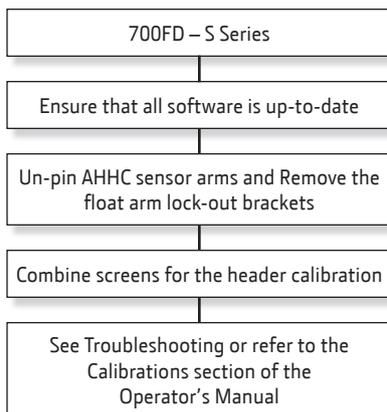


700FD Calibration Flowchart



This should fully calibrate the header for ON and OFF ground operations. No further effort in calibration sequences of locking out or pinning up sensor brackets should be required to run either mode or hybrid mode.



700FD-Flexible Draper Active Header Height Control (AHHC)

Quick Reference Guide



700FD-Flexible Draper Platforms are compatible with John Deere S-Series Combines.

- Refer to this guide for basic setup and adjustments, AHHC information, and cleaning instructions.
- S-Series information can also be found in this guide for 700FD related functions.

IMPORTANT: This guide is to assist the operators with correct setup and operation of the 700FD Flexible Draper Platform.

Refer to your Operator's Manual for additional information.

Adjustments

Draper Ground Engagement Angle

The HydraFlex™ Draper engagement angle is designed for optimum performance on your combine. It is recommended that the factory feeder house fore/aft tilt frame setting be used. If adjustments are desired, refer to your combine Operator's Manual for proper instructions.

IMPORTANT: Excessive rearward tilt may result in frame assembly being pushed into the ground, causing material accumulation in the float system components.

Excessive forward tilt may result in the cutterbar pushing the crop.

Hydraulic Feeder House Fore/Aft Tilt Adjust (If Equipped)

Hydraulic feeder house fore/aft tilt adjust allows the operator to increase or decrease the angle of the feeder house tilt frame enhancing the cutting performance.

System Requirements:

- Engine is running.
- Road transport disconnect button must be disengaged.
- Multi-function lever reconfigurable buttons are functionally assigned and unlocked (B).



On-Screen

1. To adjust the angle of the feeder house tilt frame touch plus (+) or minus (-) symbol or rotate the selection dial.
 - Increase tilts feeder house tilt frame angle forward.
 - Decrease tilts feeder house tilt frame angle rearward.
2. Display shows operator adjustment settings.

Multi-Function Lever

Reconfigurable buttons (C) or (D) can be configured to control hydraulic fore/aft.

Push and hold front of switch (C) or (D) to tilt feeder house forward.

Push and hold back of switch (C) or (D) to tilt feeder house rearward.



Belt Speed Adjust

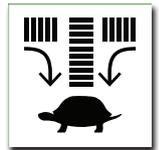
Draper belt speed adjust allows the operator to increase or decrease the belt speed.

1. Press the Header application button and select the belt speed section.
2. To increase or decrease the belt speed, touch the plus (+) or minus (-) symbol or rotate the selection dial.
3. Display shows the operator adjustment settings.

Quick Side Belt Speed Reduction Switch

When crop is harvested on one side of the platform due to irregular shaped fields, slowing the side draper belts speed enhances the feeding performance.

Side belt speed reduction switch allows the speed of the draper belt to automatically slow to a factory setpoint speed.

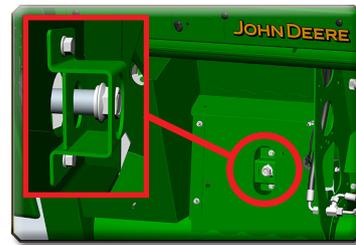


1. Press the side belt speed reduction button (A) on the multi-function lever.
2. Slow Speed Mode Engaged appears on the display and the draper belt speed automatically slows to the factory setpoint speed.
3. Pressing the belt speed reduction switch again or attempting to make manual belt speed adjustments while in slow speed mode automatically returns belt speed to the original speed set by the operator.

NOTE: If the original draper belt speed set by the operator is slower than the factory setpoint speed, the system will not engage and a diagnostic trouble code appears.

See your John Deere dealer if the factory setpoint speed needs adjusted.

Required Draper Belt Tension Setting



Critical: On the 730FD only, the idler belt tensioning bolt should be even with the outside shield.



Critical: Draper belt tension indicator must be in the position shown to ensure proper draper function in all conditions.

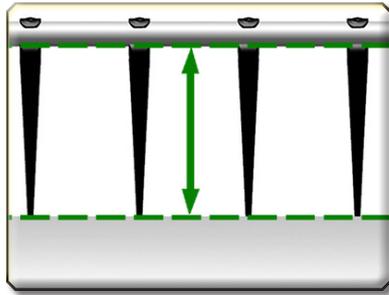
Adjustments (continued)

Reel Replacement/Reel Finger Adjustment

Recommended reel position is directly over the cutterbar, and only low enough so that the lower portion of the reel fingers engage the crop (not the tube).



Rule of Thumb: Out and Up!



Reel finger pitch is adjustable. Adjustment levers are at both ends of the reel. A more advanced finger pitch helps pick up downed crop.

A less advanced pitch reduces the material wrapping on the reel.

Additional Recommended Settings

Header Height/HydraFlex™ Pressure Control Knob

- With AHHC engaged, use the knob to adjust the header set point.
- While operating in the flex mode, the knob adjusts the flex pressure set point.
- Higher pressure = Less ground force.
- While operating in rigid mode, the knob adjusts the height set point.



Header Application Button

- Press the Header application button, then select either the manual HydraFlex™ float pressure adjustment or the belt speed adjustment.

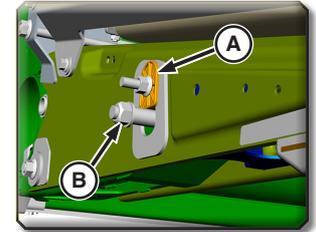


AHHC Mode Options

For flex draper platforms, there are three unique Active Header Height Control (AHHC) modes:

- On-Ground (“flex mode”) – soybeans, lentils, chickpeas
- Off-Ground (“rigid mode”), auxiliary attachment – wheat, barley, oats, canola
- On-Ground and Off-Ground AHHC are selected. AHHC resume button 2 is Off-Ground, AHHC resume button 3 is On-Ground (“hybrid mode”)

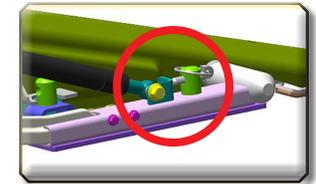
Float arm brackets may be reinstalled for operating in off-ground mode after the feeder house speed calibration and header calibration has been completed.



For on-ground mode, lockout brackets (A) must be removed. Ensure that only the lockout bracket cross-bolt is removed when unlocking the float arms. The second float arm stop bolt (B) is critical for function (Do Not Remove).

When using off-ground mode with the ground-engaging sensor arms unpinned, ensure that grease has been added to the sensor arm pivot shaft and that the sensor arm rotates freely.

Ensure that the storage pin is placed in the correct location.



NOTE: It's possible to use a Hybrid mode where no calibration is needed when changing between on and off-ground modes.

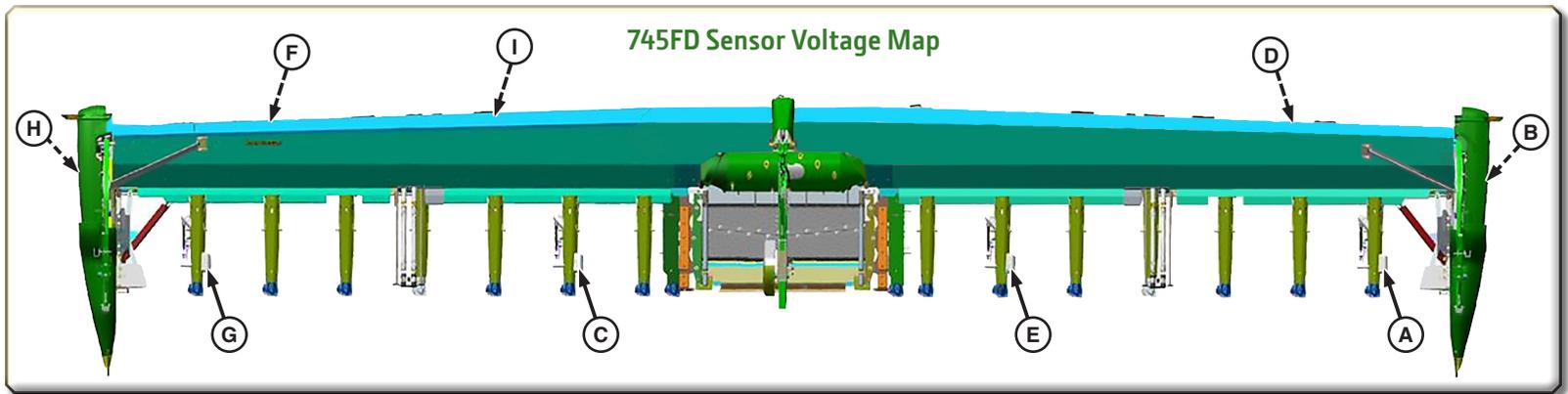
Recommended Header Modes to Enable

With both On-Ground and Off-Ground sensing buttons turned ON, it's possible to set the header activation button 2 on the multi-function lever. For the Off-Ground header height sensing and header activation button 3 for On-Ground float pressure sensing.

For pre-MY19 machines, refer to DTAC solution 92094 for enabling hybrid mode.

Header activation buttons 2 and 3 on the multi-function lever will activate the platform.





IMPORTANT: Performing any header calibration may automatically enable all six header modes. It is recommended to revisit the header application Auto Header Controls screen and turn OFF the Feeder House Float mode, which does not utilize functionality of the AHHC system on the header.



S-Series LC1 Address			
Controller	Address	Display	Description
LC1	21	__ n n n X X X	(A) Left-Hand Auxiliary Height Sensor Voltage (cc #9826)
LC1	21	__ X X X n n n	(B) Left-Hand Main Height Sensor Voltage (cc #9816)
LC1	22	__ n n n X X X	(C) Right Auxiliary Header Height Sensor Voltage (cc #9803)
LC1	22	__ X X X n n n	(D) Center Main Header Height Sensor 1 Voltage (cc #9817)
LC1	23	__ n n n X X X	(E) Left Auxiliary Header Height Sensor Voltage (cc #7464)
LC1	23	__ X X X n n n	(F) Center Main Header Height Sensor 2 Voltage (cc #9804)
LC1	24	__ n n n X X X	(G) Right-Hand Auxiliary Height Sensor Voltage (cc #9828)
LC1	24	__ X X X n n n	(H) Right-Hand Main Height Sensor Voltage (cc #9818)
LC1	30	__ n n n X X X	(I) Cutterbar Flex Pressure Sensor

Calibrations

Calibrating the feeder house speed and then the AHHC sensors is required to initially use the system. Calibration verifies that the AHHC sensors are set within the operating range. A failed calibration often means that a sensor is not set properly. See AHHC Troubleshooting and Sensor Voltage Map for more information.

Tuning calibration is also available after a header calibration is performed. This tuning operation improves sensitivity of the Height Sensing function and is recommended to be performed whenever possible.

AHHC Troubleshooting

If a header calibration fails, there are several common causes and solutions:

Sensors out of range

- Sensors may not be adjusted properly: *See Sensor Voltage Settings.*
- Damaged wiring harness: *Inspect the wiring harness leading to all the AHHC sensors.*
- Broken sensor or components: *Inspect sensors.*

Sensors seeing less than 1.2 V of range

- Broken sensor or components: *Inspect sensors.*
- Lock-out brackets still installed in the float arms.
- Off-ground sensor arm still pinned up.
- Off-ground sensor arm unable to fully rotate due to lack of lubrication: *Add grease to the fitting on the float arm.*
- Damaged wiring harness: *Inspect the wiring harness leading to all the AHHC sensors.*

Sensors seeing too much voltage range

- Float arm stop bolt was removed: *Check the float arms for stop bolts.*

Sensor Voltage Settings

Operating range while harvesting of the AHHC sensor is 0.6 – 4.4 V. Sensor voltage readings can be viewed in LC1 Diagnostic Addresses – see the *Calibrations* section of the platform *Operator's Manual*.

It is highly recommended to set the sensors at 0.9 – 4.1 volts to ensure that the sensor does not shift out of the operating range.

If a header calibration fails, see the **700FD Sensor Voltage Map** to ensure that all sensors are set correctly.

S-Series LC1 Address

Controller	Address	Display	Description
LC1	21	--_nnnXXX	(A) Left-Hand Auxiliary Height Sensor Voltage (cc #9826)
LC1	21	--_XXXnnn	(B) Left-Hand Main Height Sensor Voltage (cc #9816)
LC1	22	--_nnnXXX	(C) Center Auxiliary Header Height Sensor Voltage (cc #9803)
LC1	22	--_XXXnnn	(D) Center Main Header Height Sensor 1 Voltage (cc #9817)
LC1	30	--_nnnXXX	(E) Cutterbar Flex Pressure Sensor
LC1	23	--_nnnXXX	(F) Center Main Header Height Sensor 2 Voltage (cc #9804)
LC1	24	--_nnnXXX	(G) Right-Hand Auxiliary Height Sensor Voltage (cc #9828)
LC1	24	--_XXXnnn	(H) Right-Hand Main Height Sensor Voltage (cc #9818)

