Training Manual

Brandt

S700 SERIES COMBINE

JOHN DEERE

OUR DEALERSHIP LOCATIONS

ALBERTA AND BRITISH COLUMBIA

Bassano
Old Highway 1
(403) 641-3813

Brooks
Highway 873 North
(403) 362-3486

Calgary
292177 Crosspointe Rd
(403) 280-2200

Claresholm
8500 Alberta Road
(403) 625-4421

Coronation
4420 Victoria Avenue
(403) 578-3744

Creston
1617 Northwest Blvd
(250) 431-9002

Drumheller
3049 Highway 10 East
(403) 823-8484

Hanna
302 Pioneer Trail
(403) 854-3334

High River
498114 - 121 St East
(403) 652-7797

Olds
4310 - 50th Avenue
(403) 556-6961

Pincher Creek
1165 Main Street
(403) 627-4451

Ponoka
3600 Highway 2A South
(403) 783-3337

Red Deer County
37043 Hwy 2 Service Rd. (Northbound)
(403) 343-2238

Stettler
Highway 12 West
(403) 742-4427

Trochu
102 - 1st Avenue North
(403) 442-3982

Vulcan
311 Service Road North
(403) 485-2231

SASKATCHEWAN

Melfort
2320 Saskatchewan Dr S
(306) 752-9344

Nipawin
2002 Highway 35 South
(306) 862-9344

Prince Albert
Highway 3
(306) 763-6686

Rosthern
Highway 312 West
(306) 232-4852

Saskatoon
1125 North Service Rd
(306) 933-3303

Watrous
Highway 2 South
(306) 946-3362

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S-SERIES COMBINE SETTING TIPS AND TRICKS

- Set the combine to recommended initial settings for the grain you are going to harvest
- Use the Operator's Manual, Crop Settings Adjustment guide, GoHarvest App or the Active Combine Adjust on the combine
- Harvest until the separator is completely full, up to 100 feet before you start to do your preliminary tests
- Check your four key indicators
    - Straw condition, Grain Tank sample, Tailings and Grain Loss at the rear of combine either the shoe or the rotor
- Try to maintain as long of straw as possible and still get the grain out of the head
- Start with concave at a wider range of the recommended settings, fill combine, stop, and check for kernels in the heads
- If some kernels are left, pull up the concave at increments of two on the display until the kernels are gone and you have the longest straw length possible
- Once there are a couple of kernels left in the head, leave concave at the achieved setting, and increase rotor speed to remove the final kernels
- On a S760 and S770, the engine RPM will go to **2150** when the separator is engaged
- On a S780 and S790, combine the engine RPM will go to **2050** when the separator is engaged
- These combines have an Isochronous governor that does everything it can to maintain these engine RPMs
- Do drop box checks, then use the seed loss charts in Operator's Manual or GoHarvest App
- Don't be fooled by pre-harvest grain loss that's already on the ground before the combine passes the test area
- Use the Combine Operator's Manual, Interactive Combine Adjust if equipped or the GoHarvest App to walk you through setting your combine

The goals are to have an acceptable grain tank sample, very little grain loss at the rear of the combine at acceptable ground speeds (both on the shoe and the rotor), very low tailings and the longest straw length possible out the rear of the combine.

TIPS FOR MAKING INITIAL ADJUSTMENTS ON STS COMBINES

Feeder chain in slow speed, feed accelerator on slow speed to start within all crop conditions.

WHEN CROP IS TOUGH:

Concaves: on the tighter side of the initial adjustments. Try not to tighten up more than a setting of 10 (anything less than 10 will burn unnecessary fuel). If you must go tighter than 10, (crops such as Protégé/Harvest Wheat), a setting of 7 with a high rotor speed may be successful.

Rotor Speed: on the high end of the specifications. Increase the speed as needed to raise the centrifugal force and separate the grain. Use rotor speed when grain is hard to thresh rather than tightening the concave. Increase the rotor speed until you start cracking grain, then back off the RPM until the grain just stops cracking. Do not run your rotor speed slower than **300 RPM.** If this is difficult to achieve, contact your local Brandt Agriculture Dealer about a Discharge Flight (Paddle) Kit for Tri-Stream Rotor (BH84581). The variable stream rotor has the discharge paddles factory installed on the rotor.

Fan Speed: on the high end of initial adjustments, when fine tuning, use your tailings indicator to set maximum fan speed for the chaffer and sieve settings. Increase your fan speed until your tailings indicator begins to rise – this is an indication you are blowing clean grain into the return system.

Shoe Settings: at the larger openings of the adjustments.

WHEN CROP IS DRY:

Concave: on the open side of adjustments, **no higher than 30.**

Rotor Speed: at the lower end of adjustments. Do not run the cylinder slower than **300 RPM** unless you have installed a rear discharge kit (BH84581) on Tri-Stream rotor.

Fan Speed: on high end of initial adjustments.

Shoe Settings: at the mid-range openings of the adjustments.

CONCAVE FILLER PLATES

On any S700 model, leave the concave filler plates out until you determine if you will need them or have excessive partial heads in the grain tank.

S760 AND S770 MODELS

Start by installing one plate in the front of the front concave #1 position, then add one more in the center of the front concave #2 position, if you still have issues, add another plate into the #5 position, center of the middle concave where the returns come back to the threshing area. If you are still experiencing issues or are working in extreme conditions, especially with Protégé/Harvest Wheat, cover all three on the front concave and all three on the middle concave. This is not typically recommended as it cuts down your concave capacity dramatically and you will have to slow down your ground speed as rotor losses may/will occur.

S780 AND S790 MODELS

Start by installing one plate in the front of the front concave #1 position, then add one more in the center of the front concave #2 position, if you still have issues add another plate in #3 position in the front concave.

TINE SEPARATOR FILLER PLATES

On the S-Series combines with a Tri-Stream/Variable Stream rotor, start with the filler plates in to prevent overloading of the shoe. On standard tine separator grate machines, start with three rows of four on the left-hand side and two rows of four on the right-hand side. For heavy-duty separator grates in the Tough Grain Package, start with two rows of four on the left-hand side and one row of four on the right-hand side. If the crop is expected to yield over 80 bushels per acre remove the filler plates to give extra separation capacity. If you encounter pieces of straw or pods in the grain tank when harvesting canola in very dry conditions or in desiccated wheat straw in dry conditions, you could have an excessive shoe load. In order to reduce the shoe load, you can start by installing the filler plates one row on the left-hand side and one row on the right-hand side. We can also work with the fan and the chaffer settings to clean up the grain tank sample. If the combine is equipped with an Adjustable Front Chaffer, you can also tighten up the settings there.

CONCAVE TYPES

CONCAVE TYPE	SOYBEANS	WHEAT, BARLEY, SMALL GRAINS	SUNFLOWER (OIL)	CANOLA
Small Wire	Not Recommended	Best	Average	Best
Large Wire	Good	Good	Best	Good
Round Bar	Best	Average	Best	Average

Best: Provides the Best Level of Performance **Good:** Provides a Good Level of Performance **Average:** Provides an Average Level of Performance

HOW TO MAKE ADJUSTMENTS ON STS COMBINES

The following adjustments are not final. You will have to continue to adjust the combine accordingly throughout the day. Always be sure to only make **ONE** adjustment at a time after the initial settings are made.

- Adjust Rotor speed by 30 RPM increments
- Adjust Cleaning Fan speed in 30 RPM increments
- Adjust Concave in 1/8" increments or two numbers at a time on the display read out
- Adjust Chaffer and Clean Grain Sieve in 1/8" increments or one number at a time on the dials or readout
- Be aware if you close the Chaffer you may have to reduce the Cleaning Fan speed
- Be aware if you open the Chaffer you may have to increase the Cleaning Fan speed
- Remember: The Chaffer is for cleaning & the Clean Grain Sieve is for sizing
- On STS combines, use the tailings indicator on the corner post if you are not sure of what your Cleaning Fan speed should be. Turn up Cleaning Fan speed until the tailings indicator on VisionTrak starts to rise suddenly, then back off fan 30 RPM at a time, until the tailings indicator drops back close to where it started, or four to five bars

USE THESE FOUR KEY INDICATORS TO SET A COMBINE:

1. **Straw Condition, as long as possible**
2. **Check Grain Tank Sample (work with your grain buyer)**
3. **Check amount of Tailings**
4. **Check Cleaning Shoe losses (chaffer and sieve area) and Tine Separator Area losses**

Be aware of pre-harvest losses when checking for losses behind the combine.

Once you have the combine set where you want, then turn on Auto Maintain.

Power shut down procedure in the Operator's Manual or on the Combine Adjustment Guide can also be used to diagnose what the combine is doing to help you make the settings needed to set your combine. It is only recommended when acceptable loss levels cannot be achieved.

Use a drop box so you know exactly what is being thrown over and from where.

All the above suggestions are irrelevant if the concave is not levelled and proportioned to the rotor. This adjustment should be made before the start of a new harvest season to ensure maximum productivity of your combine.

If the swath you are picking up is intertwined and butts of grain would feed in first, it is almost impossible to clean up the sample, ideally you want the heads to be feeding in first.

When straight cutting, if the heads and stand of straw are hanging sideways to your direction of travel you will again have a hard time cleaning up the sample. If crop is standing straight things will work fine.

Do not pull your power meter to the red zone for extended periods of time. Doing so will cause your grain tank sample to go dirty very quickly.

CROP SETTINGS

Note: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.

	CANOLA	CHICKPEAS	WHEAT (DIFFICULT)	WHEAT (NORMAL)	ALFALFA	BARLEY
FEEDERHOUSE DRUM POSITION	Up	Down	Down	Down	Down	Down
FEEDERHOUSE CONVEYOR CHAIN*A*B	26 Tooth	26 Tooth	26 Tooth	26 Tooth	26 Tooth	26 Tooth
FEED ACCELERATOR SPEED *B*J	High	Low	High	High	High	High
FEED ACCELERATOR WEAR STRIPS	Serrated	Serrated	Serrated	Serrated	Serrated	Serrated
THRESHING SPEED (RPM)*B*E	350-550L	400-600	800-1000	750-950	600-800	700-950
THRESHING CLEARANCE	15—40	18—24	3-15	8-16	0-5	5-22
CONCAVE TYPE (NORTH AMERICA)*D	Small Wire	Round Bar/Large Wire	Small Wire	Small Wire	Small Wire	Small Wire
SEPARATOR GRATE COVERS*D	Use As Required	Use As Required	Use as required	Use as required	Use As Required	Use As Required
SEPARATOR GRATE SPACERS	In Storage Position	In Storage Position	In Storage Position	In Storage Position	In Storage Position	In Storage Position
TOP COVER TRANSPORT VANES*O *(IF EQUIPPED)*	Standard	Standard	Standard	Standard	Standard	Standard
FAN SPEED (RPM)	600—900	800—1100	900-1250	900-1250	550-700	850—1100
ADJUSTABLE FRONT CHAFFER (MM) *(IF EQUIPPED)*	5—10	24	24	24	5—10	24
CHAFFER CLEARANCE (MM)	10-14	15-20	13-18	13-18	10-20	13-18
DUAL ZONE ADJUST REAR CHAFFER CLEARANCE (MM)	5 Level, 10 Sidehill	5 Level, 10 Sidehill	5 Level, 10 Sidehill	5 Level, 10 Sidehill	5 Level, 10 Sidehill	5 Level, 10 Sidehill
SIEVE CLEARANCE (MM)	2-5	6-10	3-8	3-8	1-4	6-9
TAILINGS SYSTEM CONCAVE POSITION *(IF EQUIPPED)*	Corn	Corn	Grain	Grain	Grain	Grain
CROP DIVERTER	Grain	Grain	Grain	Grain	Grain	Grain
KNIFE BANK ENGAGEMENT	Allowed	Allowed	Allowed	Allowed	Allowed	Allowed
CHOPPER SPEED	High	High	High	High	High	High

	OATS	PEAS	FLAX	GRASS SEED	LENTILS	RYE
FEEDERHOUSE DRUM POSITION	Down	Down	Down	Down	Down	Down
FEEDERHOUSE CONVEYOR CHAIN*A*B	32 Tooth	26 Tooth	26 Tooth	32 Tooth	26 Tooth	26 Tooth
FEED ACCELERATOR SPEED *B*J	High	Low	High	High	Low	High
FEED ACCELERATOR WEAR STRIPS	Serrated	Serrated	Serrated	Serrated	Serrated	Serrated
THRESHING SPEED (RPM)*B*E	600-900	300-400	800-1000	500-850*N	350-500	700-900
THRESHING CLEARANCE	15-25	15-30	0-10	12-25	7-12	13-26
CONCAVE TYPE (NORTH AMERICA)*D	Small Wire	Round Bar/Large Wire	Small Wire	Small Wire	Round Bar/Large Wire	Small Wire
SEPARATOR GRATE COVERS*D	Use as required	None	Use As Required	Use As Required	Use as required	Use as required
SEPARATOR GRATE SPACERS	In Storage Position	In Storage Position	In Storage Position	In Storage Position	In Storage Position	In Storage Position
TOP COVER TRANSPORT VANES*O *(IF EQUIPPED)*	Standard	Advanced	Standard	Standard	Standard	Standard
FAN SPEED (RPM)	750-900	850-1050	700-1050	350-600*I	800-1000	750-950
ADJUSTABLE FRONT CHAFFER (MM) *(IF EQUIPPED)*	24	24	24	5-10	24	24
CHAFFER CLEARANCE (MM)	18-22	16-20	8-15	12-18	2-18	16-18
DUAL ZONE ADJUST REAR CHAFFER CLEARANCE (MM)	5 Level, 10 Sidehill	5 Level, 10 Sidehill	5 Level, 10 Sidehill	5 Level, 10 Sidehill	5 Level, 10 Sidehill	5 Level, 10 Sidehill
SIEVE CLEARANCE (MM)	6-10	6-11	5-10	5-12	3-10	6-10
TAILINGS SYSTEM CONCAVE POSITION *(IF EQUIPPED)*	Grain	Corn	Grain	Grain	Corn	Grain
CROP DIVERTER	Grain	Grain	Grain	Grain	Grain	Grain
KNIFE BANK ENGAGEMENT	Allowed	Allowed	Allowed	Allowed	Allowed	Allowed
CHOPPER SPEED	High	High	High	High	High	High

	TRITICALE	MUSTARD	NAVY BEANS	SOYBEANS	CORN (DRY)	CORN (WET)
FEEDERHOUSE DRUM POSITION	Down	Down	Down	Down	Up	Up
FEEDERHOUSE CONVEYOR CHAIN*A*B	26 Tooth	26 Tooth	22 Tooth*P	26 Tooth	26 Tooth	26 Tooth
FEED ACCELERATOR SPEED *B*J	High	High	Low*C	Low	Low*C	Low
FEED ACCELERATOR WEAR STRIPS	Serrated	Serrated	Backswept Serrated	Serrated	Serrated	Serrated
THRESHING SPEED (RPM)*B*E	850-1000	600-900	300-350*L	450-650	250-450	350-500
THRESHING CLEARANCE	18-24	10-20	15-30	15-30	20-35	20-35
CONCAVE TYPE (NORTH AMERICA)*D	Small Wire	Small Wire	Round Bar	Round Bar/Large Wire	Round Bar	Round Bar
SEPARATOR GRATE COVERS*D	Use As Required	Use As Required	None	None	None	None
SEPARATOR GRATE SPACERS	In Storage Position	In Storage Position	In Storage Position	Either	Installed	Installed
TOP COVER TRANSPORT VANES*O *(IF EQUIPPED)*	Standard	Standard	Advanced	Standard	Standard	Standard
FAN SPEED (RPM)	750-1000	500-800	800-1100	800-1050	900-1300	1000-1300
ADJUSTABLE FRONT CHAFFER (MM) *(IF EQUIPPED)*	16-18	5-10	24	24	24	24
CHAFFER CLEARANCE (MM)	8-15	10-14	14-18	14-18 (General-Purpose) or 13-17 (Deep-Tooth)	15-20 (Depp-Tooth), 17-22 (General-Purpose)	16-21 (Deep-Tooth), 18-22 (General-Purpose)
DUAL ZONE ADJUST REAR CHAFFER CLEARANCE (MM)	5 level, 10 sidehill	5 level, 10 sidehill	5 level, 10 sidehill	5 level, 10 sidehill	5 level, 10 sidehill	5 level, 10 sidehill
SIEVE CLEARANCE (MM)	6-10	2-5	6-10	6-10 (General-Purpose) or 5-9 (Deep-Tooth)	11-15 (General-Purpose) or 10-14 (Deep-Tooth)	11-15 (General-Purpose) or 10-14 (Deep-Tooth)
TAILINGS SYSTEM CONCAVE POSITION *(IF EQUIPPED)*	Grain	Grain	Corn	Corn	Corn	Corn
CROP DIVERTER	Grain	Grain	Grain	Grain	Corn	Corn
KNIFE BANK ENGAGEMENT	Allowed	Allowed	Allowed	Allowed	Disengaged Only	Disengaged Only
CHOPPER SPEED	High	High	High	High	Low	Low

FOOTNOTES

(A)* For poor feeding straw crops due to high volume, green, or windrowed conditions, the 32-tooth drive sprocket is recommended.

(B)* For improved straw quality in dry crops and grain quality, use lower speed. For dry, brittle sunflowers a 15-tooth drive sprocket can be used.

(C)* For improved grain quality, use slow down kit to 320 RPM.

(D)* In shoe overloading conditions in dry crops, with small wire concaves, initially install two rows on right side and three rows on left side of the separator grates. With large wire concaves, initially install three rows on right side and two rows on left side of separator grates. Adjust number and pattern as required by condition.

(E)* 15 elements is the standard configuration. In most conditions 15 elements will require less power leading to higher capacity, less shoe load, and less straw damage. An additional 9 element locations (Dense Pack) are available on tough crop rotors which can be used in tough material handling conditions.

(F)* For improvement in threshing, grain tank sample, and chaff load distribution in small grain, first install concave covers in front concave. Additional covers can be added to other concaves as needed.

(G)* Recommendations other than Serrated Tough Crop will require conversion of Feed Beater.

(H)* Tailings sump cover recommended.

(I)* Cleaning Fan slow down kit may be required.

(J)* For increased material handling use High speed.

(K)* Wires may be removed for increased cob capture.

(L)* Discharge paddles can be installed for improved material handling in rotor if using TriStream™ Rotor.

(M)* Utilize Corn Cob Mix separator grates.

(N)* In extremely tough material handling conditions, threshing tines may be installed in place of threshing elements (threshing performance may be reduced).

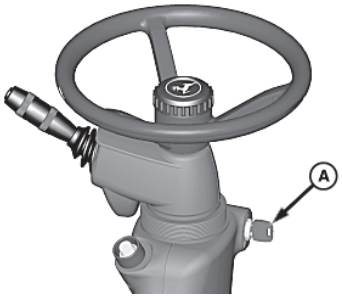
(O)* Advanced setting may be used for improved straw quality and/or material handling. Note: Separator loss may increase when advanced. Wheat Difficult / Wheat Normal.

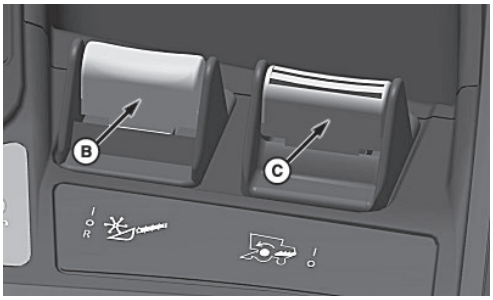
(P)* Available through service parts.

POWER SHUT DOWN PROCEDURE

A power shutdown is used to determine the machine's performance in the threshing and separating areas by taking a "snap-shot" of the material in the separator. This is valuable in determining where the losses behind the machine are generated and what adjustments can be made to correct the condition. Be sure to verify that crop condition and material intake are similar for each shutdown.

1. Locate the engine speed indicator on the corner post display and threshing speed readout on the armrest display
2. Lock the brake pedals together
3. Operate the machine at optimized throughput levels in the desired crop
4. Move the steering wheel forward for free motion (both hands are needed)
5. Press the low idle engine speed switch on the armrest
6. Depress brake pedals
    i) Non-ProDrive™ machines: Fully depress brake pedals (quickly pulls engine speed down by loading propulsion system)
    ii) ProDrive™ machines: Lightly depress brake pedals (ProDrive™ attempts to repower and will downshift changing machine dynamics if brakes are fully depressed)
7. As engine speed drops to near low idle speed (1200 RPM), quickly disengage header (B) and separator engage (C) switches on the armrest
8. Quickly move the multi-function lever to the neutral position





LEGEND:
A - Key Switch
B - Header Engage Switch
C - Separator Engage Switch

9. Allow engine to cool for a minute
10. Turn key switch (A) to shut OFF the engine, set park brake and remove key
11. Inspect for excessive grain damage, kernels left on the cobs, and free grain loss before making any adjustments
12. Decide what adjustments are needed. Open threshing clearance and engage separator(avoids undue stress to cylinder drive area during clean out)
13. Adjust machine to desired settings and continue harvesting
14. Repeat this procedure and verify grain quality and losses behind machine
15. Once acceptable loss levels are attained, calibrate VisionTrak™ Monitor and continue to harvest

CALIBRATIONS

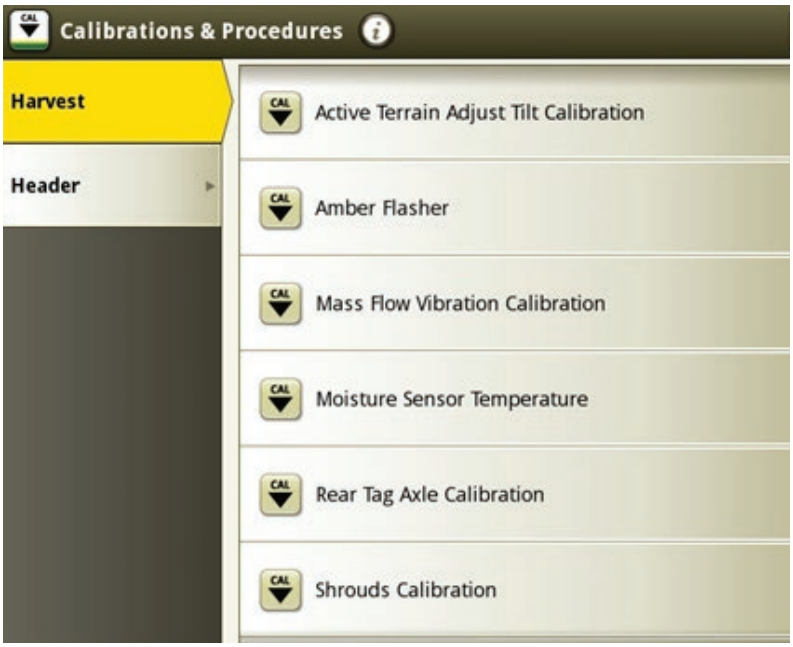
WHERE TO FIND THEM

From the main Settings page of the Combine press Menu 

From the Machine Settings page, press Calibration and Procedures tab 

This takes you to the Calibrations and Procedures page where you will be able to do calibrations on the combine and the header. What you see will depend on the options on your combine and the header you have installed.

CALIBRATION OPTIONS



Harvest Tab Calibration Options:

Mass Flow Vibration

Moisture Sensor Temperature

Yield

Amber Flashers

Chassis Tilt

Threshing Clearance (Hydraulic)

Concave Air Removal

Concave Leveling

ActiveYield

Threshing Clearance (STS Electric)

Unloading Auger Engage

Header Tab Calibration Options:

Feederhouse Speed

Header

Deck Plate Spacing

Feederhouse Lateral Tilt Speed

Wings

Reel and Cutterbar Position

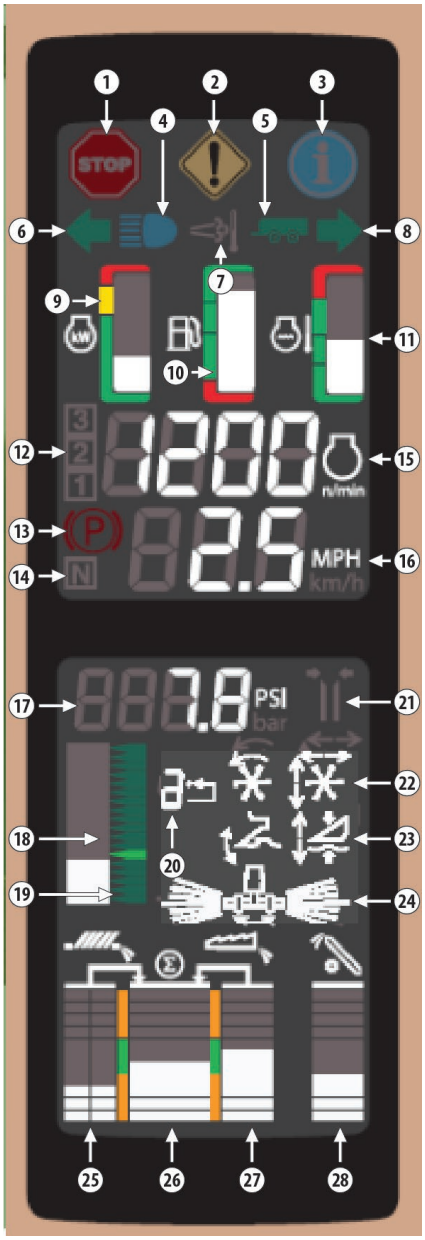
Reel Position

Feederhouse Tilt Fore/Aft Range

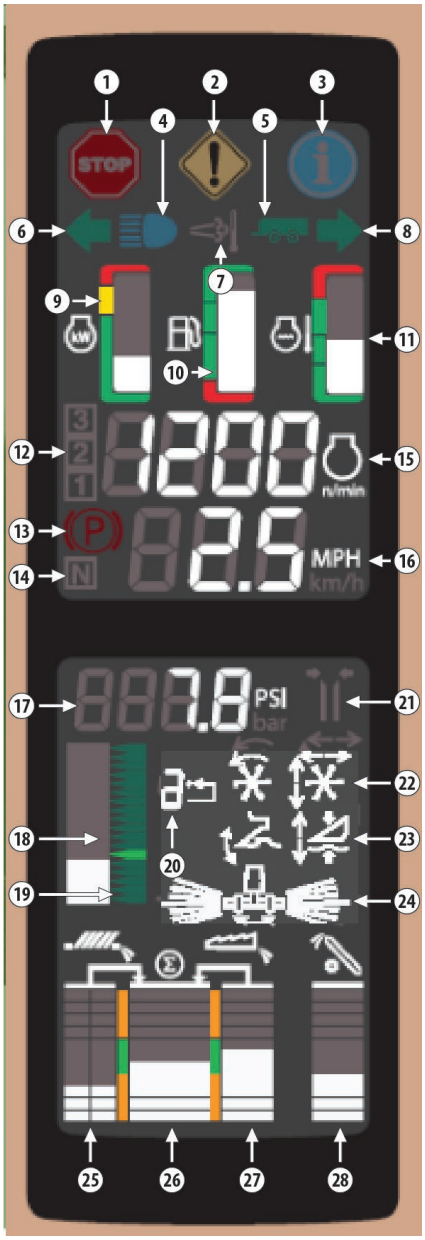
Feederhouse Lateral Tilt Range

COMMANDTOUCH CAB CORNERPOST

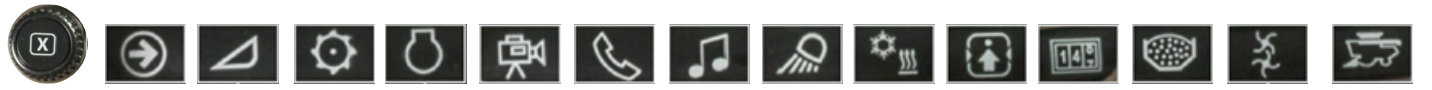
1. **Step Engine Warning Indicator (Red):** illuminates and requires the machine to be stopped at once and the problem corrected. Diagnostic trouble code is shown on armrest display until problem is resolved
2. **Service Warning Indicator (Yellow):** illuminates and flashes when a problem exists with a machine. Requires machine to be stopped at the earliest convenience. Diagnostic trouble code is shown on armrest display
3. **Information Warning Indicator (Grey):** illuminates and flashes when diagnostic trouble code is active. Alerts operator to be aware of a condition. When a warning is acknowledged, screen message disappears, and the warning indicator turns OFF
4. **High Bean Indicator:** shows operator that high beam lights are currently selected
5. **Trailer Lights Indicator:** illuminates when the trailer harness is hooked up and turn signal is applied
6. **Left Turn Signal Indicator:** shows operator that a left turn planned
7. **Exhaust Filter Cleaning Indicator (Interim Tier 4/ Stage III B):** illuminates when exhaust filter system is actively performing exhaust filter cleaning
8. **Right Turn Signal Indicator:** shows operator that a right turn is planned
9. **Engine Power Meter Indicator:** shows operator percentage of power that engine is currently using at any given time. **Important:** If the indicator moves into the red region, engine power is maximized, and machine could stall. Reduce load on machine until indicator moves back into green and yellow regions
    - Green Region (35 to 100%)
    - Yellow Region (101 to 107%)
    - Red Region (108 to 114%)
10. **Fuel Gauge Indicator:** shows how much fuel is left in the tank. When level reaches 10% (approximately one hour of operation) of remaining fuel, fuel indicator flashes, alarm sounds and low fuel message appears
    - Indicator shows zero bars when fuel tank is empty



11. **Engine Temperature Indicator:** seven to nine bars are displayed for normal operating temperature. If the alarm sounds and engine temperate message appears, stop engine and check problem immediately
12. **Transmission Gear or Range Indicator:**
    - 3 Speed Non-ProDrive Machines: shows which gear is currently selected. 1, 2, 3 indicators illuminate depending on gear selection
    - 2 Speed ProDrive Machines: shows which range is currently selected. 1 and 2 indicators illuminate depending on gear selection
13. **Park Brake Indicator:** illuminates when park break is selected
14. **Neutral Indicator:** shows that the machine is currently in neutral position
15. **Engine Speed Indicator:** shows engine RPM speed
16. **Ground Speed Indicator:** shows the machine ground speed (km/h or mph)
17. **Header Height Numeric Display:** shows current header height
18. **Header Height Position Display:** shows current header height position
19. **Header Heights Setpoint Display:** shows operator desired setpoint
20. **Header Activation Number:** shows currently selected activation button
21. **Deck Plate Position Resume:** shows system is currently active
22. **Dial-A-Speed/Reel Resume:** Dial-A-Speed (Left Icon): shows system is currently active Reel Resume (Right Icon): shows system is currently active
23. **Header Height Resume/Header Height Sensing/Active Header Float:**
    - Header Height Resume (Left Icon): shows system is currently active
    - Header Height Sensing (Right Icon): shows system is currently active Active
    - Header Float (Right Icon): shows system is currently active
24. **Lateral Tilt Display:** shows position of Feederhouse frame
25. **Shoe Loss Indicator:** shows grain loss from shoe
26. **Total Loss Indicator:** shows averages grain loss from shoe and separator area
27. **Separator Loss Indicator:** shows grain loss from separator area
28. **Tailings Volume Indicator:** shows volume of tailing return



SOFTKEYS



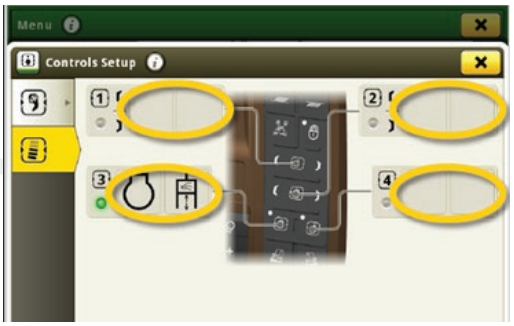
CUSTOMIZE THE MULTI-FUNCTION CONTROL LEVER

1) Press the unlock button on the CommandARM or the Control Set-up softkey

2) Configure functions based upon your preference by selecting boxes A-E to see the options and change the configuration

CUSTOMIZE THE COMMANDARM LAYOUT

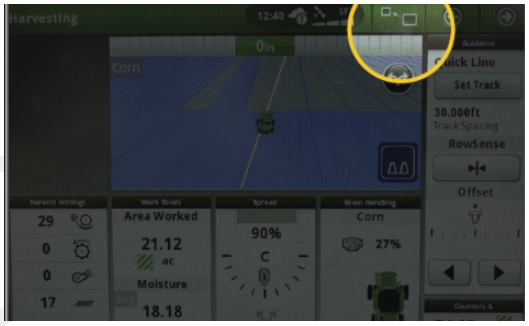
1) Press the unlock button on the CommandARM or the control set-up softkey. The Controls Set-up page will appear



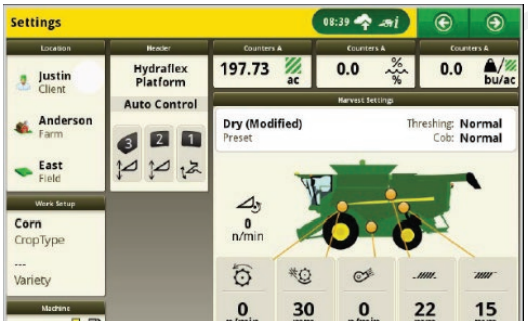
2) Configure functions based upon your preference by selecting boxes 1-4 to see the options and change the configuration

USING THE EXTENDED MONITOR

1) Toggle to the screen you wish to show on the extended monitor



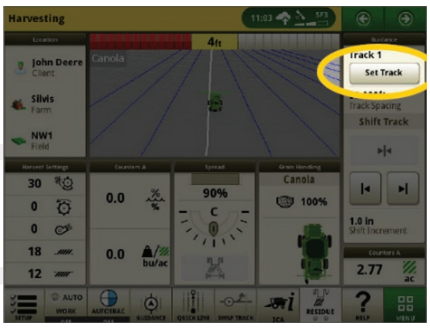
2) Hit the button to move that screen to the extended monitor



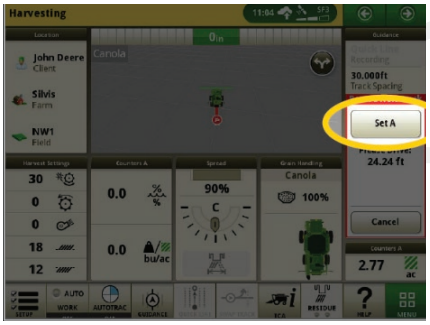
3) To edit the screen on the extended monitor, it must be brought back down to the Generation 4 display mounted on the CommandARM

SETUP OF A SIMPLE A-B GUIDANCE LINE

1) On the main page, select Quick Line



2) Push the "Set Track" button



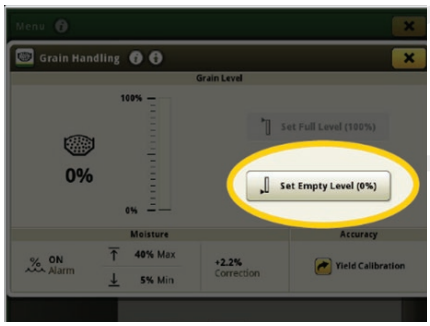
3) Set A line and start harvesting

4) Drive 50 feet, then set B line

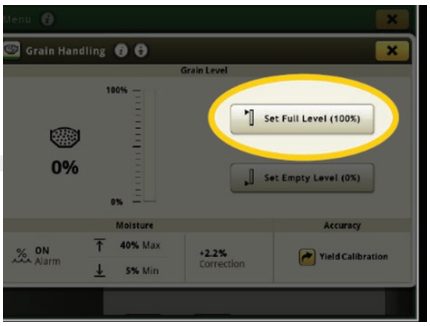
SET THE GRAIN TANK FILL LEVEL

1) Ensure the grain tank is completely empty

2) Select the Grain Handling shortcut feature

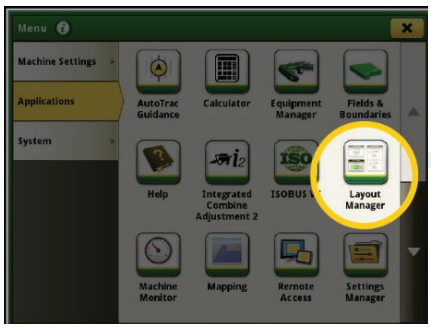


3) Push "Set Empty Level"

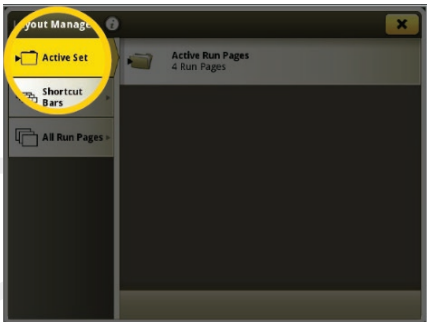


4) Once the grain tank is filled push "Set Full Level." Grain tank fill level is now complete

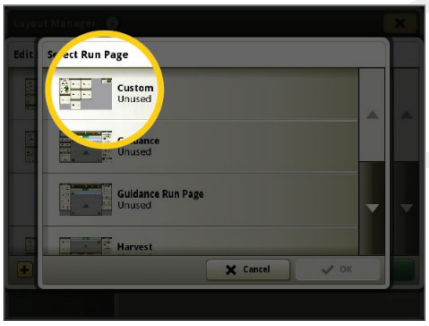
SETTING UP A CUSTOM PAGE ON 4600 DISPLAY



1) In the applications tab, go to Layout Manager

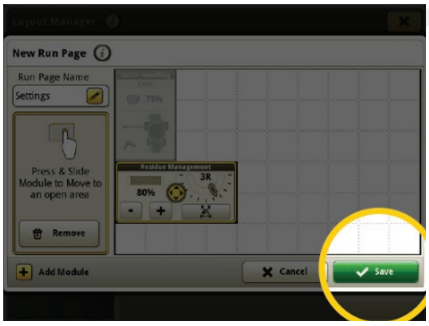


2) Select Active Set



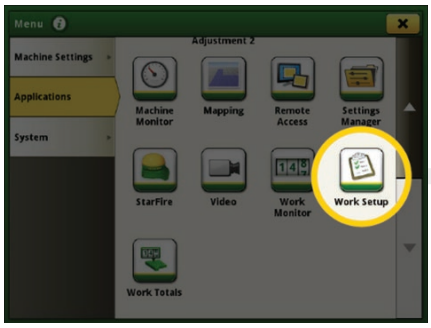
3) Select a Run Page to edit or create a new one

4) Add the module(s) you'd like to add

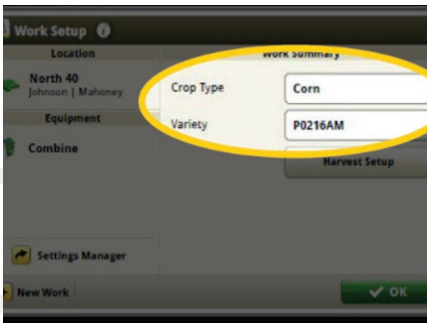


5) Don't forget to save your custom Run Page

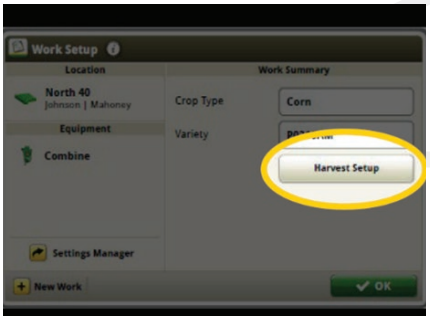
ENTERING YOUR CROP TYPE



1) When on the Applications page, scroll to the second page and select Work Setup

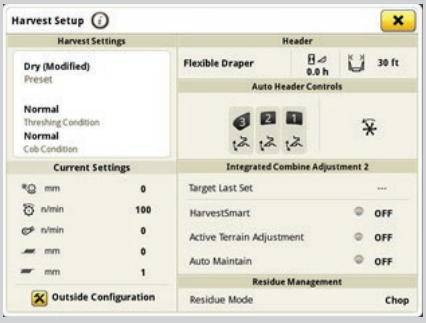


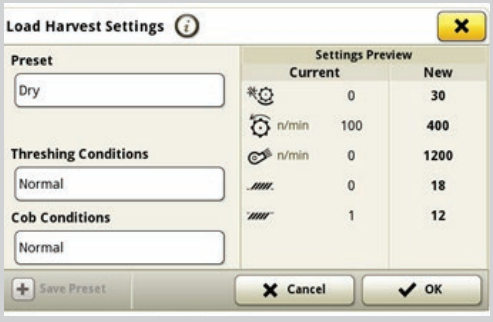
2) This is the **single place** to enter crop type by simply typing in the Crop Type and Variety

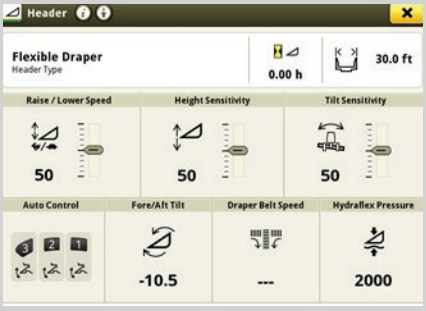


3) From here, select Harvest Setup to continue making adjustments to machine settings for crops and field conditions

Adjust Settings as Shown Below







ACTIVATION BUTTON MODE COMBINATIONS

Note: Press and hold activation buttons 1, 2, or 3 on the multi-function lever for two seconds to enter desired modes into memory.

A few common modes are shown below, but many combinations exist.

CONTROL MODES ENABLED	ACTIVATION BUTTON 1	ACTIVATION BUTTON 2	ACTIVATION BUTTON 3
Height Resume	Height Resume		
Height Resume, Height Sensing	Height Resume	Height Sensing	
Height Resume, HydraFlex™ Height Sensing	Height Resume	HydraFlex™ Height Sensing	
Height Resume, Height Sensing, HydraFlex™ Height Sensing [See your John Deere dealer to enable Height Sensing and HydraFlex Height Sensing, requires 600F or 600FD with auxiliary height sensors or 600D with gauge wheels.]	Height Resume	Height Sensing	HydraFlex™ Height Sensing
Height Resume, Height Sensing, HydraFlex™ Height Sensing [Default mode with 600D platform if gauge wheels are unpinned during calibration, requires 600D with gauge wheels.]	Height Resume	Height Sensing	HydraFlex™ Height Sensing
Height Resume, Height Sensing, Active Header Float	Height Resume	Height Sensing	Active Header Float
Height Resume, HydraFlex™ Height Sensing, Active Header Float	Height Resume	HydraFlex™ Height Sensing	Active Header Float
Height Resume, Active Header Float	HydraFlex™ Height Sensing		Active Header Float
Height Sensing	Height Sensing		
HydraFlex™ Height Sensing	HydraFlex™ Height Sensing		
Height Sensing, HydraFlex™ Height Sensing [See your John Deere dealer to enable Height Sensing and HydraFlex Height Sensing, requires 600F or 600FD with auxiliary height sensors or 600D with gauge wheels.]	Height Sensing		HydraFlex™ Height Sensing
Height Sensing, HydraFlex™ Height Sensing [Default mode with 600D platform if gauge wheels are unpinned during calibration, requires 600D with gauge wheels.]	Height Sensing		HydraFlex™ Height Sensing
Height Sensing, HydraFlex™ Height Sensing, Active Header Float [See your John Deere dealer to enable Height Sensing and HydraFlex Height Sensing, requires 600F or 600FD with auxiliary height sensors or 600D with gauge wheels.]	Height Sensing, HydraFlex™ Height Sensing		Active Header Float
Height Sensing, Active Header Float	Height Sensing		Active Header Float
HydraFlex™ Height Sensing, Active Header Float	HydraFlex™ Height Sensing		Active Header Float
Active Header Float	Active Header Float		
Reel Position Resume	Reel Position Resume		
Deck Plate Position Resume	Deck Plate Position Resume		
Hydraulic Feederhouse Fore/Aft Tilt (If Equipped)	Hydraulic Feederhouse Fore/Aft Tilt		

HARVEST SCREEN SET-UP

MY18/19 INTEGRATED COMBINE ADJUSTMENT 2 SETTINGS (ICA2)

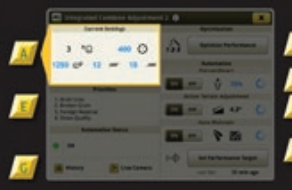
Brandt Operational Tip: For more information and possible advanced settings, select the Information icon or the Advanced Settings icon

Menu> Applications> Integrated Combine Adjustment 2

A INTEGRATED COMBINE ADJUSTMENT 2 SCREEN

Current Settings

Current settings for concave clearance, rotor speed, fan speed, chaffer clearance and sieve clearance.



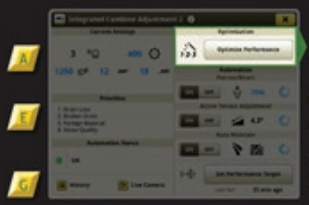
Value:

- Quick access to critical combine adjustments

B INTEGRATED COMBINE ADJUSTMENT 2 SCREEN

Optimization

Optimize performance button.



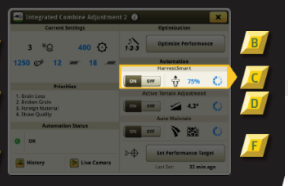
Value:

- Step-by-step wizard for intuitive combine optimization

C INTEGRATED COMBINE ADJUSTMENT 2 SCREEN

HarvestSmart™

HarvestSmart™ automates ground speed control during harvest



Value:

- Maintains a constant crop load to better utilize machine capacity
- Reduces operator fatigue and stress
- Maintains consistent grain quality and cleaner grain sample

D INTEGRATED COMBINE ADJUSTMENT 2 SCREEN

Active Terrain Adjustment™

Active Terrain Adjustment™ (ATA) increases productivity and reduces tailings volume when harvesting up and down hills.

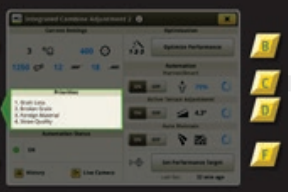
Value:

- Achieve same loss level as in level land conditions on hills up to 10 degrees
- Tailings reductions by up to 35% on 8–12 degree inclines
- Automatic settings adjustment on hills

E INTEGRATED COMBINE ADJUSTMENT 2 SCREEN

Priorities

Operator's priorities for automation.



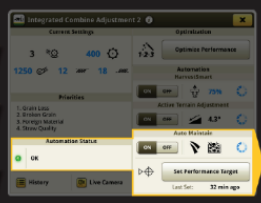
Value:

- Ensure main concerns are addressed as Combine Advisor™ resolves issues

F INTEGRATED COMBINE ADJUSTMENT 2 SCREEN

Auto Maintain

Auto Maintain monitors performance and makes adjustments to maintain operator-set performance targets when conditions change.



Value:

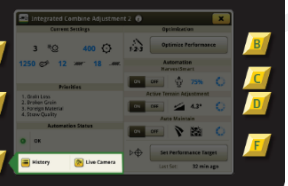
- Automate critical workload of constantly managing combine settings when conditions change
- Improve productivity as ActiveVision™ cameras identify and address tough-to-spot problems

G INTEGRATED COMBINE ADJUSTMENT 2 SCREEN

History and Live Camera Buttons

History button allows operators to see past adjustments made to the combine.

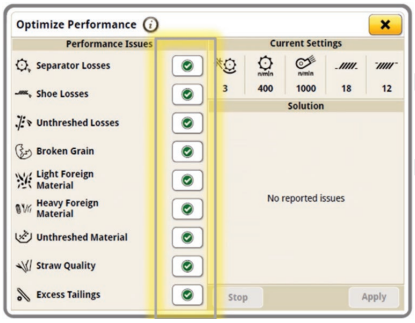
Live Camera allows a glimpse into live views of clean grain and tailings elevators.

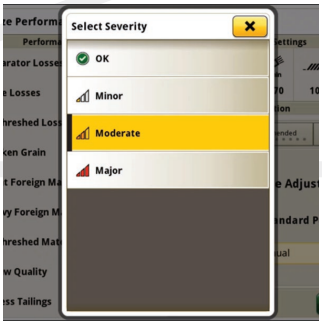


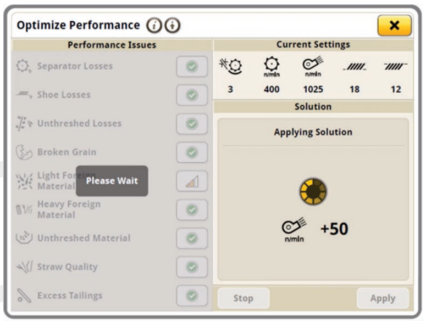
Value:

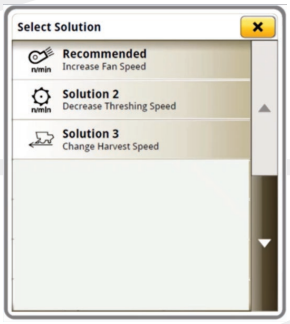
- Strong value for demonstrating as this shows the work the technology does
- Instills confidence in the functionality of the technology

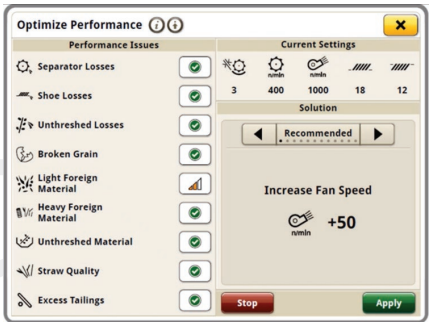
MY20/21 Combine Advisor (Replaces ICA2)

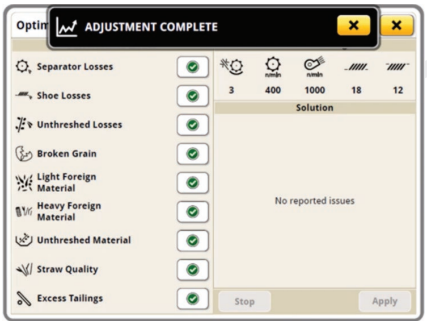












HARVESTSMART™

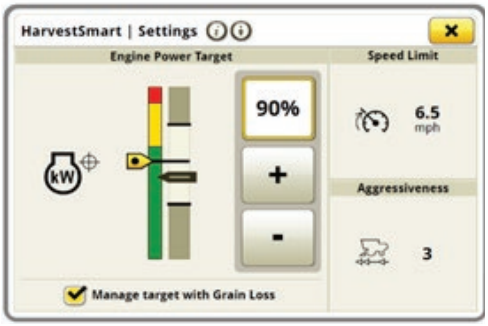
HarvestSmart improvements reduce the aggressiveness of ground speed responses that we have experienced with the previous version.

Turn on HarvestSmart

Set the Engine Power Target Percentage, Ground Speed Limit, and Aggressiveness so they are appropriate for the harvesting conditions.

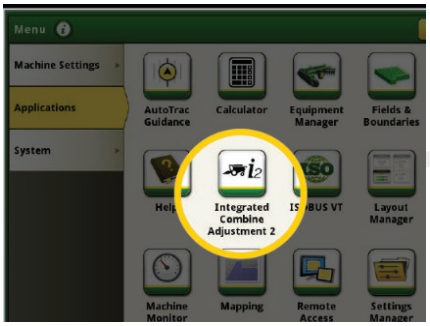
HarvestSmart will now engage by pressing the number 2 or 3 on the multi-function control lever as you are harvesting.

HarvestSmart automates ground speed to assist the operator in maintaining constant throughout, which maximizes productivity over the course of the day.

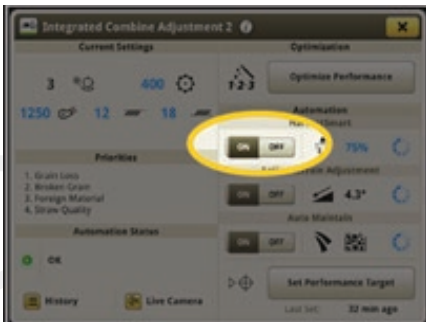


HOW TO ENABLE HARVESTSMART

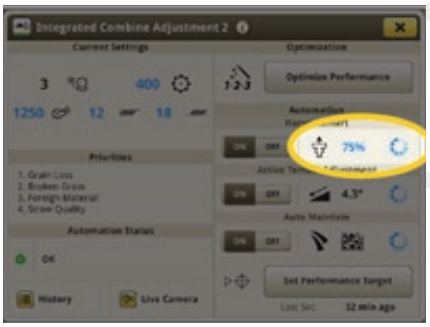
Menu> Applications> Integrated Combine Adjustment 2



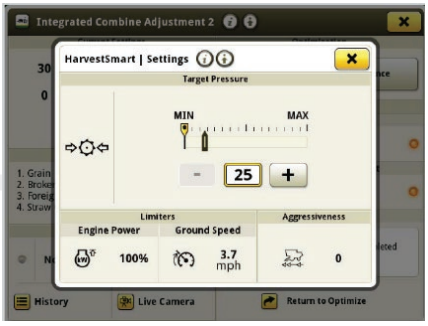
1) In the Application tab, select Integrated Combine Adjustment 2



2) Enable the HarvestSmart feature



3) To fine tune adjustments, click the box



4) Adjust settings as needed. (Target pressure/rotor pressure set at ground speed you'd like to harvest at)

AUTO MAINTAIN

SET PERFORMANCE TARGET

Turn on Auto Maintain and begin harvesting. As soon as the operator is happy with the machine's performance, touch the Set Performance Target button directly below the Auto Maintain ON/OFF switch:

Auto Maintain will remember this target and use it to make setting adjustments while harvesting this crop until the operator either sets a new performance target, shuts the system off, or switches crops.

As long as Auto Maintain is on, the system will remember the previous performance target for that crop. This saves the operator setup time each morning or when switching back and forth in crops, such as going frequently from wheat to canola to barley.

Brandt Operational Tip: Turn off HarvestSmart and Active Terrain Adjustment when setting the performance target for Auto Maintain

ACTIVE TERRAIN ADJUSTMENT

Navigate to the Combine Advisor run page. Move the slider from OFF to ON:

Take note of the current Cleaning Fan, Chaffer, and Sieve settings. Begin harvesting up or down a slope, and Active Terrain Adjustment will make adjustments.

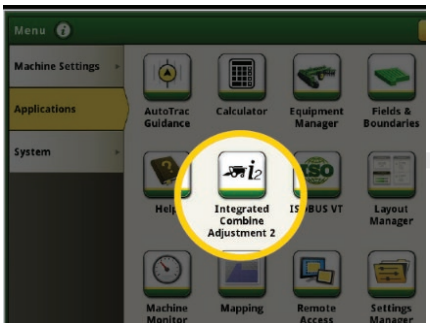
As the machine:

Starts an uphill climb, the Cleaning Fan speed decreases and the Chaffer and Sieve open more.

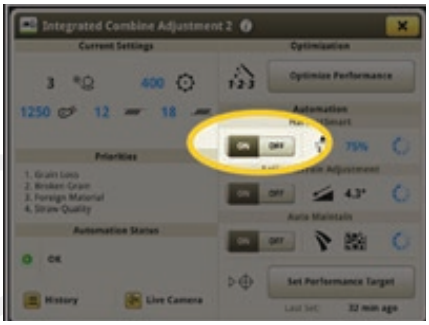
Descends down a hill, the Cleaning Fan speed increases and Chaffer and Sieve elements close more to prevent grain loss and overloading the cleaning shoe.

HOW TO ENABLE AUTO MAINTAIN

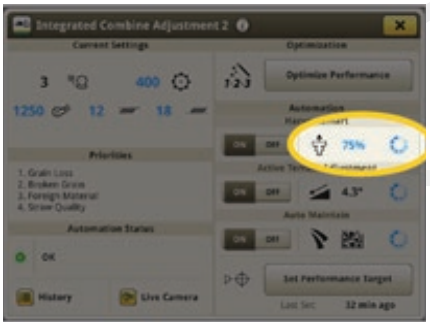
Menu> Applications> Integrated Combine Adjustment 2



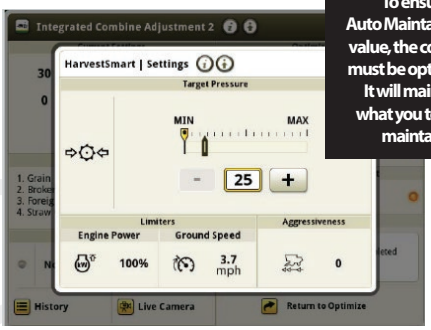
1) Have the combine fully optimized to the desired performance. This performance is what Auto Maintain will maintain



2) In the application tab, select Integrated Combine Adjustment 2



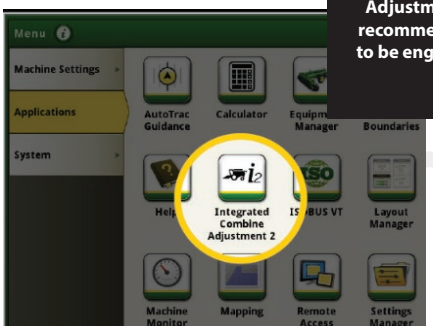
3) Enable the Auto Maintain feature



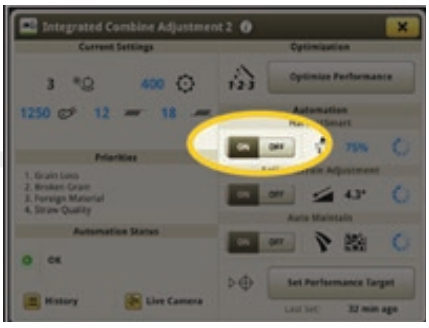
To ensure Auto Maintain adds value, the combine must be optimized. It will maintain what you tell it to maintain.

4) Hit Set Performance Target to establish the performance level that Auto Maintain will sustain. It may take up to 15 minutes to acquire the target

Active Terrain Adjustments recommended to be engaged.



5) Confirm Auto Maintain is Active

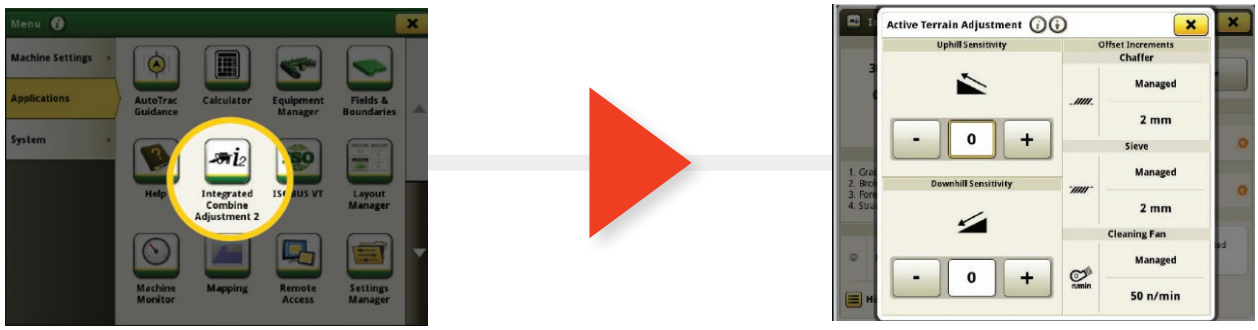


6) Notice all the adjustments that were made for you at the end of the day on both the Performance and Adjustments tabs

Brandt Operational Tip: Check with your local Brandt location for information on up upgrading ICA2 to Combine Advisor (software update required). Combine Advisor is replacing ICA2.

ENABLE ACTIVE TERRAIN ADJUSTMENT

Menu> Applications> Integrated Combine Adjustment 2



1) In the Application tab, select Integrated Combine Adjustment 2

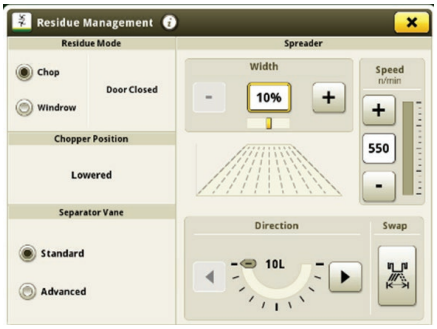
2) Adjust sensitivity as needed

RESIDUE MANAGEMENT SETTINGS

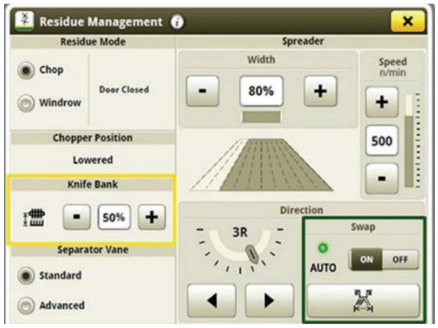
From the main run page you can touch Spread or Menu

If you touch Menu, Machine Settings comes up then touch down arrow on the right of the screen then touch the Residue Management button.

Then touch the screen on the areas you want to adjust



Screen display for Model Year 18/19 Combines



Screen display for Model Year 20/21 Combines with Knife Bank Adjust and auto-swap features

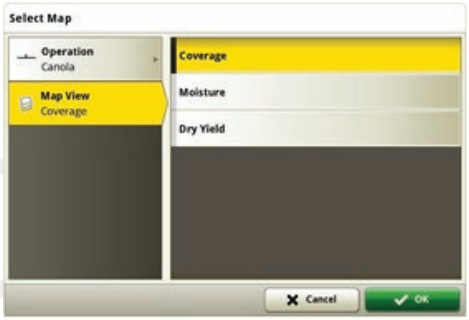
YIELD MAP DRY YIELD

Change Run Pages until you see one with a field map

1) Touch the Map

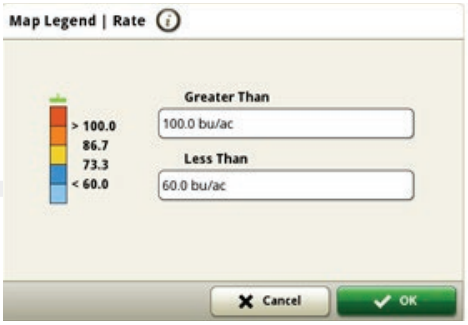
2) This screen will come up

3) Touch the Menu button bottom in the left-hand corner of the screen



4) Touch the Layer button located to the right of the Menu button

5) Select Dry Yield and click OK

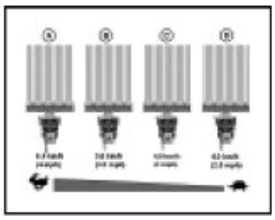


6) Click on the Map Legend to open the screen above. You can now set your greater than and less than target rates

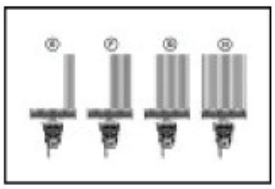
YIELD CALIBRATIONS

Varying machine ground speed is the best way to vary the flow rate.

The best way to keep the flow rate constant is to monitor the VisionTrak display and adjust the machine ground speed accordingly.



H105056-UN: Speed Variations



H105057-UN: Crop Flow Variations

LEGEND:

A - Load 1
B - Load 2
C - Load 3
D - Load 4
E - Minimum Flow
F - Medium Flow
G - Medium Flow
H - Maximum Flow

SINGLE POINT YIELD CALIBRATION

Single point yield calibration is performed when two or three calibration loads are collected. This type of calibration is suggested when the harvested field has a fairly consistent yield, and the machine is operated at a constant ground speed with little flow variation.

To collect a calibration load, harvest approximately 2722 kg (6000 lb) at the maximum harvest speed.

Running one or two additional loads is not required, but it may allow the system to average the overall error.

MULTI-POINT YIELD CALIBRATION

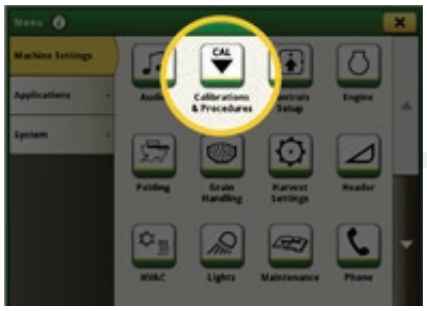
Multi-point yield calibration is used when the harvested field is expected to have varying yields or machine is operated at varying speeds with varying grain flows.

This type of calibration collects each calibration load at each expected flow condition.

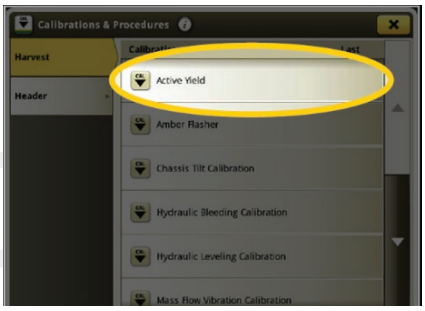
For each calibration load, harvest approximately 2722 kg (6000 lb). Run at least four calibration loads over various ground speeds (A—D) or at different cut widths to simulate four different flow rates (E—H).

ENABLE ACTIVEYIELD

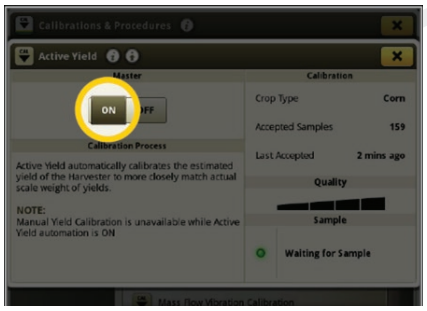
Menu> Machine Settings



1) In the Machine settings tab, go to Calibrations and Procedures



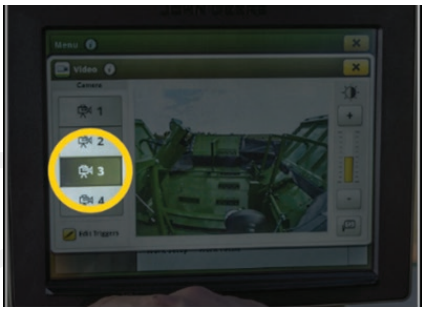
2) Select the ActiveYield Calibration



3) Turn the feature on

VIDEO CAMERA INFORMATION

1) Select the video shortcut feature



2) View the desired camera

3) Adjust video prompts by editing camera triggers

4) Choose specific camera for desired trigger

GENERAL CLEANING GUIDELINES

Your machine must be inspected periodically throughout the harvest day. Any buildup of crop material and other debris must be removed to ensure proper machine function and to reduce the risk of a thermal event. Frequency of inspections and cleanings will vary depending on a number of factors, including; operating conditions, machine settings, crop conditions, operating speeds and weather conditions. Inspections and cleanings may be required multiple times throughout the harvest day, particularly in dry, hot and windy conditions.

IMPORTANT: Regular and thorough cleaning of your machine combined with other routine maintenance procedures listed in the Operator's Manual greatly reduce the risk of a thermal event, chance of costly downtime, and improve machine performance.

Crop material and other debris can accumulate in various areas. Direction of wind, type of crop and crop moisture content can all impact where and how much crop material and debris can accumulate. Be aware of harvest conditions and adjust your cleaning schedule to ensure proper machine function and reduce the risk of fire. Inspect and clean these areas as needed throughout the harvest day.

Harvesting certain crops can cause special issues. Some crops are very "sticky" and it is often more difficult to clean the machine when harvesting these crops. Examples of these crops include alfalfa, sunflower, canola and safflower. Take special care in cleaning the machine when harvesting these crops.

Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set parking brake and remove key.

Click Here to Download the Cleaning Guides

FILTER OVERVIEW & CAPACITIES

Click Here to Download Full Size Filter Overview and Capacities Chart

CAPACITIES (Approximate):

Fuel Tank:
S760, S770 ..... 950 L (250 gal)
S780, S790 ..... 1,250 L (330 gal)

Cooling System with Heater:
Cool-Gard™ II
S760, S770 ..... 53 L (14 gal)
S780, S790 (Tier 2/Stage II) ..... 61.2 L (16.3 gal)
S780, S790 (Tier 3/Stage IIIA and FT4/Stage IV)....85 L (22.5 gal)

Engine Crankcase with Filter:
Plus-50™ II
S760, S770 (Tier 2/Stage II and FT4/Stage IV)..... 27.5 L (7.3 gal)
S760, S770 (Tier 3/Stage IIIA) ..... 29 L (7.7 gal)
S780, S790 (Tier 2/Stage II and Tier 3/Stage IIIA)..39 L (10.3 gal)
S780, S790 (FT4/Stage IV) ..... 43 L (11.4 gal)

Transmission (Mechanical Shift and Push Button Shift Machines):
GL-5
S760, S770 ..... 9.6 L (2.5 gal)

Engine Gearcase with Transfer (Mechanical Shift and Push Button Shift Machines):
Hy-Gard™
S760, S770 ..... 21.3 L (5.6 gal)

Engine Gearcase with Transfer (ProDrive™ Machines):
Hy-Gard™
S760, S770, S780, S790 ..... 51 L (13.5 gal)

Final Drives:
GL-5
S760, S770, S780, S790 ..... 8 L (2.1 gal)

Countershaft Drive Gearcase (Non-Multi-Speed):
GL-5
S760, S770, S780, S790 ..... 1.9 L (0.5 gal)

Heavy-Duty Feeder House Reverser Gearcase without Cooler:
ISO VG 460 Fully Synthetic
S760, S770 ..... 2.3 L (0.6 gal)

Heavy-Duty Feeder House Reverser Gearcase with Cooler:
ISO VG 460 Fully Synthetic
S760 ..... 3.5 L (0.9 gal)

Extra Heavy-Duty Feeder House Reverser Gearcase without Cooler:
ISO VG 460 Fully Synthetic
S780, S790 ..... 3.6 L (0.9 gal)

Extra Heavy-Duty Feeder House Reverser Gearcase with Cooler:
ISO VG 460 Fully Synthetic
S760, S770 ..... 4.9 L (1.29 gal)

Multi-Speed Feeder House Reverser Gearcase with Cooler (Optional):
ISO VG 460 Fully Synthetic
S770, S780, S790 ..... 5.2 L (1.37 gal)

Loading Auger Gearcase:
GL-5
S760, S770, S780, S790 ..... 3.8 L (1 gal)

Two Speed Separator Drive Gearcase:
GL-5
S760, S770, S780, S790 ..... 4.7 L (1.24 gal)

Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage IV):
John Deere™ Diesel Exhaust Fluid
S760, S770, S780, S790 ..... 52.2 L (13.8 gal)

Premium Overshot Beater Gearcase (if equipped):
GL-5
S770, S780, S790 ..... 0.2 L (0.05 gal)

Hydraulic / Hydrostatic Reservoir:
Hy-Gard™
S760, S770 ..... 31 L (8.2 gal)
S780, S790 ..... 47 L (12.4 gal)

BRANDT S700 SERIES COMBINE SERVICING TIPS

Contour Master FeederHouse: Check and clean out pinch points for packed material which could prevent header from tilting completely and damaging metal on the floor corners. Recommended inspection interval – Every 50 hrs.

Feederhouse Reverser Gear Case: Check torque on all three mount cap screws. Make sure they are tight. Use synthetic *HD460 oil* and change every two years.

Tire Pressure, Front and Rear: Check every 50 hours refer to Operator's Manual for proper pressures.

Wheel Bolt Torques: Check after first 50 hours and then every 200 hours.

Platform Drive Pump Sheave Bearing: Grease every 50 hours AND yearly. 12 shots at the start of season, then, 3 shots every 50 hours thereafter.

Separator Drive and Driver Sheaves: 20–25 shots every 50 hours. Cycle separator through full speed range to distribute the grease. DO NOT OVER GREASE. Yearly remove pipe plug and give 45 shots at the start of the season. *TY6341 High Temp Extreme Pressure Grease.*

Separator Drive Sheave Gap: Check and adjust as needed, 8MM (5/16). If you cannot achieve 1000 RPM rotor speed, this is the issue.

Chopper/Unloading Auger Drive Bearing: Rotate sheave to access fitting in bottom of groove in the engine gear case output pulley. Seasonally, 20 shots.

Straw Chopper Gear Case: Greased at the factory. No action needed.

Chopper Jackshaft: Greased at the factory. No action needed.

Rear Axle, Tie Rod Ends: Grease every 50 hours and check for play, if any play is found replace the worn tie-rod end.

PowerCast Tailboard: Daily, remove cover and clean out. Watch for static build up.

- NOTE: Dragging a chain will reduce the static electricity build up.

Hydraulic / Hydrostatic Oil: Check with header on the ground.

- Recommended: Hy-Gard Hydraulic Oil

Fuel Tank Breather: Clean off accumulated dirt.

Radiator and Coolers: Clean as needed. Check coolant daily.

- Recommended: Cool Guard II Premixed Coolant

Daily Engine Compartment Level Checks: Engine oil, Engine Gear Case oil level, Hydraulic oil level, Coolant level and DEF level.

Mass Flow Sensor: Lower the hopper loading auger and access sensor. Remove any dirt buildup. Clean with a soft, water moistened cloth.

ActiveYield Sensors: Check sensors when grain tank is empty. Remove any dirt buildup. Can clean with water moistened cloth if needed. Do not step on sensors.

Fuel Pre-Cleaner Screen and Sediment Bowl: Empty to remove debris and clean the screen if restricted. Use fuel treatment to prevent blackening. Drain if water has accumulated.

Active Tailings Slip Clutch: Grease every 10 hours if slip clutch is slipping excessively. (S780 – S790 models)

Tailings Auger Slip Clutch: Rotate sheave to access fitting. Don't over grease. (S760 - S770 models)

Moisture Sensor: Clean sensor and sampling auger of dirt buildup as needed. Remove sensor and clean with a soft, water moistened cloth.

Tailings ActiveVision Camera: Clean camera once a week or as needed. Frequency varies with weather, operating and crop conditions. Open latch, clean camera lens with a soft, water moistened cloth.

Clean Grain ActiveVision Camera: Clean camera once a week or as needed. Frequency varies with weather, operating and crop conditions. Open latch, clean camera lens with a soft, water moistened cloth.

Conveyor Auger Slip Clutch: Rotate sheave to access fitting. Don't over grease.

Stone Trap: Empty at the end of each day. More often in stony conditions.

Feederhouse Slip Clutch: Grease evenly on each fitting, if it has been slipping grease more often. Don't over grease.

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 rigid mode or hybrid mode.

700FD – S Series

↓

Ensure that all software is up-to-date

↓

Un-pin AHHC sensor arms and Remove the float arm lock-out brackets

↓

Combine screens for the header calibration

↓

See Troubleshooting or refer to the Calibrations section of the Operator's Manual

700FD ADJUSTMENTS

DRAPER GROUND ENGAGEMENT ANGLE

The HydraFlex™ Draper engagement angle is designed for optimum performance on your combine. It is recommended that the factory Feederhouse 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 FEEDERHOUSE FORE/AFT TILT ADJUST (IF EQUIPPED)

Hydraulic Feederhouse fore/aft tilt adjust allows the operator to increase or decrease the angle of the Feederhouse 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 Feederhouse tilt frame touch plus (+) or minus (-) symbol or rotate the selection dial
    - Increase tilts Feederhouse tilt frame angle forward
    - Decrease tilts Feederhouse tilt frame angle rearward
2. Display shows operator adjustment settings

BELT SPEED ADJUST

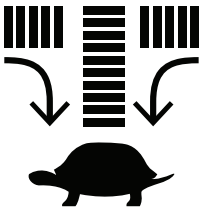
Draper belt speed adjust allows the operator to increase or decrease the belt speed

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.

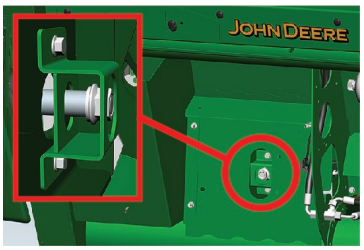
Side belt speed reduction switch allows the speed of the draper belt to automatically slow to a factory setpoint speed.



1) Press the side Belt Speed Reduction button 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 Brandt Agriculture dealer if the factory setpoint speed need to be adjusted.

REQUIRED DRAPER BELT TENSION SETTING



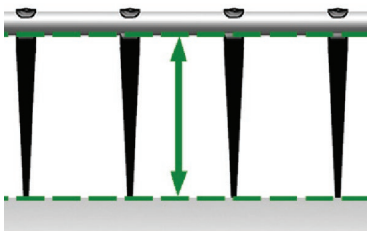
Critical: On the 730FD only, the idler belt tensioning bolt should be even with the outside shield.

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

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

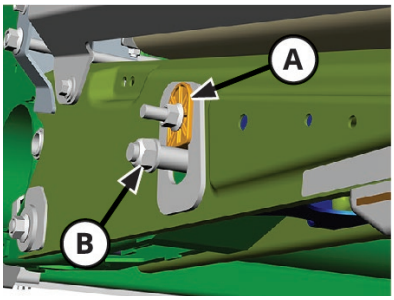
- With AHHC engaged, use the knob to adjust the header set point
- While operating in the flex mode, the knob adjusts the flex pressure set point
- Higher pressure = Less ground force
- While operating in rigid mode, the knob adjusts the height set point

HEADER APPLICATION BUTTON

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

ACTIVE HEADER HEIGHT CONTROL (AHHC) MODE OPTIONS

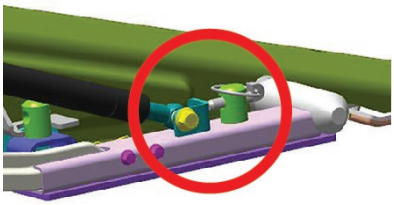
For flex draper platforms, there are three unique AHHC modes:



- 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 Feederhouse 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.

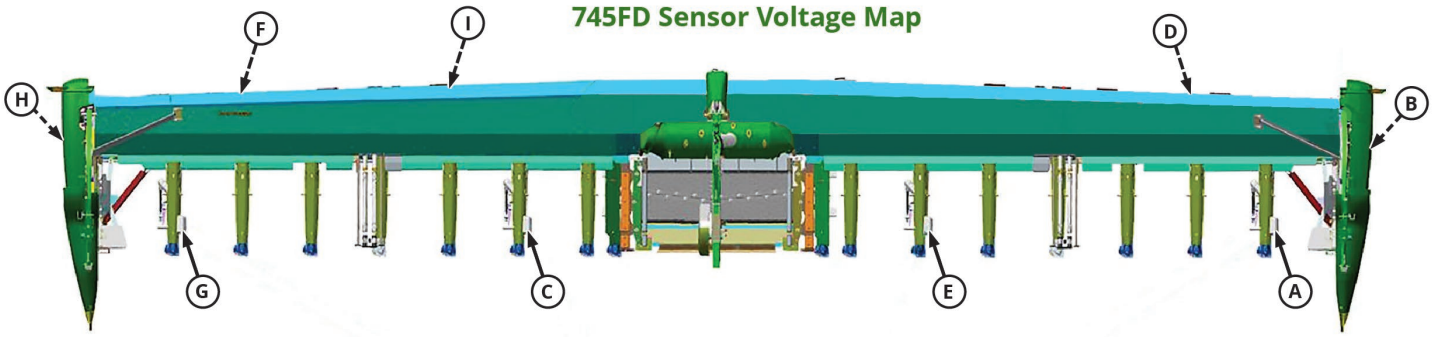
NOTE: It’s possible to use a Hybrid mode where no calibration is needed when changing between on and off-ground modes.

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.

Header Activation buttons 2 and 3 on the Multi-Function Lever will activate the platform.

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



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 Feederhouse 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)** Center 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	30	_ _nn n X X X	**(E)** Cutterbar Flex Pressure Sensor
LC1	23	_ _ n n n X X X	**(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)

CALIBRATIONS

Calibrating the Feederhouse 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

vBroken 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

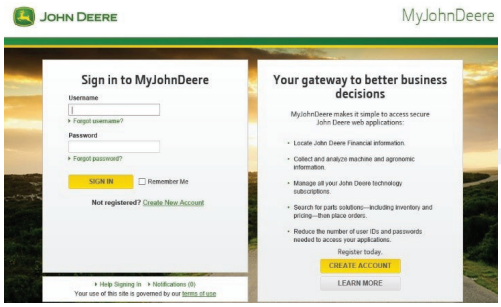
SENSOR VOLTAGE SETTINGS

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.

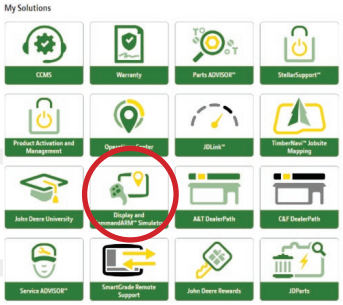
It is highly recommended to set the sensors at 0.9 – 4.1 volts to ensure that the sensor does not shift out of the operating range.

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

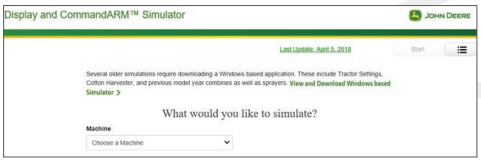
HOW TO ACCESS S700 COMBINE SIMULATOR



1) Sign in to your MyJohnDeere account

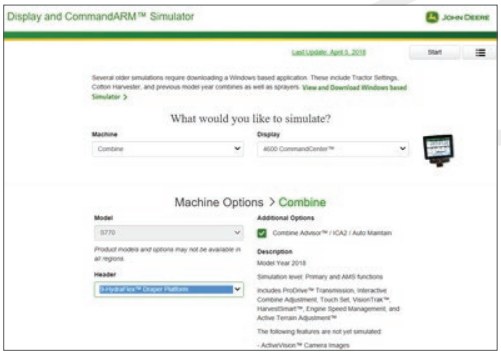


2) Select Display and CommandARM Simulator



3) Choose Combine from the Choose a Machine drop down menu

4) To change the display: Click the drop-down arrow and choose your display



5) Under Machine Options: Choose the Model of combine similar to yours, Choose the Header you want to work with, Choose the Residue Management system you have

6) Under the Guidance Options select AutoTrac

7) Then Click Start Simulation in the top or bottom of the page. It may take a minute to load, this is normal

8) Once it has loaded you can practice finding the various areas outlined in this handbook by simply clicking on the different areas of the screen just like you would touch it with your finger in your S700 combine

APPENDIX

CALIBRATIONS & PROCEDURES

BRANDT CUSTOMER PORTAL

FILTER OVERVIEW & CAPACITIES

GENERAL CLEANING GUIDELINES

OPERATOR'S MANUAL

PAYABLE MOISTURE AND DENSITY CHART

POWER SHUT DOWN PROCEDURE

S700 COMBINE SIMULATOR

STANDARD WEIGHT CHART

BRANDT.CA/AGRICULTURE