Cross Slope issues

Cross slope control is not working.

NOTE: This guide is NOT applicable for systems using two GPS units on a single implement for cross slope control.

Symptoms:

You want the T3RRA software to control the cross slope of the cutting edge but it does not seem to be working.

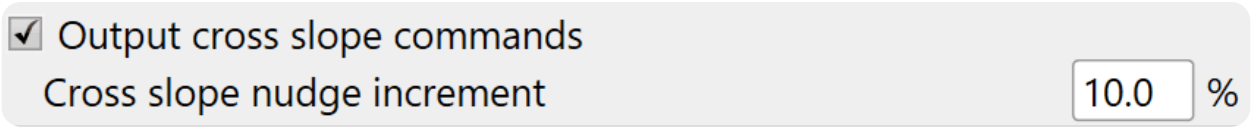
Cause:

Improper physical setup, iGrade configuration, or T3RRA software settings.

Solutions:

1. **Make sure that SCV3 is set up for cross slope control (check your iGrade Operators Manual). IMPORTANT. Choose ‘Cross Slope Control’ from the SCV3 drop down menu in UCC1. Check the ‘Enable Cross Slope’ box in UCC2.**
2. **Make sure that you have properly calibrated your TCM.**
3. **Ensure the SCV has had the thresholds calibrated as per the iGrade manual**

4. **Check the control sensitivity is not set too low causing cross slope to be “lazy”. Increase the value for a more aggressive control.**
5. **Check that the correct hoses from your implement's cross slope controlling hydraulic ram(s) are plugged in to SCV3**
6. **Reverse the hoses plugged in to SCV3 if needed.**
    a. **Reversed hoses will normally cause the blade to rotate completely to either the left or right as soon as you begin working.**
    b. **iGrade 2 has a checkbox option to reverse the blade tilt without reversing the hoses, iGrade 1 does not. If you have iGrade 2 check your iGrade manual for more information.**
7. **Make sure that the ‘Output cross slope commands’ box is checked under ‘Settings > Machine’ in the T3RRA software.**



8. **Make sure that an accurate ‘Implement Width’ is entered under ‘Settings > Machine’ in the T3RRA software.**
9. **Make sure that cross slope control is set to Auto on the implementation screen.**
10. **Ensure that the design is actually calling for the expected cross slope.**

Cross Slope not working and Front and Rear Error displays are visible.

Symptoms:

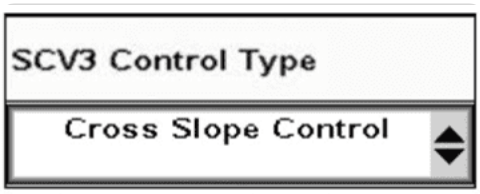
If you are seeing Front Error and Rear Error and you are not using dual scrapers, you may have set up the SCV 1 and SCV 3 incorrectly.

Cause:

You have not set Cross Slope up correctly on the Application controller.

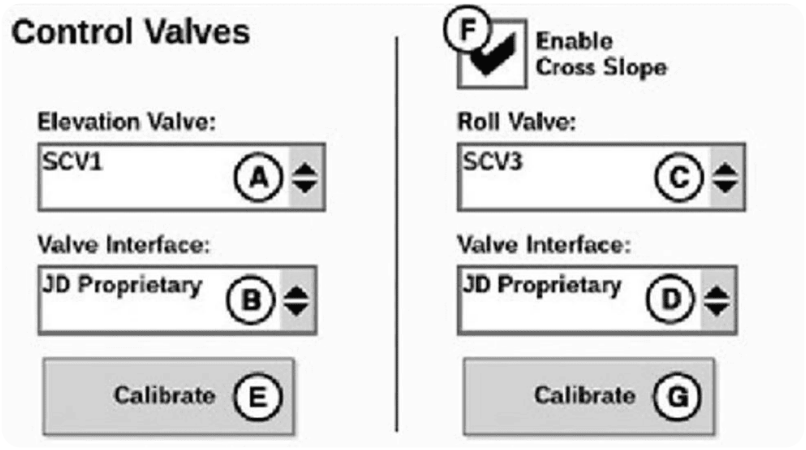
Solutions:

Choose ‘Cross Slope Control’ for SCV3’ from the drop down menu in UCC1.



SCV Control Type Drop-down Menu

Check the ‘Enable Cross Slope’ box in UCC2.



Paddle pots are backwards for manual control of cross slope.

Symptoms:

The operator is accustomed to moving the controls in one direction to achieve left tilt and in the other for right tilt. iGrade v1 wants the cross slope ram hoses in a certain way and this forces manual control to be backwards from how the operator expects.

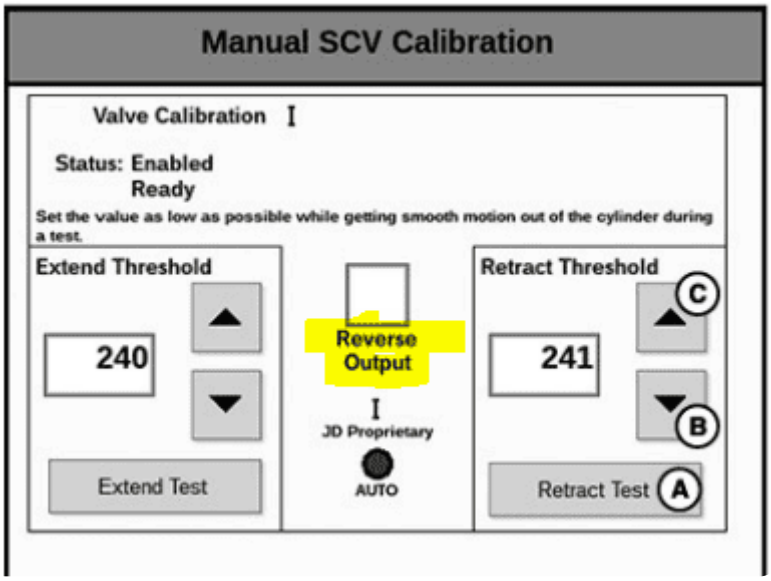
Cause:

iGrade v1 only allows the hoses to be plugged in one configuration.

Solutions:

Short of altering the hydraulic hose configuration on the implement rams, there is no known solution for iGrade v1.

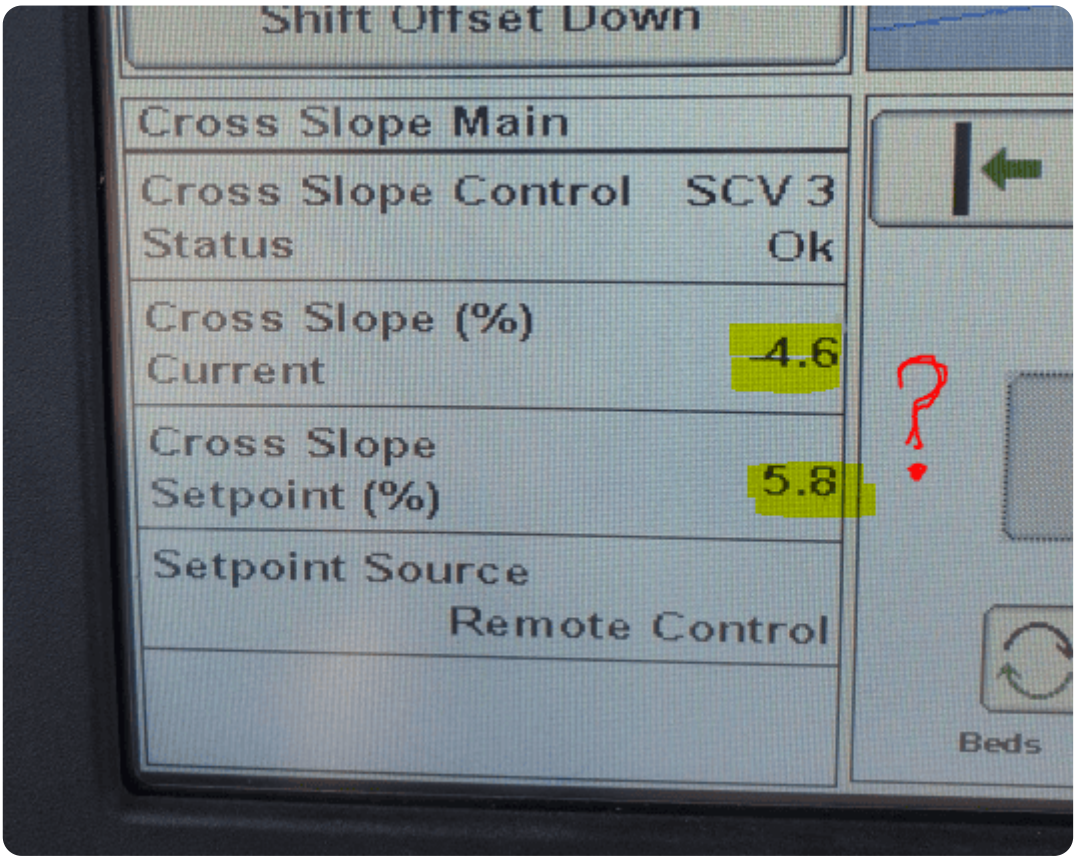
iGrade v2 gives the option of reversing the outputs.


Manual SCV Calibration
Valve Calibration
Status: Enabled
Ready
Set the value as low as possible while getting smooth motion out of the cylinder during a test.
Extend Threshold
240
Extend Test
Reverse Output
JD Proprietary
AUTO
Retract Threshold
241
Retract Test
A
B
C

Scraper cross slope appears to be the opposite of what it should be.

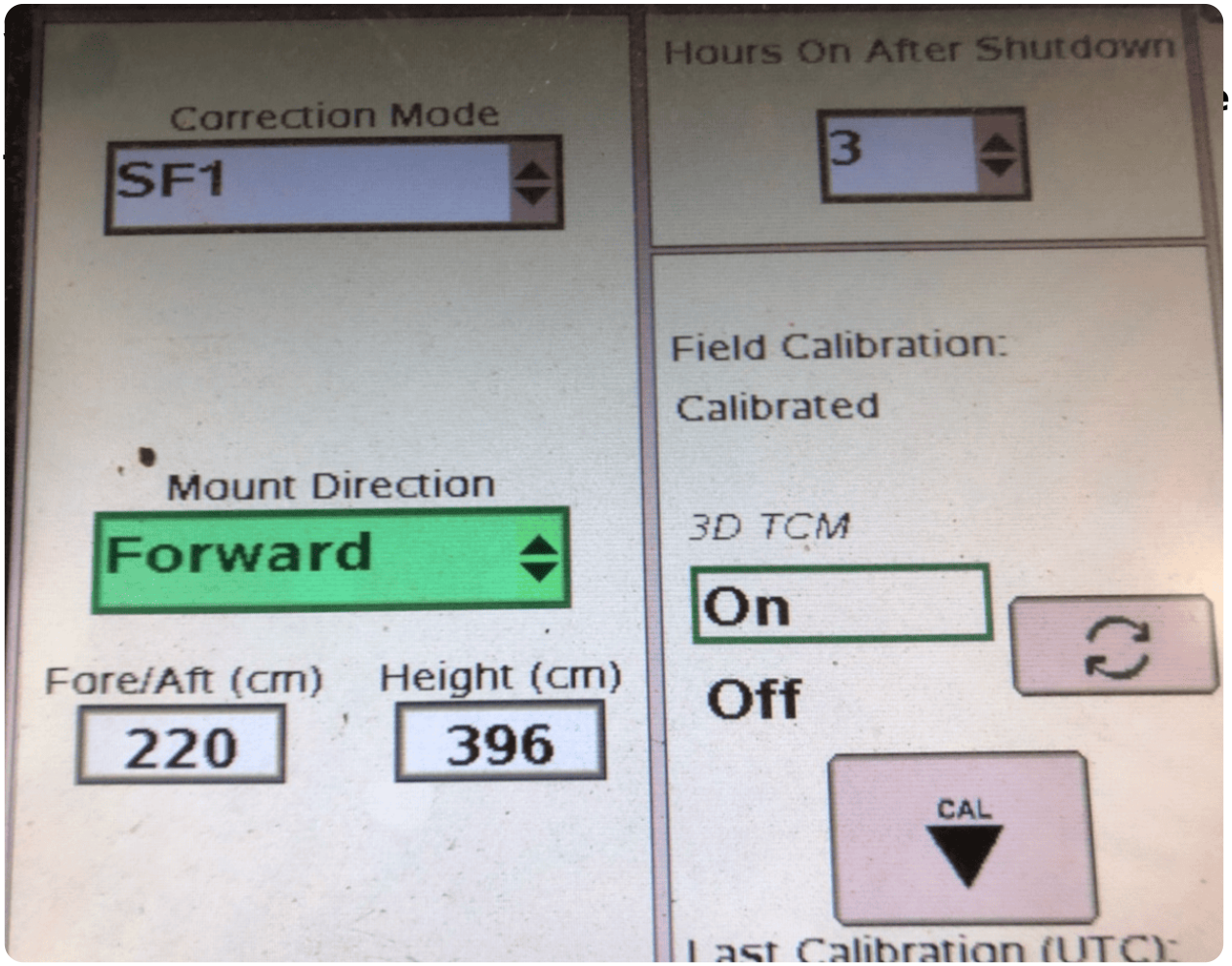
Symptoms:

When T3RRA is commanding a cross slope tilt to one side the scraper blade is doing the opposite. iGrade is showing a current cross slope % as positive when the implement is rolled to the left, and negative when tolled to the right. Reversing hydraulic hoses in the remotes does not help the problem.



Cause:

The implement GPS mount direction has been changed to ‘Backward’ in the John Deere display. This causes receiver TCM readings to be the opposite of what they should be.



iver is