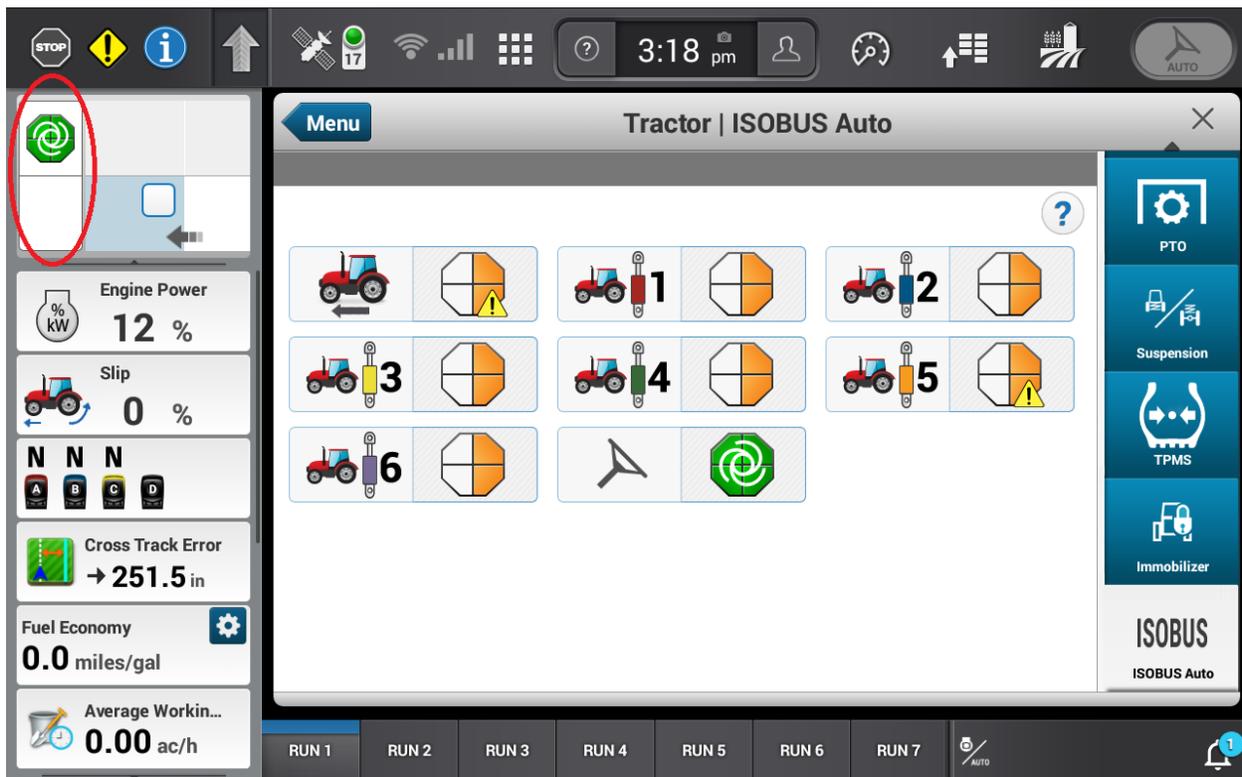
- a.  ISOBus Class 3 is off. This means the tractor controller has not initialized or the system has been cancelled.
- b.  Tractor controller is performing self-checks/ not ready to accept commands.
- c.  An activation condition on the tractor controller for accepting steering commands is not met. Example: moving steering wheel, roading switch is switched on, or operator out of seat
- d.  Tractor controller has passed internal self-checks and is ready. It is in standby mode, waiting for the external guidance system to be ready.
- e.  The tractor controller is ready to accept guidance commands and the external guidance system is ready to start sending guidance commands. The tractor and the external guidance system are ready are waiting for the operator to acknowledge
- f.  Operator has pressed the Auto engage button on the armrest. The external guidance system is currently steering the tractor.



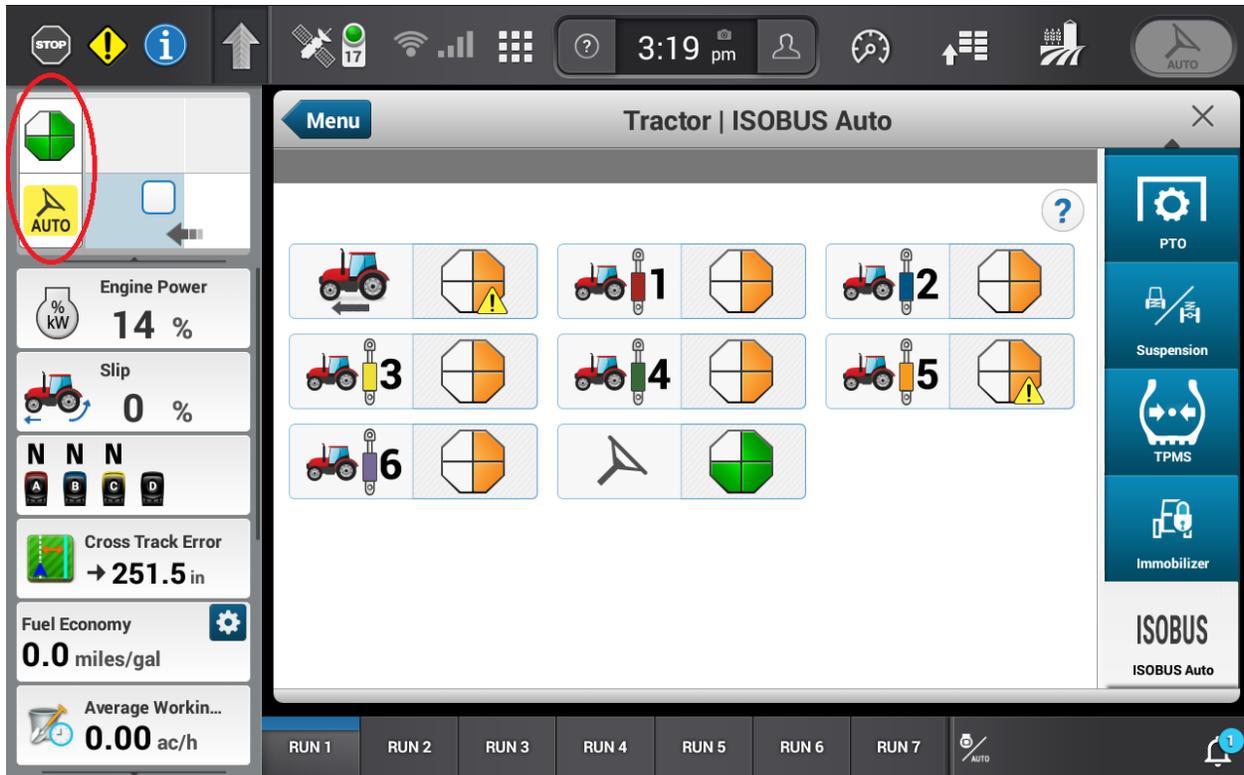
- g. Internal error in tractor function. The external guidance system will not engage.

Appendix B

The left-hand area can be used as a quick reference to view the status of the communication with the external guidance system. It follows the same status symbols that are in Appendix A. This area is viewable on all screens.



In the picture above, the external guidance system is steering the tractor.



In the picture above, the external guidance system is ready to steer the tractor. The operator just needs to press the Auto button on the armrest.