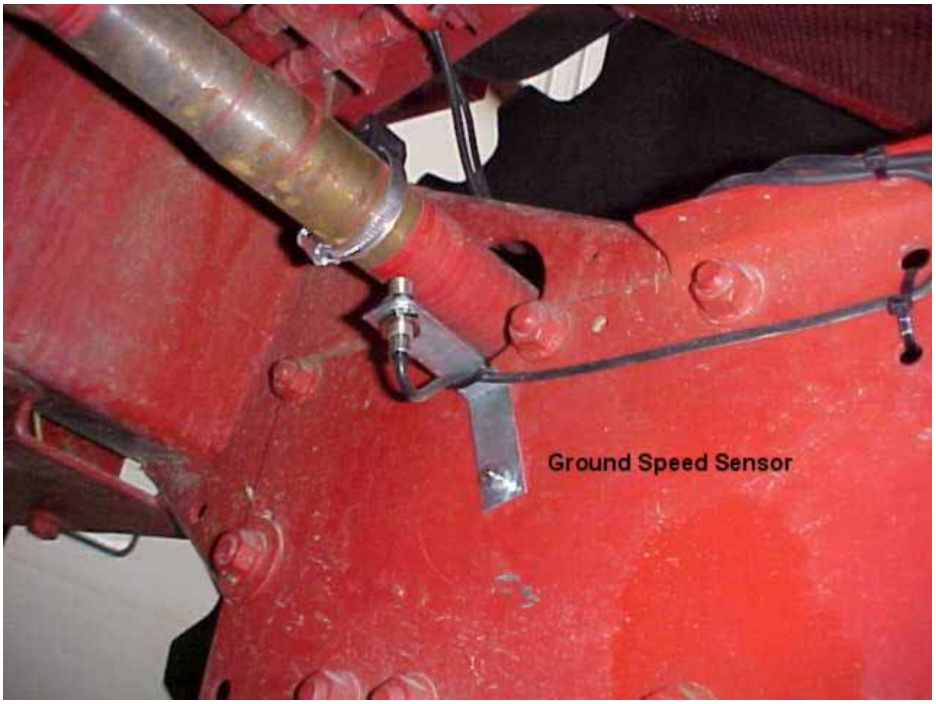
8000i Yield Monitor Install Guide

Case IH 2144-2166-2366 Series

Ground Speed

Right hand side of combine as shown.



Header Switch:

The header Switch performs an important function and must be installed such that adjustment of the chain can be made for varying crops and headers.

Below is a typical installation where the chain has been used to connect the switch to the feeder house. Use the following general rules when installing the header Switch:

1. The chain must pull on the switch as straight as possible.
2. When attaching the chain to the feeder house, make sure a location is picked that will not be damaged by crop residue building up around the chain and sensor.

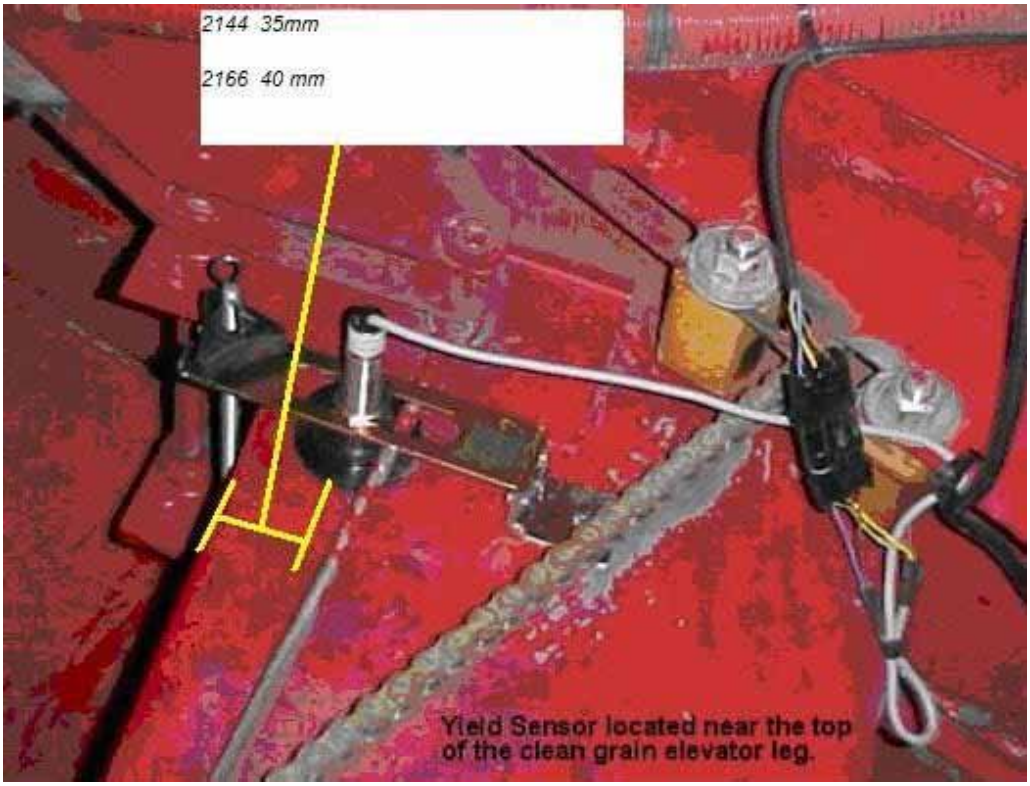
Case IH 2144-2166-2366 Series

Yield Sensor:

The Yield Sensor is the most critical part of the system. Plan the installation of this sensor carefully prior to drilling any holes.

Preparing for the installation:

1. The location for the sensor is as high as possible, below the bin floor. The measurement from the rear of the clean grain elevator to the center of the hole is 35-40mm.
2. Tools Required: For installing this sensor, a Step bit is highly recommended, these can be purchased at most tool and hardware stores, one capable of drilling a 7/8" hole will be required.
3. For ease of installation remove the tightening/tensioning rod, measure and install the sensor, then deal with the rod after the sensor is located properly.



Case IH 2144-2166-2366 Series

Yield Sensor measurements

Mark the location as shown on prior page, use either a progressive bit or standard bits to enlarge the hole to ¾ to 7/8".

Tightening rod:
Once the yield sensor is positioned it may be necessary to modify how the tensioning rod arrangement. This can be done by either moving the tightening rod so that it does not interfere with the sensor or you can carefully grind one edge of the lens cover down as is shown in the picture. It is preferable to move the tightening rod mounting hole to so it clears the sensor.

Rivets and hinge bracket.

The rivets need to be directly in the middle of the leg, between the up travel and down travel of the chain. The gap between the chain is the only safe place for the rivets.

FG Moisture Sensor Installation

For Combine models with the short cross auger in the tank the FG Sensor mounting location is in the trap door on the bottom of the Clean Grain Elevator as shown.

Cut a 3.25" hole not directly on the bottom locate the sensor towards the loaded paddle side of the elevator typically the rear of the machine.

Case IH 2144-2166-2366 Series

Check sensor fit to the door if needed grind the outer lip of the bracket to allow the sensor to fit the door.

Two ¼" holes were drilled inline with the center of the hole and out 3/8" from the hole edge to the center of the ¼" hole.

The Bolts used were ¼" x 1 ½" counter sunk head. The holes were countersunk to allow the inside to be smooth.

JB Weld Putty was used on the leading and trailing edge of the sensor to seal the sensor housing to the trap door to prevent grain leakage.

The sensor is held in place with two small brackets made from 1" x 1/8" Flat iron and fastened with lock nuts.

Route the cable up the back side of the clean grain elevator and to the front of the combine and follow the instructions for hookup in the Manual provided.

Case IH 2144-2166-2366 Series

Console Mounting

Please refer to Manual:

PS8000i Ceres Yield Monitor
Installation
Section: 2.2
Page: 8

Junction Box Installation and Wiring

The Junction Box needs to be mounted on the right hand side of the cab. Notice the marking on the Junction box indicating "Up" and "Front". The box should be installed so both of these statements are true. The Junction box also houses the "Tilt" sensor. If the Junction Box is not installed as noted, the hillside compensation will not work correctly.

For instruction on mounting and accessing the Junction Box, please refer to Manual:

PS8000i Ceres Yield Monitor

Installation
Section: 2.0
Pages: 5-6

Important Note: For all wiring except the moisture sensor, please refer to Manual:

PS8000i Ceres Yield Monitor

Installation
Section: 2.1.3-2.1.4
Pages: 6-7

Moisture Sensor Wiring Configuration is on the following page.

Case IH 2144-2166-2366 Series

Power Supply

Please refer to Manual:
PS8000i Ceres Yield Monitor
Installation
Section: 2.7
Page: 15

Moisture Sensor Wiring Configuration

This setup is using the Gray cable supplied from the FG Moisture Sensor.

The following connections must be made at the Junction Box to obtain correct readings from the FG Moisture Sensor.

Locate the Moisture Sensor Connections on the Junction Box.

The Moisture Sensor Cable enters the junction box as shown in the illustration above. Connect the Black wire to the 0V Terminal at Moisture Sensor Location on board. Connect the Red wire to the +12V Terminal at Moisture Sensor Location on board.

Note: The Other 3 Terminals on the junction box will not be used.

Connect the Green wire from the moisture sensor to the Gray wire from the Head Unit. Connect the Clear wire from the moisture sensor to the White wire from the head unit.

Case IH 2144-2166-2366 Series

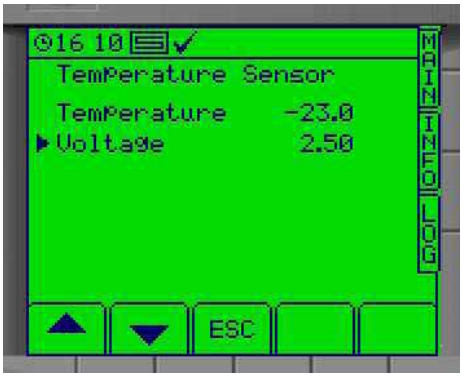
Software Configuration for the FG Moisture Sensor

From the main operate screen. Press the setup button and you will see the setup screen to the right.

Select number 2 Technician.

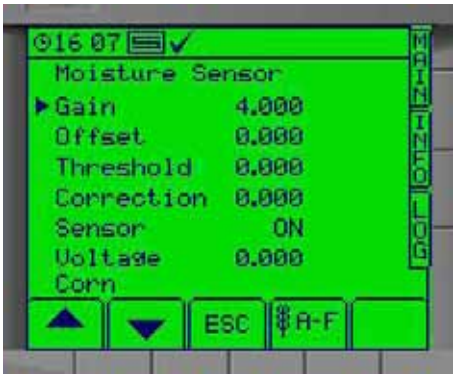
Enter the Pin (1234) then press the enter button to see the screen at right.

Select number 4 Temp Sensor.
Input the correct temperature in Degrees C.
The conversion for temperature is:
Degrees F – 32 x .555 = Degrees C.
Press Enter Button to accept changes.
Press the Esc. button to exit the temperature settings.



Select number 2 Moisture Sensor and change the Gain and offset as shown in chart below: (Use the A-F button to change between crops)

Crop	Gain	Offset
Corn	4.0	0.0
Wheat	3.6	2.4
Soybeans	3.37	0.0
Canola	1.0	9.5
Oats	2.975	3.0
Barley	1.9	9.3



If you have any questions please contact Loup Electronics